

Oracle® Essbase Administration Services

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1

Welcome to Administration Services Online Help

Oracle Essbase Administration Services is the framework for implementing, monitoring, and maintaining Oracle Essbase. Administration Services consists of a Java client console and a Java middle-tier server that communicate directly with Essbase Servers. For more information about this product, see [“About Administration Services” on page 31](#).

The Administration Services online help system provides information about using Administration Services to manage Essbase. You can access procedural help that describes how to perform specific tasks and overviews that explain concepts and describe features. You can also access context-sensitive help for dialog boxes, editors, windows, and other components.

2

Getting Started

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About Administration Services

Administration Services, the cross-platform administration tool for Essbase, consists of a Java middle-tier server (Essbase Administration Server) and a client console (Administration Services Console) which can be launched either as a Java application or from a browser.

Using the wizards, editors, and tools provided by the console, you can perform the following activities:

- View, manage, and maintain Essbase Servers and Essbase Administration Servers
- Operate on Essbase objects from a tree view
- Perform multiple tasks simultaneously
- Run processes in the background
- Perform cross-server operations
- Manage active user activity

Related Information

- [“Administration Services Architecture” on page 31](#)
- [“Setting Up Administration Services” on page 34](#)

Administration Services Architecture

Administration Services is a three-tiered system:

- **Client tier (Administration Services Console):** A Java-based client console, which runs only on Windows platforms, provides a user interface that you use to manage the Essbase environment.
- **Middle tier (Essbase Administration Server):** A Java server, which Essbase Administration Server runs on any platform supported by Essbase, maintains communication, session, and security information for Essbase Server connections, thus coordinating interactions and resources between the database and client tiers.
- **Database tier (Essbase Server):** One or more Essbase Servers, which are installed separately from Administration Services, store and process multidimensional database information.

Administration Services can be deployed in various scenarios. For example, Administration Services components (Administration Services Console and Essbase Administration Server) and Essbase Server can be installed on the same computer or on different computers. See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide* for more information about deployment scenarios.

Related Information

- [“About Administration Services” on page 31](#)
- [“About Essbase Servers” on page 81](#)
- [“About Essbase Administration Server” on page 55](#)
- [“Features of Administration Services Console” on page 37](#)
- [“Setting Up Administration Services” on page 34](#)

Starting Administration Services

Before you start Administration Services, make sure that the Essbase Servers you want to manage are started.

► To start Administration Services:

- 1 [Start Essbase Administration Server.](#)
- 2 **Perform an action:**
 - [Start Administration Services Console.](#)
 - Start Administration Services Web Console—see [“Starting Administration Services Web Console” on page 64](#)

Related Information

- [“Connecting to Essbase Administration Server” on page 33](#)
- [“Setting Up Administration Services” on page 34](#)
- [“Shutting Down Administration Services” on page 66](#)
- [“About Essbase Connections and Ports” on page 82](#)

- [“Setting Up Administration Services” on page 34](#)
- [Connecting to Administration Services](#)

Connecting to Essbase Administration Server

After Administration Services Console opens, you are asked to connect to an Essbase Administration Server. You can, thereafter, connect to and disconnect from Essbase Administration Servers from Enterprise View. You can connect to only one Essbase Administration Server at a time.

If you are connected to an Essbase Administration Server and need to connect to the Essbase Administration Server as another user, you must disconnect and then reconnect as a new user. The new user's settings and custom views are displayed.

Connections to individual Essbase Servers are handled by the Essbase Administration Server to which you are connected. Administration Services user names and passwords may differ from Essbase Server user names and passwords. For information about how Essbase Server connections are established, see [“About Essbase Connections and Ports” on page 82](#).

After connecting to Essbase Administration Server for the first time, see [“User Setup Wizard” on page 658](#) to create users and set up Essbase Server access.

For information about Essbase Administration Server ports, see [Specifying Communication Ports for Essbase Administration Server](#).

► To connect to Essbase Administration Server:

- 1 [Start Essbase Administration Server](#).
- 2 [Start Administration Services Console](#).

Note: If Administration Services Console is open and you want to change Essbase Administration Servers, in Enterprise View, select the node of the preferred Essbase Administration Server, right-click, and select **Connect**.

- 3 In the **Essbase Administration Services Login** dialog box, enter the name of the Essbase Administration Server to which you want to connect.
- 4 Enter your Essbase Administration Server user name and password.

If you are connecting for the first time after installation, use the default user name (admin) and the default password (password).

- 5 Click **OK**.

If you are connecting for the first time after installation and if Essbase Administration Server is configured for native authentication, [User Setup Wizard](#) is displayed. You use the wizard to create Administration Services users and add Essbase Servers to the users' views.

Related Information

- [“About Administration Services” on page 31](#)

- [“Essbase Administration Services Login Dialog Box” on page 468](#)
- [“About Essbase Connections and Ports” on page 82](#)
- [Configuring the Timeout for Administration Services Sessions](#)

Setting Up Administration Services

This topic describes how to set up Administration Services so that you and/or other administrators can begin using it to manage Essbase.

Note: This topic does not apply if Essbase Server is in [Oracle Enterprise Performance Management System security mode](#).

► To set up Administration Services:

- 1 [Start Administration Services](#).
- 2 [Connect to Essbase Administration Server using the default administrator account](#).
- 3 [Use the User Setup Wizard](#) to establish yourself as an Administration Services user.
- 4 [Use the User Setup Wizard](#) to create other Administration Services users and set up their connections to Essbase Servers.
- 5 If you haven't already, [change the password for the administrator account](#).
- 6 If necessary, [have other users add the appropriate Essbase Servers to their Enterprise View](#).
- 7 Make a backup copy of the files that are used to store user information for Administration Services. See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide* for more information.
- 8 [Specify an outgoing mail \(SMTP\) server](#).

Related Information

- [“About Administration Services” on page 31](#)
- [“About Essbase Administration Server” on page 55](#)
- [“Features of Administration Services Console” on page 37](#)

Administration Services in Fusion Mode

Administration Services can be used with EPM System and with Oracle Business Intelligence Enterprise Edition. When used with Oracle BI EE, some functions and menu options may not display or work as described in this documentation. These include, but may not be limited to the following functions:

- Functions associated with the Security node in Enterprise View
- Migration Wizard

- User/Group Access, for applications and databases
- Other items related to user or group access and provisioning

When using Administration Services with Oracle Business Intelligence Enterprise Edition, these security and user provisioning functions will be accessed using the Oracle WebLogic Server console.

About Sample Applications

Sample applications are provided with the Essbase Server software. The individual who installs Essbase Server is responsible for making the sample applications available to Essbase users. Sample applications are not installed with Administration Services.

If sample applications have been installed on an Essbase Server, they appear in [Enterprise View](#) in Administration Services Console. If you want to separate the sample applications from your applications in Enterprise View, move them to a [custom view](#). If you delete sample applications from Enterprise View, they are also deleted from an Essbase Server, making them unavailable to other users.

The sample applications and databases are as follows:

Table 1 Sample applications, databases, and their features

Applications	Databases	Features
ASOsamp	Sample	Demonstrates aggregate storage functionality and duplicate member names. The database outline contains 14 dimensions and over 17,000 members. A data file and rules are provided in the <code>ARBORPATH/app/ASOsamp/Sample</code> directory. More info ...
Sample	Basic	Demonstrates the following features: attribute dimensions, dynamic calculations, shared members, time series calculations, expense reporting, time balance calculations, two-pass calculations, UDAs, and member formulas.
	Interntl	Demonstrates requirements of the main database in a currency application.
	Xchgrate	Demonstrates requirements of a currency database in a currency application.
Sample_U	Basic	Demonstrates a Unicode-mode version of Sample Basic, including alias tables in four different character sets in addition to English.
Demo	Basic	Demonstrates a very simple database outline.
Samppart	Company	Demonstrates a partitioned database.
Sampeast	East	Demonstrates a partitioned database.

For more information about the sample applications, see the *Oracle Essbase Database Administrator's Guide*.

Related Information

- [“About Enterprise View” on page 43](#)

- “About Custom Views” on page 49

3

About Administration Services Console

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Features of Administration Services Console

Administration Services Console makes Essbase administration tasks easy to perform. The console provides wizards, editors, dynamic menus, and other tools to help you implement, monitor, and maintain Essbase. Click an item in the following list to view more information:

- **Enterprise View:** Enterprise View is a graphical tree view of the Essbase environment, displayed in the left pane of the console window. It displays the Essbase Administration Server and the Essbase Servers that you select. From Enterprise View, you can operate directly on Essbase objects. For more information, see [“About Enterprise View” on page 43](#).
- **Custom Views of Essbase Environment:** You can create custom views of the Enterprise View tree. Custom views help you maintain manageable views of Essbase objects. For more information, see [“About Custom Views” on page 49](#).
- **Dynamic Menus:** Dynamic, context-sensitive menus are accessed by the right mouse button. These shortcut menus contain commonly used commands for the object that is currently selected in Enterprise View or commands that are specific to the active window in the workspace pane. For details, see [“Right-Click Menus” on page 38](#).
- **Wizards:** Wizards help you step through complex processes. To view wizards, select **File**, and then **Wizards**.
- **Script Editors:** Script editors provide advanced features to help you build scripts quickly. The following script editors are available:
 - **MaxL Script Editor:** Enables you to build, execute, and view the results of MaxL statements within the console. Syntax color-coding and auto-completion help you write MaxL statements quickly. For more information, see [“About MaxL Script Editor” on page 376](#).

- **Calculation Script Editor:** Provides features to help you build calculation scripts quickly. Syntax is color-coded to improve readability, and members and calculation functions are displayed in tree views within the editor to help you insert them into your scripts easily. For more information, see [“About Calculation Script Editor” on page 334](#).
- **Report Script Editor:** Provides features to help you build report scripts quickly. Syntax is color-coded to improve readability, and members and report commands are displayed in tree views within the editor to help you insert them into your scripts easily. For more information, see [“About Report Script Editor” on page 364](#).
- **Messages Pane:** A Messages pane is displayed along the bottom of the console window. It displays error messages and status information returned from the Essbase Administration Server and the Essbase Server. For more information, see [Messages Pane](#).
- **Extensive Online Help System:** The console includes an HTML-based, cross-platform online help system. It provides information about using Administration Services to perform Essbase administration tasks and provides direct links to other Essbase documentation, where appropriate. You can find information about a specific Essbase task, and you can access context-sensitive help on dialog boxes, windows, editors, and other components.

Related Information

- [“Customizing Administration Services Console” on page 40](#)
- [“Right-Click Menus” on page 38](#)
- [Setting Display Options for Administration Services Console](#)

Right-Click Menus

Use right-click menus to access context-sensitive commands in the console. Right-click menus contain commonly used commands for the object that is currently selected in Enterprise View, or commands that are specific to the active window in the workspace pane. Right-click menu options change dynamically, depending on where you are in the console or what you have selected in Enterprise View.

For example, select a database in Enterprise View, and then click the right mouse button to display a shortcut menu that contains commands that are relevant to databases.

You can configure mouse buttons in whatever order you 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 your mouse configuration.

Related Information

- [“About Enterprise View” on page 43](#)

Alternatives to Right-Click Menus

Any command you access from a right-click menu, you can also access by the following methods. Use the method that is most convenient for you:

- Use the mouse to select a [menu](#) option from a menu on the menu bar.
- Use the mouse to select a button on a [toolbar](#) that represents a menu option.
- Use keystrokes to select a menu and menu option from the menu bar.
- Use the mouse or a keyboard equivalent to select a button that is the same action as a right-click menu option.

Menu Bar

The menu bar is displayed below the [masthead](#) in the console window. The menu bar changes dynamically, depending on where you are in the console. It displays only those commands available for the object that is currently selected in Enterprise View, or commands that are specific to the active window in the workspace pane.

Most menu bar options are also available in context-sensitive, right-click "shortcut" menus. See [“Right-Click Menus” on page 38](#) for more information.

Masthead

The masthead contains the product name and Oracle logo. The masthead is displayed above the menu bar, under the title bar of the console window.

To view the masthead, select the View menu and then check the Masthead check box.

To hide the masthead, select the View menu and then clear the Masthead check box.

Console Toolbar

The console provides toolbars that enable quick access to commonly used commands. The toolbars change dynamically, depending on what window you have open in the console. You can hover the mouse pointer over a toolbar button to view a descriptive "tooltip."

➤ To hide any toolbars that are showing:

- 1 Select the **View** menu.
- 2 Clear the **Toolbar** check box.

➤ To select the position of toolbars in the console window:

- 1 Select **Tools**, and then **Console options**.
- 2 In the **Options** dialog box, select the **Display** tab.
- 3 In the **Toolbar layout** area, select a layout option.

- 4 Click **Apply**.
- 5 Click **Close** to close the dialog box.

Messages Pane

The Messages pane is displayed along the bottom of the console window. When a message is returned from Essbase or from Essbase Administration Server, it is displayed in this area.

The Messages pane displays error messages and status information. Error messages returned from Essbase are identified by an error message number. You can get help about specific error message numbers in the *Oracle Essbase Error Message Reference* documentation.

To hide this pane, select **View** and clear the **Messages** check box. The **Messages** pane will remain hidden until you choose to display it again using the View menu.

If you have selected the option to display MaxL statements as they are being executed, an additional tab called **MaxL Statements** is displayed in the **Messages** pane.

Use the right-click menu in this pane to clear, copy, e-mail, print, or save messages to another program. On the **MaxL Statements** pane, you can also use the right-click menu to choose to display messages and data along with MaxL statements.

Customizing Administration Services Console

You can customize parts of the console to suit your needs and preferences:

- From the [Options dialog box](#), you can set various options for the console.
- You can copy a subset of the Enterprise View tree to a separate, custom view. See [“About Custom Views” on page 49](#).
- From the **View** menu, you can choose to show or hide the following parts of the interface: masthead, toolbar, status bar, navigation pane, and message pane.
- You can change the size of the navigation pane by placing your cursor over the right edge of the pane and dragging it to the desired size.
- You can change the size of the Messages pane by placing your cursor over the top edge of the pane and dragging it to the desired size.

Related Information

- [“About Enterprise View” on page 43](#)
- [Setting Display Options for Administration Services Console](#)
- [“Creating Custom Views” on page 50](#)

Printing Administration Services Console Windows

You can print the contents of most windows in the console. In this release, you cannot change the format of a printout.

► To print the contents of an open window:

- 1 Open the window you want to print.
- 2 Select **File**, and then **Print**.
- 3 In the **Print** dialog box, specify any print options that are available for your default printer.
- 4 Click **OK**.

Related Information

- [“Printing Scripts” on page 349](#)

Managing Windows within Administration Services Console

You can have more than one window open simultaneously in the console. The **Organize** menu on the console menu bar provides several options for managing open windows.

To manage multiple open windows in Administration Services Console:

- To select an open window to be the active window, select **Organize** and then select the desired open window from the list.
- To stack all open windows in the workspace pane horizontally, select **Organize**, and then **Tile Horizontal**.
- To stack all open windows in the workspace pane vertically, select **Organize**, and then **Tile Vertical**.
- To layer all open windows in the workspace pane, select **Organize**, and then **Cascade**.
- To arrange minimized windows in rows along the bottom of the workspace pane, select **Organize**, and then **Icons**.
- To close all windows, select **Organize**, and then **Close All**.
- To view of list of all open windows from which you can select a window to activate, select **Organize**, and then **Windows**.

Related Information

- [“Windows Dialog Box” on page 668](#)
- [“Features of Administration Services Console” on page 37](#)

Setting Active Alias Tables for Administration Services Console Sessions

For an Administration Services Console session, you can specify which alias table is used as the active alias table (the table that is used when aliases are displayed or updated).

Independent of the Administration Services Console setting, you can [set an active alias table for Outline Editor](#).

► To set active alias tables for Administration Services Console sessions:

- 1 From **Enterprise View** or a custom view, select a database.
- 2 Right-click, and select **Set**, and then **Active alias table**.
- 3 In the **Set Active Alias Table** dialog box, from the list of available alias tables, select an alias table.
- 4 Click **OK**.

Related Information

- [“About Alias Tables” on page 170](#)
- [“Set Active Alias Table Dialog Box” on page 640](#)
- [“Setting the Active Alias Table for Outline Editor” on page 177](#)

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- setalias (ESSCMD) in the *Oracle Essbase Technical Reference*

Using Wizards

Administration Services provides the following wizards to walk you through the steps needed to perform complex administrative tasks:

- [“User Setup Wizard” on page 658](#)
- [“Migration Wizard” on page 597](#)
- [“Aggregate Storage Outline Conversion Wizard” on page 456](#)
- [“Aggregation Design Wizard” on page 462](#)
- [“Aggregate Storage Partition Wizard” on page 459](#)

To access wizards, select **File**, and then **Wizards**, and then select a wizard from the menu.

Using Enterprise View

In this section:

- [“About Enterprise View” on page 43](#)
- [“Adding Essbase Servers to Enterprise View” on page 45](#)
- [“Removing Essbase Servers from Enterprise View” on page 46](#)
- [“Adding Objects to Enterprise View” on page 47](#)
- [“Removing Objects from Enterprise View” on page 47](#)
- [“Expanding and Collapsing Enterprise View” on page 48](#)
- [“Refreshing Enterprise View” on page 48](#)
- [“About Custom Views” on page 49](#)
- [“Creating Custom Views” on page 50](#)
- [“Removing Objects from Custom Views” on page 51](#)
- [“Arranging Objects in Custom Views” on page 51](#)
- [“Renaming a Custom View Tab” on page 52](#)
- [“Navigating and Selecting Objects” on page 52](#)
- [“Operating on Objects” on page 53](#)

About Enterprise View

When you start Administration Services Console, the Enterprise View tab is displayed in the navigation pane. Enterprise View is a graphical tree view of the Essbase environment. It displays Essbase Administration Server and the Essbase Servers that you select. If applicable, it also displays other Oracle product servers if applicable (for example, Deployment Servers).

You can administer different versions of Essbase from the same view. Because it is customizable, your view of the Essbase environment may look different from that of other administrators. For more information, see [“Adding Essbase Servers to Enterprise View” on page 45](#).

From Enterprise View, you can operate directly on Essbase objects. The easiest way to perform an action on an object in Enterprise View is to select it and then right-click to view a context-sensitive shortcut menu for that object. See [“Operating on Objects” on page 53](#).

To view the contents of a node on the Enterprise View tree, expand the object's node, or double-click the object itself. To hide items that you have expanded, collapse the object's node or double-click the object itself.

Note: Use the View menu to hide or show the navigation pane, which contains Enterprise View.

Related Information

- [“Navigating and Selecting Objects” on page 52](#)
- [“Operating on Objects” on page 53](#)
- [“Creating Custom Views” on page 50](#)
- [“Adding Essbase Servers to Enterprise View” on page 45](#)

- [“Removing Objects from Enterprise View” on page 47](#)
- [“Removing Essbase Servers from Enterprise View” on page 46](#)

Hierarchy of Enterprise View Objects

Enterprise View displays Essbase components and their related objects in a navigation tree. The node names for Essbase Administration Server and for Essbase Servers are the same as their respective server computer names.

Applications and databases, and their associated objects, are represented as nodes beneath the Essbase Server node. Some objects are grouped into container nodes. For example, individual Essbase Servers are contained in the Essbase Servers node, and applications are contained in the Applications container node.

If [sample applications and databases](#) are installed with Essbase, they appear in Enterprise View along with your organization's applications and databases.

➤ To view the hierarchy and description of objects that are displayed under each Essbase component, see the following:

- 1 [Essbase Administration Server](#)
- 2 [Essbase Servers](#)

Administration Servers View

The following table shows what is contained in the Administration Servers node in Enterprise View.

Node	Contents
Administration Servers	Container node for Essbase Administration Server.
Properties	Displays a window where you can view and edit properties for Essbase Administration Server.
Users	Container node for all users defined for Essbase Administration Server.

Essbase Servers View

The following table shows what is contained in the Essbase Servers node in Enterprise View.

Node	Contents
Essbase Servers	Container node for all Essbase Servers that you have added to Enterprise View .
Applications	Container node for all applications on an Essbase Server.
Calculation Scripts	Container node for all calculation scripts associated with an application or database. This node is displayed only if a calculation script exists for that application or database.

Node	Contents
Report Scripts	Container node for all report scripts associated with an application or database. This node is displayed only if a report script exists for that application or database.
Rules Files	Container node for all rules files associated with an application or database. This node is displayed only if a rules file exists for that database.
Outline	Displays the database outline for viewing or editing.
Linked Reporting Objects	Displays a window where you can view and manage linked reporting objects (LROs) for a database.
Triggers	Displays a window where you can view and manage triggers for a database. This node is displayed only if a trigger exists for that database.
Filters	Displays a window where you can view and manage security filters defined for a database. This node is displayed only if a filter exists for that database.
Partitions	Container node for all partitions in which the database is a source or target.
Security	Expands to display container nodes for Essbase users and groups.
Users	Displays a window where you can view and manage all users defined for an Essbase Server.
Groups	Displays a window where you can view and manage all groups defined for an Essbase Server.
Disabled Usernames	Displays a window where you can view and activate usernames that have been disabled on an Essbase Server.

Customizing Enterprise View

You can create [custom views](#) that are subsets of Enterprise View. The only way to configure Enterprise View is to create a custom view; you cannot change the order of objects in Enterprise View, and you cannot remove objects from Enterprise View without actually deleting them from Essbase. You can remove an entire Essbase Server from your Enterprise View.

Adding Essbase Servers to Enterprise View

Enterprise View is a graphical tree view of the Essbase environment, including Essbase Administration Servers and Essbase Servers. You can populate Enterprise View with a specific set of Essbase Servers. Each Administration Services user can populate Enterprise View with a unique set of Essbase Servers; the mappings to the servers are stored as part of the Essbase Administration Server user properties.

Each time you connect to Administration Services, you are automatically [connected](#) to each Essbase Server you chose to display in Enterprise View, if the server is running. When you add an Essbase Server after you open Administration Services Console, you are connected to the server automatically. To operate on an Essbase Server that you have added to Enterprise View, the server must be running.

You can also [remove Essbase Servers](#) from Enterprise View.

➤ To add an Essbase Server to Enterprise View:

- 1 From Enterprise View, select the **Essbase Servers** node.
- 2 Right-click and select **Add Essbase Server** from the shortcut menu.

The Add Essbase Server dialog box is displayed.

- 3 Enter the name of the Essbase Server, including cluster name if necessary, that you want to add to your view.

Note: If the Agent port on Essbase Server is different from the [default port](#), you should also enter the port number, in this format: *ServerMachineName:Port#* (for example, jdoe2:4378)

- 4 If you are using native Essbase authentication:

- a. Enter the user name for the Essbase Server.
- b. Enter and confirm the password for the user.

- 5 If you are using [external authentication](#):

- a. Select **Use Single Sign On**.
- b. Enter the user's current login name.

- 6 **Optional:** If you are using SSL encryption, select **Use SSL**.

- 7 Click **OK**.

The Essbase Server that you added is displayed in Enterprise View.

Related Information

- [“Add Essbase Server Dialog Box” on page 452](#)
- [“Removing Essbase Servers from Enterprise View” on page 46](#)
- [“About Essbase Connections and Ports” on page 82](#)
- [“Connecting to Essbase Servers” on page 83](#)
- [“Disconnecting from Essbase Servers” on page 84](#)

Removing Essbase Servers from Enterprise View

Enterprise View displays only those Essbase Servers that are listed in your user properties on Essbase Administration Server. If you are no longer managing an Essbase Server that is displayed in Enterprise View, you can remove the server from your view. Removing a server from your view does not affect the views of other administrators.

➤ To remove an Essbase Server from Enterprise View:

- 1 From Enterprise View or a custom view, select the appropriate Essbase Server node.
- 2 Right-click and select **Remove Essbase Server** from the pop-menu.

The selected Essbase Server is removed from Enterprise View.

Related Information

- [“Adding Essbase Servers to Enterprise View” on page 45](#)
- [“Adding Objects to Enterprise View” on page 47](#)
- [“Removing Objects from Enterprise View” on page 47](#)
- [“Adding Essbase Administration Servers to Enterprise View” on page 57](#)
- [“Removing Essbase Administration Servers from Enterprise View” on page 59](#)
- [“About Enterprise View” on page 43](#)
- [“About Custom Views” on page 49](#)

Adding Objects to Enterprise View

When you create new Essbase objects, such as applications, databases, and calculation scripts, Enterprise View is updated to reflect your additions. To view recent changes made by other Essbase administrators, you need to [refresh Enterprise View](#).

To add an Essbase Server to Enterprise View, you need to change your user properties on Essbase Administration Server. See [“Adding Essbase Servers to Enterprise View” on page 45](#) for more information.

Related Information

- [“Removing Objects from Enterprise View” on page 47](#)
- [“Adding Essbase Servers to Enterprise View” on page 45](#)
- [“Removing Essbase Servers from Enterprise View” on page 46](#)
- [“Refreshing Enterprise View” on page 48](#)

Removing Objects from Enterprise View

When you delete Essbase objects from Essbase, such as databases, calculation scripts, and filters, Enterprise View is updated to reflect your deletions. To view recent changes made by other Essbase administrators, you need to [refresh Enterprise View](#).

To remove an Essbase Server from Enterprise View, you need to change your user properties on Essbase Administration Server. See [“Removing Essbase Servers from Enterprise View” on page 46](#) for more information. You cannot remove other Essbase objects, such as databases, from Enterprise View unless you delete them from Essbase. If you do not want to see a certain object in Enterprise View but you do not want to delete it from the server, create a custom view that does not include that object. See [“Creating Custom Views” on page 50](#).

Related Information

- [“Adding Objects to Enterprise View” on page 47](#)
- [“Refreshing Enterprise View” on page 48](#)
- [“Removing Essbase Servers from Enterprise View” on page 46](#)

Expanding and Collapsing Enterprise View

You can expand and collapse parts of the Enterprise View tree.

► To expand a node in Enterprise View:

1 From Enterprise View, select a node.

You can expand the following nodes: individual Essbase Server nodes, the Applications container node, individual application nodes, and individual database nodes.

2 Right-click and select **Expand all**.

All nodes under the selected node are expanded.

► To collapse a node in Enterprise View:

1 From Enterprise View, select a node.

You can collapse the following nodes: the Essbase Servers container node, individual Essbase Server nodes, the Applications container node, individual application nodes, and individual database nodes.

2 Right-click and select **Collapse all**.

All nodes under the selected node are collapsed.

Related Information

- [“About Enterprise View” on page 43](#)
- [“Navigating and Selecting Objects” on page 52](#)

Refreshing Enterprise View

When you create or delete Essbase objects, Enterprise View is updated to reflect your changes. To view recent changes made by other administrators, you need to refresh Enterprise View manually.

You refresh Enterprise View at the container node level. For example, to see the most recent list of applications, refresh the Applications container node. You cannot refresh Enterprise View as a whole.

► To refresh Enterprise View:

1 From Enterprise View, select a node.

2 Refresh the node by performing one of the following actions:

- Right-click and select **Refresh <object name> list**. The menu item changes depending on which container node you select.
- Collapse and re-expand the node.

3 The console updates that area of Enterprise View.

Related Information

- [“Adding Objects to Enterprise View” on page 47](#)
- [“Removing Objects from Enterprise View” on page 47](#)

About Custom Views

Enterprise View can contain multiple Essbase Servers, applications, and databases. You can create custom views of the Enterprise View tree in separate tabs in the navigation pane. Custom views can help reduce the number of mouse clicks it takes to navigate to an object in Enterprise View.

For example, if you perform tasks for a particular application on a regular basis, you might want to create a more manageable view of just that application. You can do this by adding the node for that application to a custom view.

Keep in mind the following information about custom views:

- You cannot add individual container nodes to a custom view. For example, you cannot select the Applications container node and add it to a custom view. You must select individual objects below container nodes to include in a custom view.
- You can add the following Essbase objects to a custom view: Essbase Servers, applications, databases, calculation scripts, report scripts, filters, and rules files. You cannot add Essbase users and groups, Essbase Administration Servers, or Essbase Administration Server users to a custom view.
- When you add an object, everything that appears below that object is also added, including container nodes.
- When you add an object to an existing custom view, the console adds the object as the last item in the tree. You can then [rearrange](#) objects in a custom view.

Note: Rearranging objects in a custom view does not affect the order of objects in Enterprise View. You cannot change the order of objects in Enterprise View.

- You can operate on objects from a custom view or from Enterprise View.

Any custom views you create are simply pointers to the same objects in Enterprise View. Because the Enterprise View tree and custom view trees behave identically, any changes you make to Enterprise View are reflected in a custom view, and conversely.

- You can have multiple custom views.

There is no limit to the number of custom views you can create. However, if you create many custom views, you may experience slower performance when loading the console. Also, after all space along the bottom of the navigation pane is filled with tabs, the tabs wrap into multiple rows and the Enterprise View area is smaller.

- Each custom view you create is named MyView<number> by default. You can [rename](#) custom view tabs to better describe their content.

- When you add an object to a custom view, that object is placed directly under the root node of the custom view. Under the root node, objects appear in the order in which you added them.
- If you are working from a custom view when you close Administration Services Console, that custom view is displayed instead of Enterprise View when you next log in to the console.

Related Information

- [“Creating Custom Views” on page 50](#)
- [“Removing Objects from Custom Views” on page 51](#)
- [“Renaming a Custom View Tab” on page 52](#)
- [“About Enterprise View” on page 43](#)

Creating Custom Views

You can create subsets of the Enterprise View tree in separate tabs in the navigation pane. Any custom views you create are simply pointers to the same objects in Enterprise View. Operations you perform on objects in Enterprise View are reflected in custom views, and conversely.

► To create a custom view of the Enterprise View tree:

- 1 From Enterprise View, select the object that you want the custom view to contain.
- 2 Create the custom view using one of the following methods:
 - Right-click and select **Add to**, and then **New custom view**.
 - Drag the object to the empty space next to the Enterprise View tab at the bottom of the navigation pane.

The console creates a new tab in the navigation pane and adds the selected object, and everything under that object, to the new tab. The tab is named MyView1 by default. The parent container node for the object is not added to the custom view.

► To add objects to an existing custom view:

- 1 From Enterprise View, select the object that you want to add.
- 2 Add the object to the custom view using one of the following methods:
 - Right-click, select **Add to**, and select the appropriate custom view.
 - Drag the object to the appropriate tab at the bottom of the navigation pane, and drop it on the tab. When you hover over a tab while dragging an object, the view changes to that custom view.

The console adds the object to the view as the last item in the tree. If you want to change the order of items in the view, [arrange them](#) in the desired order.

Related Information

- [“About Custom Views” on page 49](#)
- [“About Enterprise View” on page 43](#)
- [“Renaming a Custom View Tab” on page 52](#)
- [“Removing Objects from Custom Views” on page 51](#)

Removing Objects from Custom Views

You can remove objects from custom views, or you can remove entire custom views from the navigation pane. When you remove an object from a custom view, it is not removed from the Enterprise View tree, and it is not deleted from the Essbase Server. See [“Removing Objects from Enterprise View” on page 47](#) for more information.

You can remove only those objects that you added. For example, if you add the Sample application node to a custom view, you can remove only that node; you cannot remove the Basic database node under the Sample application node.

➤ To remove an object from a custom view:

- 1 In the custom view tree, select the object.
- 2 Right-click and select **Remove from custom view**.

➤ To remove an entire custom view:

- 1 Select the tab for the custom view that you want to remove.
- 2 Right-click on the tab and select **Remove <MyView>**.

➤ To remove all custom views:

- 1 Select the tab for any custom view.
- 2 Right-click on the tab and select **Remove all custom views**.

Related Information

- [“About Custom Views” on page 49](#)
- [“Creating Custom Views” on page 50](#)
- [“Renaming a Custom View Tab” on page 52](#)
- [“About Enterprise View” on page 43](#)

Arranging Objects in Custom Views

You can arrange the order of objects in a custom view. You can only arrange nodes that appear directly under the root node.

You cannot rearrange objects in Enterprise View.

► To arrange objects in a custom view:

- 1 In the navigation pane, select the tab for the custom view you want to arrange.
- 2 Right-click on the tab and select **Arrange nodes for <view name>**.
- 3 In the **Arrange Custom View Nodes** dialog box, select the node you want to move, and click **Move Up** or **Move Down**, as necessary.
- 4 Click **OK** to apply your changes and update the custom view.

Any expanded tree nodes are collapsed to the root level.

Related Information

- [“About Enterprise View” on page 43](#)
- [“About Custom Views” on page 49](#)
- [“Renaming a Custom View Tab” on page 52](#)
- [“Removing Objects from Custom Views” on page 51](#)

Renaming a Custom View Tab

When you create a custom view of Enterprise View, a new tab is added to the navigation pane, named MyView<number> by default. You can rename a custom view tab to better describe the contents of the custom view.

► To rename a custom view tab:

- 1 Select the custom view tab.
- 2 Right-click on the tab and select **Rename <view name>**.
- 3 In the **Rename Custom View** dialog box, enter the new name for the view.

Related Information

- [“About Custom Views” on page 49](#)
- [“About Enterprise View” on page 43](#)
- [“Creating Custom Views” on page 50](#)

Navigating and Selecting Objects

From Enterprise View, you can view and operate on Essbase Servers, Essbase Administration Server, and their related objects. Most tasks performed in the console are performed in relation to an Essbase object that you select in Enterprise View, such as an Essbase database. This topic describes how to navigate the Enterprise View tree and how to select objects.

You can view the contents of a node in Enterprise View or in a custom view in the following ways:

- Expand the node next to an object.

For example, expand the **Applications** container node to view a list of Essbase applications to which you have access. The list of applications is displayed below that node on the tree.

- Double-click the text of the object you want to expand.

You can collapse objects that you have expanded in the following ways:

- Collapse the node next to the object.
- Double-click the text of the object you want to collapse.

To select an object on the tree, click directly on the word or words next to the tree node. Clicking the plus/minus box next to an object expands or collapses the node but does not actually select the object.

To move up and down the Enterprise View tree, use the scroll bar in the navigation pane or the arrow buttons on your keyboard.

Related Information

- [“About Enterprise View” on page 43](#)
- [“Operating on Objects” on page 53](#)
- [“Right-Click Menus” on page 38](#)
- [“About Custom Views” on page 49](#)

Operating on Objects

From Enterprise View, you can view and operate on Essbase Servers, Essbase Administration Server, and their related objects. Most tasks performed in the console are performed in relation to an Essbase object that you select in Enterprise View, such as a database. This topic describes how to perform an action on an object you select in Enterprise View.

To perform an action on an object in Enterprise View or a custom view, click directly on the words next to the tree node. Clicking the node next to an object expands or collapses the object but does not actually select it.

After you select an object, you have several options for operating on it:

- Right-click, and select a command from the shortcut menu.
The shortcut menu items change dynamically to display only the commands that are relevant to the selected object.
- Select a command from the **Actions** menu on the menu bar.
These menu items change dynamically to display only the commands that are relevant to the selected object.
- Click a button on a toolbar that represents the command you want to perform. Hover the mouse pointer over a button to view a descriptive tooltip.

Depending on what menu item you select, a dialog box or window is displayed in the workspace pane.

For more information about right-click menus and alternatives, see [“Right-Click Menus” on page 38](#).

Related Information

- [“About Enterprise View” on page 43](#)
- [“Navigating and Selecting Objects” on page 52](#)
- [“Right-Click Menus” on page 38](#)

4

Managing Essbase Administration Servers

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About Essbase Administration Server

Administration Services includes a middle-tier server, called *Essbase Administration Server*, that enables communication between the client console and one or more Essbase Servers, thus supporting cross-server operations and persistence of user preferences.

System administrators create users on Essbase Administration Server. Users can then connect to Essbase Administration Server and [add the Essbase Servers](#) that they manage to Enterprise View. Essbase Administration Server manages the users' Essbase Server connections.

The node name and computer name for an Essbase Administration Server are the same. You can [display multiple Essbase Administration Server](#) names in Enterprise View.

Related Information

- “About Administration Services” on page 31
- “Administration Services Architecture” on page 31

- [“Setting Up Administration Services” on page 34](#)

About Essbase Administration Server Logs

When you start Essbase Administration Server, a log file is created in `WL_DOMAIN_HOME/servers/WEBLOGIC_NAME/logs/easserver.log`. `WL_DOMAIN_HOME` is the directory to which WebLogic is installed, and `WEBLOGIC_NAME` is the name of the server instance within WebLogic.

Essbase Administration Server log files record all requests received from clients (Administration Services Console) and indicate whether requests were successful. Log files are not cleared when Essbase Administration Server is shut down. You must control log file size manually.

For information about Essbase logs, see [“About Essbase Logs” on page 237](#).

Setting the Timeout Period for Administration Services Sessions

If you are using the default application server, your connection to Administration Services is terminated if, during a 45-minute period, no activity occurs between Essbase Administration Server and Administration Services Console. You can reconnect and save your work, or you can exit without reconnecting.

You can change the default timeout period.

► To change the default timeout period for Administration Services sessions:

- 1 **Unzip the** `EPM_ORACLE_HOME\products\Essbase\eas\server\AppServer\InstallableApps\Common\eas.ear` **file.**
- 2 **Within this file structure, unzip the** `eas.war` **file.**
- 3 **Within this file structure, open the** `web.xml` **file.**
- 4 **Locate the Servlet Session Configuration section.**
The default value for `session-timeout` is 45 minutes.
- 5 **Change the** `session-timeout` **value, in minutes.**
- 6 **Save and close the file.**
- 7 **Rezip the** `eas.war` **file.**
- 8 **Rezip the** `eas.ear` **file.**

Subsequent Administration Services sessions that exceed the number of minutes that you set are terminated.

Related Information

- [“Connecting to Essbase Administration Server” on page 33](#)

- [“Administration Services Architecture” on page 31](#)

Adding Essbase Administration Servers to Enterprise View

Enterprise View is graphical view of the Essbase environment.

You can populate a user's Enterprise View with a single-release or multiple-release set of Essbase Administration Servers, and users can populate their own views with single-release or multiple-release sets of Essbase Administration Servers.

You can also [remove Essbase Administration Servers](#) from Enterprise View.

► To add Essbase Administration Servers to Enterprise View:

1 From Enterprise View, select an Essbase Administration Server node.

2 Right-click, and select **Add Administration Server.**

The Add Administration Server dialog box is displayed.

3 Enter the name of an Essbase Administration Server.

4 Enter your user name for the Essbase Administration Server.

5 Click **OK.**

The name and the status of the Essbase Administration Server is displayed in Enterprise View.

Related Information

- [“About Enterprise View” on page 43](#)
- [“Removing Essbase Administration Servers from Enterprise View” on page 59](#)
- [“Connecting to Essbase Administration Server” on page 33](#)
- [“Disconnecting from Essbase Administration Server” on page 57](#)
- [“Adding Essbase Servers to Enterprise View” on page 45](#)

Disconnecting from Essbase Administration Server

From Enterprise View, you can disconnect from Essbase Administration Server and view [connection status](#) for each Essbase Administration Server. Closing Administration Services Console automatically disconnects you from the Essbase Administration Server to which you are connected.

For information about adding Essbase Administration Servers to or removing Essbase Administration Servers from Enterprise View, see [“Adding Essbase Administration Servers to Enterprise View” on page 57](#) or [“Removing Essbase Administration Servers from Enterprise View” on page 59](#).

For information about Administration Services ports, see [Specifying Communication Ports for Essbase Administration Server](#).

➤ To disconnect from Essbase Administration Servers:

- 1 From **Enterprise View**, select an **Essbase Administration Server** node.
- 2 Right-click, and select **Disconnect**.

All windows are closed, and you are asked to save unsaved changes. All nodes under the selected Essbase Administration Server node are collapsed, and the Essbase Servers node is collapsed. Until you reconnect to Essbase Administration Server, most console functionality is unavailable.

Related Information

- [“Connecting to Essbase Administration Server” on page 33](#)
- [“Removing Essbase Administration Servers from Enterprise View” on page 59](#)
- [“Adding Essbase Administration Servers to Enterprise View” on page 57](#)
- [“Checking the Status of Essbase Administration Server” on page 58](#)
- [“Connecting to Essbase Servers” on page 83](#)

Checking the Status of Essbase Administration Server

In Enterprise View, the status of an Essbase Administration Server is indicated next to its name.

➤ To identify the status of an Essbase Administration Server, expand an Essbase Administration Server node, and notice which status-indicator word is displayed:

Word	Status
Running	Server is running, but you are not connected to it.
Connected	Server is running, and you are connected to it.
Stopped	Server is not running.
Unknown	Server DNS entry is not available, or server name is misspelled.

Related Information

- [“Adding Essbase Administration Servers to Enterprise View” on page 57](#)
- [“Connecting to Essbase Administration Server” on page 33](#)
- [“Disconnecting from Essbase Administration Server” on page 57](#)

Removing Essbase Administration Servers from Enterprise View

Enterprise View lists the Essbase Administration Servers that you have added to your view. You can remove Essbase Administration Servers from your view. Such removals do not affect the views of other administrators.

➤ To remove Essbase Administration Servers from Enterprise View:

- 1 From Enterprise View, select an Essbase Administration Server node.
- 2 Right-click, and select **Remove Administration Server**.

Related Information

- [“Adding Essbase Administration Servers to Enterprise View” on page 57](#)
- [“Disconnecting from Essbase Administration Server” on page 57](#)
- [“Connecting to Essbase Administration Server” on page 33](#)
- [“About Enterprise View” on page 43](#)

Creating Users on Essbase Administration Server

Note: This functionality does not apply to [EPM System security mode](#).

If you have Administrator privileges for Essbase Administration Server, you can create Administration Services users. The users that you create can use Administration Services Console to operate on Essbase Servers and to manage Essbase. Spreadsheet users do not need to be created on Essbase Administration Server.

You can create users who log on using native Essbase Administration Server authentication or users who log on using external authentication. For external authentication, Essbase Administration Server must be properly configured, as described in the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.

You can create Administration Services users from Enterprise View or with User Setup Wizard.

➤ To create Administration Services users with [User Setup Wizard](#), select **Wizards**, and then **User Setup Wizard**, and follow the steps of the wizard.

➤ To create Administration Services users from Enterprise View:

- 1 From Enterprise View, under an Essbase Administration Server node, select **Users**.
- 2 Right-click, and select **Create user**.
- 3 In the **Create User on Administration Server** dialog box, select Native or External.
- 4 If you selected **Native**, perform the following tasks:

- Enter the user's user name.
- Enter the user's e-mail address and full name.
- Confirm the user's password.

5 If you selected **External**:

- Click **Search**.
- In the [Find External User dialog box](#), select a search option, enter the user's search information, and click **Search**.
- From the list that is provided, select a user, and click OK.

6 If you want to give the user Administrator privileges, from **Administrator privileges**, select **True**.

7 Click **OK**.

Administration Services creates the user and updates Enterprise View.

8 [Add Essbase Servers to Enterprise View](#).

Related Information

- [“User Setup Wizard” on page 658](#)
- [“Find External User Dialog Box” on page 577](#)
- [“Adding Essbase Servers to Enterprise View” on page 45](#)
- [“Deleting Essbase Administration Server Users” on page 61](#)
- [“User Properties \(Administration Server\) Window” on page 656](#)
- [“Creating Users on Essbase Servers” on page 262](#)

Changing Passwords for Essbase Administration Server Users

Note: This functionality does not apply to [EPM System security mode](#).

You can change your Essbase Administration Server password. If you have Administrator privileges for Essbase Administration Server, you can also change other users' passwords.

Changes to Essbase Administration Server passwords do not affect Essbase passwords. For information about changing Essbase passwords, see [“Changing Passwords for Essbase Server Users” on page 282](#).

► To change passwords for Essbase Administration Server users:

- 1** From Enterprise View, under an Essbase Administration Server node, expand **Users**.
- 2** Select a user, right-click, and select **Edit properties**.

If you are changing the password for the default administrator account, select `admin`.

- 3 In **Password** and **Confirm password**, enter and reenter a new password.
- 4 Click **Apply**.

Related Information

- [“Creating Users on Essbase Administration Server” on page 59](#)
- [“Changing Passwords for Essbase Server Users” on page 282](#)
- [“Deleting Essbase Administration Server Users” on page 61](#)
- [“Renaming Essbase Administration Server Users” on page 61](#)

Renaming Essbase Administration Server Users

Note: This functionality does not apply to [EPM System security mode](#).

If you have Administrator privileges for Essbase Administration Server, you can rename any user, other than yourself, who is not connected to Essbase Administration Server.

Changes to Essbase Administration Server user names do not affect Essbase user names. For information about renaming Essbase users, see [“Renaming Essbase Server Users” on page 279](#).

➤ To rename Essbase Administration Server users:

- 1 From Enterprise View, under an Essbase Administration Server node, expand **Users**.
- 2 Select a user, right-click, and select **Edit properties**.
- 3 In **User name**, enter a new user name.
- 4 Click **Apply**.

Administration Services renames the user and updates Enterprise View.

Related Information

- [“Creating Users on Essbase Administration Server” on page 59](#)
- [“Changing Passwords for Essbase Administration Server Users” on page 60](#)
- [“Deleting Essbase Administration Server Users” on page 61](#)

Deleting Essbase Administration Server Users

Note: This functionality does not apply to [EPM System security mode](#).

If you have Administrator privileges for Essbase Administration Server, you can delete users, other than yourself and the most recent user of Essbase Administration Server.

Users deleted from Essbase Administration Server are not deleted from Essbase. For information about deleting Essbase users, see [“Deleting Essbase Server Users” on page 280](#).

► To delete Essbase Administration Server users:

- 1 From Enterprise View, under an Essbase Administration Server node, expand **Users**.
- 2 Select a user, right-click, and select **Delete user**.
- 3 In response to the confirmation message, click **Yes**.

Administration Services deletes the user from Essbase Administration Server and updates Enterprise View.

Related Information

[“Creating Users on Essbase Administration Server” on page 59](#)

Specifying Communication Ports for Essbase Administration Server

If you chose to deploy Administration Services using a middle-tier application server, you can change communication ports after installation. If one of the default ports is in use by another application, you need to specify another port value.

To change the default communication ports used by Essbase Administration Server,

► To change the default communication ports used by Essbase Administration Server:

- 1 Launch the administration console for your application server:
- 2 Navigate to the appropriate page and make your changes.
- 3 If Essbase Administration Server is running, close it.
- 4 [Restart Essbase Administration Server](#).

You must restart Essbase Administration Server for the port settings to take effect.

Note: If you are running Essbase Administration Server as a Windows service, stop the Windows service and start Essbase Administration Server manually. See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide* for instructions.

Related Information

- [“Administration Services Architecture” on page 31](#)
- [“Connecting to Essbase Administration Server” on page 33](#)

Starting Essbase Administration Server

Essbase Administration Server runs in an agent window. The Essbase Administration Server agent window includes a log of server activities.

On Windows platforms, you can also start Essbase Administration Server as a Windows service. For more information, see the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.

To start Administration Services, first start Essbase Administration Server, then Administration Services Console.

► To start Essbase Administration Server:

1 Locate the directory to which you installed Essbase Administration Server.

2 From the directory, launch the appropriate executable for your platform:

- **Windows**—`MIDDLEWARE_HOME/user_projects/epmsystem1/bin/startEAS.exe`
- **UNIX (foreground)**—`MIDDLEWARE_HOME/user_projects/epmsystem1/bin/startEAS`
- **UNIX (background)**—`MIDDLEWARE_HOME/user_projects/epmsystem1/bin/startEAS &`

Note: On Windows, if you chose to add shortcuts to the Start menu during installation, you can also start Essbase Administration Server by selecting Start, then Programs, then Oracle EPM System, then Essbase, then Essbase Administration Services, then Start Administration Server. A text-mode Agent process or DOS window opens for Essbase Administration Server. When Essbase Administration Server starts properly, you see the following message: Server started successfully Waiting for client requests If you do not see this message, Essbase Administration Server has not started properly.

Related Information

- [Starting Administration Services Console](#)
- [“Connecting to Essbase Administration Server” on page 33](#)
- [“Setting Up Administration Services” on page 34](#)

Starting Administration Services Console

You can either run Administration Services Console using the standard thin client, or from a Web browser. To start Administration Services Console from a browser, see [“Starting Administration Services Web Console” on page 64](#).

Before you start Administration Services Console, start the Essbase Servers you want to manage, and [start Essbase Administration Server](#).

Note: You can no longer start Essbase from within Administration Services. For information on starting Essbase, see “Starting and Stopping Essbase using OPMN” in the *Oracle Essbase Database Administrator's Guide*.

► To start Administration Services Console thin client:

- 1 Locate the directory to which you installed Administration Services Console.
- 2 From the directory, launch the following executable: `\console\bin\admincon.bat`

Note: If you chose to add shortcuts to the Start menu during installation, you can also start Administration Services Console by selecting **Start**, then **Programs**, then **Oracle EPM System**, then **Essbase**, then **Administration Services**, and then **Start Administration Services Console**. When the **Administration Services Login** dialog box is displayed, [connect to Essbase Administration Server](#).

Related Information

- [Starting Essbase Administration Server](#)
- [“Starting Administration Services Web Console” on page 64](#)
- [“Connecting to Essbase Administration Server” on page 33](#)
- [“Setting Up Administration Services” on page 34](#)
- [“Shutting Down Administration Services” on page 66](#)

Starting Administration Services Web Console

Before you start Administration Services Console, start the Essbase Servers you want to manage, and [start Essbase Administration Server](#).

Note: You can no longer start Essbase from within Administration Services. For information on starting Essbase, see “Starting and Stopping Essbase using OPMN” in the *Oracle Essbase Database Administrator's Guide*.

► To start Administration Services Console using a browser:

- 1 Enter `http://server:port/easconsole/console.html` in the browser URL window, where *server* is the application server running Essbase Administration Server and *port* is the port number.
- 2 Select your locale country and language from the drop-down box.
- 3 **Optional:** Select **Enable Console Logging** to log console activity, or clear **Enable Console Logging** to stop logging.

Note: To enable or disable console logging for Administration Services using the standard thin client, see the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.

- 4 **Optional:** Change log file size, log folder size, or log format options. File sizes are in bytes.
- 5 Click **Launch**.

Related Information

- [“Starting Administration Services” on page 32](#)
- [“Starting Administration Services Console” on page 63](#)
- [“Connecting to Essbase Administration Server” on page 33](#)
- [“Setting Up Administration Services” on page 34](#)
- [“Shutting Down Administration Services” on page 66](#)

Specifying an E-mail Server

To enable administrators to e-mail information directly from Administration Services Console to other administrators or to Oracle Technical Support, an outgoing mail (SMTP) server must be specified on the Essbase Administration Server computer.

SMTP (Simple Mail Transfer Protocol) is a protocol for sending e-mail messages between servers. When an administrator sends e-mail from Administration Services Console, the specified SMTP server is used to send the message to the receiver's e-mail client.

For information about how to e-mail information from Administration Services Console, see [“E-mailing Essbase Information” on page 87](#).

➤ To specify an outgoing mail server:

- 1 [Start Administration Services](#).
- 2 From the Administration Services Console window, select the appropriate Essbase Administration Server.
- 3 Right-click and select **Edit properties** from the popup menu.
- 4 In the **Admin Server Properties** window, select the **Configuration** tab.
- 5 In the **E-mail Server** area, enter the name of the SMTP server.
- 6 Click **Apply** and close the **Admin Server Properties** window.

Related Information

- [“E-mailing Essbase Information” on page 87](#)
- [“Admin Server Properties Window” on page 455](#)

Shutting Down Administration Services

When you close Administration Services Console, you are automatically disconnected from Essbase Administration Server and from all Essbase Servers you are connected to. For information about how Essbase connections and ports are established and released, see [“About Essbase Connections and Ports”](#) on page 82.

► To shut down Administration Services:

1 To shut down Administration Services Console, select **File, and then **Exit**.**

You are prompted to save any unsaved settings, scripts, modifications, and so forth. If your session times out but you still have open files that require action (for example, a report script), you are prompted to log back on to Administration Services Console before closing.

2 To shut down Essbase Administration Server, launch the following executable:

- Windows: `EPM_ORACLE_INSTANCE\bin\stopEssbaseAdminServices.bat`
- UNIX: `EPM_ORACLE_INSTANCE\bin\stopEssbaseAdminServices.sh`

Note: On Windows, if you chose to add shortcuts to the **Start** menu during installation, you can also stop Essbase Administration Server by selecting **Start**, then **Programs**, then **Oracle EPM System**, then **Essbase**, then **Administration Services**, then **Stop Administration Server**.

Related Information

- [“Disconnecting from Essbase Servers”](#) on page 84
- [“Starting Administration Services”](#) on page 32

5

Managing Aggregate Storage

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About Aggregate Storage

Aggregate storage is the Essbase database storage model that supports large-scale, sparsely distributed data that is categorized into many, potentially large dimensions. Selected data values are aggregated and stored, typically with improvements in aggregation time. Aggregate storage is an alternative to [block storage](#) (dense-sparse configuration).

A [sample application](#) (ASOsamp), which is installed with Essbase, demonstrates aggregate storage functionality. For the sample application, a data source file (`dataload.txt`) and a rules file (`dataload.rul`) are installed in the database directory (`ARBORPATH\app\ASOsamp\sample`).

Related Information

- “Comparison of Aggregate and Block Storage” in the *Oracle Essbase Database Administrator's Guide*

- [“About Block Storage” on page 68](#)
- [“Workflow for Working with Aggregate Storage Applications” on page 68](#)

Workflow for Working with Aggregate Storage Applications

Step	Task	More Information
1.	Create an aggregate storage application and database manually or by using the “Aggregate Storage Outline Conversion Wizard” on page 456 to convert a block storage outline.	<ul style="list-style-type: none"> • “Creating Applications” on page 90 • “Creating Databases” on page 98 • “Aggregate Storage Outline Conversion Wizard” on page 456
2.	Create an aggregate storage outline by using the “Aggregate Storage Outline Conversion Wizard” on page 456 to convert a block storage outline, by populating the outline that is created when a database is created, or by using data sources and rules files to build dimensions and members (dimension build).	<ul style="list-style-type: none"> • “About Aggregate Storage Outlines” on page 69 • “Aggregate Storage Outline Conversion Wizard” on page 456
3.	Optional: Use the Create Date-Time Dimension wizard to create a date-time dimension and the associated attribute dimensions.	<ul style="list-style-type: none"> • “Create Date-Time Dimension Wizard” on page 648 • “Aggregate Storage Time-Based Analysis” in the Oracle Essbase Database Administrator's Guide
4.	Use tablespaces to optimize data storage and retrieval for data files and work files.	“Managing Tablespaces” on page 76
5.	Specify the maximum size of the aggregate storage cache.	“Sizing the Aggregate Storage Cache” on page 77
6.	Load data into the database (may be combined with a dimension build). At this point, aggregations exist for all level 0 combinations, and retrievals can be executed against the database.	“Loading Data and Building Dimensions” on page 199
7.	Calculate selected aggregations on the database.	“Using Aggregations to Improve Retrievals” on page 74
8.	View database statistics.	“Viewing Aggregate Storage Statistics” on page 79
9.	Optional: Use the “Aggregate Storage Partition Wizard” on page 459 to enable write-back functionality.	“Aggregate Storage Partition Wizard” on page 459
10.	View data with Spreadsheet Add-in, Data Preview Grid, other Oracle tools, or third-party tools.	<p>Appropriate product documentation.</p> <p>“Previewing Data” on page 331</p>

About Block Storage

Block storage is the Essbase database storage model that categorizes dimensions as sparse or dense and stores data in blocks. Block storage is designed for applications that perform interactive planning, allocations, and sophisticated analytics:

- Sales forecasting, which may be write-back intensive and require what-if analysis
- Profitability analysis, which may require cost allocations across products and customers
- Financial consolidation, which may require currency conversions and inter-company eliminations

Essbase also provides an aggregate storage model, which can produce dramatic improvements in both database aggregation time and dimensional scalability for certain types of applications. For an explanation of and workflow for aggregate storage, see [“Workflow for Working with Aggregate Storage Applications” on page 68](#).

Related Information

- “Basic Architectural Elements” in the *Oracle Essbase Database Administrator's Guide*
- “Comparison of Aggregate and Block Storage” in the *Oracle Essbase Database Administrator's Guide*

About Aggregate Storage Outlines

You can create aggregate storage outlines in various ways:

- Use the [“Aggregate Storage Outline Conversion Wizard” on page 456](#) to convert block storage outlines to aggregate storage. The wizard provides a list of changes that must be made. You can modify outlines manually, or the wizard can modify outlines automatically. The wizard does not convert formulas.

Caution! Do not use the file system to copy outline files manually, especially between block storage and aggregate storage databases. See [“Copying Outlines” on page 132](#).

- Create aggregate storage applications and databases. Aggregate storage outlines are created when you create databases. Then, you can populate the outlines.
- Load dimensions and members into aggregate storage outlines by using data source files and rules files (dimension builds).

Related Information

- “Aggregate Storage Applications, Databases, and Outlines” in the *Oracle Essbase Database Administrator's Guide*
- “Comparison of Aggregate and Block Storage” in the *Oracle Essbase Database Administrator's Guide*

About Aggregate Storage Security

Defining and executing aggregations requires at least Calculation permissions. Because dimension builds clear databases, they can be performed only by users with Write permissions.

In all other areas, security for aggregate storage applications and block storage applications is the same.

Related Information

[“About Security and Permissions” on page 253](#)

Converting Block Storage Outlines to Aggregate Storage

Use the [“Aggregate Storage Outline Conversion Wizard” on page 456](#) to convert block storage outlines to aggregate storage. The wizard provides a list of changes that must be made. You can modify outlines manually, or the wizard can modify the outlines automatically. The wizard does not convert formulas to MDX.

Essbase supports the following scenarios for converting block storage outlines to aggregate storage outlines:

- Non-Unicode block storage outline to non-Unicode aggregate storage outline
- Non-Unicode block storage outline to Unicode aggregate storage outline
- Unicode block storage outline to Unicode aggregate storage outline

The following conversion scenarios are not supported:

- Unicode block storage outline to non-Unicode aggregate storage outline
- Aggregate storage outline to a block storage outline

► To convert block storage outlines to aggregate storage:

- 1 Select **File**, then **Wizards**, and then **Aggregate Storage Outline Conversion**.
- 2 In the [Aggregate Storage Outline Conversion Wizard](#), follow the instructions.
- 3 If you need assistance, click **Help**.

Related Information

- [“About Aggregate Storage” on page 67](#)
- [“About Aggregate Storage Outlines” on page 69](#)
- [“Aggregate Storage Outline Conversion Wizard” on page 456](#)

Creating Formulas for Aggregate Storage Databases

In aggregate storage databases, formulas must be written as numeric value expressions in the MDX language. Formulas are permitted only on members of dynamic hierarchies and on the accounts dimension. You can [specify a solve order](#) for formulas within a dimension.

Formulas are calculated only at retrieval time; calculated formula values are not stored.

➤ To create or edit formulas:

1 [Open an outline in edit mode.](#)

The **Outline** tab is displayed.

2 Right-click a member to which a formula is attached, and select **Edit member properties**.

3 In the **Member Properties** dialog box, select the **Formula** tab.

4 Following MDX syntax, enter a formula in the text box provided.

5 **Optional:** Use a predefined template to generate your formula:

- a. Click **MDX Templates**.
- b. In **ASO MDX Formula Templates**, select a formula template from **Select MDX Templates**.
- c. Enter parameter information in the provided fields.
- d. Click **Insert Formula**.
- e. **Optional:** Perform additional edits to the generated formula in the text box.

6 Click **OK** to save the formula.

Related Information

- [“About Aggregate Storage” on page 67](#)
- [“ASO MDX Formula Templates Dialog Box” on page 482](#)
- “Developing Formulas on Aggregate Storage Outlines” in the *Oracle Essbase Database Administrator's Guide*
- [Specifying Calculation Order for Members and Dimensions in Aggregate Storage Databases](#)
- “Calculating Aggregate Storage Databases” in the *Oracle Essbase Database Administrator's Guide*
- *Oracle Essbase API Reference*

Specifying Calculation Order for Members and Dimensions in Aggregate Storage Databases

When multidimensional queries are executed, individual cells are evaluated. The order in which cell calculations should occur may be ambiguous. For aggregate storage databases, to remove ambiguity, you can use the solve order property to specify calculation priority for members and dimensions.

The value of the solve order property determines the priority with which a formula is calculated. The formula on the member with the highest solve order is calculated first.

You can specify solve order (between 1 and 127) at the member level or at the dimension level. Members with a solve order of 0 (the default value) inherit the solve order of their dimension. Members with the same solve order are evaluated in the order in which their dimensions are displayed in the database outline. Members with no solve order are evaluated after members with a solve order.

For information and examples about solve order, see the *Oracle Essbase Database Administrator's Guide*.

Note: During dimension builds, you can use dimension properties to specify calculation order.

► To specify calculation order for formulas in aggregate storage databases:

1 **Open an outline in edit mode.**

The **Outline** tab is displayed.

2 **Right-click a dimension or member, and select *Edit member properties*.**

3 **In the *Member Properties* dialog box, select the *Information* tab.**

4 **In *Member solve order*, enter a number representing the placement of the formula attached to the selected member or dimension within the order of calculations.**

5 **Click *OK*.**

Related Information

- “Calculation Order” in the *Oracle Essbase Database Administrator's Guide*
- [“Creating Formulas for Aggregate Storage Databases” on page 70](#)
- [“Member Properties Dialog Box—Information Tab” on page 595](#)

Defining Hierarchies in Aggregate Storage Outlines

In aggregate storage databases, within dimensions you can create two types of hierarchies:

- Stored
- Dynamic

Each hierarchy type provides unique advantages and restrictions. One dimension can contain both hierarchy types. To use both hierarchy types within one dimension, you must enable multiple hierarchies for the dimension. The generation 1 members of dimensions that are enabled for multiple hierarchies are tagged label-only.

The dimension tagged as accounts is automatically considered a dynamic hierarchy. You cannot specify the accounts dimension as a stored hierarchy.

For information about restrictions imposed by dynamic hierarchies and stored hierarchies, see the *Oracle Essbase Database Administrator's Guide*.

Note: During dimension builds, you can use dimension properties to designate hierarchies as dynamic or stored.

► To enable multiple hierarchies for dimensions:

1 [Open an outline in edit mode.](#)

The **Outline** tab is displayed.

- 2 Right-click a dimension, and select **Edit member properties**.
- 3 In the **Member Properties** dialog box, select the **Information** tab.
- 4 In **Hierarchy**, select **Hierarchies Enabled**.
- 5 Click **OK**.

➤ To tag dimensions or generation 2 members as dynamic or stored hierarchies:

- 1 [Open an outline in edit mode](#).

The **Outline** tab is displayed.

- 2 Right-click a dimension or member, and select **Edit member properties**.
- 3 In the **Member Properties** dialog box, select the **Information** tab.
- 4 In **Hierarchy**, select **Dynamic** or **Stored**.
- 5 If multiple hierarchies are enabled for the dimension, you can repeat steps 1–4 for all generation 2 members of the dimension, thus selecting a hierarchy type for each member.
- 6 Click **OK**.

Related Information

- “Hierarchies” in the *Oracle Essbase Database Administrator's Guide*
- [“Member Properties Dialog Box—Information Tab” on page 595](#)

Tracking Query Data for Aggregation View Selection

You can use query data to select the most appropriate set of aggregate views to materialize for a database. To capture data about the cost of each query that is performed against the database, you can enable query tracking. Once enabled, query tracking continues until one of the following happens:

- Query tracking is disabled for the database, as described in this topic.
- The application is shut down. If the application is shut down, query tracking does not resume automatically when the application is restarted.
- Additional aggregate views are materialized for the database. Because query tracking data becomes invalid when additional views are materialized, materializing any new aggregate views resets the query tracking.

Query tracking, which is stored only in memory, includes queries from Oracle Hyperion Web Analysis, the grid API, report scripts, Java APIs, and so forth.

For information about how query cost is defined and how query data is stored, see “Selecting Views Based on Usage” in the *Oracle Essbase Database Administrator's Guide*.

➤ To enable or disable query tracking for aggregate storage databases:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Query tracking**, and then **Enable or Query Tracking**, and then **Disable**.

When you enable query tracking, Essbase begins recording query information. When you disable query tracking, Essbase stops recording query information and clears query data from memory.

Related Information

- [“Aggregation Design Wizard” on page 462](#)
- “Selecting Views Based on Usage” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

alter database (MaxL) in the *Oracle Essbase Technical Reference*

Using Aggregations to Improve Retrievals

In response to retrieval requests, values loaded to level 0 cells are aggregated and [formulas](#) of accounts members are calculated.

To improve retrieval performance, Essbase can materialize and store aggregate views. The stored results are called *aggregations*. For databases for which you have Calculation permissions, you can use the Aggregation Design Wizard to design aggregations.

For complete information about calculating aggregate storage databases, see the *Oracle Essbase Database Administrator's Guide*.

➤ To design aggregations:

- 1 From Enterprise View or a custom view, select an aggregate storage database.
- 2 Right-click, and select **Design aggregation**.
- 3 In the [Aggregation Design Wizard](#), select a task, and follow the instructions.
- 4 If you need assistance, click **Help**.

Related Information

- [“Aggregation Design Wizard” on page 462](#)
- “Calculating Aggregate Storage Databases” in the *Oracle Essbase Database Administrator's Guide*
- [“Creating Formulas for Aggregate Storage Databases” on page 70](#)
- [“Loading Data and Building Dimensions” on page 199](#)
- [“About Aggregate Storage” on page 67](#)

Related Commands

- execute aggregate process (MaxL) in the *Oracle Essbase Technical Reference*
- query database (MaxL) in the *Oracle Essbase Technical Reference*

Clearing Data from Aggregate Storage Databases

You can clear data from an aggregate storage database using one of these methods:

- Clear all data (requires Database Manager or Administrator permissions)
 - Cleared data values are set to #MISSING.
 - After data is cleared, data files are not deleted; however, Essbase attempts to shorten the files and give as much space as possible back to the operating system. For information about managing storage for aggregate storage applications, see the *Oracle Essbase Database Administrator's Guide*.

- Clear all aggregations (requires Calculation permissions)

All but level 0 values are cleared. Thus, all aggregate cells are removed from the database, and the disk area is available for other uses.

- Clear partial data (requires Database Manager or Administrator permissions)

Use an MDX set expression to specify the region to be cleared. Follow these guidelines:

- The region must be symmetrical.
- Individual members in any dimension in the region specification must be stored members.
- Members in the region cannot be Dynamic members (members with implicit or explicit MDX formulas) nor from attribute dimensions.
- Members in the region can be upper-level members in stored hierarchies.

For information about MDX syntax, see the MDX section of the *Oracle Essbase Technical Reference*.

Related Information

- [“Clearing Data” on page 112](#)

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- resetdb (ESSCMD) in the *Oracle Essbase Technical Reference*
- cleardata (calculation command) in the *Oracle Essbase Technical Reference*

➤ To clear data from aggregate storage databases:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select the appropriate command:

- **Clear**, and then **All data**
- **Clear**, and then **All aggregations**
- **Clear**, and then **Partial data**

Enter an MDX set expression that specifies the region of data to be cleared.

- 3 At the confirmation message, click **Yes**.

Selecting an Accounts Dimension for Aggregate Storage

Within aggregate storage databases, when you mark a dimension as accounts, you enable compression. Compression estimates, which are related to the size of the database on disk, change, depending on which dimension is tagged as accounts.

You can view estimated compression statistics, to help you determine which dimension to tag as accounts. You can view actual compression statistics in the [Compression tab of the Database Properties window](#).

Note: You can view compression statistics only for databases that contain data.

► To select an accounts dimension:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Select accounts dimension**.

The [Select Accounts Dimension dialog box](#) is displayed.

- 3 Select a dimension, and click **OK**.
- 4 At the confirmation message, click **Yes**.

The outline is updated and restructured.

Related Information

- [“Select Accounts Dimension Dialog Box” on page 636](#)
- [“Database Properties Window—Compression Tab” on page 530](#)
- “Choosing an Accounts Dimension to Manage Database Compression” in the *Oracle Essbase Database Administrator's Guide*

Managing Tablespaces

Essbase uses tablespaces to optimize data storage and retrieval for [aggregate storage](#) data files and work files. Tablespaces are location definitions that map data objects, such as aggregate views and aggregations, to files.

Essbase sets up two tablespaces that cannot be altered (log and metadata) and two tablespaces that can be altered (default and temp). You can change the size and location of the default and temp tablespaces, but you cannot remove or rename them. Within all four tablespaces, data is stored in file locations. You can modify internal file locations and can delete file locations that do not contain data.

➤ To manage tablespaces for aggregate storage applications:

- 1 From Enterprise View or a custom view, select an application.
- 2 Right-click, and select **Edit properties**.
- 3 In the **Application Properties** window, select the **Tablespaces** tab.
- 4 Perform one or more actions:
 - To add a file location to a tablespace, click **Add Location**, and enter the path and parameters.
 - To edit a file location, click in a cell, and modify parameters.

Note: You cannot edit file-location paths.

- To remove a file location from a tablespace, select a row, and click **Drop Location**.
- 5 Click **Apply**.

Related Information

- [“Application Properties—Tablespaces Tab” on page 477](#)
- “Managing Storage for Aggregate Storage Applications” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- alter tablespace (MaxL) in the *Oracle Essbase Technical Reference*
- display tablespace (MaxL) in the *Oracle Essbase Technical Reference*

Sizing the Aggregate Storage Cache

Essbase uses the aggregate storage cache to facilitate use of memory during data loads, aggregations, and retrievals. When an aggregate storage application is started, Essbase allocates a small area in memory as the aggregate storage cache for the application. As needed, Essbase increases the cache size incrementally until the maximum cache size specified for the application is reached or until the operating system denies additional allocations.

You can view the current aggregate cache size, and you can change the setting for maximum aggregate cache size. For information about managing the aggregate storage cache, see the *Oracle Essbase Database Administrator's Guide*.

- To view and change the maximum size of an aggregate storage cache:
- 1 From Enterprise View or a custom view, select an application.
 - 2 Right-click, and select **Edit properties**.
 - 3 In the **Application Properties** window, select the **General** tab.
 - 4 Next to the **Pending cache size limit** node, enter a value, in megabytes, for the size of the cache.
 - 5 Click **Apply**.

The cache setting becomes effective after the application is restarted.

Related Information

- [“Application Properties—General Tab” on page 475](#)
- “Managing the Aggregate Storage Cache” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- `alter application (MaxL)` in the *Oracle Essbase Technical Reference*
- `query application (MaxL)` in the *Oracle Essbase Technical Reference*

Compacting Aggregate Storage Outline Files

As aggregate storage outline files (.otl files) are changed, they may increase in size. By compacting such files, you can remove the records of deleted members and thus reduce file size.

Note: This functionality does not apply to block storage databases.

- To compact outline files:
- 1 From Enterprise View or a custom view, locate a database.
 - 2 Right-click the **Outline** node, and select **Compact**.
 - 3 **Optional:** If you want to continue working during the compaction process, in the **Compact Outline dialog box**, select **Compact outline in the background**.
 - 4 Click **OK**.

Related Information

- [“Compact Outline Dialog Box” on page 486](#)
- [“About Aggregate Storage Outlines” on page 69](#)

Related Commands

`alter database (MaxL)` in the *Oracle Essbase Technical Reference*

Viewing Aggregate Storage Statistics

You can view statistics that are specific to aggregate storage databases, such as:

- Cache usage
- Disk space
- Dimensions
- Aggregations
- Size and number of incremental data slices
- Cost of querying incremental data slices

➤ To view runtime statistics for aggregate storage databases:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Edit**, and then **Properties**.
- 3 In the **Database Properties** window, select the **Statistics** tab.
- 4 Expand the **Aggregate storage statistics** node and the **Run-time** node.

Related Information

[“Database Properties Window—Statistics Tab” on page 534](#)

Related Commands

- query database (MaxL) in the *Oracle Essbase Technical Reference*
- query application (MaxL) in the *Oracle Essbase Technical Reference*

6

Managing Essbase Servers, Applications, and Databases

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Managing Essbase Servers

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About Essbase Servers

Essbase is a multidimensional database for storing data with an unlimited number of dimensions, such as time, accounts, regions, channel, or product. Essbase manages analytical data models, data storage, calculations, and data security. See the *Oracle Essbase Database Administrator's Guide* for complete information about Essbase.

Essbase is different from Essbase Administration Server. Essbase Administration Server enables communication between individual Essbase Servers and Administration Services Console.

In Enterprise View, Essbase Servers are listed under the Essbase Servers container node. The node names for Essbase Servers are the same as their server computer names. For information about adding Essbase Servers to Enterprise View, see [“Adding Essbase Servers to Enterprise View” on page 45](#).

Related Information

- [“Administration Services Architecture” on page 31](#)
- [“Connecting to Essbase Servers” on page 83](#)
- [“Adding Essbase Servers to Enterprise View” on page 45](#)

About Essbase Connections and Ports

The number of ports available for an instance of Essbase represents the number of licensed concurrent connections. Essbase provides one reserve port for the system administrator. A system administrator uses the reserve port to log off one or more users when all other ports are in use. For more information about Essbase ports, see the *Oracle Essbase Database Administrator's Guide*.

For information about changing and connecting to nondefault Essbase Agent ports, see [“Connecting to Nondefault Agent Ports” on page 83](#).

In Administration Services, a port is in use only when an Essbase Server connection is established. Connections are established when you:

- Expand an Essbase Server node in Enterprise View.
- Select an Essbase Server node in Enterprise View, right-click, and select **Connect**.
- Use the [“User Setup Wizard” on page 658](#) or the [User Properties window](#) to add an Essbase Server to Enterprise View.
- Perform an operation that implicitly requires an Essbase Server connection, such as opening a script that is saved on an Essbase Server.
- Send MaxL statements to Essbase via [MaxL Script Editor](#).

Essbase connections are handled by the middle-tier Essbase Administration Server.

Connections to Essbase Servers are not established by simply logging on to Administration Services Console or by performing tasks specific to Essbase Administration Server or Administration Services Console. In addition, connections are not established when you edit objects that are saved locally. For example, you can open the console and edit a local calculation script without connecting to Essbase or using a port.

After an Essbase connection is established and a port is in use, the port remains in use until you manually [disconnect](#) from Essbase in Enterprise View or close the console, or until you exceed the timeout limit set for Essbase. If a process is running when you disconnect or close, the port is released, but the process continues until completion.

Related Information

- [“Connecting to Essbase Servers” on page 83](#)
- [“Disconnecting from Essbase Servers” on page 84](#)
- [“Checking Available Ports” on page 307](#)
- “Running Essbase Servers, Applications, and Databases” in the *Oracle Essbase Database Administrator's Guide*

Connecting to Essbase Servers

If you manually [disconnect](#) from an Essbase Server, you can reconnect. Essbase must be started before you can connect to it.

In Administration Services, connections to individual Essbase Servers are handled by the middle-tier Essbase Administration Server. You need not provide a user name and password to establish individual Essbase Server connections. For more information about how Essbase Server connections and ports are established and released, see [“About Essbase Connections and Ports” on page 82](#).

For information about adding Essbase Servers to Enterprise View, see [“Adding Essbase Servers to Enterprise View” on page 45](#).

You can connect to different releases of Essbase simultaneously from the Administration Services Console. See the Oracle Hyperion Enterprise Performance Management System Certification Matrix (<http://www.oracle.com/technology/products/bi/hyperion-supported-platforms.html>) for release compatibility information.

► To connect to an Essbase Server manually:

- 1 From Enterprise View or a custom view, find an Essbase Server.
- 2 Perform an action:
 - Right-click the Essbase Server node, and select **Connect**.
 - Expand the Essbase Server node.

Administration Services repopulates Enterprise View.

Related Information

[“Disconnecting from Essbase Servers” on page 84](#)

Connecting to Nondefault Agent Ports

You can change the default port used by the Essbase Agent. You may want to change the default if, for example, the default value is inappropriate for your site because it specifies a port number already in use or if you want to install a second Agent on a single computer to facilitate testing. For more information about specifying nondefault port values, see the *Oracle Essbase Database Administrator's Guide*.

If you change the default Agent port, you can specify that port when you define Essbase connection information in the [“User Setup Wizard” on page 658](#) or the [Administration Server User Properties window \(Essbase Servers tab\)](#). In either location, you can append the port number to the server machine name, as follows:

ServerMachineName:Port#

For example:

jdoe2:4378

Note: For information about partitioning and non-default Agent port requirements, see [“Repairing Partitions” on page 409](#).

Related Information

- [“About Essbase Connections and Ports” on page 82](#)
- [“Connecting to Essbase Servers” on page 83](#)
- [“Disconnecting from Essbase Servers” on page 84](#)
- [“Checking Available Ports” on page 307](#)
- [“Running Essbase Servers, Applications, and Databases” in the *Oracle Essbase Database Administrator's Guide*](#).

Related Commands

- `agentport` (`essbase.cfg` setting) in the *Oracle Essbase Technical Reference*
- `serverportbegin` (`essbase.cfg` setting) in the *Oracle Essbase Technical Reference*
- `serverportend` (`essbase.cfg` setting) in the *Oracle Essbase Technical Reference*
- `portinc` (`essbase.cfg` setting) in the *Oracle Essbase Technical Reference*

Disconnecting from Essbase Servers

From Enterprise View, you can disconnect from individual Essbase Servers. You can view connection status in the [Administration Server Properties window](#).

When you open Administration Services Console, you are connected automatically to each Essbase Server that is displayed in the Enterprise View tree. Connections are handled by the middle-tier Essbase Administration Server. For information about adding Essbase Servers to or removing Essbase Servers from Enterprise View, see [“Adding Essbase Servers to Enterprise View” on page 45](#) or [“Removing Essbase Servers from Enterprise View” on page 46](#).

For information about how Essbase ports are established and released, see [“About Essbase Connections and Ports” on page 82](#).

➤ To disconnect from an Essbase Server:

- 1 From Enterprise View or a custom view, select an Essbase Server.

2 Right-click and select **Disconnect** from the pop-menu.

You are prompted to save any unsaved changes, and then all nodes under the selected Essbase Server node in Enterprise View and in custom views are collapsed.

To disconnect from all Essbase Servers at one time, shut down Administration Services Console.

Related Information

- [“Connecting to Essbase Servers” on page 83](#)
- [“Connecting to Essbase Administration Server” on page 33](#)

Setting Essbase Server Properties

You can view and edit properties for an Essbase Server from one window, and you can open properties windows for multiple servers at the same time. This topic provides a list of Essbase Server properties that you can set.

You can also use the `essbase.cfg` configuration file to set server-wide properties. For information about how to create this file and about what settings are available, see the *Oracle Essbase Technical Reference*.

► To open the Essbase Server Properties window:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click and select **Edit**, then **Properties**.

You can set the following Essbase Server properties:

- [“Managing Password Longevity” on page 287](#)
- [“Disconnecting Users Automatically” on page 257](#)
- [“Disabling User Names” on page 284](#)
- [Permission to create Unicode-mode applications](#)

Related Information

- [“Essbase Server Properties Window” on page 469](#)
- [“About Essbase Server Monitoring” on page 305](#)

Related Commands

- `alter system (MaxL)` in the *Oracle Essbase Technical Reference*
- `display system (MaxL)` in the *Oracle Essbase Technical Reference*

Registering Essbase Server with Performance Management Architect

In order to deploy cubes from Oracle Hyperion EPM Architect to Essbase Server, you must register the appropriate Essbase Server instances with Performance Management Architect.

Note: To register Essbase Server instances with Performance Management Architect, the Essbase Server instances must be externalized to Oracle Hyperion Shared Services.

- To register Essbase Server with Performance Management Architect:
 - 1 Ensure that you are logged into Essbase Server and Essbase Administration Services Console with the same user name and password, and that this user is externalized.
 - 2 From Enterprise View, right-click the Essbase Servers node and select **Register Essbase Servers with BPM Architect**.
 - 3 In the **Register Essbase Servers with BPM Architect** dialog box, choose a server from the **Available** list in the top right pane, and either click the left arrow button or double-click the server name to move it to the **Select** pane.

The Essbase Server instances displayed in the **Available** list are servers that have been externalized in Shared Services.

The server you selected is now displayed under **Server Name** in the lower right portion of the dialog box; for example, aspen5.

- 4 Under **Instance Name** for the server you just selected, enter a user-friendly name for this registration.
For the example, for aspen5, you might provide the instance name, Esb for BPMA.
- 5 Click **OK**.

The next time you open the **Register Essbase Servers with BPM Architect** dialog box, the instance and server name that you registered is now displayed in the **Selected** pane. For example:

Esb for BPMA aspen5

- 6 Optional—Complete [step 1 on page 86](#) through [step 5 on page 86](#) for each Essbase Server instance you want to register with Performance Management Architect

Managing Essbase Server Permissions to Create Unicode-Mode Applications

To help prevent accidentally setting applications to Unicode mode, each Essbase Server has a property that gives it permission to create or migrate applications to Unicode mode.

This permission applies only to creating Unicode-mode applications and migrating applications to Unicode mode. You can work with Unicode-mode applications regardless of the value of this Essbase Server property. It is recommended that this property is not selected unless it is needed.

When Essbase has permission to create applications in, and migrate applications to, Unicode mode, Essbase is in Unicode mode.

You can see whether Essbase is in Unicode mode by viewing the server property, Permission to create Unicode-mode application.

Note: Unicode-mode applications cannot be changed to non-Unicode-mode applications.

- To view and enable or disable the Essbase permission for creating Unicode-mode applications:
 - 1 From Enterprise View or a custom view, select an Essbase Server.
 - 2 Right-click and select **Edit**, then **Properties**.
 - 3 View the **Permission to create Unicode-mode application** check box to see if Essbase is in Unicode mode or non-Unicode mode. Perform an action:
 - Select the check box to set Essbase Server to Unicode mode.
 - Clear the check box to set Essbase Server to non-Unicode mode.
 - 4 Click **Apply**.

Related Information

- [“Creating Unicode-Mode Applications” on page 119](#)
- [Migrating Applications to Unicode-Mode](#)
- [Essbase Server Properties - Security Tab](#)
- [“Setting Essbase Server Properties” on page 85](#)
- “Unicode and Non-Unicode Essbase Server Modes” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- alter system (MaxL) in the *Oracle Essbase Technical Reference*
- display system (MaxL) in the *Oracle Essbase Technical Reference*

E-mailing Essbase Information

You can e-mail information directly from Administration Services Console to other administrators or to Oracle Technical Support.

When you send an e-mail from the console, the e-mail message contains an XML or HTML attachment that can be opened in a browser. XML files can be viewed only in Internet Explorer 5.x or higher. E-mails that contain Essbase Server, application, or database properties require Internet Explorer 6.0 or higher. You can also send a personal comment to include in the body of the message.

When you send an e-mail, Essbase sends the message as a background process. An ID for the process is displayed in the Messages pane. You can use the ID to [track the status](#) of the e-mail process in the Background Process Status window. E-mail messages are encoded in UTF-8.

► To e-mail Essbase information from the console:

- 1 **Open a window or dialog box.**
- 2 **Select **File**, then **Send to**.**
- 3 In the **Send E-mail dialog box**, specify receivers, a subject line, and a comment (optional) to include in the e-mail.
- 4 **Click **Send**.**

If you receive an error about an SMTP server not being found, [specify a valid SMTP server](#) and send the e-mail again.

- 5 **Select **Tools**, then **View background processes** to open the **Background Process Status** window, where you can verify that the e-mail was sent successfully.**
- 6 If you want to view the results of an e-mail that was sent, select the appropriate row and click **View**.

Related Information

- [“Specifying an E-mail Server” on page 65](#)
- [“Send E-mail Dialog Box” on page 638](#)

Managing Substitution Variables

Substitution variables act as global placeholders for information that changes regularly. You create the variable and a corresponding string value, and the value can then be changed at any time. You can specify whether the substitution variable applies to an entire Essbase Server, an application, or a database.

You can create variables directly from the right-click menu on the Variables node, or in the Substitution Variables dialog box.

Note: When creating substitution variables using single quotes, precede the single quote with a forward slash. If you do not do this, the single quotes will be discarded.

► To manage a substitution variable:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click and select **Edit**, then **Variables**.
- 3 In **Substitution Variables**, select the application and database to which the variable should apply.
- 4 Specify or edit the variable name and value.
- 5 Click **Set** to apply the settings.

- 6 Stop and restart the application to make the new value available in outline formulas, partition definitions, and security filters.
- 7 To delete a variable, select the row containing the variable you want to delete, and click **Delete**.

Related Information

- [“Substitution Variables Window” on page 646](#)
- “Using Substitution Variables” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- alter system (MaxL) in the *Oracle Essbase Technical Reference*
- alter application (MaxL) in the *Oracle Essbase Technical Reference*
- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- createvariable (ESSCMD) in the *Oracle Essbase Technical Reference*
- listvariables (ESSCMD) in the *Oracle Essbase Technical Reference*
- updatevariable (ESSCMD) in the *Oracle Essbase Technical Reference*
- deletevariable (ESSCMD) in the *Oracle Essbase Technical Reference*

Copying Substitution Variables

You can copy substitution variables to any Essbase Server, application, or database to which you have appropriate access.

You can also migrate substitution variables across servers as part of application/database migration. See [“Migration Wizard” on page 597](#).

► To copy substitution variables:

- 1 From Enterprise View or a custom view, select the Essbase Server whose variables you want to copy.
- 2 Right-click and select **Edit**, then **Variables**.
- 3 In **Substitution Variables**, select a variable, and click **Copy**.
- 4 In **Copy Substitution Variables**, select the Essbase Server to which you want to copy variables.
- 5 In the **Application** drop-down list box, select the application to which you want to copy variables. To associate the variables with all applications on the selected Essbase Server, select **(all apps)**.
- 6 In the **Database name** drop-down list box, select the database to which you want to copy variables. To associate the variables with all databases in the selected application, select **(all dbs)**.
- 7 In the **Copy** column, select the check box next to each variable you want to copy.
 - To select all variables, click **Check all**.
 - To clear all selections, click **Clear all**.
- 8 If you want the selected variables to replace existing variables with the same name, select **Replace existing variable**.

9 Click **OK**.

Related Information

- [“Copy Substitution Variables Dialog Box” on page 495](#)
- [“Managing Substitution Variables” on page 88](#)

Using ESSCMD

You can pass ESSCMD commands to Essbase using the ESSCMD command-line interface. The ESSCMD interface is installed with Essbase Administration Server in:

`EAS_HOME\server\bin\esscmd.exe` (`EAS_HOME/server/bin/esscmd` on UNIX)

where `EAS_HOME` is the directory to which Administration Services is installed.

ESSCMD is also installed with Essbase. For information about using ESSCMD, see the *Oracle Essbase Database Administrator's Guide*.

Managing Applications

In this section:

- [“Creating Applications” on page 90](#)
- [“Starting Applications” on page 91](#)
- [“Configuring Applications to Start Automatically” on page 92](#)
- [“Stopping Applications” on page 93](#)
- [“Setting Application Properties” on page 93](#)
- [“Copying Applications” on page 94](#)
- [“Renaming Applications” on page 95](#)
- [“Deleting Applications” on page 96](#)
- [“Setting Essbase Default Options” on page 97](#)

Creating Applications

If you have Create/Delete Applications permissions, you can create applications ([block storage](#) or [aggregate storage](#) applications). When you create applications, Essbase creates application directories on the Essbase Server (`ARBORPATH\app\appname`). You must create an application before you can create a database.

➤ To create applications:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click, and select **Create**, then **Application**, and then **Using block storage** or **Create**, then **Application**, and then **Using aggregate storage**.

- 3 In the **Create Application** dialog box, if the preferred Essbase Server is not selected, select the preferred Essbase Server.
- 4 In **Application name**, enter a name for the application.
- 5 If you want to create a Unicode-mode application and if [the selected Essbase Server has permission](#), select **Unicode-mode**.

Caution! You cannot undo the Unicode-mode selection.

- 6 Click **OK**.

Essbase creates the application and updates Enterprise View.

Related Information

- [“Create Application Dialog Box” on page 497](#)
- “Creating Applications and Databases” in the *Oracle Essbase Database Administrator's Guide*
- “Process for Creating Aggregate Storage Applications” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- create application (MaxL) in the *Oracle Essbase Technical Reference*
- createapp (ESSCMD) in the *Oracle Essbase Technical Reference*

Starting Applications

You can start applications for which you have at least Read permission. Essbase loads newly started applications into memory on the Essbase Server.

You can specify that databases start when their parent applications start. In this case, if you start an application before users connect to the databases within the application, users may experience better initial performance (upon database connection) because the application and all associated databases are in memory.

You can start one application or all applications on Essbase Server. When you start an application, an application server process (ESSSVR) is started.

You can also configure applications to [start automatically](#).

➤ To start one application:

- 1 From Enterprise View or a custom view, select the application.
- 2 Right-click, and select **Start**, and then **Application**.

➤ To start all applications on an Essbase Server:

- 1 From Enterprise View or a custom view, under an Essbase Server, select the **Applications** node.
- 2 Right-click, and select **Start all applications**.

Related Information

- [“Configuring Applications to Start Automatically” on page 92](#)
- [“Viewing Application and Database Status” on page 312](#)
- “Starting and Stopping Applications” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- alter system (MaxL) in the *Oracle Essbase Technical Reference*
- loadapp (ESSCMD) in the *Oracle Essbase Technical Reference*
- login (ESSCMD) in the *Oracle Essbase Technical Reference*
- select (ESSCMD) in the *Oracle Essbase Technical Reference*
- start (Essbase Agent) in the *Oracle Essbase Technical Reference*

Configuring Applications to Start Automatically

If you have Application Manager permissions, you can automate application startup.

Application startup settings become effective after an application is stopped and restarted.

► To configure applications to start automatically:

- 1 From Enterprise View or a custom view, select an application.
- 2 Right-click, and select **Edit properties**.
- 3 In the **Application Properties** window, select the **General** tab.
- 4 Expand the **Startup** node.
- 5 Perform an action:
 - To configure the application to start when a user retrieves data from a database within the application, select **Allow users to start application**.
 - To configure the application to start when Essbase Server starts, select **Start application when Essbase Server starts**.
- 6 Click **Apply**.

Related Information

- [“Application Properties—General Tab” on page 475](#)
- [“Starting Applications” on page 91](#)

Related Commands

- alter application (MaxL) in the *Oracle Essbase Technical Reference*
- setappstate (ESSCMD) in the *Oracle Essbase Technical Reference*

Stopping Applications

When you stop applications, Essbase unloads the applications and all databases within the applications from memory on the Essbase Server. Thus, available memory is increased.

To ensure that databases within applications are not corrupted, you must stop applications properly.

On an Essbase Server, you can stop one application or all applications.

➤ To stop one application:

- 1 From Enterprise View or a custom view, select the application.
- 2 Right-click, and select **Stop**, and then **Application**.

➤ To stop all applications on an Essbase Server:

- 1 From Enterprise View or a custom view, under an Essbase Server, select the **Applications** node.
- 2 Right-click, and select **Stop all applications**.

Related Information

- [“Starting Applications” on page 91](#)
- [“Stopping Databases” on page 100](#)
- [“Viewing Application and Database Status” on page 312](#)

Related Commands

- alter system (MaxL) in the *Oracle Essbase Technical Reference*
- unloadapp (ESSCMD) in the *Oracle Essbase Technical Reference*
- stop (Essbase Agent) in the *Oracle Essbase Technical Reference*

Setting Application Properties

You can view and edit properties for one Essbase application from one window or for multiple applications from multiple windows.

To apply settings throughout Essbase, you may be able to use the `essbase.cfg` configuration file. For information about how to create this file and about what settings are available, see the *Oracle Essbase Technical Reference*.

➤ To set application properties:

- 1 From Enterprise View or a custom view, select an application.
- 2 Right-click, and select **Edit properties**.
- 3 In the **Application Properties** window, set one or more of the following properties:
 - [“Configuring Applications to Start Automatically” on page 92](#)

- [“Clearing Applications of User Activity” on page 261](#)
- [“Disabling Application-Level Security” on page 260](#)
- [“Setting Minimum Permissions for Applications” on page 258](#)
- [“Setting Timeout for Data Locks” on page 303](#)
- [“Limiting LRO File Sizes” on page 373](#)
- [“Migrating Applications to Unicode Mode” on page 120](#)
- [“Managing Tablespaces” on page 76](#)

Related Information

- [“Application Properties Window” on page 474](#)
- [“About Application Monitoring” on page 311](#)

Related Commands

- `alter application (MaxL)` in the *Oracle Essbase Technical Reference*
- `display application (MaxL)` in the *Oracle Essbase Technical Reference*
- `getappinfo (ESSCMD)` in the *Oracle Essbase Technical Reference*
- `getappstate (ESSCMD)` in the *Oracle Essbase Technical Reference*
- `setappstate (ESSCMD)` in the *Oracle Essbase Technical Reference*

Copying Applications

You can copy applications to Essbase Servers to which you have appropriate access. You can copy an application from one Essbase Server to another Essbase Server (for example, from a development server to a production server) or within an Essbase Server (for example, for testing or backup). Essbase copies applications between servers differently than it copies applications within servers.

Target and source applications must be of the same type (aggregate or block storage). Settings related to [member name uniqueness](#) requirements are retained.

To copy applications, you can use the following procedure or use [“Migration Wizard” on page 597](#). You should not use the file system to copy, move, rename, or delete applications. For information about using the file system to manage applications and databases during backup, see the *Oracle Essbase Database Administrator's Guide*.

Note: You cannot copy an application to a target Essbase Server whose version precedes the version of the source Essbase Server.

➤ To copy applications:

- 1 From Enterprise View or a custom view, select an application.
- 2 Right-click, and select **Copy**.

- 3 In the **Copy Application** dialog box, select the Essbase Server that will contain the application copy.
- 4 In **Application name**, enter a name for the application copy.
- 5 Click **OK**.

Essbase copies the application and updates Enterprise View.

Related Information

- [“Copy Application Dialog Box” on page 489](#)
- [“Migration Wizard” on page 597](#)
- “Reloading the Database” in the *Oracle Essbase Database Administrator's Guide*.

Related Commands

- create application (MaxL) in the *Oracle Essbase Technical Reference*
- createapp (ESSCMD) in the *Oracle Essbase Technical Reference*

Renaming Applications

You can rename applications for which you have Create/Delete Applications permissions.

When you rename an application, the application directory (ARBORPATH\app\appname) and some application objects, such as the application log, are also renamed.

➤ To rename applications:

- 1 From Enterprise View or a custom view, select an application.
- 2 Right-click, and select **Rename**.
- 3 In the **Rename Application** dialog box, enter a new name for the application.
- 4 Click **OK**.

If the application contains locked objects, Essbase displays a list of the objects and indicates who locked which object at what time.

- 5 If a list of locked objects is displayed, [unlock objects](#) and complete the rename operation by clicking **OK**.

If you do not have Administrator privileges, you can unlock only objects that you locked.

Provided that all objects are unlocked, Essbase renames the application and updates Enterprise View.

Related Information

- [“Rename Application Dialog Box” on page 627](#)
- [“Locking and Unlocking Objects” on page 105](#)

Related Commands

- alter application (MaxL) in the *Oracle Essbase Technical Reference*
- renameapp (ESSCMD) in the *Oracle Essbase Technical Reference*

Deleting Applications

You can delete applications for which you have Create/Delete Applications permissions.

When an application is deleted:

- All objects within the application are deleted.
- You are asked to unlock locked objects. Locked objects cannot be deleted. Non-administrators can unlock only the objects that they locked.
- The application directory (`ARBORPATH\app\appname`) and all files stored in it are deleted.
- Log chart information for the application (used for [Log Analyzer](#)) is deleted.
- Open windows associated with the application (for example, Application Properties, Sessions, and Locks) are closed. For windows that contain unsaved changes, you are asked to save changes.

► To delete applications:

- 1 From Enterprise View or a custom view, select an application.
- 2 Right-click, and select **Delete**, and then **Application**.
- 3 At the confirmation message, click **Yes**.

If the application contains locked objects, Essbase displays a list of the locked objects and indicates who locked which object at what time.

- 4 If the application contains locked objects, [unlock objects](#), complete the delete operation, and click **OK**.

Essbase deletes the application—provided that all locked objects were unlocked—and updates Enterprise View.

Related Information

- [“Deleting Databases” on page 104](#)
- [“Locking and Unlocking Objects” on page 105](#)

Related Commands

- drop application (MaxL) in the *Oracle Essbase Technical Reference*
- deleteapp (ESSCMD) in the *Oracle Essbase Technical Reference*

Setting Essbase Default Options

You can specify the default behavior for certain Essbase operations, such as opening objects in locked or unlocked mode. These settings are stored on Essbase Administration Server so that your preferences for certain behaviors are always the same no matter which computer you connect from.

➤ To set Essbase default options for the console:

- 1 From the menu bar, select **Tools**, and then **Console options**.
- 2 In the **Options** dialog box, select the **Essbase** tab.
- 3 Select the desired [Essbase default options](#).
- 4 Click **Apply** to save the settings.
- 5 Click **Close** to close the dialog box.

Related Information

- [“Options Dialog Box” on page 609](#)
- [“Locking and Unlocking Objects” on page 105](#)
- [“Executing Calculation Scripts” on page 345](#)
- [“Executing Report Scripts” on page 366](#)

Managing Databases

In this section:

- [“Creating Databases” on page 98](#)
- [“Starting Databases” on page 99](#)
- [“Configuring Databases to Start Automatically” on page 99](#)
- [“Stopping Databases” on page 100](#)
- [“Setting Database Properties” on page 101](#)
- [“Annotating Databases” on page 102](#)
- [“Copying Databases” on page 102](#)
- [“Renaming Databases” on page 103](#)
- [“Deleting Databases” on page 104](#)
- [“Locking and Unlocking Objects” on page 105](#)
- [“Exporting Databases” on page 107](#)
- [“Restructuring Databases Manually” on page 108](#)
- [“Backing Up Block Storage Databases” on page 108](#)
- [“Restoring Block Storage Databases” on page 109](#)

- [“Replaying Logged Transactions” on page 110](#)
- [“Viewing Logged Transactions” on page 111](#)
- [“Clearing Data” on page 112](#)
- [“Clearing Upper-Level Data Blocks” on page 113](#)
- [“Clearing Calculated Data Blocks” on page 113](#)
- [“Creating Location Aliases” on page 114](#)
- [“Clearing All Data Values” on page 115](#)
- [“Editing or Deleting Location Aliases” on page 115](#)
- [“Managing Drill-Through Definitions” on page 116](#)

Creating Databases

If you have Create/Delete Applications permissions, you can create databases. When you create databases, Essbase creates database directories under the application directory on an Essbase Server (`ARBORPATH\app\appname\dbname`).

You must create applications before you add databases to them. Block storage databases are created within block storage applications, and aggregate storage databases are created within aggregate storage applications.

► To create databases:

- 1 From Enterprise View or a custom view, select an application.
- 2 Right-click, and select **Create database**.
- 3 In the **Create Database** dialog box, if the preferred Essbase Server and application are not selected, select the preferred Essbase Server and application.
- 4 In **Database name**, enter a name for the database.
- 5 From **Database type**, select **Normal** (the default) or **Currency**.
For information about currency databases, see [Converting Currency](#).
- 6 If you want to permit [duplicate member names](#) in the database outline, select **Allow duplicate member names**.
- 7 Click **OK**.

Essbase creates the database and updates Enterprise View.

Related Information

- [“Create Database Dialog Box” on page 497](#)
- [“Linking a Database to a Currency Database” on page 426](#)
- “Creating Applications and Databases” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- create database (MaxL) in the *Oracle Essbase Technical Reference*
- createdb (ESSCMD) in the *Oracle Essbase Technical Reference*

Starting Databases

When you start databases, Essbase loads the databases into memory on the Essbase Server. Index caches are allocated automatically, and data-file and data caches are allocated when blocks are requested. If you start databases before users access them, users may experience better initial performance (upon connection) because the databases are in memory.

When you start databases from applications that are not started, the applications and all databases within the applications are loaded. You can start one database or all databases of an application.

You can also configure databases to [start automatically](#).

➤ To start one database:

- 1 From Enterprise View or a custom view, select the database.
- 2 Right-click, and select **Start**.

➤ To start all databases of an application:

- 1 From Enterprise View or a custom view, select the application.
- 2 Right-click, and select **Start**, and then **All databases**.

Related Information

- [“Configuring Databases to Start Automatically” on page 99](#)
- [“Starting Applications” on page 91](#)
- [“Viewing Application and Database Status” on page 312](#)

Related Commands

- alter application (MaxL) in the *Oracle Essbase Technical Reference*
- loaddb (ESSCMD) in the *Oracle Essbase Technical Reference*
- login (ESSCMD) in the *Oracle Essbase Technical Reference*
- select (ESSCMD) in the *Oracle Essbase Technical Reference*

Configuring Databases to Start Automatically

If you have Database Manager permissions, you can automate database startup.

Database startup settings become effective immediately after Apply is clicked.

Note: This functionality does not apply to aggregate storage databases.

► To configure databases to start automatically:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Edit**, and then **Properties**.
- 3 In the **Database Properties** window, select the **General** tab.
- 4 Expand the **Startup** node.
- 5 Perform an action:
 - To configure the database to start when the application starts, select **Start database when application starts**.
 - To configure the database to start when a user attempts retrievals against it, select **Allow users to start database**.
- 6 Click **Apply**.

Related Information

- [“Starting Databases” on page 99](#)
- [“Database Properties Window—General Tab” on page 532](#)

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- setdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdbstateitem (ESSCMD) in the *Oracle Essbase Technical Reference*

Stopping Databases

When you stop databases, Essbase unloads the databases from memory on the Essbase Server and commits updated data to disk. Thus, on the server computer, you increase available memory.

► To stop one database:

- 1 From Enterprise View or a custom view, select the database.
- 2 Right-click, and select **Stop**.

► To stop all databases of an application:

- 1 From Enterprise View or a custom view, select the application.
- 2 Right-click, and select **Stop**, and then **All databases**.

Related Information

- [“Starting Databases” on page 99](#)

- [“Viewing Application and Database Status” on page 312](#)

Related Commands

- `alter application (MaxL)` in the *Oracle Essbase Technical Reference*
- `unloaddb (ESSCMD)` in the *Oracle Essbase Technical Reference*
- `stop (Essbase Agent)` in the *Oracle Essbase Technical Reference*

Setting Database Properties

You can view and edit properties for one Essbase database from one window or for multiple databases from multiple windows.

To apply settings throughout Essbase, you may be able to use the `essbase.cfg` configuration file. For information about how to create this file and about what settings are available, see the *Oracle Essbase Technical Reference*.

► To set database properties:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Edit**, and then **Properties**.
- 3 Set one or more of the following properties:
 - [“Configuring Databases to Start Automatically” on page 99](#)
 - [“Aggregating Missing Values During Calculation” on page 361](#)
 - [“Enabling Create Blocks on Equations” on page 331](#)
 - [“Using Two-Pass on Default Calculations” on page 360](#)
 - [“Setting Minimum Permissions for Databases” on page 259](#)
 - [“Setting Retrieval-Buffer Sizes” on page 321](#)
 - [“Enabling Cache Memory Locking” on page 319](#)
 - [“Setting Cache Sizes” on page 320](#)
 - [“Setting Data Integrity Options” on page 326](#)
 - [“Selecting I/O Access Modes” on page 327](#)
 - [“Selecting Data Compression Methods” on page 325](#)
 - [“Setting Disk Volumes” on page 323](#)
 - [“Linking a Database to a Currency Database” on page 426](#)

Related Information

- [“Database Properties Window” on page 527](#)
- [“About Database Monitoring” on page 313](#)
- [“Improving Essbase Performance” in the Oracle Essbase Database Administrator's Guide](#)

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- display database (MaxL) in the *Oracle Essbase Technical Reference*
- getdbinfo (ESSCMD) in the *Oracle Essbase Technical Reference*
- getdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- getdbstats (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdbstateitem (ESSCMD) in the *Oracle Essbase Technical Reference*

Annotating Databases

You can annotate databases for which you have Database Manager permissions. For example, you can use database notes to broadcast messages about database status or update deadlines to spreadsheet users. Database notes are accessible from the login dialog box in Spreadsheet Add-in.

► To annotate databases:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Set**, and then **Database note**.
- 3 In the **Set Database Note** dialog box, in **Database Note**, enter a note.
- 4 Click **OK**.

Related Information

[“Set Database Note Dialog Box” on page 641](#)

Related Commands

alter database (MaxL) in the *Oracle Essbase Technical Reference*

Copying Databases

You can copy the databases of applications for which you have Application Manager permissions and applications to which you have appropriate access. You cannot copy a database to a target Essbase Server whose version precedes the version of the source Essbase Server.

Databases copied from non-Unicode-mode applications to Unicode-mode applications are converted to Unicode-mode. You cannot copy databases from Unicode-mode applications to non-Unicode-mode applications.

When databases are copied, settings related to [member name uniqueness](#) requirements are retained, and database directories (ARBORPATH\app\appname\dbname) are created on the target servers.

You can copy databases between Essbase Servers (for example, from a development server to a production server) or within an Essbase Server (for example, for testing or backup). Essbase copies databases between servers and within servers differently.

You can copy databases only to existing applications. If necessary, on target servers, you can [create the applications](#) that will contain the databases.

To copy databases, you can use the following procedure or use [“Migration Wizard” on page 597](#). You should not use the file system to copy, move, rename, or delete databases. For information about using the file system to manage applications and databases during backup, see the *Oracle Essbase Database Administrator's Guide*.

Note: You cannot copy aggregate storage databases. However, you can copy aggregate storage applications.

➤ To copy databases:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Copy**.
- 3 In the **Copy Database** dialog box, select the Essbase Server to contain the database copy.
- 4 In the **Application** list, select the application to contain the database copy.
- 5 In **Database name**, enter a name for the database copy.
- 6 Click **OK**.

Essbase copies the database and updates Enterprise View.

Related Information

- [“Copy Database Dialog Box” on page 490](#)
- [“Copying Applications” on page 94](#)
- [“Migration Wizard” on page 597](#)
- “Unicode and Non-Unicode Application Modes” in the *Oracle Essbase Database Administrator's Guide*
- “Reloading the Database” in the *Oracle Essbase Database Administrator's Guide*.

Related Commands

- create database (MaxL) in the *Oracle Essbase Technical Reference*
- createdb (ESSCMD) in the *Oracle Essbase Technical Reference*

Renaming Databases

If you have Application Manager permissions for a database, you can rename that database. If any objects within the database are locked by other users, Essbase prompts you to remove the

locks before deleting. Unless you are an Administrator, you can unlock only those objects that you originally locked.

When you rename a database, the database directory (`ARBORPATH\app\appname\dbname`) and database outline (`dbname.otl`) are renamed. Other system-defined database files are also renamed (`dbname.db`, `dbname.dbb`, `dbname.esm`, `dbname.ind`, `dbname.tct`).

Database objects created separately from the database, such as calculation scripts and report scripts, are not renamed.

► To rename a database:

- 1 From Enterprise View or a custom view, select the database.
- 2 Right-click and select **Rename**.
- 3 In the **Rename Database** dialog box, enter the new name for the database. (For naming restrictions, see the *Oracle Essbase Database Administrator's Guide*.)
- 4 Click **OK**.

If the database contains objects that are locked, Essbase displays a list of these objects and indicates who locked the object at what time.

- 5 To **unlock objects** and complete the rename operation, click **OK**. If all objects are unlocked successfully, Essbase renames the database and updates Enterprise View.

Related Information

- [“Rename Database Dialog Box” on page 628](#)
- [“Locking and Unlocking Objects” on page 105](#)

Related Commands

- `alter database (MaxL)` in the *Oracle Essbase Technical Reference*
- `renamedb (ESSCMD)` in the *Oracle Essbase Technical Reference*

Deleting Databases

Within applications that you created and for which you have Application Manager permissions, you can delete databases.

When you delete a database:

- All objects within the database are deleted.
- You are asked to unlock locked objects. Locked objects cannot be deleted. Non-administrators can unlock only objects that they locked.
- The database directory (`ARBORPATH\app\appname\dbname`) and all files stored in it are deleted.
- Open windows associated with the database (for example, Database Properties, Sessions, and Locks) are closed. For windows that contain unsaved changes, you are asked to save changes.

You can delete one database or all databases on an Essbase Server.

➤ To delete individual databases:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Delete**.
- 3 At the confirmation message, click **Yes**.

If the database contains locked objects, Essbase displays a list of the locked objects and indicates who locked which object at what time.

- 4 If the application contains locked objects, [unlock objects](#) and complete the delete operation by clicking **OK**.

Essbase deletes the database, provided that all objects were unlocked, and updates Enterprise View.

➤ To delete all databases on an Essbase Server:

- 1 From Enterprise View or a custom view, select the application that contains the databases that you want to delete.
- 2 Right-click, and select **Delete**, and then **All databases**.
- 3 At the confirmation message, click **Yes**.

If any database contains locked objects, Essbase displays a list of the locked objects and indicates who locked which object at what time.

- 4 If the application contains locked objects, [unlock objects](#) complete the delete operation by clicking **OK**.

Essbase deletes all databases for which all locked objects were unlocked and updates Enterprise View.

Related Information

- [“Deleting Applications” on page 96](#)
- [“Locking and Unlocking Objects” on page 105](#)

Related Commands

- drop database (MaxL) in the *Oracle Essbase Technical Reference*
- deletedb (ESSCMD) in the *Oracle Essbase Technical Reference*

Locking and Unlocking Objects

Essbase uses a check-out facility for database objects (such as calculation scripts, report scripts, and rules files) to ensure that objects are modified by only one user at one time. By default, Essbase asks you to lock objects when you open them and deletes your locks when you exit the

object editor. For some objects, you can change the default locking behavior. See [“Setting Essbase Default Options” on page 97](#).

Note: This topic does not discuss outline locking and unlocking behavior. See [“Locking and Unlocking Outlines” on page 128](#).

You can open, edit, execute, and copy locked objects. You cannot save, rename, or delete locked objects. To save changes to locked objects, you must select **File** and then **Save as**, and save the modified object to another location.

If you attempt non-permitted operations on locked objects or on applications or databases that contain locked objects, Essbase displays the [Unlock Objects dialog box](#), which asks you to remove locks and continue with the operation. You can view and unlock objects, according to your security permissions. Users with Administrator permissions can unlock any object. Users without Administrator permissions can unlock only objects that they locked.

Note: Object locks and user locks on data are different. For information on data locks, see [“Viewing Data Locks” on page 301](#).

➤ To view and unlock multiple locked objects:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click, and select **Edit**, and then **Locked objects**.
- 3 In the [Locked Objects window](#), perform an action:
 - To unlock specific objects, select the rows that contain the objects, and click **Unlock**.
 - To unlock all objects, click **Unlock All**.

➤ To lock or unlock one object manually:

- 1 From Enterprise View or a custom view, select an unlocked or locked object, for example, a calculation script.
- 2 Right-click, and, depending upon whether you selected an unlocked or locked object, click **Lock** or **Unlock**.

Related Information

- [“Setting Essbase Default Options” on page 97](#)
- [“Locked Objects Window” on page 586](#)
- [“Unlock Objects Dialog Box” on page 655](#)

Related Commands

- alter object (MaxL) in the *Oracle Essbase Technical Reference*
- unlockobject (ESSCMD) in the *Oracle Essbase Technical Reference*

Exporting Databases

For databases for which you have Read permission, you can back up data by exporting it to text files. Exported data is not compressed. Export files contain only data—not control, outline, or security information.

If the database that you are exporting is not running, Administration Services starts it. During data export, users can connect to and perform read-only operations on the database.

Note: When you export data from databases that contain duplicate member names, the qualified names for duplicate members are exported. In export files, all member names are enclosed in quotation marks (“ ”).

➤ To export databases:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Export**.
- 3 In the [“Export Database Dialog Box” on page 563](#) dialog box, specify the name for the export file or files.
- 4 Select the data to export.

Note: For aggregate storage databases, you can export only level 0 data.

- 5 **Optional:** To export data in a columnar format, select **Export in column format**.

Note: This option does not apply to aggregate storage databases.

- 6 **Optional:** To export data in the background, so you can work in the console as the export processes, select **Execute in the background**.
- 7 Click **OK**.

Essbase runs the export. Errors and status messages are displayed in the Messages pane, at the bottom of the console window. If you export in the background, an ID for the process is displayed. You can use the ID to [track the status](#) of the export in the **Background Process Status** window.

Note: By default, Administration Services exports the database to the file system of the selected Essbase Administration Server, not to your local file system.

Related Information

- [“Export Database Dialog Box” on page 563](#)
- “Export Backups” in the *Oracle Essbase Database Administrator's Guide* (block storage)
- “Exporting Aggregate Storage Databases” in the *Oracle Essbase Database Administrator's Guide* (aggregate storage)

Related Commands

- export data block storage (MaxL) in the *Oracle Essbase Technical Reference*
- export data aggregate storage (MaxL) in the *Oracle Essbase Technical Reference*
- export (ESSCMD) in the *Oracle Essbase Technical Reference*

Restructuring Databases Manually

At any time, to eliminate or reduce fragmentation, you can manually restructure databases for which you have Database Manager permissions. Data-file blocks are restructured, data files are created, and the index is regenerated so that index entries point to the new data blocks. After a database is restructured, you must recalculate the data.

When databases or outlines are changed in certain ways, database restructures that leave space within data files may be triggered. See [“Saving Outlines” on page 130](#) for information about automatic restructures.

Note: This functionality does not apply to aggregate storage databases.

► To restructure databases manually:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Restructure**.
- 3 **Optional:** To continue working during the restructure process, in the [Restructure Database dialog box](#), select **Restructure in the background**.
- 4 Click **OK**.

Related Information

- [“Restructure Database Dialog Box” on page 634](#)
- “Optimizing Database Restructuring” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

alter database (MaxL) in the *Oracle Essbase Technical Reference*

Backing Up Block Storage Databases

You can back up a block storage database at a particular point in time and later restore the database to that same state. In backing up a database, Essbase writes a copy of the database files to a single archive file. The database archive file contains information about the database that was backed up, such as the application and database name, the time the backup was performed, and disk volume names. When needed, you can restore the database from the archive file.

To back up a database, you must have the Administrator role.

Note: Oracle recommends that you use database backup and restore with transaction logging and replay, as part of a comprehensive backup and recovery strategy.

➤ To archive databases:

1 From Enterprise View or a custom view, right-click a database and select **Archive Database**.

2 Enter the path and filename of the archive file to be created.

The path must be to an existing directory on the Essbase Server computer. Oracle recommends that you name the file with a `.arc` extension. The size of the archive file is limited only by disk space.

Note: The archive file must be saved to a file system that supports large files. For Windows, the file system must be formatted as NTFS. For UNIX, large file support must be enabled. See your operating system documentation.

3 **Optional:** To continue working in the console while the archive operation is performed, select **Archive in the background**.

4 Click **OK**.

Related Information

- “Retrieving Archive File Information” in the *Oracle Essbase Database Administrator's Guide*
- “Restoring Block Storage Databases” on page 109
- “Viewing Logged Transactions” on page 111
- “Replaying Logged Transactions” on page 110

Related Commands

- `alter database (MaxL)` in the *Oracle Essbase Technical Reference*
- `query archive_file (MaxL)` in the *Oracle Essbase Technical Reference*

Restoring Block Storage Databases

Restoring a backed-up database returns the database to the state it was in when the backup procedure was performed. Transactions that occurred after the backup are lost once you restore the database.

You must have the Administrator role to restore a database.

Note: Use transaction logging and replay, along with database backup and restore, to capture ongoing transactions that can be used to recover the database to its most recent state, not just to the state the database was in when it was backed up.

► To restore archived databases:

- 1 Terminate active client connections to the database.
- 2 From Enterprise View or a custom view, right-click a database and select **Restore Database**.
- 3 Select the database archive file to be restored from the list or enter the path and filename of the archive file.
- 4 **Optional:** If the database used disk volumes, click **Advanced**.

You can restore the database to the same disk volumes or you can enter different disk volume names.

The number of disk volumes used and the space required for the restored database must be the same as for the database before it was backed up. Only the name of disk volumes can be modified. For example, you can replace disk volume “C” with “F” and “D” with “G.”
- 5 If the names of the backed up database and application are not the same as the application and database to which you are restoring data, select **Force restore**.
- 6 **Optional:** To continue working in the console while the restore operation is performed, select **Restore in the background**.
- 7 Click **OK**.

Related Information

- [“Backing Up Block Storage Databases” on page 108](#)
- “Retrieving Archive File Information” in the *Oracle Essbase Database Administrator's Guide*
- [“Viewing Logged Transactions” on page 111](#)
- [“Replaying Logged Transactions” on page 110](#)

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*

Replaying Logged Transactions

When you restore a backed up database, the transactions that took place after the archive operation are lost. If you enable transaction logging after you back up the database, you can replay the logged transactions to recover a database to its most recent state.

You can log and replay only block storage database transactions.

Note: Oracle recommends that you use transaction logging and replay with database backup and restore, as part of a comprehensive backup and recovery strategy.

Each logged transaction is assigned a sequence ID, indicating the order in which the transaction was performed. To ensure the integrity of the restored data after a replay, Essbase enforces the replay of transactions in the same order in which they originally were performed. The order of

sequence IDs are tracked across multiple replay commands. After a transaction has been replayed, you can replay only transactions with a greater sequence ID.

➤ To replay transactions:

1 From Enterprise View or a custom view, right-click a database and select **Replay Transactions**.

2 To specify the transactions you want to replay, select one of the following options:

- **Based on Last Replay Time**

Administration Services Console replays the transactions that were logged after the last replay request was originally executed.

- **Using Sequence ID Ranges**

To selectively replay transactions, enter a comma-separated string of sequence ID ranges. A range can consist of one or more transactions:

- One transaction: n to n ; for example, 1 to 1
- Multiple transactions: x to y ; for example, 20 to 100

- **Since Time:** Enter a time in format mm-dd-yyyy hh:mm:ss. For example, Mar 28, 2008 19:35:43.

Administration Services Console replays the transactions that were logged after the specified time.

3 Click **OK**.

Related Information

- “Enabling Transaction Logging” and “Configuring Transaction Replay” in the *Oracle Essbase Database Administrator's Guide*
- [“Viewing Logged Transactions” on page 111](#)
- [“Backing Up Block Storage Databases” on page 108](#)
- [“Restoring Block Storage Databases” on page 109](#)

Related Commands

- `alter database (MaxL)` in the *Oracle Essbase Technical Reference*

Viewing Logged Transactions

Transactions that take place after a database is backup are lost when you restore the database. After you back up a database, enable transaction logging, which captures ongoing transactions that can be replayed to recover a database to its most recent state.

You can log and replay only block storage database transactions.

Note: Oracle recommends that you use transaction logging and replay, along with database backup and restore, as part of a comprehensive backup and recovery strategy.

To view the list of logged transactions, you must have the Administrator role.

► To view logged transactions:

- 1 From Enterprise View or a custom view, right-click a database for which transaction logging is enabled, and select **Display Transactions**.
- 2 To specify the transactions you want to view, select one of the following options:
 - **Based on Last Replay Time**
Administration Services Console lists the transactions that were logged after the last replay request was originally executed.
 - **Since Time:** Enter a time in format mm-dd-yyyy hh:mm:ss. For example, Mar 28, 2008 19:35:43.
Administration Services Console lists the transactions that were logged after the specified time.
- 3 You can sort the list by the following attributes:
 - The time the transaction was executed
 - The user who submitted the transaction request
 - The transaction sequence ID, which indicates the order in which the transaction was performed and the order in which it must be replayed
- 4 Click **OK**.

Related Information

- “Enabling Transaction Logging” and “Configuring Transaction Replay” in the *Oracle Essbase Database Administrator's Guide*
- [“Replaying Logged Transactions” on page 110](#)
- [“Display Transactions Dialog Box” on page 554](#)
- [“Backing Up Block Storage Databases” on page 108](#)
- [“Restoring Block Storage Databases” on page 109](#)

Related Commands

query database (MaxL) in the *Oracle Essbase Technical Reference*

Clearing Data

You can clear data from databases for which you have Write permissions.

You can clear all data values, or, for block storage databases, you can clear only calculated data blocks or only upper-level data blocks. Cells for which data is cleared are set to #MISSING.

You can also clear data automatically, as part of a data load. See [“Clearing Data Values Before Loading Data” on page 233](#).

- To clear all data values, see [Clearing All Data Values](#).
- To clear data from aggregate storage databases, see “[Clearing Data from Aggregate Storage Databases](#)” on page 75.
- To clear calculated data blocks, see [Clearing Calculated Data Blocks](#).
- To clear upper-level data blocks, see [Clearing Upper-Level Data Blocks](#).

Related Information

“Data Storage in Data Blocks,” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- resetdb (ESSCMD) in the *Oracle Essbase Technical Reference*
- cleardata (calculation command) in the *Oracle Essbase Technical Reference*
- clearblock noninput (calculation command) in the *Oracle Essbase Technical Reference*
- clearblock upper (calculation command) in the *Oracle Essbase Technical Reference*

Clearing Upper-Level Data Blocks

You can clear data from databases for which you have Write permissions.

If you clear only upper-level blocks, the data values for upper-level blocks are set to #MISSING. Upper-level blocks are created for sparse member combinations of which at least one sparse member is a parent member.

Note: This functionality does not apply to aggregate storage databases.

➤ To clear upper-level blocks from databases:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Clear**, and then **Upper-level blocks**.
- 3 In response to the confirmation prompt, click **Yes**.

Related Information

“[Clearing Data](#)” on page 112

Related Commands

clearblock upper (calculation command) in the *Oracle Essbase Technical Reference*

Clearing Calculated Data Blocks

You can clear data from databases for which you have Write permissions.

You can choose to clear only data blocks that contain values that are derived from calculation (non-input blocks). When you clear calculated blocks, data values for calculated (non-input) cells are set to #MISSING.

Note: This functionality does not apply to aggregate storage databases.

► To clear calculated (non-input) blocks from databases:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Clear**, and then **Non-input blocks**.
- 3 In response to the confirmation prompt, click **Yes**.

Related Information

[“Clearing Data” on page 112](#)

Related Commands

clearblock noninput (calculation command) in the *Oracle Essbase Technical Reference*

Creating Location Aliases

If you have Database Manager permissions, you can create location aliases. A location alias, which maps an alias name to the physical location of its database, specifies an Essbase Server, an application, a database, a user name, and a password.

You can use aliases to refer to databases and can edit location definitions.

You can use location aliases only with the @XREF function. With this function, you can retrieve a data value from a database other than the current database and include the value in calculations on the current database. The location alias points to the database from which the value is retrieved.

Note: Location aliases do not apply to aggregate storage databases.

► To create location aliases for databases:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Edit**, and then **Location aliases**.
The **Location Aliases** window is displayed.
- 3 In **Alias**, enter an alias for the database.
- 4 Enter or select [alias information](#), information about the server that contains the database.
- 5 Click **Test** to verify the location alias information.

When the location alias information is valid, the check box in the **Verified** column is selected.

6 Click **Set**.

Related Information

- [“Editing or Deleting Location Aliases” on page 115](#)
- [“Location Aliases Window” on page 585](#)

Related Commands

- create location alias (MaxL) in the *Oracle Essbase Technical Reference*
- display database (MaxL) in the *Oracle Essbase Technical Reference*
- createlocation (ESSCMD) in the *Oracle Essbase Technical Reference*
- listlocations (ESSCMD) in the *Oracle Essbase Technical Reference*

Clearing All Data Values

You can clear all data from databases for which you have Write permissions.

For information about clearing data from aggregate storage databases, see [“Clearing Data from Aggregate Storage Databases” on page 75](#).

➤ To clear all data from [block storage](#) databases:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Clear**, and then **All data**.
- 3 In response to the confirmation message, click **Yes**.

Related Information

[“Clearing Data” on page 112](#)

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- resetdb (ESSCMD)
- cleardata (calculation command) in the *Oracle Essbase Technical Reference*

Editing or Deleting Location Aliases

Location aliases map database alias names to the physical locations of the databases. If you have Database Manager permissions, you can edit location alias definitions and delete location aliases.

Note: This functionality does not apply to aggregate storage databases.

- To edit or delete location aliases:
 - 1 From Enterprise View or a custom view, select a database.
 - 2 Right-click, and select **Edit**, and then **Location aliases**.
 - 3 In the **Location Aliases** window, perform one or both actions:
 - Edit alias information, and click **Set**.
 - For an alias, select a row, and click **Delete**.

Related Information

- [“Creating Location Aliases” on page 114](#)
- [“Location Aliases Window” on page 585](#)

Related Commands

- drop location alias (MaxL) in the *Oracle Essbase Technical Reference*
- deletelocation (ESSCMD) in the *Oracle Essbase Technical Reference*

Managing Drill-Through Definitions

- To manage drill-through definitions:
 - 1 In Enterprise View, right-click on a database.
 - 2 Select **Edit**, and then **Drill-through definitions**.
 - 3 Perform an action:
 - Add a definition
 - Modify a definition
 - Delete a definition
- To add or modify a definition:
 - 1 Perform an action:
 - To add a definition, in **Definitions**, select **Click here to add a definition**.
 - To modify a definition, select it in **Definitions**.
 - 2 **Optional:** If creating a definition, enter a **URL name**.
 - 3 Perform an action:
 - In **XML Contents**, enter an XML script.
 - Click **Load XML from file**, and select a file containing an XML script.
 - Click **Save XML to file** to save the XML script.
 - Click **Export XML** to export the XML script.
 - 4 Add one or more regions to include in the definition:

- a. In the outline tree, double-click member names to insert them into the formula at the text marker position. You can perform Find Members operations to locate members containing specific text.
- b. **Optional:** To view alias names in the outline tree, select **Use aliases** and select an alias table from the list.
- c. In the Commands and functions tree, double-click an operator or function. The selected operator or function is inserted in the text area at the text-marker position. Select **Insert arguments** to include arguments in the text area as the command or function is inserted.
- d. **Optional:** To include only level 0 members, select **Level zero members only**.

5 Click **Save**, and then **Close**.

► To delete a definition:

1 In **Definitions**, select a drill-through definition.

2 Click **Delete definition**.

Related Topics

[“Edit Drill-Through Definitions Dialog Box” on page 555](#)

Unicode-mode Applications

In this section:

- [“About File Encoding and Locales” on page 117](#)
- [“How Administration Services Determines the File Encoding ” on page 118](#)
- [“About Locale Headers” on page 119](#)
- [“Creating Unicode-Mode Applications” on page 119](#)
- [“Migrating Applications to Unicode Mode” on page 120](#)

About File Encoding and Locales

Within files, each text character is stored as a bit combination. When a file reads or writes characters, it consults a code page or other mapping standard. For example, the commonly-used code page for English, Latin 1, maps Hex 41 to a capital A. Writing text characters according to a code page is called *encoding*.

Code pages are identified in locale specifications. For Essbase, locale is specified by the ESSLANG variable or by the system locale of the computer (see the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*). Encoding within non-Unicode-mode applications is based on the locale that is common to Essbase and Administration Services.

To interpret text, such as member names, Administration Services Console must know how the text is encoded. Encoding considerations affect what you can and cannot do with various categories and subcategories of files:

- You cannot directly edit internal application and database files. The encoding within such files is based on the encoding of the application, Unicode mode or non-Unicode mode.
 - Text in Unicode-mode application files is UTF-8 encoded.
 - Text in non-Unicode-mode application files is encoded to the ESSLANG variable or to the system locale of the Essbase Server on which the files were created.
- You can edit and create text files, such as scripts and data sources, and can edit binary files, such as outline and rules files.
- To edit outline and rules files, you use Administration Services Console. When you edit within applications, Administration Services Console identifies locale (based on the encoding of the application). When you edit outside applications, Administration Services Console may ask you for the encoding.
- When you use Administration Services Console to create text files, you are asked for encoding information when you save the files. The information that you provide is stored in the files.
- When you use a means other than Administration Services Console to create text files, you must add encoding information manually, through a text editor or by using the Essbase Unicode File Utility (ESSUTF8).

Note: The encoding indicator for UTF-8-encoded text files is the industry-standard UTF-8 signature. The encoding indicator for non-UTF-8-encoded text files is a locale header record with a particular format.

Related Information

- [“How Administration Services Determines the File Encoding” on page 118](#)
- “Identification of Text Encoding” and “Managing File Encoding” in the *Oracle Essbase Database Administrator's Guide*
- Essbase Unicode File Utility (ESSUTF8) in the *Oracle Essbase Technical Reference*

How Administration Services Determines the File Encoding

When Essbase Administration Server opens files, encoding is determined in one of the following ways:

- For files that include an encoding indicator, the specified encoding is used.
- For files that do not include an encoding indicator and that are opened from Essbase, the application encoding is used.
- For rules and text files that do not include an encoding indicator and that are not opened from Essbase, Administration Services Console asks for the encoding. For outline files (.otl), the Essbase encoding is used.

When Essbase Administration Server saves files, text is encoded in one of the following ways:

- For files saved to Essbase, the application encoding is used:

- In UTF-8, if the application is a Unicode-mode application
- In the encoding specified by the Essbase ESSLANG variable, if the application is a non-Unicode-mode application
- For previously existing files that are saved to client locations, the previously existing encoding is used.
- For new text files that are saved to client locations, Administration Services Console asks for the encoding. For outline files (.otl), the Essbase encoding is used.

Note: Once the encoding is specified and the file is saved, the encoding cannot be changed, even if the file is saved to another name.

Related Information

- [“About File Encoding and Locales” on page 117](#)
- [“About Locale Headers” on page 119](#)
- “Managing File Encoding” in the *Oracle Essbase Database Administrator's Guide*

About Locale Headers

Locale headers are used in non-Unicode text files. If a file is associated with a Unicode application and is not UTF-8 encoded, Essbase uses the locale header record to determine which encoding to use to interpret the character text within the file.

You can insert locale header records as you create text files or by using Essbase Unicode File Utility (ESSUTF8). For information about locale header records and insertion methods and record format, see the *Oracle Essbase Database Administrator's Guide*.

When Administration Services Console saves text files, it inserts locale header records. Administration Services Console follows a particular [process to determine the locale value that it inserts](#) in the header record.

Locale header records are inserted in text files for Unicode-mode and non-Unicode-mode applications. Therefore, one text file can be used with both types of applications.

Related Information

- [“How Administration Services Determines the File Encoding” on page 118](#)
- “Managing File Encoding” in the *Oracle Essbase Database Administrator's Guide*

Creating Unicode-Mode Applications

Within a Unicode-mode application, users can use multiple character sets.

You can create Unicode-mode applications for block storage or aggregate storage. You can also migrate non-Unicode-mode applications to Unicode mode. See [Migrating Applications to Unicode-Mode](#).

The Unicode mode application property identifies whether applications are in Unicode mode.

► To create Unicode-mode applications:

- 1 From Enterprise View or a custom view, select an Essbase Server that has permission to create applications.
See [Managing the Essbase Server Permission to Create Unicode-Mode Applications](#).
- 2 Right-click, and select **Create**, then **Application**, and then **Using block storage**, or **Create**, then **Application**, and then **Using aggregate storage**.
- 3 In the **Create Application** dialog box, select the preferred Essbase Server.
- 4 In **Application name**, enter a name for the application.
- 5 Select **Unicode mode**.

Caution! You cannot undo the Unicode-mode selection.

- 6 Click **OK**.

Related Information

- [“Migrating Applications to Unicode Mode” on page 120](#)
- [“Managing Essbase Server Permissions to Create Unicode-Mode Applications” on page 86](#)
- [“Application Properties—General Tab” on page 475](#)
- “Enabling Multi-Language Applications Through Unicode” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- create application (MaxL) in the *Oracle Essbase Technical Reference*
- alter application (MaxL) in the *Oracle Essbase Technical Reference*
- alter system (MaxL) in the *Oracle Essbase Technical Reference*

Migrating Applications to Unicode Mode

You can migrate a non-Unicode application to Unicode mode, thus enabling users to view application information in multiple character sets.

Caution! Migration to Unicode mode cannot be reversed.

► To migrate applications to Unicode mode:

- 1 From Enterprise View or a custom view, select an application.
- 2 Right-click, and select **Edit Properties**.

3 In the **Application Properties** window, select the **General** tab.

4 Select **Unicode mode**.

The **Unicode mode** check box is available only if Essbase has permission to create a Unicode-mode application.

5 Click **Apply**.

Related Information

- [“Managing Essbase Server Permissions to Create Unicode-Mode Applications” on page 86](#)
- “Enabling Multi-Language Applications Through Unicode” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- alter application (MaxL) in the *Oracle Essbase Technical Reference*
- create application (MaxL) in the *Oracle Essbase Technical Reference*
- alter system (MaxL) in the *Oracle Essbase Technical Reference*
- display system (MaxL) in the *Oracle Essbase Technical Reference*



Managing Outlines and Formulas

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Understanding Outlines

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- “About Duplicate Member Names” on page 124
- “About Typed Measures” on page 125
- “About Text Measures” on page 125
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About Outlines

For information about aggregate storage outlines, see [“About Aggregate Storage Outlines” on page 69](#).

In Essbase, a database outline defines the structure of the database through dimensions, members, aliases, attributes, consolidations, and mathematical relationships. The outline structure determines how data is stored and calculated in the database.

Essbase uses dimensions and members to represent data hierarchies. In an outline, each dimension consists of one or more members. The members, in turn, may have child members. This hierarchy determines how Essbase consolidates the values of individual members. Within the tree structure of the database outline, a consolidation is a group of members within a branch of the tree.

When a database is created, Essbase automatically creates an empty outline. The outline file uses the database name with an `.otl` extension (`dbname.otl`). If you have Database Manager permissions (or higher) for the database, you can access the outline in Administration Services by using the Outline node under the node for the specific database.

You can create and maintain an outline manually, by using [Outline Editor](#), or you can dynamically build an outline from a data source by performing a [dimension build](#). For a quick, read-only view of an outline, use [Outline Viewer](#).

For more information about Essbase outlines, see the *Oracle Essbase Database Administrator's Guide*.

Related Information

- [“About Aggregate Storage Outlines” on page 69](#)
- [“Dimensions and Members” in the Oracle Essbase Database Administrator's Guide](#)
- [Working With Outlines](#)
- [“About Outline Editor” on page 140](#)
- [“About Data Loading and Dimension Building” on page 197](#)

About Duplicate Member Names

You can specify that duplicate (non-unique) member names and aliases are allowed in a database outline, with some restrictions. For example, a database may require two members named New York in the outline, one under a State member and one under a City member. In the outline, the member names are both displayed as New York. The qualified member names are:

```
[State].[New York] [City].[New York]
```

You can view the qualified member name for a duplicate member in the Member Properties dialog box in Outline Viewer. When inserting duplicate member names in scripts, partition definitions, and so forth, the qualified member name is inserted for you.

Dimension names, generation names, and level names must always be unique, and siblings under a parent member must always be unique. For a list of restrictions for duplicate member names in outlines, see the *Oracle Essbase Database Administrator's Guide*.

Within a duplicate member name outline, you can tag dimensions (and generations and levels within a dimension) as unique to require that member names for a particular set of members are unique. These tags enable you to specify member name uniqueness at a more granular level in a duplicate member name outline.

For information about duplicate member names, see the *Oracle Essbase Database Administrator's Guide*.

Related Information

“Creating and Working with Duplicate Member Outlines” in the *Oracle Essbase Database Administrator's Guide*

About Typed Measures

Typed measures extend the analytical capabilities of Essbase. In addition to numeric values, measures can also be associated with text- or date-typed values.

Text measures are tagged as “text” in whichever dimension measures are represented. They enable cell values to contain one of an enumerated list of text labels. These labels are defined, at the outline level, using a mapping artifact called a Text List object.

Date measures are tagged as “date” in the dimension where measures are represented. Date measures enable cell values in the form of a formatted date.

The following general guidelines apply to both text and date measures:

- Add them to the existing measures dimension; for example, Accounts.
- Do not aggregate them. By default, text and date measures are assigned the non-aggregation symbol (^).
- Queries should be made at the same level at which data was loaded.

Related Information

- [“About Text Measures” on page 125](#)
- [“About Date Measures” on page 126](#)
- “Working With Typed Measures” in the *Oracle Essbase Database Administrator's Guide*

About Text Measures

Text measures extend the analytical capabilities of Essbase beyond numerical data to text-based content. Storage and analysis of textual content can be useful when a cell needs to have one of a finite list of textual values; for example, a product may be sold in 5 different colors. The color is a text measure whose value must be one of the 5 colors.

The colors are a set of text strings mapped to corresponding numeric IDs. These mappings are contained in database-level Text List objects that you create.

Use the following workflow to enable and use text measures.

- Enable text measures in the outline properties.
- Create a Text List object to store the text values and map them to integers. Also, map Missing and Out of Range to integers.
- Create a member to be a text measure in the dimension where measures are represented. For example, create a measure called “Color.”
- In the member properties for the text measure, define it as type “text,” and associate it with the Text List object.

Related Information

- [“About Date Measures” on page 126](#)
- [“About Typed Measures” on page 125](#)
- “Working With Typed Measures” in the *Oracle Essbase Database Administrator's Guide*

About Date Measures

Date measures enable members to have date-type values. The ability to process dates in the dimension where measures are represented can be useful for types of analysis that are difficult to represent using the Time dimension. For example, an application analyzing asset depreciation tracks acquisition dates for a series of capital assets. The company is fifty years old, so the acquisition dates span too large a period for feasible Time dimension modeling.

Additionally, date measures enable analysis of date values with small granularity, such as hours and minutes.

Use the following workflow to enable and use date measures.

- Enable date measures in the outline properties.
- Create a member to be a date measure in the dimension where measures are represented.
- In the member properties for the date measure, define it as type “date,” and select the desired date format.

Related Information

- [“About Text Measures” on page 125](#)
- [“About Typed Measures” on page 125](#)
- “Working With Typed Measures” in the *Oracle Essbase Database Administrator's Guide*

Working with Outlines

You use Outline Editor to manage outlines. For information about outlines, dimensions, and members, see the *Oracle Essbase Database Administrator's Guide*.

You can also use rules files to create and maintain outlines from data sources such as flat files or relational databases. For information about data loading and dimension building, see the *Oracle Essbase Database Administrator's Guide*.

► To use Outline Editor to create and manage an outline:

- 1 After creating a database, [open the outline in Outline Editor](#).
- 2 Populate the outline by [copying an existing outline](#) or by using Outline Editor [to add dimensions and members](#).
- 3 **Define outline properties:**
 - Set whether names are case-sensitive.
 - Set the active alias table and manage alias tables.
 - If relevant, define the format for members of attribute dimensions.
- 4 **Define the following dimension and member properties and characteristics:**
 - [The data storage for each dimension as dense or sparse](#) (block storage outlines only).
 - [Member consolidation properties](#).
 - [Member storage properties](#) (block storage outlines only).
- 5 **Optional: Define the following dimension and member properties and characteristics:**
 - [Tag the time dimension](#) (block storage outlines only).
 - [Tag the accounts dimension](#).
 - [Enable dynamic time series members](#) (block storage outlines only).
 - [Assign generation and level names](#).
 - [Set variance reporting properties](#) (block storage outlines only).
 - [Set two-pass calculation properties](#) (block storage outlines only).
 - [Create formulas for specific members](#) (different for aggregate storage outlines).
 - [Set other dimension and member properties](#).
 - [Define attribute dimensions, associate attribute dimensions with their base dimensions, and associate attributes to specific members](#).
- 6 If relevant, [prepare the outline for currency conversion](#) (block storage outlines only).
- 7 **Optional: Create alias tables and define aliases.**
- 8 [Sort members](#) to maximize performance.
- 9 [Verify the outline](#).
- 10 [Save the outline](#).
- 11 [Print the outline](#).

Related Information

- [“About Outlines” on page 124](#)

- “Case Study: Designing a Single-Server, Multidimensional Database” in the *Oracle Essbase Database Administrator's Guide*
- [“Opening and Editing Outlines” on page 149](#)
- [“Setting Outline Properties” on page 129](#)

Locking and Unlocking Outlines

An outline is always locked when it is opened in edit mode. Essbase unlocks the outline when the **Close** button is used to close the outline. In some circumstances, an outline may get closed without getting unlocked; for example, when a user has an outline open and is disconnected from the server because of a timeout.

When an outline is locked to other users, Essbase does not allow them to save over, rename, delete, edit, or optimize the outline. When you attempt to edit a locked outline, you are given an option to view the outline in Outline Viewer.

If you have Administrator permissions, you can unlock a locked outline. Before you forcefully unlock a locked outline, make sure that no one else is working with it.

Note: Essbase uses a different process for locking and unlocking outlines than for other objects. The locking option specified in the [Essbase tab of the Options dialog box](#) does not affect locking of outlines. For more information about locking of other objects, see [“Locking and Unlocking Objects” on page 105](#).

To lock an outline, [open the outline in editing mode](#).

► To unlock an outline:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click and select **Edit**, then **Locked objects**.
- 3 In the **Locked Objects** window, select the row containing the outline that you want to unlock.
- 4 Make sure that the user displayed in the **Locked by** column for that outline does not have the outline open.
- 5 Click **Unlock**.

Related Information

- [“Opening and Editing Outlines” on page 149](#)
- [“Locked Objects Window” on page 586](#)

Related Commands

- alter object (MaxL) in the *Oracle Essbase Technical Reference*
- unlockobject (ESSCMD) in the *Oracle Essbase Technical Reference*

Creating Outlines

When you create a database, Essbase creates an empty outline for the database automatically. The outline has the same name as the database (`dbname.otl`) and is stored in the database directory (`ARBORPATH\app\appname\dbname`).

➤ To create an outline:

- 1 [Create a new database.](#)
- 2 [Open the outline.](#)
- 3 Define dimensions, members, and properties. See [Working with Outlines](#).

Related Information

- [“About Outlines” on page 124](#)
- [“Working with Outlines” on page 126](#)

Setting Outline Properties

Outlines have properties that tell Essbase how to work with dimensions and members. Outline Editor enables you to view and edit properties for an outline. For information about outline properties and drafting an outline, see the *Oracle Essbase Database Administrator's Guide*.

Some outline properties cannot be changed in Outline Editor, such as outline type.

Note: Some [outline properties](#) do not apply to aggregate storage outlines.

➤ To view properties for an outline:

- 1 [Open the outline in edit mode](#) and select the **Properties** tab.
- 2 Expand each node in the properties tree to view or set the following [outline properties](#):
 - Case sensitivity of member names
 - [Uniqueness](#) requirement for member names
 - Handling of [alias tables](#)
 - Naming of [attribute dimensions](#) and members
 - [Dense and sparse data storage](#) settings for dimensions (block storage outlines only)

Related Information

- [“About Outlines” on page 124](#)
- [“About Outline Editor” on page 140](#)
- [“Outline Editor Window—Properties Tab” on page 619](#)

Creating Duplicate Member Name Outlines

By default, outlines require that member names are unique within the outline. If you want to allow [duplicate member names](#) in an existing unique outline, you can convert the outline to allow duplicate members. Once an outline is converted, it cannot be changed back to unique.

By default, all dimensions in a duplicate member name outline allow duplicate member names. You can tag one or more dimensions as unique in a duplicate member name outline to require unique member names in that particular dimension.

► To create a duplicate member name outline:

- 1 [Open the outline in edit mode.](#)
- 2 Select the **Properties** tab.
- 3 Save any unsaved changes you have made to the outline.
- 4 Next to the **Duplicate member names allowed** node, select **true** from the drop-down list.
- 5 [Save the outline](#) before proceeding with any other outline changes.

Note: After you change the setting to **true** and save the outline, the outline cannot be converted back to a unique member outline.

- 6 If you want to require unique member names in any dimension, [tag the dimension as unique](#).

You can now create duplicate member names in the dimensions you tagged to allow duplicate members.

- 7 In dimensions that allow duplicate member names, if you want to require unique member names in a particular generation or level, [specify the generation or level as unique](#).

Related Information

- [“About Duplicate Member Names” on page 124](#)
- [“Tagging a Dimension as Unique” on page 158](#)
- [“Creating Databases” on page 98](#)

Saving Outlines

When you save an outline, Essbase Administration Server automatically verifies the outline. You can also verify an outline before saving it. See [“Verifying Outlines” on page 131](#).

When you save changes to an outline when the database contains data, Essbase may restructure the database. For information about block storage restructuring, see the *Oracle Essbase Database Administrator's Guide*. For information about managing aggregate storage database restructuring, see the *Oracle Essbase Database Administrator's Guide*.

You can save outline files on an Essbase Server, on a client computer, or on a network. The Essbase encoding is used for all locations.

➤ To save an outline to an Essbase Server:

- 1 [Edit](#) and [verify](#) the outline, as needed.
- 2 Select **File**, then **Save**.

If you have made outline changes that trigger database restructuring, a dialog box is displayed to provide options for the restructure operation. For block storage databases, the [Restructure Database Options dialog box](#) enables you to define how data values should be handled during restructure; for example, you can choose to preserve all data, to preserve only level 0 or input data, or to discard all data during restructure. For more information about block storage restructuring, see the *Oracle Essbase Database Administrator's Guide*.

For aggregate storage databases, you may be prompted to clear data before the restructure. If a restructure can be performed without clearing data, the [Aggregate Storage Database Restructure dialog box](#) enables you to choose whether or not to clear data before the restructure. For more information about managing aggregate storage database restructuring, see the *Oracle Essbase Database Administrator's Guide*.

- 3 If a confirmation prompt or dialog box is displayed, respond as appropriate.

➤ To save the outline file locally or on a network:

- 1 [Edit](#) and [verify](#) the outline, as needed.
- 2 Select **File**, then **Save as**.
- 3 In the **Save As** dialog box, select the **File System** tab.
- 4 Navigate to the directory in the file system where you want to save the outline.
- 5 In the **File name** text box, enter a name for the outline.

By default, outlines have a .otl extension.

- 6 Click **OK**. Essbase saves the outline in the specified location.

Related Information

- [“Verifying Outlines” on page 131](#)
- [“Restructure Database Options Dialog Box” on page 634](#)
- [“Aggregate Storage Database Restructure Dialog Box” on page 456](#)

Verifying Outlines

When you save an outline, Essbase verifies it for errors. You can also verify the accuracy of an outline before you save it. Essbase provides a series of verification checks when you verify an outline. For details about verification checks, see the *Oracle Essbase Database Administrator's Guide*.

The outline verification process takes into account the outline type ([aggregate storage](#) or [block storage](#)) and verifies the outline according to the rules for each type.

After it has verified the outline and the outline is error free, Essbase verifies member formulas. To correct formula errors, see [“Creating and Editing Formulas in Outlines” on page 179](#).

Note: When you verify an outline and you are not connected to an Essbase Server, member formulas in the outline are not verified.

► To verify an outline:

- 1 **Open the outline** and make changes, as desired.
- 2 **Click the Verify button.**
 - If the outline has no errors, Outline Editor displays a message.
 - If the outline is not valid, the [Verification tab](#) is displayed. The tab lists the errors that the outline contains. Correct the errors, and then verify the outline again.

When the outline has verified as error free, Essbase verifies member formulas, displaying warnings for formula errors. Even though you can save an outline with formula errors, be sure to correct the formulas before using the outline.
- 3 **When the outline is error free, save the outline.**

Related Information

- “Verifying Outlines” in the *Oracle Essbase Database Administrator's Guide*.
- [“Outline Editor Window—Verification Tab” on page 621](#)

Copying Outlines

To copy an outline from one database to another database, perform a **Save As** to the new database. You can copy an outline to the file system directory or to the Essbase location of an existing database.

You cannot copy an outline from a block storage database to an aggregate storage database, and vice versa.

Caution! Do not use the file system to copy outline files manually, especially between block storage and aggregate storage databases.

► To copy a complete outline from one database to another database:

- 1 **Open an Outline.**
- 2 **Select File, then Save as.**
- 3 In the [Save As](#) dialog box, specify the file system location or the Essbase location to which to save the outline.
- 4 In the message about replacing the existing file, select **Yes**.

Related Information

[“Save As Dialog Box” on page 635](#)

Related Commands

alter object (MaxL) in the *Oracle Essbase Technical Reference*

Printing Outlines

In Outline Editor, you can print outline information, including information displayed on the **Outline**, **Properties**, and **Modifications** tabs.

You can print the entire, expanded outline to see members lower in the tree. If you expand only some dimensions or members in the outline, you can print the collapsed and consolidation sections as they are currently displayed in Outline Editor.

► To print an outline and its properties:

- 1 Open an outline in [Outline Editor](#) or [Outline Viewer](#).
- 2 **Optional:** Expand the outline to display child members that you want to see in the printout.
- 3 **Optional:** Select **File**, then **Page Setup** to set up page layout properties.
- 4 **Optional:** Select **File**, then **Print Preview** to preview the printed outline.
- 5 Select **File**, then **Print**.
- 6 In the [Outline Print Options dialog box](#), select outline printing options.
- 7 In the **Print** dialog box, select print options.
- 8 Click **OK**.

Related Information

- [“About Outlines” on page 124](#)
- [“About Outline Editor” on page 140](#)
- [“Viewing Outlines” on page 135](#)
- [“Printing Member Formulas” on page 182](#)

Renaming Outlines

An outline always has the same name as its database. To rename an outline, you must rename the database. See [“Renaming Databases” on page 103](#).

Deleting Outlines

An outline is a required part of a database. To delete an outline, you must delete its database. See [“Deleting Databases” on page 104](#).

You can delete dimensions and members from an existing outline. See [“Deleting Dimensions and Members” on page 165](#).

Optimizing Outlines for Batch Calculation

The arrangement of dimensions in an outline and the storage properties of dimensions and members affect two areas of performance--how quickly batch calculations are run and how long it takes to retrieve data.

Note: This functionality only applies to block storage outlines.

As you design, develop, and tune a block storage database outline, you can use **Optimize Outline** to apply standard design principles to the outline for optimized performance of batch calculations. The standards applied using this feature may not optimize your outline because of factors unique to your deployment such as calculation scripts, end user workloads, and hardware environment.

For detailed information about outline design and performance issues, see “Optimizing Calculations” in the *Oracle Essbase Database Administrator's Guide*.

➤ To optimize an outline for calculation performance:

- 1 [Back up the database.](#)
- 2 If the outline is open in Outline Editor and there are unsaved edits, save the outline.
- 3 From Enterprise View or a custom view, select a database.
- 4 Select the **Outline** node, right-click, and select **Optimize**.

Caution! This action cannot be undone.

- 5 At the confirmation prompt, click **Yes**.
- 6 If the outline is open, close and reopen it to see the updated outline.

Essbase Administration Server displays in a message the number of members that were changed.

Related Information

“Designing an Outline to Optimize Performance” in the *Oracle Essbase Database Administrator's Guide*

Using Outline Viewer

In this section:

- [“About Outline Viewer” on page 135](#)
- [“Viewing Outlines” on page 135](#)
- [“Expanding and Collapsing Outlines” on page 136](#)
- [“Viewing Dimension and Member Properties” on page 137](#)

- [“Viewing Formulas” on page 138](#)
- [“Viewing Relationally-Stored Members in Outline Viewer” on page 139](#)

About Outline Viewer

Outline Viewer provides a quick, read-only view of outlines and their properties. Outline Viewer is quick because it loads outline members into memory only as you need to see them.

You can [customize Outline Viewer](#) to display only the outline information that you want to see. The values that you set apply to both the Outline Viewer window and the Outline Editor window.

Use [Outline Editor](#) to view and change outlines.

Related Information

- [“About Outlines” on page 124](#)
- [“Viewing Outlines” on page 135](#)
- [“Outline Viewer Window” on page 621](#)
- [“About Outline Editor” on page 140](#)

Viewing Outlines

Use [Outline Viewer](#) to view outlines without changing them. Outline Viewer conserves resources because it loads outline members into memory only as you need to see them. If desired, you can [customize](#) the information displayed and the colors used to identify types of information.

You can also use [Outline Editor](#) to view outlines. However, because Outline Editor immediately loads the entire outline into memory, you may experience a delay before you see the outline. Outline Editor also enables you to modify outlines.

To view and change the outline and its properties, use Outline Editor.

➤ To view an outline without changing it, use Outline Viewer:

- 1 **From Enterprise View or a custom view, find the database whose outline you want to view.**
- 2 **Right-click the **Outline** node, and select **View**.**

Outline Viewer displays the dimensions in the outline. Perform the following actions to see different parts of the outline:

- Use menu items to [expand and collapse the outline](#).
- To expand a dimension to see the members of the dimension, click the plus box (or analogous symbol) next to the dimension name or double-click the dimension name.
- To expand lower levels of a dimension or member, click the appropriate plus box or member name.
- To collapse any section of the outline, click the minus box (or analogous symbol) of the topmost member of the section.

- To view outline properties, click the [Properties](#) tab.
- To view dimension or member properties in a separate pane of the Outline Viewer window, right-click the dimension or member and select **View member properties**.

If needed, Administration Services Console opens the properties pane to display the properties. See [“Viewing Dimension and Member Properties” on page 137](#) for information on using the properties pane.

Note: Outline Viewer does not detect changes made to an outline by another user in Outline Editor, outline optimize, or dimension build. To view background changes, close and then reopen the outline.

Related Information

- [“Printing Outlines” on page 133](#)
- [“About Outlines” on page 124](#)
- [“About Outline Viewer” on page 135](#)
- [“About Outline Editor” on page 140](#)
- [“Viewing Dimension and Member Properties” on page 137](#)
- [“Viewing Formulas” on page 138](#)

Expanding and Collapsing Outlines

You can expand and collapse outlines in specific ways, as described in this topic. The procedures in this topic apply to both Outline Editor and Outline Viewer.

You cannot select multiple members to expand or collapse simultaneously.

For information about expanding in outlines that contain relationally stored members, see [Viewing Relationally Stored Members](#).

► To expand or collapse outlines:

- 1 Open the outline in [Outline Editor](#) or [Outline Viewer](#).
- 2 To expand the entire outline to all descendants, select **Outline**, then **Expand entire outline**.
- 3 To expand the outline to the children of a particular member, select the member and then select **Outline**, then **Expand to children**.
- 4 To expand the outline to all descendants of a particular member, select the member and then select **Outline**, then **Expand to descendants**.
- 5 To collapse the outline to the ancestor of a particular member, select the member and then select **Outline**, then **Collapse to ancestor**.

Related Information

- [“Manipulating Dimensions and Members in an Outline” on page 145](#)

- [“Sorting Members” on page 165](#)

Viewing Dimension and Member Properties

Use Outline Viewer or Outline Editor to view member property details. Outline Editor enables you to change properties but requires more Essbase Administration Server resources than Outline Viewer does, possibly affecting overall performance.

► To view dimension or member properties using Outline Viewer:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click the **Outline** node and select **View**. [Outline Viewer](#) displays the selected outline.
- 3 On the [Outline](#) tab of Outline Viewer, right-click a dimension or member and select **View member properties**.

Administration Services Console adds a view pane, showing the outline in the left pane and the properties of the selected items in the right pane. If the right pane is already open, it displays the properties of the most recently selected item.

If the selected member has a formula, Administration Services Console shows the formula in a third pane immediately below the properties pane. See [“Viewing Formulas” on page 138](#).

► To view dimension or member properties using Outline Editor:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click the **Outline** node and select **Edit**. [Outline Editor](#) displays the selected outline.
- 3 Select one or more dimensions and members and right-click.
- 4 Select **Edit member properties**.

The Member Properties dialog box is displayed. Information is organized on tabs. See [Member Properties dialog box](#) for details about the tabs.

Related Information

- [Viewing Outline Properties](#)
- [Customizing Outline Viewer](#)
- “Setting Dimension and Member Properties” in the *Oracle Essbase Database Administrator's Guide*
- [“Viewing Formulas” on page 138](#)

Related Commands

getmbrinfo (ESSCMD) in the *Oracle Essbase Technical Reference*

Viewing Formulas

Based on the [console options](#) selected for viewing outlines, within the outline tree Outline Editor and Outline Viewer display as much of a formula as possible next to the related member in the outline pane.

If the outline is already open in Outline Editor, you can use Formula Editor to view large member formulas. See [“Creating and Editing Formulas in Outlines” on page 179](#).

If the outline is not open in Outline Editor, use the Formula viewing capability of [Outline Viewer](#) to view large member formulas.

To view formulas in the outline tree of Outline Editor and Outline Viewer, select the **Formula console option** to display formulas.

If the outline is already open in Outline Editor, you can use Formula Editor to view large member formulas. See [“Creating and Editing Formulas in Outlines” on page 179](#).

► To use Outline Viewer to view a large formula:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click the **Outline** node, and select **View**.

Outline Viewer displays the selected outline on the Outline Tab.

- 3 Right-click the member formula and select **View Member Properties**.

If the selected member has a formula, Administration Services Console breaks the Outline tab into three panes containing the following information:

- Outline tree, in the left pane
- Member properties, in the upper right pane
- Member formula, in the lower right pane

- 4 To change the area of the viewing panes, place the cursor over a border and drag the border to the desired size.
- 5 If the formula is too large for the lower right pane, scroll to view more.

Outline Viewer displays the **Formula** dialog box containing the member formula. To display unseen areas of the formula:

- Drag the scroll bar.
- Double-click a location in the dialog box where you want to insert a position cursor. You can use the keyboard to move this cursor up and down to display text within the dialog box.

- 6 Click **Close** to close the **Formula** dialog box.

Related Information

- [“About Outline Viewer” on page 135](#)
- [“About Outline Editor” on page 140](#)
- [“Creating and Editing Formulas in Outlines” on page 179](#)

Viewing Relationally-Stored Members in Outline Viewer

In outlines enabled for Advanced Relational Access or Hybrid Analysis through Oracle Essbase Integration Services, you can view members stored in a relational database or data warehouse in Outline Viewer in Administration Services Console. Relationally-stored members are not displayed in Outline Editor.

Note: You should not edit and save any changes to an outline that is enabled for Advanced Relational Access.

The advanced relational access feature applies only to aggregate storage outlines.

In Outline Viewer, relationally-stored members look identical to regular members; there is no indication as to which members are stored in a relational source. You can view relationally-stored members, but you cannot perform any actions on these members. For example, there are no member properties for relationally-stored members.

Note: If you have chosen to [display the child count](#) of each member in Outline Viewer, the count does not include relationally stored members.

➤ To view relationally-stored members:

1 [Open the outline in view mode.](#)

The **Outline** tab is displayed.

2 [Expand a member.](#)

When expanding parts of the outline, keep in mind the following:

- "Expand to children" on a member that contains relationally-stored children displays the children, as expected.
- "Expand to descendants" on a member that contains relationally-stored children displays only the children (not all descendants) of the selected member.
- "Expand outline" displays only the children (not all descendants) of any members that contain relationally-stored children.
- Expanding parts of the outline that do not contain relationally-stored children [works as documented for all outlines](#).

Related Information

- [“Enabling or Disabling Hybrid Analysis” on page 159](#)
- [“Expanding and Collapsing Outlines” on page 136](#)
- “Retrieving Relational Data” in the *Oracle Essbase Database Administrator's Guide*

Using Outline Editor

In this section:

- [“About Outline Editor” on page 140](#)
- [“Customizing Outline Editor and Outline Viewer” on page 141](#)
- [“Splitting Outline Editor into Multiple Panes” on page 142](#)
- [“Using the Outline Editor Toolbar” on page 143](#)
- [“Finding Text in Editors” on page 143](#)
- [“Finding and Replacing Members and Text in Outlines” on page 143](#)
- [“Manipulating Dimensions and Members in an Outline” on page 145](#)
- [“Query Hints” on page 147](#)
- [“Setting User-Defined View Selection Properties” on page 147](#)

About Outline Editor

Outline Editor provides a graphical view of outline dimensions and members, enabling you to define an Essbase database. Outline Editor is a [window](#) with tabs providing various types of portals through which you can view and change outline content, structure, and properties. If more than one outline is open, each outline is displayed in a separate Outline Editor window.

The [Outline tab](#) displays the dimensions and members of the outline in a hierarchical tree structure, enabling you to see relationships as you work with members. To help you work with outline dimensions and members, you can [customize the information displayed and select the colors used](#). Outline Editor provides several different approaches for you to access and change outlines:

- Right-click shortcut menus. Right-click an item on the tree to see a shortcut menu that lists actions you can take. Using this approach you can perform such tasks as adding and deleting dimensions and members, sorting members, accessing member information, and splitting the view into multiple panes. [More info ...](#)
- Drag and drop. Select and move an item. [More info ...](#)
- Menus on the Administration Services Console menu bar. Editing an outline adds the Outline menu to the menu bar. The menu is not context-sensitive. You can access menu items at any time in Outline Editor and can perform the following actions:
 - [Verify the outline](#)
 - Define [generations and levels](#)
 - Define [Dynamic Time Series](#) members
 - [Generate a currency database](#)
 - [Import](#) or [export](#) alias table data
 - [Update the outline](#) dynamically using a rules file
 - [Expand and collapse](#) the outline

- Outline Editor toolbar. Click an [Outline Editor toolbar button](#) for immediate access to the functionality that it provides.
- Keyboard shortcuts. Press [a key or key combination](#) to initiate the most common outline tasks.

You can [split the Outline tab into multiple panes](#), enabling you to view different parts of the outline at the same time.

The Outline [Properties tab](#) also displays outline properties in a tree format. Viewing and changing property information is similar to working with Enterprise View. Open and close nodes that group related information and properties.

- Click an underlined value to open a text box or a drop-down list box and change the value. Values shown without underlines are not editable.
- Right-click an item on the tree to see a shortcut menu that lists actions you can take.

Other Outline Editor tabs provide informational lists, such as a list in response to a [verify request](#) or a [find operation](#), or a list of [modifications](#) made to the outline.

Related Information

- [“About Outlines” on page 124](#)
- [“Outline Editor Window” on page 617](#)
- [“About Outline Viewer” on page 135](#)
- [Customizing Outline Viewer and Outline Editor](#)
- [“Working with Outlines” on page 126](#)
- [“Opening and Editing Outlines” on page 149](#)

Customizing Outline Editor and Outline Viewer

Outline Editor and Outline Viewer display database outlines in navigation trees. You can view information about an outline and about the dimensions and members that it contains.

You can select specific outline information to be displayed, such as formulas, aliases, and child count, as well as the color in which to display each type of information.

You can also specify whether or not you are prompted each time you perform certain actions in an outline, for example, deleting members.

➤ To select the information that is displayed with each dimension and member in the outline:

- 1 **Select [Tools](#), and then [Console options](#).**
- 2 Select the [Outline Tools](#) tab.
- 3 Select the items to be displayed in the outline tree.
- 4 If desired, to change the display color for an item, click the cell for the item in the far right column and select a color from the drop-down list.

5 Specify confirmation options.

6 Click **Apply**.

The changes take effect the next time you open the outline.

7 Click **Close** to close the dialog box.

Related Information

- [“About Outline Editor” on page 140](#)
- [“About Outline Viewer” on page 135](#)
- [Options Dialog - Outline Tools Tab](#)

Splitting Outline Editor into Multiple Panes

To facilitate viewing and working with members in very large outlines, you can split the Outline tab into multiple views of the outline and work separately within each view (pane). You can divide the tab into two or more vertical and horizontal views.

To enable the multiple view process, [open the outline in editing mode](#). The Outline tab is displayed.

➤ To split a view of the outline tree into two side-by-side panes:

- 1 Right-click anywhere within the pane to be split
- 2 From the shortcut menu, select **Split view horizontally**.

➤ To split a view of the outline tree into two panes, one above the other:

- 1 Right-click anywhere within the pane to be split
- 2 From the shortcut menu, select **Split view vertically**.

➤ To return the Outline tab to a single view:

- 1 Right-click anywhere within the pane containing the single view to be retained.
- 2 From the shortcut menu, select **Close other views**.

➤ To close a specific pane:

- 1 Right-click anywhere within the pane containing the single view to be closed.
- 2 From the shortcut menu, select **Close view**.

Related Information

- [“About Outlines” on page 124](#)
- [“About Outline Editor” on page 140](#)
- [“Outline Editor Window” on page 617](#)

Using the Outline Editor Toolbar

For quick access to commonly used Outline Editor operations, a toolbar is displayed at the top of the Outline Editor window. In Outline Editor, hovering the cursor over a button displays a tool tip description for the button. Some buttons are not available depending on what is selected in the outline. For example, buttons that are specific to the accounts dimension are displayed only when the accounts dimension is selected. You may need to maximize the size of the Administration Services Console window to ensure that all buttons can be seen.

Click a button to perform the desired function. When a button is selected, it appears depressed.

Note: Some toolbar icons do not apply to aggregate storage outlines.

Finding Text in Editors

You can find and replace text in formulas, calculation scripts, report scripts, and MaxL scripts. You can find text in reports that you view using Report Viewer.

➤ To find text in formulas, calculation scripts, report scripts, MaxL scripts, and Report Viewer:

- 1 In a script area or in Report Viewer, right-click, and select **Find**.
- 2 In the **Find** dialog box, [enter the text](#) that you want to find.
- 3 **Optional:** To make the search case-sensitive, select **Match case**.
- 4 Click **Find**.

➤ In editors, to find and replace text:

- 1 In a script, right-click, and select **Replace**.
- 2 In the **Find** dialog box, [enter the text](#) that you want to replace.
- 3 In **Replace with**, enter the replacement text.
- 4 **Optional:** To make the replacement case-sensitive, select **Match case**.
- 5 Click **Replace** or **Replace All**.

Related Information

- [“Find Dialog Box” on page 577](#)
- [“Replace Dialog Box” on page 631](#)
- [“Finding and Replacing Members and Text in Outlines” on page 143](#)

Finding and Replacing Members and Text in Outlines

Outlines contain character text in dimension and member names, aliases, formulas, and UDAs. Outline Editor provides a text search-and-replace facility that enables you to find and replace text strings that you specify. You cannot replace text in Outline Viewer.

This topic describes separate procedures for finding text and for replacing text.

Regarding wildcards in searches:

- Wildcards are not accepted in Outline Editor.
- Use an asterisk (*) to find anything containing the text that precedes it; for example, 100* returns 100, 100-10, 100-20, 100-30.

The characters preceding the * are assumed to be the beginning characters of the entire text string; for example, 100* does not return 21000000.

The * cannot be used at the beginning of a search term.

Note: To search and replace text while editing calculation scripts or report scripts or while using Formula Editor, see [“Finding Text in Editors” on page 143](#).

► To find members or text on the Outline tab of Outline Editor or Outline Viewer:

- 1 [Open the outline](#) in view or edit mode.
- 2 Right-click anywhere on the **Outline** tab and select **Find members**.
- 3 In the **Find Members** dialog box, [specify the text to search for](#) and the search criteria.
- 4 Click **OK**.

When the search is finished, a message box is displayed. The box contains information about the success rate of the search.

- 5 Click **OK** to close the message box.

The Find Results tab is displayed, which lists members that meet the search criteria.

- 6 **Optional:** To perform additional operations on any member in the results list, right-click the item and select the desired action.

► To find and replace members or text on the Outline tab of Outline Editor:

- 1 [Open the outline](#) in edit mode.
- 2 Right-click anywhere on the **Outline** tab and select **Replace**.
- 3 In the [Replace in Outline](#) dialog box, specify the text to search for, the replacement text, and other search criteria.
- 4 Click **Find Next** and **Replace** to step through each occurrence of text that meets the search criteria and optionally replace each occurrence.
- 5 Click **Replace All** to replace all occurrences of text that meets the search criteria.

A message box displays information about the replace operation. The Find Results tab lists members that were replaced.

- 6 **Optional:** To perform additional operations on any member in the results list, right-click the item and select the desired action.

Related Information

- [“About Outline Editor” on page 140](#)
- [“About Outline Viewer” on page 135](#)
- [“Find Members Dialog Box” on page 578](#)
- [“Replace in Outline Dialog Box” on page 632](#)
- [“Find Results Tab” on page 579](#)

Manipulating Dimensions and Members in an Outline

Outline Editor enables you to choose among several methods when working with dimensions and members in the outline tree and when defining their dimension and member properties. Mix and match the methods that you prefer: drag and drop, toolbar buttons, keyboard shortcuts, the Edit menu, and right-click menus.

Caution: If you delete a member or the parent of a member, or if you rename a member, be sure to correct all locations where the member name is used. Member names are used in member formulas, report scripts, calculation scripts, and partition definitions.

For details about changing dimension and member properties, see [“Setting Dimension and Member Properties” on page 155](#).

- To add, delete, or rename a member, change the location of a member, insert members below a selected member, or change the properties of a member:

1 [Open an outline in edit mode.](#)

2 As desired, use any of the following methods to work with outline members:

- To move a dimension or member, select and drag it to the new location. As you move up and down the tree, other dimensions or members are highlighted (selected), one at a time. The cursor position, at release, determines whether the member that you are moving becomes a child or sibling of the selected member.
 - To create a child, release on top of or to the right of the selected member.
 - To create a sibling, release to the left of the selected member.
- [Expand and collapse members in the outline.](#)
- To initiate common member-related tasks, use the following keyboard shortcuts:

Key or Key Combination	Task
Delete or Del	Delete the selected member
Ins or Insert	Add a child for the selected member
Ctrl + Ins	Add a sibling for the selected member
=	Open Formula Editor (Formula tab of the Member Properties dialog box) for the selected member
Ctrl + Enter	Open the Information tab of the Member Properties dialog box for the selected member

- Right-click a member and select the appropriate menu option:

Menu option	Task
Cut	Removes the member from the outline and places it on the clipboard. The member remains on the clipboard until another member is cut or copied to the clipboard and replaces it. See “Moving Dimensions and Members” on page 153.
Copy	Copies the current selection to the clipboard. The selection remains in the clipboard until another selection is cut or copied to the clipboard. See “Copying Dimensions and Members” on page 153.
Delete	Removes the member from the outline. See “Deleting Dimensions and Members” on page 165.
Paste child	Pastes, as a child of the selected member, the member from the clipboard.
Paste sibling	Pastes, as a sibling of the selected member, the member from the clipboard.
Add child	Adds a child to the selected parent. In the displayed text box, type the name of the child, and press Enter . The child is added. If you want to add another child, press Enter once. Outline Editor displays another text box. Continue the process until you have added the last child. Then press Enter twice or Esc once.
Add sibling	Adds a sibling to the selected parent. In the displayed text box, type the name of the sibling, and press Enter . The sibling is added. If you want to add another sibling, press Enter once. Outline Editor displays another text box. Continue the process until you have added the last sibling. Then press Enter twice or Esc once.
Rename	Opens a text box containing the name of the selected member. Type the new name, and press Enter once to close the text box. See “Renaming Dimensions and Members” on page 164.
Sort children ascending	Sorts all children of the selected parent member in ascending alphanumeric order (0 to 9, A to Z). This menu command is not available if the current member or dimension has no children. See “Sorting Members” on page 165.
Sort children descending	Sorts all children of the selected parent member in descending alphanumeric order (Z to A, 9 to 0). This menu command is not available if the current member or dimension has no children. See “Sorting Members” on page 165.

Note: For information about the Find option, see [“Finding and Replacing Members and Text in Outlines” on page 143.](#) For information about the Split view options, see [“Splitting Outline Editor into Multiple Panes” on page 142.](#)

Related Information

- [“Expanding and Collapsing Outlines” on page 136](#)
- [“Opening and Editing Outlines” on page 149](#)
- [“About Outline Editor” on page 140](#)

Query Hints

Query hints influence view selection. By specifying members from one or more dimensions, the administrator can indicate to Essbase what types of queries are likely to occur. For example, to optimize queries at the bottom level of time, the administrator can specify one member at the bottom level of time, such as January. This tells Essbase that *any member* at the bottom level of the time dimension is likely to be queried. If no member is specified for a dimension, it means that the queries are equally likely to include members at any level of that dimension.

Query-based view selection ignores query hints, and user-defined view selection overrides them if there is a conflict between the two.

➤ To apply query hints:

- 1 Open Outline Editor.
- 2 Select the **Query Hints** tab.
- 3 Double-click the dimension on which to apply hints.

Note: You cannot use query hints with dynamic dimensions.

4 Perform an action:

- Select the **Use Member Selection** option and drill down to the member.
- Select **Use Inline Editing** and type a member name in the field below its dimension name.






Related Information

- [“About Outlines” on page 124](#)
- [“Outline Editor Window” on page 617](#)
- [Customizing Outline Viewer and Outline Editor](#)
- [“Working with Outlines” on page 126](#)
- [“Opening and Editing Outlines” on page 149](#)
- [“Query Hints” in the *Oracle Essbase Database Administrator's Guide*](#)

Setting User-Defined View Selection Properties

By default, Essbase uses internal mechanisms to decide how to create aggregations. User-defined view selection provides a way for an administrator to influence both default and query-based view selection.

When you select a stored member in an aggregate storage outline, icons appear in the Outline Editor toolbar enabling you to modify selection properties for that member. You can also set these properties in the [“Member Properties Dialog Box—Information Tab” on page 595](#) dialog box, under Level Usage for Aggregation. You can select from the following options:

Property	Effect
 Default	On primary hierarchies, Essbase considers all levels. It does not aggregate on secondary hierarchies unless alternative rollups are enabled.
 Consider all levels	Considers all levels of the hierarchy as potential candidates for aggregation. This is the default for primary hierarchies, but not for secondary hierarchies.
 Do not aggregate	Does not aggregate along this hierarchy. All views selected by Essbase are at the input level.
 Consider top level only	Applies only to primary hierarchies. Queries are answered directly from input data.
 Never aggregate to intermediate levels	Applies to primary hierarchies. Selects top and bottom levels only.

Related Topics

- [“About Outline Editor” on page 140](#)
- [Understanding User-Defined View Selection in the *Oracle Essbase Database Administrator's Guide*](#)

Editing Outlines

In this section:

- [“Opening and Editing Outlines” on page 149](#)
- [“Adding Dimensions to Outlines” on page 151](#)
- [“Adding Members to Dimensions” on page 152](#)
- [“Copying Dimensions and Members” on page 153](#)
- [“Moving Dimensions and Members” on page 153](#)
- [“Defining Shared Members” on page 154](#)
- [“Setting Dimension and Member Properties” on page 155](#)
- [“Setting the Dimension Type” on page 156](#)
- [“Tagging a Time Dimension” on page 156](#)
- [“Tagging an Accounts Dimension” on page 157](#)
- [“Tagging Attribute Dimensions” on page 158](#)
- [“Tagging a Dimension as Unique” on page 158](#)

- “Setting Dimensions as Dense or Sparse” on page 159
- “Enabling or Disabling Hybrid Analysis” on page 159
- “Setting Member Consolidation Properties” on page 160
- “Setting Time Balance Properties” on page 160
- “Setting Two-Pass Calculation Properties” on page 161
- “Setting Member Storage Properties” on page 162
- “Setting Variance Reporting Properties” on page 163
- “Assigning Currency Categories to Accounts Members” on page 163
- “Setting Comments on Dimensions and Members” on page 164
- “Renaming Dimensions and Members” on page 164
- “Sorting Members” on page 165
- “Deleting Dimensions and Members” on page 165
- “Enabling Dynamic Time Series Members” on page 166
- “Disabling Dynamic Time Series Members” on page 166
- “Naming Generations and Levels” on page 167
- “Viewing a List of Outline Modifications” on page 168
- “Viewing Attribute Information in Outlines” on page 169
- “Undoing Outline Changes” on page 169

Opening and Editing Outlines

You use Outline Editor to open an outline in edit mode or you use Outline Viewer to open an outline in read-only mode. When you open an outline in edit mode, the following actions occur:

- The entire outline is loaded into memory on the Essbase Administration Server. If multiple users are opening large outlines on the same Essbase Administration Server, you may need to adjust memory on the Essbase Administration Server machine, or open the outlines in read-only mode.
- The outline is displayed in an Outline Editor window in the workspace pane.
- The **Edit** and **Outline** menus are added to the menu bar of the console.
- To ensure outline integrity, Essbase locks the outline. Anyone attempting to edit an open outline is provided the option to view the outline in Outline Viewer.
- The database associated with the outline is not started until you save the outline.

If you do not need to modify an outline, you can open it in read-only mode in [Outline Viewer](#). When you open an outline in read-only mode, the following actions occur:

- Parts of the outline are loaded into memory on the Essbase Administration Server as they are requested. Opening an outline in read-only mode uses less memory on the Essbase Administration Server than opening it in edit mode.

- The outline is displayed in a new Outline Viewer window in the workspace pane.
- The outline is not locked and cannot be edited or saved.
- The database associated with the outline is started when you open the outline. If the database is already started, the outline may open more quickly than in edit mode.

For more information about how outlines consume memory in Outline Editor and Outline Viewer, see *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*

Note: In applications with more than one database, in some circumstances opening one database loads all of them. To prevent loading of multiple databases, make sure the option to [start databases when the application starts](#) is *not* selected for each database in the application.

➤ To open and edit an outline that is saved as an object on an Essbase Server:

- 1 From Enterprise View or a custom view, select a database.
- 2 To open an outline in edit mode, perform an action:
 - Select the **Outline** node, right-click, and select **Edit**.
 - Double-click the **Outline** node.

Outline Editor displays the selected outline. Depending on the option selected in the [Options dialog box](#), Administration Services Console may prompt you to lock the outline. If you plan to modify the outline and you want to save your changes, you should lock the outline so that other users cannot modify it while you are working on it. See “[Locking and Unlocking Objects](#)” on page 105 for more information.

- 3 **Optional:** [Set up the Outline Editor work area](#) to accommodate your working style and to edit the outline.
- 4 Edit the outline.
See [Working with Outlines](#).

➤ To open an outline file that is saved locally or on a network:

- 1 Select **File**, then **Open**.
- 2 In the **Open** dialog box, select the **File System** tab.
- 3 Navigate to an outline file.
- 4 From the **Files of type** drop-down list, select Outline file (.otl).
- 5 Select the outline file and click **OK**.

Outline Editor displays the selected outline.

- 6 Depending on the option selected in the [Options dialog box](#), you may be prompted to lock the outline. If you plan to modify the outline and you want to save your changes, you should lock the outline so that other users cannot modify it while you are working on it. See [Locking and Unlocking Objects](#) for more information.

- 7 **Optional:** [Set up the Outline Editor work area](#) to accommodate your working style for editing outlines.
- 8 Edit the outline.

Related Information

- [Working With Outlines](#)
- [Customizing Outline Viewer and Outline Editor](#)
- [“Viewing Outlines” on page 135](#)
- [“Setting Outline Properties” on page 129](#)
- [“Setting Dimension and Member Properties” on page 155](#)
- [“Printing Outlines” on page 133](#)
- [“Locking and Unlocking Outlines” on page 128](#)

Adding Dimensions to Outlines

Outlines are composed of members. The top level members of an outline are called dimensions. There are two types of dimensions: standard dimensions and attribute dimensions. For more information about dimensions, see the *Oracle Essbase Database Administrator's Guide*.

Dimension names must always be unique in the outline, even if the outline allows [duplicate member names](#).

The position of dimensions in an outline can affect performance. For information about designing an outline to optimize performance, see the *Oracle Essbase Database Administrator's Guide*.

Note: If you add, delete, or change dimensions and then save the outline, Essbase needs to restructure your database. After the restructuring is complete, you must recalculate the data.

➤ To add a dimension to an outline:

- 1 [Open the outline in edit mode](#).
- 2 **Perform an action:**
 - If the outline does not contain members, right-click the **Outline:***<database name>* node and select **Add child**.
 - If the outline contains members, right-click an existing dimension and select **Add sibling**.
- 3 Enter the dimension name, following the proper naming rules, and press **Enter**.

After you press **Enter**, a new text box is displayed, ready for you to add a sibling member. To close the text box without entering a name, press Esc.
- 4 For block storage outlines, [change the storage configuration](#) of the dimension, if necessary.

- 5 [Set the dimension type.](#)
- 6 [Define other dimension properties](#), as needed.
- 7 Consider the effects of the position of the dimension in the outline and position the dimension.

For information about designing an outline to optimize performance, see the *Oracle Essbase Database Administrator's Guide*.

- 8 [Add members to the dimension.](#)

Related Information

- [“Adding Members to Dimensions” on page 152](#)
- [“Setting Dimension and Member Properties” on page 155](#)
- [“Working with Outlines” on page 126](#)
- [“Manipulating Dimensions and Members in an Outline” on page 145](#)
- [“Renaming Dimensions and Members” on page 164](#)

Adding Members to Dimensions

Members are the individual components of the outline. Unless the dimension is enabled for duplicate member names, each member has a unique name. A dimension can contain an unlimited number of members, and members can be nested under other members. For more information about members, see the *Oracle Essbase Database Administrator's Guide*.

In a [duplicate member name outline](#), each dimension allows duplicate member names by default. To add a duplicate member name, simply type the duplicate member name. There are no additional requirements for adding a duplicate member. If the outline is not enabled for duplicate members, an error is returned when a duplicate member name is entered.

Note: If you add, delete, or change dimensions and then save the outline, Essbase needs to restructure your database. After the restructuring is complete, you must recalculate the data.

► To add members to an outline:

- 1 [Open the outline in edit mode.](#)
- 2 Perform an action:
 - To add a member as a child of a dimension or another member, select the dimension or member, right-click, and select **Add child**.
 - To add a member as a sibling of another member or dimension, select the member or dimension, right-click, and select **Add sibling**.
- 3 Enter the member name, following the proper naming rules, and press **Enter**.

After you press **Enter**, a text box is displayed, to add an additional sibling member. To close the text box without entering a name, press **Enter** again or press **Esc**.

- 4 Define the [member properties](#) for all new members and dimensions.

Related Information

- [“Adding Dimensions to Outlines” on page 151](#)
- [“Setting Dimension and Member Properties” on page 155](#)
- [Manipulating Dimensions and Members in an outline](#)
- [“Sorting Members” on page 165](#)
- [“Defining Shared Members” on page 154](#)
- [“Renaming Dimensions and Members” on page 164](#)

Copying Dimensions and Members

➤ To copy a dimension or member:

- 1 [Open the outline in edit mode.](#)
- 2 Right-click a dimension or member and select **Copy**.
- 3 If copying to a different outline, [open the target outline in edit mode.](#)
- 4 Right-click a dimension or member in the target outline and perform an action:
 - **Paste child** if you want to paste as the first child of the selected dimension or member.
 - **Paste sibling** if you want to paste as a sibling of the selected dimension or member.

Related Information

- [“Moving Dimensions and Members” on page 153](#)
- [“Copying Outlines” on page 132](#)

Moving Dimensions and Members

➤ To move a dimension or member:

- 1 [Open the outline in edit mode.](#)
- 2 Select a dimension, member, or members.
- 3 Right-click and select **Cut**.
- 4 Select a target dimension or member, right-click, and select an item:
 - **Paste child** to paste as the first child of the selected dimension or member.
 - **Paste sibling** to paste as a sibling of the selected dimension or member.

You can also select a single member and use the mouse to drag it to the desired location in the outline.

To drag multiple members, select the members and press and hold the right mouse button as you drag the members to the desired location in the outline.

Related Information

- [“Copying Dimensions and Members” on page 153](#)
- [“Copying Outlines” on page 132](#)

Defining Shared Members

To include a value under more than one parent in the same database, Essbase enables you to use shared members. For example, in the Sample Basic database, the Diet Cola member (100-20) rolls up to the value for Colas. When you define a shared member for 100-20 under Diet Drinks, the value for 100-20 is included in the reported total for Diet Drinks as well.

You should always place a shared member lower in the outline tree than the actual member.

When using shared members, consider that shared member values are present multiple times in the outline, potentially distorting the consolidation of the database. To prevent distorting the consolidation of the database, you may want to set the consolidation property of the shared member or of its parent or of a higher ancestor to (~) Ignore.

Note: There are different strategies and restrictions to consider when using shared members in aggregate storage outlines versus block storage outlines. For information about alternate hierarchies and using shared members in aggregate storage outlines, see the *Oracle Essbase Database Administrator's Guide*. For information about using shared members in block storage outlines, see the *Oracle Essbase Database Administrator's Guide*.

► To define a shared member in the outline tree:

- 1 [Add a member to a dimension](#).
- 2 Give the member a name that duplicates another member name in the dimension.
- 3 Select the member, right-click, and select **Edit member properties**.
- 4 In the **Member Properties** dialog box, select the **Information** tab.
- 5 In the **Data storage** drop-down list, select **Shared Member**.
- 6 Click **OK**.

In outlines that allow duplicate member names, if more than two members have the same name as the member you tag as shared, the [Duplicate Shared Member dialog box](#) opens.

- 7 If the **Duplicate Shared Members** dialog box is displayed, in the **Base Members** column, double-click the duplicate member that you want to be the basis for the shared member.

When you double-click the member, it is added to the Shared Members column.

- 8 Click **OK** to close the dialog box.

You can change the base member later in the [“Member Properties Dialog Box”](#) on page 592.

Related Information

- “Understanding Shared Members” in the *Oracle Essbase Database Administrator's Guide*
- “Alternate Hierarchies” in the *Oracle Essbase Database Administrator's Guide*
- [“Setting Member Consolidation Properties”](#) on page 160
- [“Duplicate Shared Member Dialog Box”](#) on page 555

Setting Dimension and Member Properties

After creating and organizing a database outline, you can define properties for dimensions and members in the outline. Properties define how dimensions and members are stored, calculated, and consolidated.

You can set some properties in common for multiple dimensions and members. If multiple members are selected and you change a property, the change is applied to all selected members.

► To set properties for dimensions and members:

1 [Open Outline Editor.](#)

The Outline tab displays the outline in the form of a hierarchical outline tree.

2 Right-click one or more dimensions or members for which you want to set properties, and select **Edit member properties**.

3 In the [Member Properties](#) dialog box, select the appropriate tab and edit properties, as desired. If multiple dimensions or members are selected, not all properties are editable. Editable property fields are underlined.

Note: For block storage databases, the dimension storage property (dense or sparse) is not editable in this dialog box. See [Setting Dimensions as Dense or Sparse](#) for instructions to change this setting.

4 To save changes, click **OK**, click **Next** or **Prev**, or select a different tab in the **Member Properties** dialog box.

5 To undo changes made since this tab was opened for the current member, click **Cancel**.

Related Information

- [Working With Outlines](#)
- “Setting Dimension and Member Properties” in the *Oracle Essbase Database Administrator's Guide*
- [Setting Comments on Dimensions and Members](#)
- [“Setting the Dimension Type”](#) on page 156
- [“Setting Dimensions as Dense or Sparse”](#) on page 159

- “Setting Member Consolidation Properties” on page 160
- “Setting Two-Pass Calculation Properties” on page 161
- “Setting Member Storage Properties” on page 162
- “Setting Time Balance Properties” on page 160
- “Setting Variance Reporting Properties” on page 163
- “Creating Aliases for Dimensions and Members” on page 177
- “Creating and Editing Formulas in Outlines” on page 179

Setting the Dimension Type

A dimension type is a property that Essbase provides, adding special functionality to a dimension. The most commonly used dimension types are time, accounts, and attribute. By default, all dimensions are tagged as None.

The following dimension types do not apply to [aggregate storage](#) outlines: time, country, and currency.

The following topics describe how to set specific dimension types:

- “Tagging a Time Dimension” on page 156
- “Tagging an Accounts Dimension” on page 157
- Tagging a Country Dimension
- Tagging a Currency Partition
- “Tagging Attribute Dimensions” on page 158

Related Information

“Setting Dimension Types” in the *Oracle Essbase Database Administrator's Guide*

Tagging a Time Dimension

Use dimensions tagged as time to describe how often you collect and update data. The time dimension enables several accounts dimension functions, such as first and last time balances. An outline does not have to include a time dimension.

Note: The time dimension only applies to aggregate storage outlines.

► To tag a dimension as time:

- 1 **Open the outline in edit mode.**
The **Outline** tab is displayed.
- 2 **Right-click a dimension and select *Edit member properties*.**
- 3 In the **Member Properties** dialog box, select the **Information** tab.

- 4 Under the **MemberInformation** node, in the **Dimension type** drop-down list, select **Time**.
- 5 Click **OK**.

Related Information

- “Creating a Time Dimension” in the *Oracle Essbase Database Administrator's Guide*
- [“Setting the Dimension Type” on page 156](#)
- [“Member Properties Dialog Box—Information Tab” on page 595](#)

Tagging an Accounts Dimension

Tag a dimension as accounts if it contains items that you want to measure, such as profit or inventory. When you tag a dimension as accounts in block storage databases, built-in Essbase accounting functionality is made available. An outline does not have to include an accounts dimension.

To calculate members of the accounts dimension on the second pass through the outline, see [“Setting Two-Pass Calculation Properties” on page 161](#).

➤ To tag a dimension as accounts:

- 1 [Open the outline in edit mode](#).

The **Outline** tab is displayed.

- 2 Right-click the dimension to be tagged and select **Edit member properties**.
- 3 In the **Member Properties** dialog box, select the **Information** tab.
- 4 Under the **Member Information** node, in the **Dimension type** drop-down list, select **Accounts**.
- 5 Click **OK**.
- 6 If you want to set properties for members of accounts dimensions, see [Setting Time Balance Properties](#), [Setting Variance Reporting Properties](#), and [Assigning Currency Categories to Accounts Members](#).

Related Information

- “Creating an Accounts Dimension” in the *Oracle Essbase Database Administrator's Guide*
- [“Setting Time Balance Properties” on page 160](#)
- [“Setting Variance Reporting Properties” on page 163](#)
- [Assigning Currency Categories to Accounts Members](#)
- [“Setting the Dimension Type” on page 156](#)
- [“Member Properties Dialog Box—Information Tab” on page 595](#)

Tagging Attribute Dimensions

Use attribute dimensions to classify members of another, associated dimension. For example, in the Sample Basic database, the Pkg Type attribute dimension contains a member for each type of packaging, such as bottle or can, that applies to members of the Product dimension.

► To tag an attribute dimension:

1 **Open the outline in edit mode.**

The Outline tab is displayed.

2 **Right-click a dimension and select *Edit member properties*.**

3 **In the *Member Properties* dialog box, select the *Information* tab.**

4 **Under the *Member Information* node, in the *Dimension type* drop-down list, select *Attribute*.**

5 **Click *OK*.**

Related Information

- “Working with Attributes” in the *Oracle Essbase Database Administrator's Guide*
- [“About Attributes” on page 184](#)
- [“Defining Attributes” on page 185](#)
- [“Setting the Dimension Type” on page 156](#)
- [“Member Properties Dialog Box—Information Tab” on page 595](#)

Tagging a Dimension as Unique

In an outline that is enabled for [duplicate member names](#), you can tag particular dimensions to require unique member names. This setting enables you to specify member name uniqueness at a granular level in a duplicate member name outline.

► To tag a dimension to require unique member names in a duplicate member name outline:

1 **Open the outline in edit mode.**

2 **Right-click the dimension and select *Edit member properties*.**

3 **In the *Member Properties* dialog box, select the *Information* tab.**

4 **Under the *Member Information* node, in *Duplicate member names allowed in dimension*, select *false*.**

5 **Click *OK*.**

Related Information

[“About Duplicate Member Names” on page 124](#)

Setting Dimensions as Dense or Sparse

For block storage databases, Essbase optimizes database performance by dividing the standard dimensions into two types: dense dimensions and sparse dimensions. This division allows Essbase to cope with data that is not smoothly distributed. For more information about sparse and dense data storage, see the *Oracle Essbase Database Administrator's Guide*.

When you create a new dimension and save an outline, Essbase automatically sets the new dimension as sparse. Standard dimensions that you plan to associate with attribute dimensions must be set as sparse. By definition, attribute dimensions are set as sparse; the sparse setting of attribute dimensions cannot be changed.

Note: Dense/sparse storage does not apply to [aggregate storage databases](#).

➤ To change the storage configuration of a dimension:

1 [Open the outline in edit mode](#).

The **Outline** tab is displayed.

2 Select the **Properties** tab.

3 In the Dimension storage types option group, select **Dense** or **Sparse** for each dimension whose storage type you want to change.

Note: You can change the dimension storage type only if the Auto configure option for the outline is set to false.

Related Information

- [“Outline Editor Window—Properties Tab” on page 619](#)

Enabling or Disabling Hybrid Analysis

You can enable or disable hybrid analysis for each dimension that is defined for hybrid analysis in Integration Services Console. If you open an outline that is not defined for hybrid analysis, the Hybrid Analysis option is not displayed in the Member Properties dialog box or on the Outline Editor toolbar.

When hybrid analysis is disabled for a dimension, the end user is unable to see and drill-through to the hybrid analysis data associated with the dimension; however, the members of the dimension are still visible in Outline Editor.

➤ To enable or disable hybrid analysis for a dimension:

1 [Open the outline in edit mode](#).

The **Outline** tab is displayed.

2 Right-click the dimension and select **Edit member properties**.

- 3 In the **Member Properties** dialog box, select the **Information** tab.
- 4 Next to the **Hybrid Analysis** node, select **Enabled** or **Disabled**, as desired.
- 5 Click **OK**.

Related Information

“Accessing Relational Data” in the *Oracle Essbase Database Administrator's Guide*

Setting Member Consolidation Properties

Essbase determines the value of a parent by accumulating the values of its children. Consolidation operators defined for each child member define how Essbase treats each value; for example, whether to add or subtract a value. By default, new members are given the addition (+) operator, meaning that members are added. For example, in the Sample Basic database, Jan, Feb, and Mar values are added and the result is stored in their parent, Qtr1.

Note: In aggregate storage outlines, there are some restrictions on the use of consolidation operators. For more information about the differences between aggregate and block storage, see the *Oracle Essbase Database Administrator's Guide*.

► To set the consolidation property for a member in an outline:

- 1 Open the outline in edit mode.
- 2 Select the member, right-click, and select **Edit member properties**.
- 3 In the **Member Properties** dialog box, select the **Information** tab.
- 4 In the **Consolidation** drop-down list, select the consolidation operator.
- 5 Click **OK**.

Related Information

- “Setting Member Consolidation” in the *Oracle Essbase Database Administrator's Guide*
- “Calculating Members with Different Operators” in the *Oracle Essbase Database Administrator's Guide*
- [“Member Properties Dialog Box—Information Tab” on page 595](#)

Setting Time Balance Properties

Time balance properties provide instructions to Essbase about how to calculate data in the accounts dimension. By default, a parent in the time dimension is calculated based on the consolidation and formulas of its children. Setting a time balance property causes parents to roll up in a different way. To use time balance properties, you must have a dimension tagged as accounts and a dimension tagged as time. Time balance properties can be applied only to a *stored* time dimension.

If you set a time balance property, you must also set the skip property to tell Essbase what to do when it encounters missing values or values of 0.

➤ To set time balance properties for an accounts member:

1 Open the outline in edit mode.

The **Outline** tab is displayed.

2 Right-click the member and select **Edit member properties**.

3 In **Member Properties**, select the **Information** tab.

4 From **Time balance**, select a time balance property.

5 If the **Time balance** property is Average, First, or Last, from **Skip option**, select a skip property.

6 Click **OK**.

Outline Editor verifies that the time balance property is applied only to a stored time dimension.

Related Information

- “Setting Time Balance Properties” in the *Oracle Essbase Database Administrator's Guide*
- “Setting Skip Properties” in the *Oracle Essbase Database Administrator's Guide*
- [“Tagging an Accounts Dimension” on page 157](#)
- [“Member Properties Dialog Box—Information Tab” on page 595](#)

Setting Two-Pass Calculation Properties

The Two-Pass Calculation property indicates which members need to be calculated twice to produce the desired value. To obtain the correct values for two-pass members, Essbase must calculate the outline and then re-calculate the members that are dependent on the calculated values of other members.

Even though two-pass calculation is a property that you can give to any non-attribute dimension member, it works only on members of accounts dimensions, Dynamic Calc members, and Dynamic Calc And Store members. If two-pass calculation is assigned to any other member, Essbase ignores it.

Note: Two-pass calculation does not apply to aggregate storage outlines.

➤ To set a member to be calculated on the second pass through an outline:

1 Open the outline in edit mode.

2 Right-click the dimension or member and select **Edit member properties**.

3 In the **Member Properties** window, select the **Information** tab.

4 From the **Two-Pass calculation** drop-down list, select true or false.

5 Click **OK**.

Related Information

- “Setting Two-Pass Calculations” in the *Oracle Essbase Database Administrator's Guide*
- [“Member Properties Dialog Box—Information Tab” on page 595](#)

Setting Member Storage Properties

You can determine how and when Essbase stores data values for a dimension or member in a database. For example, you can tell Essbase to calculate the value for a member only when a user requests it and then to discard the data value. By default, Essbase stores each data value with its associated member.

Note: Some member storage options do not apply to aggregate storage outlines.

Members can be defined in any of six ways:

- Store Data
- Dynamic Calc and Store
- Dynamic Calc
- Never Share
- Label Only
- Shared Member

➤ To set storage properties for a dimension or member in an outline:

1 Open the outline in edit mode.

The **Outline** tab is displayed.

2 Right-click a dimension or member and select **Edit member properties**.

3 In the **Member Properties** dialog box, select the **Information** tab.

4 In the **Data storage** drop-down list box, select a storage property.

5 Click **OK**.

Related Information

- [“Member Properties Dialog Box—Information Tab” on page 595](#)
- [“Defining Shared Members” on page 154](#)
- “Determining How Members Store Data Values” in the *Oracle Essbase Database Administrator's Guide*
- [“Setting Dimension and Member Properties” on page 155](#)

Setting Variance Reporting Properties

You can set variance reporting properties for members in an accounts dimension to determine how Essbase calculates the difference between actual and budget data. Any member that represents an expense to the company requires an expense property tag.

Note: Variance reporting does not apply to aggregate storage outlines.

► To tag an accounts member as expense or non-expense:

- 1 Open the outline in edit mode.
- 2 Select the member, right-click, and select **Edit member properties**.
- 3 In the **Member Properties** dialog box, select the **Information** tab.
- 4 In the **Variance reporting expense** drop-down list, select a variance reporting property.
- 5 Click **OK**.

Related Information

- “Setting Variance Reporting Properties” in the *Oracle Essbase Database Administrator's Guide*
- [“Member Properties Dialog Box—Information Tab” on page 595](#)

Assigning Currency Categories to Accounts Members

When preparing a main database outline for currency conversion, you need to assign currency categories to the accounts dimension and its members. For example, you may want to convert the members Gross Profit and Net Profit using one category of rates (e.g., Profit & Loss), and use a different set of rates for other accounts (e.g., Balance Sheet).

When you assign currency categories in the main database, Essbase can create a dimension in the currency database that contains members for each of the individual currency categories. When defining currency categories in the main database, you can use inheritance in the hierarchy to allow a category at a higher level to pass its currency category to its children.

► To set currency conversion properties for an accounts member:

- 1 Open the main database outline.
- 2 Select the member. The member must be in a dimension tagged as accounts.
- 3 Right-click and select **Edit member properties**.
- 4 Select the **Information** tab and find the **Account information** node.
- 5 In the **Currency conversion** drop-down list, select a conversion option.
- 6 If you select **Category**, enter the appropriate conversion category in the **Category** text box.
- 7 Tag members not to be converted as **No Conversion**. The No Conversion tag is not inherited.

8 Click **OK**.

Note: Each descendant of a member inherits the currency category tag of its ancestor. A member or sub-branch of members can also have its own category defined.

Related Information

- [“About Essbase Currency Conversion” on page 421](#)
- [Converting Currency](#)
- [“Tagging an Accounts Dimension” on page 157](#)
- [“Troubleshooting Currency Conversion” on page 429](#)
- [“Member Properties Dialog Box—Information Tab” on page 595](#)

Setting Comments on Dimensions and Members

You can add comments to dimensions and members. Outline Editor displays comments to the right of the dimension or member name in the following format:

```
/* comment */
```

You can specify whether or not Outline Editor displays comments.

➤ To enter a comment for a dimension or member:

- 1 **Open the outline in edit mode.**
The **Outline** tab is displayed.
- 2 **Select a dimension or member, right-click, and select **Edit member properties**.**
- 3 **In the **Member Properties** dialog box, select the **Information** tab.**
- 4 **In the **Comment** text box, enter the comment.**
- 5 **Click **OK**.**

Related Information

- [“Member Properties Dialog Box—Information Tab” on page 595](#)
- [“Customizing Outline Editor and Outline Viewer” on page 141](#)

Renaming Dimensions and Members

You can rename dimensions and members.

➤ To rename a dimension or member:

- 1 **Open the outline in edit mode.**
- 2 **Right-click a dimension or member and select **Rename**.**

- 3 Type the name, following the proper naming rules, and press **Enter**.

For naming restrictions, see the *Oracle Essbase Database Administrator's Guide*.

Caution! Renaming dimensions or members that are used in a partition definition invalidates the partition definition unless you also redefine the partition using the new names.

Sorting Members

You can arrange members in the outline tree in alphanumerical order (0 to 9, A to Z) or reverse alphabetical order (Z to A, 9 to 0).

You cannot use sort commands to rearrange level 0 members of attribute dimensions.

- To sort all members in the level below a dimension or member:

- 1 [Open the outline in edit mode.](#)

The **Outline** tab is displayed.

- 2 Right-click the dimension or member whose members you want to sort.
- 3 If you want to sort the members in alphanumerical order, select **Sort children ascending**.
- 4 If you want to sort the members in reverse alphanumerical order, select **Sort children descending**.

Caution! Sorting members can place a shared member before its actual member in the outline. Placing a shared member before its actual member is not recommended.

Related Information

- “Positioning Dimensions and Members” in the *Oracle Essbase Database Administrator's Guide*
- [“Manipulating Dimensions and Members in an Outline” on page 145](#)

Deleting Dimensions and Members

If you add, delete, or move non-attribute dimensions or members, Essbase restructures your database, and you must recalculate your data.

- To delete a dimension or member:
- 1 [Open the outline in edit mode.](#)
 - 2 Right-click a dimension or member and select **Delete**.
 - 3 At the confirmation prompt, click **Yes**.

Caution! Deletions cannot be undone.

Enabling Dynamic Time Series Members

To use pre-defined Dynamic Time Series (DTS) members to dynamically calculate period-to-date values, you must enable them for an outline. When you enable a DTS member, you must associate the DTS member with a generation number.

When you associate a DTS member with a generation number, Essbase creates a predefined generation name for the generation number. Predefined member and generation names are reserved for use by Essbase. If you create a generation name on the time dimension, and you use one of the predefined generation names, Essbase automatically creates and enables the corresponding DTS member for you.

Note: Dynamic time series members do not apply to aggregate storage databases.

► To enable a Dynamic Time Series (DTS) member in an outline:

- 1 [Open the outline in edit mode.](#)
- 2 Select **Outline**, then **Dynamic time series**.

Outline Editor displays the [Define Dynamic Time Series Members](#) dialog box.

- 3 In the **Enabled** column, select the check box for the pre-defined DTS member that you want to enable.
- 4 In the **Gen** column, select the generation with which you want to associate the member that you selected to be enabled.

When you click a cell in the Gen column, a drop-down list is displayed. The list identifies the numbers of the generations within which you can create a DTS member in the current outline.

- 5 If desired, you can create an alias name for the DTS member. See [Creating Aliases for Dynamic Time Series Members](#).
- 6 Click **OK**.

Related Information

- [“Define Dynamic Time Series Members Dialog Box” on page 543](#)
- [“Disabling Dynamic Time Series Members” on page 166](#)
- “Selecting Dynamic Times Series Members” in the *Oracle Essbase Database Administrator's Guide*
- “Using Dynamic Time Series in Partitions” in the *Oracle Essbase Database Administrator's Guide*

Disabling Dynamic Time Series Members

Essbase provides pre-defined Dynamic Time Series (DTS) members that you can use to dynamically calculate period-to-date values. If you no longer want to use a DTS member, you can disable the member.

- To disable a Dynamic Time Series (DTS) member in an outline:
- 1 [Open the outline in edit mode.](#)
 - 2 Select **Outline**, then **Dynamic time series**.
 - 3 In the **Enabled** column corresponding to the DTS member that you want to delete, clear the check box.
 - 4 Click **OK**.

Related Information

- [“Define Dynamic Time Series Members Dialog Box” on page 543](#)
- [“Enabling Dynamic Time Series Members” on page 166](#)
- “Selecting Dynamic Times Series Members” in the *Oracle Essbase Database Administrator's Guide*
- “Using Dynamic Time Series in Partitions” in the *Oracle Essbase Database Administrator's Guide*

Naming Generations and Levels

You can create your own names for generations and levels in an outline. The name is a word or phrase that describes the generation or level. For example, you might create a generation name called Cities for all cities in the outline. You can define only one name for each generation or level. Once defined, you can view generation and level names in the [Properties tab](#) in Outline Viewer.

Use generation and level names in calculation scripts and report scripts wherever you need to specify either a list of member names or a list of generation or level numbers. For example, you can limit a calculation in a calculation script to the members of a specific generation.

In a dimension that allows [duplicate member names](#), you can specify that unique member names are required for a particular generation or level.

- To create, modify, or delete a generation name or level name:
- 1 [Open the outline in edit mode.](#)
 - 2 Perform an action:
 - Select **Outline**, then **Generations** to open the [Define Generations dialog box](#).
 - Select **Outline**, then **Levels** to open the [Define Levels dialog box](#).
 - 3 From the **Dimensions** list box, select the appropriate dimension name.
 - 4 To create a generation or level name, complete the following actions:
 - a. In the **Generation Name** or **Level Name** column, click the cell that contains the text, <Click here to create a new generation> or <Click here to create a new level>.
 - b. In the text box, enter the generation name or the level name, following the same naming rules as for members.

- c. In the **Number** drop-down list box in the same row, select the generation number or level number. For example, to name a generation for the months in the Sample Basic database, select 3. To name a level for the months in the Sample Basic database, select 1.
 - d. **Optional:** In outlines that allow [duplicate member names](#), if you want to require unique member names within a particular generation or level in a duplicate member name dimension, select the check box in the **Unique** column.
- 5 If you want to delete an existing generation name or level name, click **Delete** next to the generation name or level name to be deleted.
 - 6 If you want to keep the dialog box open, but undo all changes made in the dialog box since it was opened, click **Revert**.
 - 7 Click **OK**.

Related Information

- “Dimension and Member Relationships” in the *Oracle Essbase Database Administrator's Guide*
- [“Define Generations Dialog Box” on page 543](#)
- [“Define Levels Dialog Box” on page 544](#)

Viewing a List of Outline Modifications

You can view modifications made to an outline during the current outline editing session. The Modifications tab in Outline Editor displays all modifications made to the outline since the outline was opened. The modifications list is cleared when you close Outline Editor.

The modifications list does not include modifications made to the outline by other administrators.

You can [undo](#) some outline modifications.

► To view the list of modifications made to the outline:

- 1 [Open the outline in edit mode.](#)
- 2 Edit the outline, as needed.
- 3 Select the [Modifications](#) tab.

Related Information

- [“Outline Editor Window—Modifications Tab” on page 618](#)
- [“Setting Dimension and Member Properties” on page 155](#)
- [“Undoing Outline Changes” on page 169](#)

Related Commands

`outlinechangelog` (`essbase.cfg` setting) in the *Oracle Essbase Technical Reference*

Viewing Attribute Information in Outlines

Attribute settings are properties of the outline, dimensions, and members. You can view attribute settings when you view the appropriate properties information.

If the console is customized to display attribute information in the outline, you can also view attribute information for dimensions and members in the outline tree.

To control the display of member and dimension attribute information within the outline tree, select or deselect the following [Outline Tools options for Administration Services Console](#):

- **Associations:** to see attributes and attribute dimension names displayed next to the associated member and dimension names in the outline
- **Attribute types:** to see the type of attribute dimension noted next to the attribute dimension member

To view attribute information of base dimensions and members of base dimensions, regardless of the outline options settings for Administration Services Console, in Outline Editor [view the dimension or member properties](#) of the base dimension member.

- For dimensions: view the **Attributes** tab.
- For members: view the **Associations** tab.

To view the attribute settings for the outline, [view the Properties tab](#) for the outline.

Note: In Outline Viewer, you can view the attribute dimensions and their associations to base dimensions, but you cannot see which base members the attributes are associated with until you click on the attribute member.

Related Information

- [“About Attributes” on page 184](#)
- [Customizing Outline Viewer and Outline Editor](#)
- [“Viewing Dimension and Member Properties” on page 137](#)

Undoing Outline Changes

As you use [Outline Editor](#) to change an outline, each change is posted to a separate line that is added to the Modifications tab. The Modifications tab displays changes made to the outline during the current session. The most recent change is at the bottom of the list.

Operations that you perform simultaneously on multiple members are listed in the Modifications tab as one entry. You cannot undo only one part of a multi-member operation.

Outline changes can be undone only in the reverse order that they were executed. You cannot undo all changes listed on the Modifications tab. What changes can and cannot be undone depends on the type and sequence of the changes.

You can undo operations listed on the Modifications tab even after saving the outline in the current Outline Editor session.

► To undo changes made to an outline during the current Outline Editor session:

- 1 In the **Outline Editor** window, select the **Modifications** tab.
- 2 Select the change to be undone and select **Edit**, then **Undo**.

Note: Depending on the type and sequence of changes made to the outline, you cannot undo all listed changes.

Related Information

- [“About Outlines” on page 124](#)
- [“Outline Editor Window—Modifications Tab” on page 618](#)
- [“Viewing a List of Outline Modifications” on page 168](#)

Working with Aliases

In this section:

- [“About Alias Tables” on page 170](#)
- [“About Alias Table Import and Export Files” on page 172](#)
- [“Creating Alias Tables” on page 172](#)
- [“Exporting Alias Tables” on page 173](#)
- [“Importing Alias Tables” on page 174](#)
- [“Copying Alias Tables” on page 175](#)
- [“Renaming Alias Tables” on page 175](#)
- [“Deleting and Clearing Alias Tables” on page 176](#)
- [“Setting the Active Alias Table for Outline Editor” on page 177](#)
- [“Creating Aliases for Dimensions and Members” on page 177](#)
- [“Creating Aliases for Dynamic Time Series Members” on page 178](#)

About Alias Tables

You can assign one or more alternate names (aliases) to a member or a shared member. Aliases can improve the readability of an outline or a report. For example, members of the Product dimension of the Sample Basic database are identified both by product codes, such as 100, and by more descriptive aliases, such as Cola.

Alias names for members are stored in one or more tables as part of a database. Every block storage or aggregate storage database has a table named Default and can have up to 31 additional tables, for a total of 32 alias tables per database. In databases that allow [duplicate member](#)

[names](#), an alias table can contain duplicate alias names. You can use either of the following approaches to create alias tables:

- [Create an empty alias table](#), and then populate it by [copying aliases from existing alias tables](#) or by [manually defining aliases for individual members](#).
- [Import an alias table](#) from a source file. You can manually create the source file or use a file that was created by the [export of an alias table](#). For source file formatting details, see [About Alias Table Import or Export Files](#).

The alias table, Default, is the default active alias table. Because Outline Editor displays names in the outline tree from only one alias table at a time, to display aliases from a different table than Default, you must [set an alias table as the active alias table for the outline](#).

Aliases are also used in other circumstances such as in reports and in spreadsheet displays. You can select a different table to be the active alias table for database activities outside Outline Editor.

In addition, Outline Editor enables you to perform the following operations while working with alias tables:

- [Rename alias tables](#)
- [Clear the content of alias tables](#)
- [Delete alias tables](#)
- [Create aliases for Dynamic Time Series members](#)

You can also map aliases to dimensions and members by using rules files for dimension builds. In the rules file you can use the generation, level, or parent-child reference build methods, specifying alias as the field type for the field in the dimension build data source that contains the alias value. For details on setting field type information, see the *Oracle Essbase Database Administrator's Guide*.

Related Information

- “Setting Aliases” in the *Oracle Essbase Database Administrator's Guide*
- “Working with Alias Table Language Codes” in the *Oracle Essbase Database Administrator's Guide*
- [“About Alias Table Import and Export Files” on page 172](#)
- [“Create Alias Table Dialog Box” on page 496](#)

Related Commands

- query database (MaxL) in the *Oracle Essbase Technical Reference*
- copyobject (ESSCMD) in the *Oracle Essbase Technical Reference*
- displayalias (ESSCMD) in the *Oracle Essbase Technical Reference*
- listaliases (ESSCMD) in the *Oracle Essbase Technical Reference*
- loadalias (ESSCMD) in the *Oracle Essbase Technical Reference*
- renameobject (ESSCMD) in the *Oracle Essbase Technical Reference*

- `unloadalias` (ESSCMD) in the *Oracle Essbase Technical Reference*

About Alias Table Import and Export Files

Alias table import files contain information that associates aliases with outline members. You can create an alias table import file in the following ways:

- Export an alias table
- Use a text editor to create the file
- Use an automated means such as a Perl script to generate the file

Alias table import and export files are text files with the following format:

- The first line of the file says, `$ALT_NAME`. The name of the alias table is included after one or two spaces. Alias table names that contain blank characters must be enclosed in single quotation marks.
- The last line of the file must say, `$END`.
- On each of the lines between the first and the last lines, two values must be placed. The first value must be the name of an existing outline member; the second value is the alias for the member. Separate the two values by one or more spaces or tabs.

Note: Enclose in double quotation marks members or alias names that contain a blank or an underscore.

The following text represents the example content of a small, alias table import or export file for Sample Basic:

```
$ALT_NAME 'Long Names'
Qtr1   Quarter1 Jan   January Feb   February Mar   March $END
```

Note: Administration Services requires alias table import files to be UTF-8 encoded, with the UTF-8 signature.

Related Information

- “Creating and Managing Alias Tables” in the *Oracle Essbase Database Administrator's Guide*
- [“Importing Alias Tables” on page 174](#)
- [“Exporting Alias Tables” on page 173](#)

Creating Alias Tables

Alias names for members are stored in one or more tables as part of a database outline. After you create an alias table, you create aliases for members in Outline Editor. Aliases that you create are saved to the [active alias table](#) for the outline. By default, every database has one alias table

named Default. You can add up to 31 additional alias tables per block storage or aggregate storage database, for a total of 32 alias tables per database.

You can also create an alias table for a database by [copying an alias table](#) in the same database to a new name or by [importing an alias table](#) from a text file, as described in “[About Alias Table Import and Export Files](#)” on page 172.

➤ To create new, empty alias tables for an outline:

- 1 [Open the outline in edit mode](#) and select the **Properties** tab.
- 2 Right-click the **Alias tables** node and select **Create alias table**.
- 3 In the [Create Alias Table](#) dialog box, specify the name of the alias table.
- 4 Click **OK**.
- 5 If desired, [set the new alias table as the active table](#) for the outline.

Related Information

- “Setting Aliases” in the *Oracle Essbase Database Administrator's Guide*
- “Working with Alias Table Language Codes” in the *Oracle Essbase Database Administrator's Guide*
- “Creating Aliases for Dimensions and Members” on page 177
- “Create Alias Table Dialog Box” on page 496

Exporting Alias Tables

You can export alias tables from databases to .alt files, and then import the tables to another database.

After you export a file, you can use a text editor to view or change the contents of the export file.

➤ To export an alias table:

- 1 [Open the outline in edit mode](#).
- 2 Select **Outline**, then **Export alias table**.
- 3 In the [Export Alias Table](#) dialog box, select an alias table and click **OK**.
- 4 In the **Save As** dialog box, specify a location for the export file.
- 5 Perform an action:
 - To save the export file on an Essbase Server:
 - a. Select the **Essbase Server** tab.
 - b. In the **Look in** list box, select the Essbase Server where you want to save the export file.
 - c. Navigate to the application or database where you want to save the export file.
 - To save the export file locally or on a network:

- a. Select the **File System** tab.
- b. Navigate to the file system directory where you want to save the file.

6 In the **File name** text box, type a name for the file.

Export files have an `.alt` extension.

7 Click **OK**.

8 **Optional:** [Import the alias table](#) to a database.

Related Information

- [“About Alias Table Import and Export Files” on page 172](#)
- “Setting Aliases” in the *Oracle Essbase Database Administrator's Guide*
- [“Export Alias Table Dialog Box” on page 563](#)
- [“Importing Alias Tables” on page 174](#)
- [“About Alias Tables” on page 170](#)

Related Commands

- `unloadalias` (ESSCMD) in the *Oracle Essbase Technical Reference*
- `loadalias` (ESSCMD) in the *Oracle Essbase Technical Reference*
- `displayalias` (ESSCMD) in the *Oracle Essbase Technical Reference*

Importing Alias Tables

You can import alias tables that you have exported from another database. You can also create a source file as an import file.

Alias table import files must be formatted correctly, with names ending in `.alt`. For format details, see [“About Alias Table Import and Export Files” on page 172](#). Essbase uses the table name provided in the header record of the import file to either create a new alias table or replace an existing one.

For non-Unicode-mode applications, alias table import files are assumed to be in the encoding of the Application Server. For Unicode-mode applications, alias table import files can be UTF-8 encoded (with the UTF-8 signature) or in the encoding of the application. Locale header records are not supported. For information about encoding, see [“About File Encoding and Locales” on page 117](#).

► To import an alias table:

- 1** [Open the outline in edit mode](#).
- 2** Select **Outline**, then **Import alias table**.
- 3** In the [Open](#) dialog box, select the alias table import file.
- 4** Click **OK**.

Related Information

- “Setting Aliases” in the *Oracle Essbase Database Administrator's Guide*
- [“About Alias Tables” on page 170](#)
- [“About Alias Table Import and Export Files” on page 172](#)
- [“Exporting Alias Tables” on page 173](#)
- [“About File Encoding and Locales” on page 117](#)

Related Commands

- unloadalias (ESSCMD) in the *Oracle Essbase Technical Reference*
- loadalias (ESSCMD) in the *Oracle Essbase Technical Reference*

Copying Alias Tables

You can copy aliases from one alias table to another alias table within the same database. You can copy to an existing table or to a new table. When copying to an existing table, you can choose whether to merge the aliases of the two tables.

To copy an alias table from one database to another database, you must [export the alias table](#) from its original database and then [import](#) the alias table to the other database.

➤ To copy aliases from one alias table to another alias table within the same database:

- 1 [Open the outline in edit mode](#) and select the **Properties** tab.
- 2 Under the **Alias Tables** node, right-click the alias table to be copied and select **Copy alias table**.
- 3 In **Copy Alias Table**, select an alias table or enter the name of a new alias table.
- 4 Click **OK**.

Related Information

- “Setting Aliases” in the *Oracle Essbase Database Administrator's Guide*
- “Working with Alias Table Language Codes” in the *Oracle Essbase Database Administrator's Guide*
- [“Copy Alias Table Dialog Box” on page 487](#)

Related Commands

- alter object (MaxL) in the *Oracle Essbase Technical Reference*
- copyobject (ESSCMD) in the *Oracle Essbase Technical Reference*

Renaming Alias Tables

You can rename any alias table other than the Default alias table.

► To rename an alias table:

- 1 [Open the outline in edit mode](#) and select the **Properties** tab.
- 2 Under the **Alias Tables** node, right-click an alias table and select **Rename**.
- 3 In the **New name** text box, enter a name.
- 4 Click **OK**.

Related Information

- “Setting Aliases” in the *Oracle Essbase Database Administrator's Guide*
- [“Rename Alias Table Dialog Box” on page 626](#)

Related Commands

- alter object (MaxL) in the *Oracle Essbase Technical Reference*
- renameobject (ESSCMD) in the *Oracle Essbase Technical Reference*

Deleting and Clearing Alias Tables

You can clear the contents of an alias table, and you can delete an alias table from an outline. You can clear, but cannot delete, the Default alias table.

► To clear or delete alias tables:

- 1 [Open the outline in edit mode](#) and select the **Properties** tab.
- 2 Under the **Alias tables** node, right-click an alias table, and select one of the following:
 - Clear: Clears the contents of the table but does not delete the table itself.
 - Delete: Deletes the alias table.
- 3 At the confirmation prompt, click **Yes**.

► To clear or delete all alias tables:

- 1 [Open the outline](#).
- 2 Select the **Properties** tab.
- 3 Right-click the **Alias tables** node and select **Clear all tables** or **Delete all tables**.
- 4 At the confirmation prompt, click **Yes**.

Related Information

- “Setting Aliases” in the *Oracle Essbase Database Administrator's Guide*
- “Working with Alias Table Language Codes” in the *Oracle Essbase Database Administrator's Guide*
- [“About Alias Tables” on page 170](#)
- [“Creating Alias Tables” on page 172](#)

Related Commands

query database (MaxL) in the *Oracle Essbase Technical Reference*

Setting the Active Alias Table for Outline Editor

If [Outline Editor is configured to display aliases in the outline tree](#), the names from the active alias table are displayed.

By default, aliases from the alias table named Default are displayed. You can select a different alias table to be the active alias table for the current Outline Editor session.

Independent from this setting, you can [set the active alias table for the Administration Console Session](#).

➤ To set the active alias table for a database:

- 1 [Open the outline in edit mode](#) and select the **Properties** tab.
- 2 Under the **Alias Tables** node, right-click an alias table and select **Set as active**.

If the console [Outline Tools](#) option to display aliases is selected, Outline Editor displays in the outline tree next to each member the appropriate alias from the active alias table.

Related Information

- “Setting Aliases” in the *Oracle Essbase Database Administrator's Guide*
- [“About Alias Tables” on page 170](#)
- [“Setting Active Alias Tables for Administration Services Console Sessions” on page 42](#)

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- query database (MaxL) in the *Oracle Essbase Technical Reference*
- setalias (ESSCMD) in the *Oracle Essbase Technical Reference*

Creating Aliases for Dimensions and Members

In an outline, you can assign alternate names, or aliases, to a dimension, a member, or a shared member. For example, in the Sample Basic database outline, members of the Product dimension are identified both by product codes, such as 100, and by descriptive aliases, such as Cola.

To create aliases for a Dynamic Time Series member, see [“Creating Aliases for Dynamic Time Series Members” on page 178](#).

➤ To create aliases for dimensions or members:

- 1 [Open the outline in edit mode](#).
- 2 Right-click a dimension or member and select **Edit member properties**.
- 3 In **Member Properties**, select the **Information** tab.

- 4 Under **Aliases**, in the text box next to the appropriate alias table, enter the alias for the member.
Be sure to follow proper naming rules. For naming restrictions, see the *Oracle Essbase Database Administrator's Guide*.
- 5 If you want to view the alias you just created, make sure the appropriate [alias table is set as the active table](#) for the outline, and [set the Outline Tools option to display aliases](#).
- 6 Click **OK**.

Related Information

- [“About Alias Tables” on page 170](#)
- [“Creating Aliases for Dynamic Time Series Members” on page 178](#)
- [“Creating Alias Tables” on page 172](#)
- [“Member Properties Dialog Box—Information Tab” on page 595](#)

Creating Aliases for Dynamic Time Series Members

In each alias table defined for a database, you can specify alias names for predefined Dynamic Time Series members. You can then use the alias names to retrieve the Dynamic Time Series members in Spreadsheet Add-in or in a report.

- To create an alias name for a Dynamic Time Series member:
- 1 [Open the outline in edit mode](#).
 - 2 Select **Outline**, then **Dynamic time series** to open the [Define Dynamic Time Series Members](#) dialog box.
 - 3 For each enabled Dynamic Time Series member to be given an alias name, select the intersecting cell in the appropriate alias table column and enter the desired alias name.
 - 4 Click **OK** to close the dialog box.

Related Information

- [“About Alias Tables” on page 170](#)
- [“Setting Aliases” in the Oracle Essbase Database Administrator's Guide](#)
- [“Enabling Dynamic Time Series Members” on page 166](#)
- [“Define Dynamic Time Series Members Dialog Box” on page 543](#)
- [“Member Properties Dialog Box—Information Tab” on page 595](#)

Working with Member Formulas

In this section:

- [“About Formulas” on page 179](#)
- [“Creating and Editing Formulas in Outlines” on page 179](#)
- [“Printing Member Formulas” on page 182](#)

- [“Understanding Guidelines for Formula Syntax” on page 182](#)
- [“Finding Members in Editors” on page 182](#)

About Formulas

Formulas calculate relationships between members of a database outline. You can use formulas in two ways:

- Apply them to members in the database outline. Use this method if you do not need to control database calculations carefully for accuracy or performance. This method limits the size of formulas to less than 64 KB.
- Place them in calculation scripts. Use this method if you need to control database calculations carefully. For more information, see [“About Calculation Scripts” on page 333](#).

For more information about developing formulas, see the *Oracle Essbase Database Administrator's Guide*. For information about formula syntax, see the *Oracle Essbase Technical Reference*.

Note: There are different guidelines for using formulas with aggregate storage databases. For more information, see [“Creating Formulas for Aggregate Storage Databases” on page 70](#).

Related Information

- [“Creating and Editing Formulas in Outlines” on page 179](#)
- [“Viewing Formulas” on page 138](#)
- “Developing Formulas” in the *Oracle Essbase Database Administrator's Guide*
- “Reviewing Examples of Formulas” in the *Oracle Essbase Database Administrator's Guide*
- [“Understanding Guidelines for Formula Syntax” on page 182](#)

Related Commands

getmbrcalc (ESSCMD) in the *Oracle Essbase Technical Reference*

Creating and Editing Formulas in Outlines

Formula Editor enables you to write formulas applicable to specific outline members. This topic describes how to create and edit formulas for block storage databases. For information about formulas for aggregate storage databases, see [“Creating Formulas for Aggregate Storage Databases” on page 70](#).

You can construct formulas from operators, functions, dimension names, member names, substitution variables, and numeric constants. Similar to Calculation Script Editor, Formula Editor provides a formula editing pane in which you can type a formula. You can use the Tab

and arrow keys to move focus within Formula Editor. Also, you can use a point-and-click approach to select and insert formula components into the formula editing pane.

Be sure to verify a member formula. Formula verification messages sometimes refer to the message pane. The message pane is located at the bottom of the Administration Services Console window.

Note: You may get outline verification errors during validation for formulas containing newly added members. Such errors do not prevent saving the outline to the server, and saving the outline to the server will result in successful formula validation.

To view formulas without changing them, use the [formula viewer](#) in Outline Viewer.

For information about writing formulas for use in calculation scripts, see “[Creating Scripts](#)” on [page 337](#).

► To create or edit a formula:

- 1 [Open the outline in edit mode](#).
- 2 Right-click a dimension or member and select **Edit member properties**.
- 3 In the **Member Properties** dialog box, select the [Formula](#) tab.
- 4 To use aliases instead of member names, select the **Use aliases** button and, from the **Alias table** drop-down list, select the desired alias table.
- 5 On the **Script** tab on the right, insert the text marker in the desired location to enter formula text.
- 6 Following [formula syntax guidelines](#), perform an action:

- Use the keyboard to enter formula text. Enclose in quotation marks any member names containing blanks or special characters.

In outlines that allow duplicate member names, when typing [duplicate member names](#), you must type the qualified member name in order to differentiate the member from its duplicates. You can view the qualified member name for a duplicate member in the Member Properties dialog box in Outline Viewer. Type the qualified member name enclosed in double quotation marks.

You can also insert the member name from the outline tree.

- In the **Commands and functions** tree, double-click an operator or function. The selected operator or function is inserted in the text area at the text-marker position.

Select **Insert arguments** to include arguments in the text area as the command or function is inserted.
- In the outline tree, double-click member names to insert them in the formula at the text marker position. You can perform [Find Members](#) operations to locate members containing specific text you specify.

In outlines that allow duplicate member names, if you insert a [duplicate member](#), the qualified member name is inserted in the script. For example, if the outline contains

two members named New York, if you insert either New York member, the qualified member name is inserted in the script.

- Paste text from a text editor.
- Right-clicking in the formula editing pane enables the following tasks:
 - Undoing and redoing previous actions
 - Copying, cutting, and pasting text
 - Selecting all text in the formula
 - [Finding or replacing text](#); repeating a find or a replace operation for the next instance of the same text
 - [Going to a line number that you specify](#).

The status area of [Formula Editor](#) displays the location of the text marker as you move it.

- At the end of each line, type a semicolon (;).
- If you want to delete all text from the text area, select **Clear**.

7 Select **Verify** to verify the formula.

You can verify a formula only when connected to an Essbase Server.

Note: You may get outline verification errors during validation for formulas that contain newly added members. Such errors do not prevent saving the outline back to the server, and saving the outline to the server will result in successful formula validation.

8 Click **OK** to save the formula.

Note: Clicking Next or Prev to move to a different member or selecting a different tab for the current member saves changes made to the formula for the current member.

Related Information

- “Developing Formulas” in the *Oracle Essbase Database Administrator's Guide*
- “Understanding Formula Syntax” in the *Oracle Essbase Database Administrator's Guide*
- “Reviewing Examples of Formulas” in the *Oracle Essbase Database Administrator's Guide*
- [Member Properties - Formula tab](#)
- [“Viewing Formulas” on page 138](#)
- [“About Formulas” on page 179](#)
- [“Customizing Script Color-Coding” on page 335](#)

Related Commands

getmbrcalc (ESSCMD) in the *Oracle Essbase Technical Reference*

Printing Member Formulas

You can print member formulas from Formula Editor in Outline Editor.

► To print a formula:

- 1 Open the outline in [Outline Editor](#).
- 2 Right-click a member and select **Edit member properties**.
- 3 In the **Member Properties** dialog box, select the **Formula** tab.
- 4 Click the **Print** button.
- 5 In the **Print** dialog box, select print options.
- 6 Click **OK**.

Related Information

[“Printing Outlines” on page 133](#)

Understanding Guidelines for Formula Syntax

When you create formulas for block storage databases, you must follow the appropriate syntax guidelines for formulas, calculation commands, and calculation functions.

For information about formulas in aggregate storage databases, see [“Creating Formulas for Aggregate Storage Databases” on page 70](#).

See the following for details:

- “Understanding Formula Syntax” in the *Oracle Essbase Database Administrator's Guide*
- Calculation Commands in the *Oracle Essbase Technical Reference*
- Calculation Functions in the *Oracle Essbase Technical Reference*

Related Information

- [“About Formulas” on page 179](#)
- [“Creating and Editing Formulas in Outlines” on page 179](#)
- “Reviewing Examples of Formulas” in the *Oracle Essbase Database Administrator's Guide*
- [“Member Properties Dialog Box—Formula Tab” on page 594](#)

Finding Members in Editors

In editor windows, the outline associated with the object being edited is displayed in a tree view in the left pane of the editor window.

You can search for members in the outline tree, as described in this topic.

To search for members in Outline Editor or Outline Viewer, see [“Finding and Replacing Members and Text in Outlines” on page 143](#).

➤ To find members in the outline trees of editor windows:

- 1 Open an editor.
- 2 If the outline tree of the editor window is not populated, [associate an outline](#) with the editor.
The outline tree is displayed in the upper left pane of the window.
- 3 Right-click in the outline tree area, and select **Find members**.
- 4 In the [Find Members dialog box](#), enter the text that you want to find, and select the preferred search options.
- 5 Click **OK**.

Administration Services Console displays the results on the **Find Results** tab (in the right pane of the editor window) and displays a window that contains a count of the number of successful matches.

Related Information

- [“Find Members Dialog Box” on page 578](#)
- [“Creating Scripts” on page 337](#)
- [“Opening Scripts” on page 338](#)
- [“Creating or Editing Filters” on page 289](#)
- [“Finding Text in Editors” on page 143](#)

Working with Attributes

In this section:

- [“About Attributes” on page 184](#)
- [“Defining Attributes” on page 185](#)
- [“Assigning Member Names to Ranges of Values” on page 185](#)
- [“Associating Attributes with Members of the Base Dimension” on page 186](#)
- [“Associating Attribute Dimensions with Standard Dimensions ” on page 187](#)
- [“Defining a Prefix or Suffix Format for Members of Attribute Dimensions” on page 187](#)
- [“Changing Member Names of the Attribute Calculations Dimension” on page 188](#)
- [“Setting Member Names for Boolean Attribute Dimensions” on page 189](#)
- [“Setting the Member Name Format of Date Attribute Dimensions” on page 189](#)
- [“Setting Attribute Dimension Type” on page 190](#)
- [“Calculating Attribute Data” on page 191](#)
- [“Working With UDAs Using Outline Editor” on page 191](#)
- [“About Varying Attributes” on page 192](#)
- [“Adding Varying Attributes” on page 194](#)

- [“Enabling Varying Attributes” on page 195](#)

About Attributes

Attributes describe characteristics of data, such as the size and color of products. You can use attributes to group and analyze members of dimensions based on their characteristics. For example, you can analyze product profitability based on size or packaging, and you can make more effective conclusions by incorporating market attributes, such as the population size of each market region, into your analysis.

An attribute dimension such as Pkg Type contains members that describe the packaging characteristics of individual members of a non-attribute dimension. Non-attribute dimensions are called standard dimensions. When you associate an attribute dimension to a standard dimension, the standard dimension becomes the base dimension for the attribute dimension. For example, associating Pkg Type with the standard dimension Product makes Product the base dimension for the Pkg Type attribute dimension. An attribute dimension can have only one base dimension.

You must also associate the individual members of the attribute dimension to members of its base dimension. For example, the Pkg Type dimension has two members, Bottle and Can. To enable analysis of products by their packaging, you associate Bottle or Can to each member of the base dimension.

If an outline includes attribute dimensions, Essbase provides a special purpose dimension with the default name Attribute Calculations dimension. The Attribute Calculations dimension provides a set of calculations such as the average and the count of items analyzed. You can change the name of the Attribute Calculations dimension and the names of the members of the Attribute Calculations dimension. Outline Viewer displays the Attribute Calculations dimension and member names in the outline tree. Outline Editor displays the names on its Properties tab.

Note: For information about attribute dimensions and attributes with aggregate storage databases, see the *Oracle Essbase Database Administrator's Guide*.

It is possible to need to specify an attribute name in two or more attribute dimensions. For example, the name 20 might be a member of an attribute dimension called Size and another attribute dimension called Age. Essbase provides a method to apply a prefix or suffix to ensure distinct member names.

Related Information

- [“Defining Attributes” on page 185](#)
- “Working with Attributes” in the *Oracle Essbase Database Administrator's Guide*
- [“Calculating Attribute Data” on page 191](#)

Defining Attributes

When using a rules file to dynamically build an outline, you can automatically define and build an attribute dimension and associate the members of the attribute dimension with members of the base dimension. For information about building attribute dimensions and associating attributes, see the *Oracle Essbase Database Administrator's Guide*.

When manually working with attributes, use Outline Editor to perform the following dimension and member-related tasks:

- Create attribute dimensions. See [Adding Dimensions to Outlines](#). In the outline, position attribute dimensions at the bottom of the outline.
- [Tag the dimensions as attribute dimensions](#) and set the attribute dimension type (text, numeric, Boolean, or date).
- Define the following formats or names of members of attribute dimensions:
 - [Use of a prefix or suffix](#) in the names of members in attribute dimensions
 - [Member name format of date attribute dimensions](#)
 - If desired, [new names for members of Boolean attribute dimensions](#)
 - If needed, [the naming convention for ranges of values in numeric dimensions](#)
 - If desired, [new names for members of the Attribute Calculations dimension](#)
- Add members to attribute dimensions. See [Adding Members to Dimensions](#).
- Associate a standard dimension with an attribute dimension, thereby defining the base dimension of the attribute dimension. See [Associating Attribute Dimensions with Standard Dimensions](#).
- Associate attribute dimension members with members of the base dimensions. See [Associating Attributes with Base Dimension Members](#).

Related Information

[“About Attributes” on page 184](#)

Assigning Member Names to Ranges of Values

Members of numeric attribute dimensions can represent single numeric values or ranges of values. Consider using ranges of values when you want data to be accumulated and retrieved based on ranges of values rather than on individual values. For example, to enable a view of sales values in various states grouped into population categories, you can define an attribute to represent populations between 1 and 100,000. Another attribute can represent populations between 100,001 and 1,000,000.

For each numeric attribute dimension that uses ranges, you must define whether the attribute dimension member name represents the bottom of the range or the top of the range.

- To define a rule for assigning, in numeric attribute dimensions, names to members representing ranges of values:
- 1 [Open the outline in edit mode](#) and select the **Properties** tab.
- 2 In the **Boolean, date, and numeric attribute settings** option group, select the **Numeric ranges represent** option that sets whether numeric attribute values define the tops or bottoms of the ranges that they represent.
- 3 Click **OK**.

Related Information

- [“About Attributes” on page 184](#)
- [“Outline Editor Window—Properties Tab” on page 619](#)
- “Setting Up Member Names Representing Ranges of Values” in the *Oracle Essbase Database Administrator's Guide*

Associating Attributes with Members of the Base Dimension

After you associate an attribute dimension with a standard dimension and thus create a base dimension, to enable attribute analysis, you must associate members of the attribute dimension with members of the base dimension.

For example, in the Sample Basic database, product 100-30 is sold in bottles. To set bottle as an attribute for product 100-30, associate the Bottle member of the Pkg Type attribute dimension to the 100-30 member of the base dimension, Product.

Attribute associations must follow certain rules.

- To associate members of a base dimension with members of attribute dimension:
- 1 [Open the outline in edit mode](#).
- The **Outline** tab is displayed.
- 2 Select one or more base dimension members, right-click, and select **Edit member properties**.
- 3 In the **Member Properties** dialog box, select the [Associations](#) tab.
- 4 In the **Available attributes** list box, select the appropriate member of the attribute dimension.
- 5 Click **Assign** to associate the selected attribute dimension member with the base dimension members.
- 6 Perform an action:
 - If you want to remove an associated attribute, select it in the **Associated attributes** list box and click **Remove**.
 - If you want to remove all attributes associated with the selected base dimension members, click **Remove All**.
- 7 Click **OK**.

Related Information

- [Associating Attribute Dimensions with Standard Dimensions](#)
- [“About Attributes” on page 184](#)
- [“Defining Attributes” on page 185](#)

Associating Attribute Dimensions with Standard Dimensions

When you associate an attribute dimension with a standard dimension, the standard dimension is known as the base dimension for that attribute dimension. For more information, see *Working with Attributes in the Oracle Essbase Database Administrator's Guide*.

➤ To associate an attribute dimension with a standard dimension:

1 [Open the outline in edit mode.](#)

The **Outline** tab is displayed.

2 Select the standard dimension, right-click, and select **Edit member properties**.

3 In the **Member Properties** dialog box, select the [Attributes](#) tab.

4 Perform an action:

- If you want to associate an attribute dimension with the selected standard dimension, from the **Other attribute dimensions** list box, select the available attribute dimension that you want to associate with the selected dimension and click **<**.
- If you want to associate all available attribute dimensions with the selected standard dimension, click **<<**.
- If you want to disassociate the attribute dimension selected in the **Associated attribute dimensions** list box, click **>**.
- If you want to disassociate all attribute dimensions, click **>>**.

5 Click **OK**.

6 [Associate attributes with members of the base dimension.](#)

Related Information

- [“Member Properties Dialog Box—Attributes Tab” on page 593](#)
- [“Associating Attributes with Members of the Base Dimension” on page 186](#)
- [“About Attributes” on page 184](#)

Defining a Prefix or Suffix Format for Members of Attribute Dimensions

Note: This information does not apply to attribute dimensions in duplicate member name outlines. For more information, see [Setting Prefix and Suffix Formats for Member Names of Attribute Dimensions](#).

To avoid generating duplicate member names across Boolean, date, and numeric attribute dimensions of the same database, you can define a method for automatically adding a prefix or a suffix to names of members of attribute dimensions.

For example, you can add the attribute dimension name as a suffix to the member name, separating the names by an underscore. As a result, in the Sample Basic database, the member 12 in the Ounces attribute dimension assumes the unique, full member name 12_Ounces.

The format that you specify applies to the level 0 member names of all numeric, Boolean, and date attribute dimensions in the outline. By default, member names in attribute dimensions do not have a prefix or suffix.

► To define a prefix or suffix format for the names of members of Boolean, date, and numeric attribute dimensions:

- 1 [Open the outline in edit mode](#) and select the **Properties** tab.
- 2 Under **Attribute settings**, in the **Prefix/Suffix Format** option group, select the appropriate prefix or suffix format to use for attribute names.
- 3 Click **OK**.

Related Information

- “Setting Prefix and Suffix Formats for Member Names of Attribute Dimensions” in the *Oracle Essbase Database Administrator's Guide*
- [“About Attributes” on page 184](#)
- [“Outline Editor Window—Properties Tab” on page 619](#)

Related Commands

getattrinfo (ESSCMD) in the *Oracle Essbase Technical Reference*

Changing Member Names of the Attribute Calculations Dimension

To avoid duplicating names in an outline, you may need to change the name of the Attribute Calculations dimension or the names of the members of the Attribute Calculations dimension.

Regardless of the name that you use for a member, the function of the member remains the same. For example, the Sum member always calculates a sum, no matter what you name it.

► To change the names of the Attribute Calculations dimension and the members of the Attribute Calculations dimension:

- 1 [Open the outline in edit mode](#) and select the **Properties** tab.
- 2 If you want to change the Attribute Calculations dimension name, under the Calculation dimension names node, click the value next to **Dimension name is:**. In the resulting text box, enter a new name for the dimension.

- 3 If you want to change the name of a specific member, under the Calculation dimension names node, click the value next to the member. In the resulting text box, enter a new name, following the proper naming rules.
- 4 Click **OK**.

Related Information

- [“Calculating Attribute Data” on page 191](#)
- [“Outline Editor Window—Properties Tab” on page 619](#)

Setting Member Names for Boolean Attribute Dimensions

All Boolean attribute dimensions in a single database have two level 0 members. The default names for the members are True and False. Essbase enables you to change the default names; for example, to Yes and No.

When you set an attribute dimension type as Boolean, Essbase automatically creates two members with the names specified in the setting. If the attribute dimension includes members, you must remove the members before you can change the attribute dimension type to Boolean.

Changing the Boolean member-name setting does not retroactively change the names of the Boolean attributes that are already assigned. For example, if the Caffeinated attribute for product 100-10 is True and you change the Boolean attribute dimension member name from True to Yes, the Caffeinated attribute for product 100-10 is not changed to Yes.

If you have more than one Boolean attribute dimension, [specify a prefix or suffix member name format](#) to ensure unique member names; for example, Caffeinated_True and Caffeinated_False.

➤ To change the member names setting of Boolean attribute dimensions in a database:

- 1 [Open the outline in Outline Editor](#) to the **Properties** tab.
- 2 In the Boolean, date, and numeric attribute settings option group, specify the names for the True and False members of Boolean attribute dimensions.
- 3 Click **OK**.

Related Information

- Setting Boolean Attribute Member Names in the *Oracle Essbase Database Administrator's Guide*
- [“Outline Editor Window—Properties Tab” on page 619](#)

Setting the Member Name Format of Date Attribute Dimensions

You can set the format of member names in date attribute dimensions. If you change the date member name format, the names of existing members of date attribute dimensions may be invalid. For example, if the 10-18-1999 member exists and you change the format to dd-mm-yyyy, outline verification identifies 10-18-1999 as invalid. If you change the date format, you

must rebuild the date attribute dimensions and reassociate the data attributes with the base dimension members.

If you have more than one date attribute dimension, to ensure unique member names, consider specifying a prefix or suffix member name format; for example, Product_07012002 and Market_07012002. See [“Defining a Prefix or Suffix Format for Members of Attribute Dimensions” on page 187](#).

► To change the date format of members of date attribute dimensions:

- 1 [Open the outline in edit mode](#) and select the **Properties** tab.
- 2 Under the **Boolean and date member names** node, select a date format to apply to all date attribute dimensions in the outline.
- 3 Click **OK**.

Related Information

- [“Outline Editor Window—Properties Tab” on page 619](#)
- “Changing the Member Names in Date Attribute Dimensions” in the *Oracle Essbase Database Administrator's Guide*
- [“About Attributes” on page 184](#)
- [“Defining a Prefix or Suffix Format for Members of Attribute Dimensions” on page 187](#)

Setting Attribute Dimension Type

Attributes have a text, Boolean, date or numeric type property. Although assigned at the dimension level, the type applies only to the level 0 members of the dimension.

To avoid the possibility of duplicate member names across Boolean, date, and numeric attribute dimensions, you may need to format the member names to include a [prefix or a suffix](#).

If you change the attribute dimension type for an existing dimension with members, the existing level 0 member names may not conform to the rules for the new attribute dimension type. Because it does not know what you want to do with the names of existing members or their associations, Essbase does not remove or rename them. If needed, you must manually remove or rename the names of existing members that do not conform because of a change in attribute dimension type. For more information about attribute types, see the *Oracle Essbase Database Administrator's Guide*.

The default attribute dimension type is text.

► To set the attribute dimension type:

- 1 [Open the outline in Outline Editor](#) to the **Outline** tab.
- 2 Right-click the attribute dimension and select **Edit member properties**.
- 3 In the **Member Properties** dialog box, select the **Information** tab.
- 4 In the **Dimension type** drop-down list, select **Attribute**.

- 5 In the **Attribute type** drop-down list, select the attribute type.
- 6 Click **OK**.

Related Information

- “Attribute Types” in the *Oracle Essbase Database Administrator's Guide*
- [Defining Prefix or Suffix Formats for Members of Attribute Dimensions](#)
- “Member Properties Dialog Box—Information Tab” on page 595

Calculating Attribute Data

Essbase calculates attribute data dynamically at retrieval time, using members from a system-defined dimension (the Attribute Calculations dimension) created automatically by Essbase. Using this dimension, you can apply different calculation functions, such as a sum or an average, to the same attribute. You can also perform specific calculations on members of attribute dimensions; for example, to determine profitability by ounce for products sized by the ounce.

Note: For aggregate storage databases, only the Sum calculation is available for attribute calculations.

The Attribute Calculations dimension contains five members that are used to calculate and report attribute data. You can change the default member names. For more information, see “[Changing Member Names of the Attribute Calculations Dimension](#)” on page 188.

Working With UDAs Using Outline Editor

You can create user-defined attributes for members. A user-defined attribute (UDA) is a word or phrase that describes the member. For example, you might create a UDA called Major Market and assign it to all members in the outline that are part of a major market, as defined by your organization.

For information on comparing attributes and UDAs, see the *Oracle Essbase Database Administrator's Guide*.

➤ To create, assign, or remove a UDA:

- 1 [Open the outline in edit mode](#).
- 2 Select the member or members for which you want to manage UDAs.
- 3 Right-click and select **Edit member properties**.
- 4 In the **Member Properties** dialog box, select the [UDAs](#) tab.

The UDAs assigned to *selected member names* list box displays UDAs currently assigned to the selected members.

The UDAs assigned in *dimension-name dimension* list box displays all UDAs currently defined for the dimension.

- 5 If you want to assign a UDA to members selected from the outline, double-click the UDA from the **UDAs assigned** in dimension-name **dimension** list box or select the UDA and click **Assign**.
- 6 If you want to create a UDA and assign the new UDA to all selected members, enter the UDA name in the text box and click **Assign**. The UDA is displayed in both list boxes.
- 7 If you want to unassign a UDA, select the appropriate UDA in the **UDAs assigned to selected member names** list box and click **Unassign**.

Note: A UDA is deleted from an outline when it is no longer assigned to any member and you close the dialog box.

- 8 Click **OK**.

Related Information

- [“Member Properties Dialog Box—UDAs Tab” on page 597](#)
- “Creating UDAs” in the *Oracle Essbase Database Administrator's Guide*
- [“Using Rules Files to Update UDAs” on page 215](#)

About Varying Attributes

A product typically has attributes that describe or define the product. For example, a product could have an attribute describing the size of the product in ounces and an attribute describing the flavor of the product. In such a scenario, Product would be a base dimension while Ounces and Flavor would be attribute dimensions.

Note: For a full explanation of base dimensions and attribute dimensions, see the *Oracle Essbase Database Administrator's Guide*.

A varying attribute enables you to track two values in relation to a third dimension called an independent dimension. You could, for example, track your product in eight ounces over a year. In this scenario, Time is the independent dimension. The value of this third factor can vary (hence the name). For example, you could track your product over a year, a quarter, or a month.

Note: There are two types of independent dimensions: continuous and discrete. The members in a continuous dimension reflect continuity. For example, week, month, and quarter reflect the continuity in a time dimension. The members in a discrete dimension do not imply continuity. For example, California, Texas, and Ohio in a market dimension do not have a relationship based on continuity.

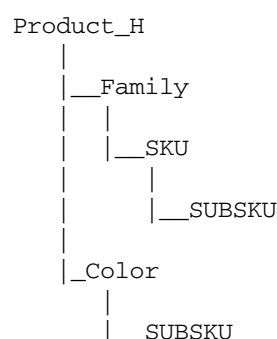
As another example, consider this scenario: The sales representative for a client changes in midyear. Customer sales totals and sales representative assignments over six months are as follows:

Table 2 Varying Attribute Example: Sales Representative Changing Over Time

March	April	May	June	July	August
4000	6000	2000	1000	1000	7000
Jones	Jones	Jones	Smith	Smith	Smith

In this example, Sales Representative is the varying attribute. Data retrievals show that the sales representative Jones sold the customer a total of \$12,000 worth of products from March through May and the sales representative Smith then sold a total of \$9,000 worth of products to the customer from June through August. Without the use of the varying attribute, the only known sales representative would be the current representative Smith to whom all sales (\$21,000) would be credited.

Varying attributes offer alternate ways of grouping your members. For example, you can use color to group SKUs. In this scenario, the attribute dimension “Color” is associated with SUBSKU:



When Color is set as a varying attribute, the retrieval results would be similar to the following table:

Table 3 Retrieval Results for SUBSKU and SKU for the Above Example

SUBSKU	SKU
Red	100
White	400
White	600
Black	200
Black	300
Silver	500

Varying attributes must meet the following guidelines:

- They must have multiple chains.
- Leaf levels must match.

You can enable an outline to support varying attributes. You can define attribute dimensions to function as varying attributes. You can also edit varying attributes to reflect the type of information you need.

Related Information

- [“Enabling Varying Attributes” on page 195](#)
- [“Adding Varying Attributes” on page 194](#)

Adding Varying Attributes

Varying attributes associate a base dimension with an attribute dimension by associating specific members of the attribute dimension.

► To add a varying attribute at a dimension level:

- 1 Open the outline in **Outline Editor**.
- 2 **Optional:** If necessary, enable the outline for varying attributes. See [“Enabling Varying Attributes” on page 195](#).
- 3 If it is not already selected, select the **Outline** tab.
- 4 Select an attribute dimension.
- 5 Right-click and select **Edit member properties**.
- 6 In the **Member Properties** dialog box, select the **Attributes** tab.

Any attribute dimensions already associated with the base dimension are displayed in the **Associated attribute dimensions** text box. Other dimensions not yet associated with the base dimension are displayed in the **Other attribute dimensions** text box. Independent dimensions are displayed in the **Independent Dimensions** text box.

- 7 If the dimension to which you want to add a varying attribute is not yet associated with the base dimension, highlight the dimension in the **Other attribute dimensions** and click the **Assign** button.

Note: To disassociate an attribute dimension from the base dimension highlight the dimension in the **Associated attribute dimensions** text box and click the **Remove** button.

- 8 In the **Independent dimensions** text box, check the box next to the independent dimension you want to use as a varying attribute.

Note: You can use the up and down arrow buttons to alter the order of independent dimensions.

- 9 Select the type of independent dimension, **Continuous** or **Discrete**.

Note: There are two types of independent dimensions: continuous and discrete. The members in a continuous dimension reflect continuity. For example, week, month, and quarter reflect the continuity in a time dimension. The members in a discrete dimension do not imply continuity. For example, California, Texas, and Ohio in a market dimension do not have a relationship based on continuity.

10 Click OK.

In the **Outline** tab of the **Outline Editor**, the independent dimension is now displayed in bold font.

11 Select the independent dimension.

12 Right-click and select **Edit member properties.**

13 In the **Member Properties dialog box, select the **Associations** tab.**

14 In the **Available attributes text box, select the attribute dimension you want to use for the varying attribute.**

15 Optional—Assign a range to the varying attribute by clicking the **Add range button.**

16 Click the **Assign button.**

17 In the **Association mode dialog box, select the appropriate response.**

18 Click OK.

19 Save your outline.

When you reopen your member properties, the newly added varying attribute is displayed.

Related Information

- [“About Varying Attributes” on page 192](#)
- [“Enabling Varying Attributes” on page 195](#)

Enabling Varying Attributes

► To enable an outline to support varying attributes:

1 Open the outline in **Outline Editor.**

2 Select the **Properties tag.**

3 In the **Outline Properties menu, highlight **Varying attributes enabled** and right-click.**

4 Select **true.**

Note: To disable support of varying attributes in the outline, select **false** from the drop-down list. This will remove all attribute associations. This operation cannot be undone. If later you wish to reassociate the attributes, you must do so manually.

Related Information

- [“About Varying Attributes” on page 192](#)

- [“Adding Varying Attributes” on page 194](#)

8

Loading Data and Building Dimensions

In This Chapter

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About Data Loading and Dimension Building

An Essbase database contains dimensions, members, and data values.

- You can use data sources and rules files to add dimensions and members to databases. This process is called *dimension building*. Also, in [Outline Editor](#), you can use dimension build rules files to [update outlines](#) and add dimensions and members dynamically.
- You can use data sources, such as spreadsheets and SQL databases, to add data values to databases. This process is called *data loading*. You need rules files to load data from data sources that are not perfectly formatted.

➤ To add data or dimensions and members to an Essbase database:

- 1 If necessary, set up the data source. For information about setting up the data source, see the *Oracle Essbase Database Administrator's Guide*.
- 2 If necessary, set up the [data load](#) or [dimension build](#) rules file.
- 3 [Load data or build dimensions](#).

Related Information

- “Understanding Data Loading and Dimension Building” in the *Oracle Essbase Database Administrator's Guide*
- “Creating Rules Files” in the *Oracle Essbase Database Administrator's Guide*
- [“Creating a Data Load Rules File” on page 198](#)

- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Data Load Dialog Box” on page 515](#)
- [“Updating an Outline Dynamically Using a Rules File” on page 201](#)

Creating a Data Load Rules File

Data load rules files tell Essbase how to handle data-source values that are loaded into Essbase databases.

► To create data load rules files:

- 1 [Create a rules file.](#)
- 2 [Set file delimiters for the data source.](#)
- 3 If necessary, set [record](#), [field](#), and [data](#) operations to modify data-source values during loading.
- 4 [Validate the rules file.](#)
- 5 [Save the rules file.](#)

Note: If Administration Services is running under UNIX, data loads from .XLS files are not supported.

Related Information

- [“Creating Rules Files” in the *Oracle Essbase Database Administrator's Guide*](#)
- [“Setting Field Types \(Loading Data\)” on page 222](#)
- [“About Data Prep Editor” on page 203](#)

Creating Dimension Build Rules Files

Dimension build rules files specify how, during dimension builds, dimensions and members are processed. After you create a rules file, you use the file and the data source to perform a dimension build.

► To create a dimension build rules file:

- 1 [Create a rules file.](#)
- 2 [Set the file delimiters for the data source.](#)
- 3 If you are creating a dimension, [name the dimension.](#)
- 4 [Select a build method.](#)
- 5 If necessary, set the properties of the [members](#) and [dimensions](#) you are building.
- 6 If necessary, set [record](#) and [field](#) operations that, as data is loaded, change the data-source members.

- 7 Set [field type information](#), including field type, field number, and dimension.
- 8 [Validate the rules file](#).
- 9 [Save the rules file](#).

Related Information

- “Creating Rules Files” in the *Oracle Essbase Database Administrator's Guide*
- [“About Data Prep Editor” on page 203](#)

Loading Data and Building Dimensions

You can use the **Data Load** dialog box to load data into and build the dimensions of (load members into) aggregate and block storage databases to which you have at least Write permissions.

Note: Aggregate and block storage databases use different load and build processes. For example, aggregate storage databases use a buffer to hold a batch list of data sources. See the relevant documentation for aggregate storage and [block storage](#).

During background execution of data loads and dimension builds, you can continue working and can check process status, but you cannot shut down Essbase Administration Server. You can specify whether Essbase executes all data loads and dimension builds in the background or prompts you for each load or build. See [“Setting Essbase Default Options” on page 97](#).

► To load data or build dimensions:

- 1 From Enterprise View or a custom view, select the database.
- 2 Right-click and select **Load data**.

The [Data Load dialog box](#) is displayed. The first line in the data sources table is populated with the default settings (data file, load only). You can edit the first row or add a row (by clicking Insert).

- 3 If you want to populate the data-source table with information from a previous data load or dimension build, click **Open**, and locate and select the file that contains the information.
- 4 If you want to populate the data source table manually:
 - a. Click in the **Data Source Type** column and select **Data file** or **SQL**.
 - b. Click in the **Mode** column and select **Load only**, **Build only**, or **Both**.
 - c. If you selected **SQL**, in **SQL User Name** and **SQL Password**, enter the database user name and password.
 - d. If you selected **Data file**, click **Find Data File**, and locate and select one or more data files (from the file system or from an Essbase Server).

Multiple files are added to the data-source table in the order that they are listed in the Open dialog box, and data sources are loaded in the order that they are listed in the data-source table.

You can reduce load time by loading data sources from the Essbase Server computer (rather than from a client computer).

- e. If you want to use a rules file with the selected data source, click **Find Rules File** to find and select one or more rules files (from the file system or from Essbase Server). If you select multiple rules files, they are added to the table in the same order that they appear in the Open dialog box. The files are added consecutively, starting with the first selected row in the table.

You can associate a different rules file with each data source.

- f. If you are loading data only and you want the data load to stop if an error occurs, select the check box in the **Abort on Error** column.
- g. If you want errors that occur during the load or build to be written to an error log file, in the **Error File** column, specify the full path to the location where you want errors to be written.
- h. If you want new errors to overwrite the contents of an existing error file, select the check box in the **Overwrite** column.
- i. Repeat these steps to select multiple data sources, rules files, and settings.
- j. If you want to save the information you have specified in the data sources table, click **Save** to save the information to an XML file on the client file system.

5 For dimension builds, if you want to perform a deferred-restructure dimension build, select **Deferred-restructure dimension build.**

6 For aggregate storage databases only:

- If you are loading data and values exist in the database, select an option from the **Data load values** drop-down list for overwriting existing values, adding to existing values, subtracting from existing values, or replacing the contents of the database.
- Select whether to ignore missing values and zero values in the data source.
- Select whether to load the data as a new slice in the database.

7 If you want to execute the data load or dimension build in the background so that you can work in the console as the load or build processes, select **Execute in background.**

8 Click **OK.**

Essbase runs the data load or dimension build and displays the [Data Load Results dialog box](#), where status messages are displayed.

If you chose to execute the data load or dimension build in the background, an ID for the process is displayed. If a load or build includes multiple data sources, it is treated as a single background process. You can use the ID to [track the status](#) of the background process in the **Background Process Status** window.

Related Information

- [“Data Load Dialog Box” on page 515](#)
- “Preparing Aggregate Storage Databases” in the *Oracle Essbase Database Administrator's Guide*
- “Understanding Data Loading and Dimension Building” (block storage) in the *Oracle Essbase Database Administrator's Guide*
- [“Data Load Results Dialog Box” on page 517](#)

Related Commands

For a data load:

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- import data (MaxL) in the *Oracle Essbase Technical Reference*
- import (ESSCMD) in the *Oracle Essbase Technical Reference*
- loaddata (ESSCMD) in the *Oracle Essbase Technical Reference*

For a dimension build:

- import dimensions (MaxL) in the *Oracle Essbase Technical Reference*
- builddim (ESSCMD) in the *Oracle Essbase Technical Reference*
- alter system kill request (MaxL) in the *Oracle Essbase Technical Reference*

Updating an Outline Dynamically Using a Rules File

When you have a valid dimension build rules file, you can create and update dimensions dynamically from Outline Editor. The outline must have at least one dimension defined before you can do a dynamic dimension build.

To create new dimensions, you must define them in the rules file.

Note: This feature does not apply to aggregate storage outlines.

➤ To update an outline using a rules file:

- 1 [Open the outline in edit mode.](#)
- 2 Select **Outline**, then **Update outline** to open the [Update Outline](#) dialog box.
- 3 Select a data source type:
 - To select a data file, select **Data files**, and then click **Find Data File**.
 - To select a SQL database, select **SQL**, and then supply the user name and password for the database.
- 4 Click **Find Rules File** to find and select the dimension build rules file.

5 Specify an [option](#) for error handling.

6 Click **OK**.

Essbase adds the dimensions in the data source to the outline.

Related Information

- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Update Outline Dialog Box” on page 655](#)

Creating and Managing Rules Files

In this section:

- [“About Data Prep Editor” on page 203](#)
- [“Setting How Records Are Displayed” on page 203](#)
- [“Creating Rules Files” on page 203](#)
- [“Opening Rules Files” on page 204](#)
- [“Opening a Data Source” on page 205](#)
- [“Opening SQL Databases” on page 205](#)
- [“Setting File Delimiters” on page 206](#)
- [“Using Rules Files to Name Dimensions” on page 206](#)
- [“Specifying Build Methods” on page 207](#)
- [“Arranging Dimensions for Calculation Performance” on page 208](#)
- [“Setting Dimension Properties” on page 208](#)
- [“Setting and Modifying Member Properties” on page 209](#)
- [“Setting Field Types \(Building Dimensions\)” on page 210](#)
- [“Validating Rules Files” on page 211](#)
- [“Saving a Rules File” on page 211](#)
- [“Copying Rules Files” on page 212](#)
- [“Renaming Rules Files” on page 213](#)
- [“Deleting a Rules File” on page 213](#)
- [“Printing Rules Files” on page 214](#)
- [“Using Rules Files To Define Aliases” on page 215](#)
- [“Using Rules Files to Update UDAs” on page 215](#)

About Data Prep Editor

To open Data Prep Editor, from the console menu bar, select **File**, then **Editors**, then **Data Prep Editor**.

You use Data Prep Editor to create and modify rules files for loading data to an Essbase application. In Data Prep Editor, you can open data sources such as text files, spreadsheet files, and SQL data sources. Data Prep Editor displays the data source, enabling you to see what needs to be changed in order to load the data successfully.

Related Information

- [“Selecting Multiple Fields” on page 221](#)
- [“About Data Loading and Dimension Building” on page 197](#)
- [Setting the Record Displayed](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Opening Rules Files” on page 204](#)
- [“Loading Data and Building Dimensions” on page 199](#)

Setting How Records Are Displayed

You can specify how Data Prep Editor displays records.

➤ To set how records are displayed in Data Prep Editor:

- 1 [Open Data Prep Editor](#).
- 2 Select **Record**, then **Record view count**.
- 3 In **View count**, enter the number of records to be displayed.
- 4 In **Start record**, enter the first record to be displayed.
- 5 Click **OK**.

Related Information

- [“About Data Prep Editor” on page 203](#)
- [“Record View Count Dialog Box” on page 625](#)

Creating Rules Files

You can use rules files to specify how Essbase, during data loads and dimension builds, handles data-source data and metadata.

➤ To create rules files:

- 1 From **Enterprise View** or a custom view, select an application or database.

- 2 Select **File**, then **New** to open the **New** dialog box.
- 3 Select the **Scripts** tab.
- 4 Select **Rules file**, and click **OK**.

The new rules file opens in Data Prep Editor.

- 5 Select **View**, then **Data load fields** or **View**, then **Dimension build fields**.
- 6 Open the [data file](#) or [SQL database](#) data source.

Related Information

- [“About Data Prep Editor” on page 203](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Loading Data and Building Dimensions” on page 199](#)
- [“Naming Files” on page 335](#)

Opening Rules Files

Rules files specify how Essbase, during data loads and dimension builds, handles data-source data and metadata.

To open a rules file, you must have at least Read permissions for the database with which the file is associated.

► To open rules files:

- 1 From Enterprise View or a custom view, locate the application or database with which the preferred rules file is associated.
- 2 Under the application or database node, expand the **Rules Files** node
- 3 Select a rules file.
- 4 Right-click, and select **Edit**.

The rules file opens in Data Prep Editor. Essbase Administration Server may prompt you to lock the script. If you plan to modify the script and save the modifications, you should lock the script so that other users cannot modify it while you are working on it. See [Locking and Unlocking Objects](#).

- 5 Select **View**, then **Data load fields** or **View Dimension build fields**.
- 6 Open the [data file](#) or [SQL database](#) data source.

Related Information

- [“About Data Prep Editor” on page 203](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)

- [“Loading Data and Building Dimensions” on page 199](#)
- [“Open Dialog Box” on page 607](#)
- [“Locking and Unlocking Objects” on page 105](#)

Opening a Data Source

A data source is a file (Microsoft Excel spreadsheet, spreadsheet audit log, text file, or Essbase export file) that contains data or members.

Data sources can be located on Essbase Server, on client computers, or on networks.

► To open data sources:

- 1 [Open Data Prep Editor.](#)
- 2 Select **File**, then **Open data file**.
- 3 In the Open dialog box, select the **Essbase Server** tab (to find files stored on Essbase Server) or the **File System** tab (to find files saved locally or on the network), and navigate to the preferred file.
- 4 Select a file and click **OK**.
- 5 If you are prompted for encoding, accept the default (Essbase Server) or select the encoding.
- 6 If necessary, [set the file delimiters](#).

The data file is displayed in the top pane of Data Prep Editor.

Related Information

- “Supported Data Sources” in the *Oracle Essbase Database Administrator's Guide*
- [“About Data Prep Editor” on page 203](#)
- [“Opening SQL Databases” on page 205](#)
- [“Open Dialog Box” on page 607](#)

Opening SQL Databases

The licensed SQL Interface feature enables you to use SQL databases as data sources.

► To open SQL databases as data sources:

- 1 [Open Data Prep Editor.](#)
- 2 Select **File**, then **Open SQL**.
- 3 Log on a SQL database.
- 4 Click **OK/Retrieve** to connect to the SQL database.
- 5 In the **SQL Connect** dialog box, enter the database user name and password.

The data source is displayed in the top pane of Data Prep Editor.

- 6 If necessary, [set the file delimiters](#).

Related Information

- [“About Data Prep Editor” on page 203](#)
- [“Opening a Data Source” on page 205](#)
- [“Open SQL Data Sources Dialog Box” on page 608](#)
- [“SQL Connect Dialog Box” on page 644](#)

Setting File Delimiters

File delimiters separate data-source fields. Outside rules files, data-source fields are delimited by spaces. Within rules files, by default, data-source fields are delimited by tabs.

Within data load or dimension build rules files, you can set commas, tabs, white spaces, fixed-width columns, or custom values as file delimiters. You need not set file delimiters for SQL data.

► To set file delimiters:

- 1 [Open](#) or [create](#) the rules file.
- 2 Select **Options**, then **Data source properties**.
- 3 In the **Data Source Properties** dialog box, select the **Delimiter** tab.
- 4 In the **Delimiter** node, select a file delimiter.
- 5 If you selected a custom file delimiter, in the text box, enter a character from the standard ASCII character set, from 0 to 127.
- 6 If you selected fixed-width columns, in the text box, enter the column width.

Related Information

- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)
- [Data Source Properties Dialog Box, Delimiter Tab](#)

Using Rules Files to Name Dimensions

If you create a new dimension using dimension build, you must name the dimension in the rules file.

► To name a dimension:

- 1 [Open](#) or [create](#) a rules file.
- 2 Select **Options**, then **Dimension build settings**.
- 3 In the **Dimension Build Settings** dialog box, select the **Dimension Definition** tab.
- 4 For standard dimensions:

- a. Select **Rules file**.
- b. Enter a name for the new dimension, and press **Enter**.
The dimension is displayed the **Dimensions** node (under the **Rules file** option).
- c. Right-click the new dimension, and select **Edit**.
- d. In the [Dimension Properties dialog box](#), define the dimension properties, such as configuration (dense or sparse) and type.

5 For attribute dimensions:

- a. Right-click the name of the base dimension, and select **Edit properties**.
- b. In the **Dimension Properties** dialog box, select the **Attribute Dimensions** tab.
- c. Enter a name for the attribute dimension. select the attribute dimension type, and click **OK**.
- d. Select the attribute dimension type, and click **OK**.

Related Information

- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Loading Data and Building Dimensions” on page 199](#)
- [Dimension Build Settings Dialog Box - Dimension Definition Tab](#)
- [“Dimension Properties Dialog Box” on page 549](#)
- [“Setting Dimension Properties” on page 208](#)
- [“Building Attribute Dimensions and Associating Attributes” in the *Oracle Essbase Database Administrator's Guide*](#)

Specifying Build Methods

To create or add members to a dimension, you must specify an algorithm (build method).

► To select a build method:

- 1 [Open](#) or [create](#) the rules file.
- 2 Select **Options**, then **Dimension build settings**.
- 3 In the **Dimension Build Settings** dialog box, select the **Dimension Build Settings** tab.
- 4 Scroll to the **Build method** node.
- 5 Select a build method.
- 6 If you select **Add as child of**, enter a parent name or from **Add as child of**, select a parent.
- 7 Click **OK**.

Related Information

- [“Build Methods” in the *Oracle Essbase Database Administrator's Guide*](#)

- [“Creating Dimension Build Rules Files” on page 198](#)
- [Dimension Build Settings Dialog Box, Dimension Build Settings Tab](#)

Arranging Dimensions for Calculation Performance

Dimension placement (within outlines) affects calculation time. For details, see *Oracle Essbase Database Administrator's Guide*.

Note: This functionality does not apply to aggregate storage databases.

Rules files contain a dimension build, global properties option that optimizes calculation performance by placing dimensions in the following order (called an *hourglass* arrangement):

1. Densest dimensions (accounts and time)
2. Remaining dense dimensions (largest to smallest)
3. Sparse dimensions (smallest to largest)
4. Attribute dimensions (no particular order)

The Optimize Outline feature of Outline Editor also places dimensions in an hourglass arrangement. But, the Outline Editor feature also makes changes to the storage properties of some members. See [Optimizing Outlines for Batch Calculation Performance](#).

► To place outline dimensions in an hourglass arrangement:

- 1 [Open](#) or [create](#) a rules file.
- 2 Select **Options**, then **Dimension build settings**.
- 3 In the **Dimension Build Settings** dialog box, select the **Global Settings** tab.
- 4 Select **Arrange dimensions by size and type to an hourglass shape**.
- 5 Click **OK**.

Related Information

- “Designing an Outline to Optimize Performance” in the *Oracle Essbase Database Administrator's Guide*
- [Dimension Build Settings Dialog Box, Global Settings Tab](#)

Setting Dimension Properties

Using rules files, you can set the properties of individual standard and attribute dimensions or of all standard dimensions.

► To set properties for individual dimensions:

- 1 [Open](#) or [create](#) a rules file.

- 2 Select **Options**, then **Dimension build settings**.
- 3 In the **Dimension Build Settings** dialog box, select the **Dimension Definition** tab.
- 4 Select a dimension.
If the **Dimension** node is empty, click **Outline**, and associate the rules file with an outline.
- 5 Right-click, and select **Edit properties**.
- 6 In the **Dimension Properties dialog box**, select one or more properties, and click **OK**.

➤ To set properties for all standard dimensions:

- 1 **Open** or **create** a rules file.
- 2 Select **Options**, then **Dimension build settings**.
- 3 In the **Dimension Build Settings dialog box**, select the **Global Settings** tab.
- 4 Select dense or sparse configuration, an alias table, a dimension arrangement (automatic or hourglass), and **AND** or **OR** (to specify whether to combine selection and rejection criteria).

Note: Some properties do not apply to aggregate storage databases.

- 5 Click **OK**.

Related Information

- [“Creating Dimension Build Rules Files” on page 198](#)
- [Dimension Build Settings Dialog Box, Dimension Definition Tab](#)
- [Dimension Build Settings Dialog Box, Global Settings Tab](#)
- [“Dimension Properties Dialog Box” on page 549](#)
- “Setting Dimension and Member Properties” in the *Oracle Essbase Database Administrator's Guide*
- “Using the Data Source to Set Member Properties” in the *Oracle Essbase Database Administrator's Guide*
- “Dense and Sparse Selection Scenarios” in the *Oracle Essbase Database Administrator's Guide*
- “Setting Aliases” in the *Oracle Essbase Database Administrator's Guide*

Setting and Modifying Member Properties

For dimension builds, you can set or modify the properties of the members of standard dimensions.

➤ For dimension builds, to set or modify member properties:

- 1 **Open** or **create** a rules file.
- 2 Select **Options**, then **Dimension build settings**.
- 3 In the **Dimension Build Settings** dialog box, select the **Dimension Build Settings** tab.

- 4 If the **Dimension** node is empty, click the **Outline** button to associate the rules file with an outline.
- 5 Select a dimension.
- 6 Right-click the dimension name, and select **Edit properties**.
- 7 [Perform one or more actions](#) (such as modifying member properties, modifying attribute associations, and sorting members).
- 8 Click **OK**.

Related Information

- [“Creating Dimension Build Rules Files” on page 198](#)
- [Dimension Build Settings Dialog Box, Dimension Build Settings Tab](#)
- “Using the Data Source to Work with Member Properties” in the *Oracle Essbase Database Administrator's Guide*

Setting Field Types (Building Dimensions)

When building dimensions, you must set field types for fields that contain member names or member information, such as member properties or attribute associations.

► To set field type information:

- 1 [Open](#) or [create](#) the rules file.
- 2 Select **Field**, and then **Properties**.
- 3 In the **Field Properties** dialog box, select the **Dimension Build Properties** tab.
- 4 Double-click the dimension name.
- 5 If the **Dimension** node is empty, click the **Outline** button to associate the rules file with an outline.
- 6 Double-click the field type.
- 7 In **Number**, enter the field's number.
- 8 Click **Next** to set field information for the next field in the rules file.
- 9 Repeat step 8 as many times as necessary.
- 10 Click **OK**.

Related Information

- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Specifying Build Methods” on page 207](#)
- [“Field Properties Dialog Box—Dimension Build Properties Tab” on page 572](#)
- “List of Field Types and Valid Build Methods” in the *Oracle Essbase Database Administrator's Guide*

Validating Rules Files

You validate rules files to ensure that members and dimensions in the files map to the associated outlines.

➤ To validate rules files:

- 1 [Open a rules file.](#)
- 2 **Select Options, then Associate outline.**
Typically, you associate the rules file with the outline of the database into which you are currently loading data or members. The association is not permanent; later, you can associate the file with a different outline.
- 3 **Select View, then Data load fields, or View, then Dimension build fields.**
- 4 If you are using dynamic references, [open the data source.](#)
- 5 **Select Options, then Validate.**

Errors are displayed in the [Validate Rules dialog box](#).

Related Information

- [“Creating Dimension Build Rules Files” on page 198](#)
- [“About Data Prep Editor” on page 203](#)
- [“Associate Outline Dialog Box” on page 484](#)
- [“Setting Headers in the Data Source” on page 217](#)
- [“Opening a Data Source” on page 205](#)
- [“Requirements for Valid Data Load Rules Files” in the *Oracle Essbase Database Administrator's Guide*](#)
- [“Requirements for Valid Dimension Build Rules Files” in the *Oracle Essbase Database Administrator's Guide*](#)
- [“Defining Header Records” in the *Oracle Essbase Database Administrator's Guide*](#)

Saving a Rules File

You can save a rules file on an Essbase Server, on client computers, and on networks.

➤ To save rules files to the locations from which they were opened, select **File**, then **Save**.

➤ To save a rules file to Essbase Server:

- 1 **Select File, then Save as.**
- 2 In the **Save As** dialog box, select the **Essbase Server** tab.
- 3 In the **Look in** list box, select an Essbase Server instance.
- 4 Select an application or database.

5 In File name, enter a name for the rules file.

See *Oracle Essbase Database Administrator's Guide* for length limitations. Rules files are given a `.rul` extension by default.

6 Click OK.

Essbase saves the rules file to the selected application or database and updates Enterprise View.

► To save rules files locally or on a network:

1 Select File, then Save as.

2 In the Save As dialog box, select the File System tab.

3 Navigate to and select a file-system directory.

4 In File name, enter a name for the rules file.

By default, rules files are given `.rul` extensions.

5 For encoding, perform an action:

- To specify UTF-8 encoding, select **UTF-8**.
- To specify non-Unicode encoding, select from the list.
- For a non-Unicode application, accept the default selection.

6 Click OK.

Essbase saves the rules file to the selected directory.

Related Information

- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Creating Rules Files” on page 203](#)
- [“Save As Dialog Box” on page 635](#)
- [“About File Encoding and Locales” on page 117](#)

Copying Rules Files

Using the method described in this topic or the file system, you can copy rules files to applications or databases.

Rules files are copied to the application directory (`ARBORPATH\app\appname`) or the database directory (`ARBORPATH\app\appname\dbname`) on the destination Essbase Server.

You can also copy rules files across servers as part of application migration. See [“Migration Wizard” on page 597](#).

► To copy rules files to other applications and databases:

1 From Enterprise View or a custom view, select a rules file.

- 2 Right-click, and select **Copy** to open the **Copy Rules File** dialog box.
- 3 In **Essbase Server**, select an Essbase Server.
- 4 In **Application**, select an application.
- 5 Do one of the following:
 - To copy the rules file a specific database, in **Database**, select a database.
 - To copy the rules file to all databases of the selected application, select **all dbs**.
- 6 In **Rules file**, enter a name for the copy of the rules file.
- 7 Click **OK**.

Related Information

[“Copy Rules File Dialog Box” on page 494](#)

Related Commands

- `alter object` (MaxL) in the *Oracle Essbase Technical Reference*
- `copyobject` (ESSCMD) in the *Oracle Essbase Technical Reference*

Renaming Rules Files

Using the method described in this topic or the file system, you can rename rules files that are not locked by other users.

Rules file names must be valid (for the operating system) and must contain no more than eight alphanumeric characters. Essbase adds an extension of `.rul`.

► To rename rules files:

- 1 From Enterprise View or a custom view, select a rules file.
- 2 Right-click, and select **Rename**.
- 3 In the **Rename Rules File** dialog box, enter a name.
- 4 Click **OK**.

Related Information

[“Rename Rules File Dialog Box” on page 630](#)

Related Commands

`alter object` (MaxL) in the *Oracle Essbase Technical Reference*

Deleting a Rules File

Using the file system or the method described in this topic, you can delete a rules files from an Essbase Server computer (from the application or database directory in which the file is saved).

To delete rules files, you need appropriate permissions, Application Manager permissions for an application and Database Manager permissions for a database.

Related Commands

drop object (MaxL) in the *Oracle Essbase Technical Reference*

► To delete rules files from Essbase Server computers:

- 1 From Enterprise View or a custom view, select a rules file.
- 2 Right-click, and select **Delete**.
- 3 At the confirmation prompt, click **Yes**.
- 4 If you are prompted to unlock the file, unlock the file, and click **Yes**.

You can unlock the file only if you have Application Manager permissions or you locked the file.

Printing Rules Files

You can print all or selected portions of the contents of data load and dimension build rules files.

► To print rules files:

- 1 From Enterprise View or a custom view, locate the application or database with which the preferred rules file is associated.
- 2 Under the application or database node, expand the **Rules Files** node.
- 3 Select a rules file.
- 4 Right-click and select **Edit**.
The rules file is displayed in Data Prep Editor.
- 5 **Optional:** Select **File**, then **Page Setup**, and set page layout properties.
- 6 **Optional:** Select **File**, then **Print Preview**, and preview the printed document.
- 7 Select **File**, then **Print**.
- 8 In the **Print Options** dialog box, select the preferred [print options](#).
- 9 Click **OK**.

Related Information

- [“Print Options Dialog Box” on page 623](#)
- [“Creating Rules Files” on page 203](#)
- [“Opening Rules Files” on page 204](#)

Using Rules Files To Define Aliases

Using rules files and data sources, you can define (add and rename) aliases. Data sources used to define aliases must, at minimum, include the member names associated with the aliases and the tables that contain the alias names. Alias assignment can be combined with other dimension building rules.

You can also define aliases by [manually editing an outline](#) or by [importing an alias table source file](#).

Member name naming rules also apply to alias names.

Note: If you are using a level reference build, you cannot create alias names that duplicate member names.

➤ To use rules files to define aliases:

- 1 [Open](#) or [create](#) a rules file.
- 2 Select **Options**, and then **Dimension Build Settings** to open the **Dimension Build Settings** dialog box.
- 3 On the **Global Settings** tab, click **Update Alias Table** to display a list of existing alias tables.
- 4 Select an alias table, and click **OK**.
- 5 In the rules file, select the field column for the alias names.
- 6 Select **Field**, then **Properties**, and select the **Dimension Build Properties** tab from the **Field Properties** dialog box.
- 7 Under the **Field definition** node, select the **Alias** field type.
- 8 Click **OK**.

Related Information

- “Setting Aliases” in the *Oracle Essbase Database Administrator's Guide*
- [“About Alias Tables” on page 170](#)
- [“Creating Alias Tables” on page 172](#)
- [“Field Properties Dialog Box—Dimension Build Properties Tab” on page 572](#)

Using Rules Files to Update UDAs

User-defined attributes (UDAs) are words or phrases that you create to describe members. For example, you might create a UDA called *Major Market* and assign it to the members that represent your larger markets.

To update (add, replace, or remove) UDAs, you can use dimension build rules files or Outline Editor.

For a discussion that compares UDAs and attribute dimensions, see *Oracle Essbase Database Administrator's Guide*.

► To use dimension build rules files to update UDAs:

- 1 Design the data source to include a column for the members that receive UDAs and a column for the UDA values.
- 2 [Create a dimension build rules file.](#)
- 3 For each data-source field that contains a UDA value, set the Dimension Build field type as UDA.
- 4 **Optional:** To enable replacement of UDA values, for the rules file, for the Dimension Build setting, select **Enable UDA changes**.

Note: To remove a UDA value, use **Enable UDA changes**, and, in the data source, leave the relevant UDA field blank.

Related Information

- [Member Properties - UDAs](#)
- “Creating UDAs” in the *Oracle Essbase Database Administrator's Guide*
- [Working with UDAs Using Outline Editor](#)

Operating on Records with Rules Files

In this section:

- [“About Record Operations” on page 216](#)
- [“Setting Headers in the Data Source” on page 217](#)
- [“Specifying Data-Source Members in Rules Files” on page 217](#)
- [“Selecting Records” on page 218](#)
- [“Rejecting Records” on page 219](#)
- [“Combining Selection and Rejection Criteria” on page 219](#)

About Record Operations

Within data load and dimension build rules files, Essbase can operate on one record as one unit. During data loads and dimension builds, rules files tell Essbase how to process the information contained in each record.

Operations that you can perform at the record level:

- [Select the records to load into the database.](#)
- Select the records *not* to load into the database, that is, [reject records](#).
- [Set header records in the data source](#) to describe the contents of the data source and point to those records in the rules file.
- [Set header records in the rules file](#) that describe the contents of the data source.

- [Determine which records are displayed in Data Prep Editor.](#)

Related Information

- [About Data Loading or Dimension Building](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)
- [“About Field Operations” on page 220](#)
- [“About Data Operations” on page 231](#)

Setting Headers in the Data Source

In a data load or dimension build rules file, you can refer to header information in the data source. Placing header information in the data source allows you to use the same rules file for multiple data sources with different formats, because the data source format is specified in the data source header and not the rules file.

Header information defined in the data source takes precedence over header information defined in the rules file.

➤ To specify the location of header records in a data source:

- 1 Using a text editor or spreadsheet, place header information in the first record of one or more data sources.
- 2 [Open](#) or [create](#) the rules file.
- 3 Select **Options**, then **Data source properties**.
- 4 In the **Data Source Properties** dialog box, select the **Header** tab.
- 5 In the [Header tab](#), enter the header location information.
- 6 Click **OK**.

Related Information

- [“Defining Header Records” in the *Oracle Essbase Database Administrator's Guide*](#)
- [“Specifying Data-Source Members in Rules Files” on page 217](#)
- [Data Source Properties Dialog Box, Header Tab](#)

Specifying Data-Source Members in Rules Files

Within the header of a data load rules file, you can specify one member per dimension. For example, if you specify January, for all data-source records, January represents the Year dimension.

If a rules file contains a dynamic reference to data-source headers, the header information contained in the rules file is not used (because the header in the data source takes precedence).

► To specify data-source members within rules file headers:

- 1 [Open](#) or [create](#) the rules file.
- 2 Select **Options**, then **Data load settings**.
- 3 In the **Data Load Settings** dialog box, select the **Header Definition** tab.
- 4 If the **Dimension** node is empty, click **Outline**, and associate the rules file with an outline.
- 5 In **Name**, enter a member name.

If you enter a substitution variable, the variable value that is effective when data is loaded is used.
- 6 Click **OK**.

Related Information

- “Defining Header Records” in the *Oracle Essbase Database Administrator's Guide*
- [“Setting Headers in the Data Source” on page 217](#)
- [Data Load Settings Dialog Box, Header Definition Tab](#)

Selecting Records

Within data load and dimension build rules files, you can define one or more selection criteria (string and number conditions) to determine which records are loaded.

► To define selection criteria:

- 1 [Open](#) or [create](#) a rules file.
- 2 Select a field.
- 3 Select **Record**, then **Select**.
- 4 In the [Select Record](#) dialog box, define a criterion.
- 5 **Optional:** To define another selection criterion:
 - a. Click **New**.
 - b. Repeat steps 2–3.
 - c. Select **AND** (to require the field to meet all criteria) or **OR** (to require the field to meet any one criterion).
- 6 **Optional:** To define selection criteria on multiple fields:
 - a. Repeat steps 2–5.
 - b. Specify [how Administration Services combines criteria](#).

Related Information

- [“Rejecting Records” on page 219](#)
- [“Combining Selection and Rejection Criteria” on page 219](#)

- [“Select Record Dialog Box” on page 637](#)

Rejecting Records

Within data load and dimension build rules files, you can define one or more rejection criteria (string and number conditions) and, thus, reject the records that you do not want to load into the database.

➤ To define one or more rejection criteria to prevent a record from being loaded into the data source:

- 1 [Open](#) or [create](#) a rules file.
- 2 Select one or more fields.
- 3 Select **Record**, then **Reject**.
- 4 In the [Reject Record](#) dialog box, define a criterion.
- 5 **Optional:** To apply another rejection criteria to the selected fields:
 - a. Click **New**.
 - b. Repeat step 4.
 - c. Select **AND** (to reject a record only if all criteria are met) or **OR** (to reject a record if any criterion is met).
- 6 **Optional:** To create one or more rejection criteria on multiple fields, repeat steps 2–5 and [specify how Essbase combines the criteria](#) of the various fields.

Related Information

- [“Selecting Records” on page 218](#)
- [“Combining Selection and Rejection Criteria” on page 219](#)
- [“Reject Record Dialog Box” on page 625](#)

Combining Selection and Rejection Criteria

Within data load and dimension build rules fields, you can combine selection and rejection criteria.

Records that are selected and rejected (as determined by the criteria) are rejected.

➤ To combine selection and rejection criteria:

- 1 [Open](#) or [create](#) a rules file.
- 2 Select **Options**, and then **Data load settings** and select the **Data Load Values** tab, or select **Options**, and then **Dimension build settings** and select the **Global Settings** tab.
- 3 Expand the **Global select/reject Boolean** node.

- 4 Select **And** (to require fields to match all selection and rejection criteria) or **Or** (to require fields to match any one selection or rejection criterion).
- 5 Click **OK**.

Related Information

- [“Selecting Records” on page 218](#)
- [“Rejecting Records” on page 219](#)
- [Data Load Settings Dialog Box, Data Values Tab](#)
- [Dimension Build Settings Dialog Box, Global Settings Tab](#)

Operating on Fields with Rules Files

In this section:

- [“About Field Operations” on page 220](#)
- [“Selecting Multiple Fields” on page 221](#)
- [“Setting Field Types \(Loading Data\)” on page 222](#)
- [“Ignoring Fields” on page 223](#)
- [“Ignoring Fields By Specifying Tokens” on page 223](#)
- [“Moving Fields” on page 224](#)
- [“Joining Fields” on page 224](#)
- [“Creating Fields Using Joins” on page 225](#)
- [“Using Text to Create Fields” on page 225](#)
- [“Splitting Fields” on page 226](#)
- [“Undoing Field Operations” on page 226](#)
- [“Mapping Field Names” on page 227](#)
- [“Replacing Field Names” on page 228](#)
- [“Placing Text in Empty Fields” on page 228](#)
- [“Changing the Case of Fields” on page 229](#)
- [“Dropping Spaces around Fields” on page 230](#)
- [“Converting Spaces to Underscores” on page 230](#)
- [“Adding Prefixes and Suffixes” on page 230](#)

About Field Operations

Within data-load and dimension-build rules files, Essbase can operate on one field as one unit. While loading data or building dimensions, you can ignore, manipulate, or rename fields:

You can ignore a field in the following ways:

- [Ignore all fields in a column.](#)
- [Ignore fields based on string matches.](#)

You can change the position of a field in the following ways:

- [Move fields to a new location.](#)
- [Join fields together.](#)
- [Create a new field by joining two existing fields.](#)
- [Create a new field by adding a field with a text value.](#)
- [Split a field into two fields.](#)
- If desired, you can [undo each position change.](#)

You can change the name of a field in the following ways:

- [Map the field name to a member name in the outline.](#)
- [Replace text strings in a field name.](#)
- [Change the case of the field name.](#)
- [Drop extra spaces around the field name.](#)
- [Convert spaces in a field name to underscores.](#)
- [Add prefixes and/or suffixes to a field name.](#)

Related Information

- [About Data Loading or Dimension Building](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)
- [“About Data Operations” on page 231](#)
- [“About Record Operations” on page 216](#)
- [“Selecting Multiple Fields” on page 221](#)

Selecting Multiple Fields

Within Data Prep Editor, you can select multiple fields. When multiple fields are selected, only menu items and controls that you can use are available.

➤ To select continuous fields:

- 1 [Open](#) or [create](#) a rules file.
- 2 [Select a field.](#)
- 3 Press **Shift**, and select the last field.

► To select discontinuous fields:

- 1 **Open** or **create** a rules file.
- 2 **Perform an action:**
 - Select the fields of the first region, press **Ctrl**, and drag to select the fields of the second region.
 - Select the first field, press **Ctrl**, and select each other field.

Related Information

[“About Data Prep Editor” on page 203](#)

Setting Field Types (Loading Data)

When loading data, you must set field types for fields that contain member names or member information, such as member properties or attribute associations. You must specify the following information:

- Field type, such as generation or alias. The field type depends on the data source and the build method.
- The dimension that the members in that field belong to.
- The generation or level number of the members in that field.

► To set field type information:

- 1 **Open** or **create** the rules file.
- 2 **Select Field**, and then **Properties**.
- 3 In the **Field Properties** dialog box, select the **Dimension Build Properties** tab.
- 4 Double-click the dimension name.
- 5 If the **Dimension** node is empty, click the **Outline** button to associate the rules file with an outline.
- 6 Double-click a field type.
- 7 In **Number**, enter a field's number.
- 8 Click **Next**, and set the field information for the next field in the rules file.
- 9 Repeat step 8 as many times as necessary.
- 10 Click **OK**.

Related Information

- [“Creating Dimension Build Rules Files” on page 198](#)
- [Choosing a Build Method](#)
- [“Field Properties Dialog Box—Dimension Build Properties Tab” on page 572](#)

Ignoring Fields

Within data load and dimension build rules files, you can ignore (not load into the Essbase database) the fields of a specified data-source column. For example, you can ignore a column that contains comments.

➤ To ignore fields:

- 1 [Open](#) or [create](#) the rules file.
- 2 Select a column.
- 3 Select **Field**, then **Properties**.
- 4 In the **Field Properties** dialog box, select the **Data Load Properties** tab.
- 5 Select **Ignore field during data load** or **Ignore field during dimension build**.
- 6 Click **OK**.

Related Information

- [“Ignoring Fields By Specifying Tokens” on page 223](#)
- [“About Field Operations” on page 220](#)
- “Ignoring Fields” in the *Oracle Essbase Database Administrator's Guide*
- [Field Properties Dialog Box, Data Load Properties Tab](#)

Ignoring Fields By Specifying Tokens

Within data load and dimension build rules files, you can ignore data-source values that match a specified token (text string)—regardless of where the values are located.

➤ To ignore data-source values that match a specified token:

- 1 [Open](#) or [create](#) the rules file.
- 2 Select **Options**, then **Data source properties**.
- 3 In the **Data Source Properties** dialog box, select the **Ignore Tokens** tab.
- 4 In the text box, enter a text string.
- 5 **Optional:** To ignore values that match another token, click **New**, and repeat step 4.
- 6 Click **OK**.

Related Information

- [“Ignoring Fields” on page 223](#)
- [“About Field Operations” on page 220](#)
- [Data Source Properties Dialog Box, Ignore Tokens Tab](#)

Moving Fields

Within data load and dimension build rules files, you can move fields. For example, the first field can become the third field.

► To move fields within rules files:

- 1 **Open** or **create** a rules file.
- 2 **Select** the field to move.
- 3 **Select Field**, then **Move**.
- 4 Click **Up** or **Down** one or more times.
- 5 When the field is correctly positioned, click **OK**.

Related Information

- [“About Field Operations” on page 220](#)
- [“Undoing Field Operations” on page 226](#)
- [“Move Field Dialog Box” on page 601](#)
- “Moving Fields” in the *Oracle Essbase Database Administrator's Guide*
- [“Selecting Multiple Fields” on page 221](#)

Joining Fields

Within data load and dimension build rules files, you can join multiple fields into one field (which is given the name of the first field in the join).

Before joining fields, [position the fields](#) in the order in which you want to join them.

► To join multiple fields into one field:

- 1 **Open** or **create** a rules file.
- 2 **Select Field**, then **Join**.
- 3 In the **Join Field** dialog box, in the **Fields to join** list box, [select the fields](#) to join.
For example, select field2 and field3 to join them.
- 4 Click **OK**.

Related Information

- [“About Field Operations” on page 220](#)
- [“Creating Fields Using Joins” on page 225](#)
- [“Moving Fields” on page 224](#)
- [“Splitting Fields” on page 226](#)
- [“Undoing Field Operations” on page 226](#)

- [“Join Field Dialog Box” on page 584](#)
- [“Selecting Multiple Fields” on page 221](#)

Creating Fields Using Joins

Within data load or dimension build rules files, you can create fields by joining other fields.

➤ To create a field by joining multiple fields:

- 1 [Open](#) or [create](#) a rules file.
- 2 **Select Field**, then **Create using join**.
- 3 In the **Create Field Using Join** dialog box, in **Fields to join for create**, [select two or more fields](#).
- 4 Click **OK**.

The new field is displayed to the left of the first field in the join.

Related Information

- [“About Field Operations” on page 220](#)
- [“Using Text to Create Fields” on page 225](#)
- [“Joining Fields” on page 224](#)
- [“Undoing Field Operations” on page 226](#)
- [“Creating a New Field by Joining Fields” in the *Oracle Essbase Database Administrator's Guide*](#)
- [Create Using Join Dialog Box](#)
- [“Selecting Multiple Fields” on page 221](#)
- [Copying Fields](#)

Using Text to Create Fields

Within data load or dimension build rules files, you can insert columns and fill all fields of the newly created columns with text. For example, if one column contains fields such as 100 and another column contains fields such as 10-1, you can insert a column that contains fields such as 100-10-1.

➤ To create a field using text:

- 1 [Open](#) or [create](#) the rules file.
- 2 **Select the field to put the new field in front of**.
- 3 **Select Field**, then **Create using text**.
- 4 In the **Create Field Using Text** dialog box, in **Text in field**, enter a text string.
- 5 Click **OK**.

The new field is displayed to the left of the selected field.

Related Information

- [“About Field Operations” on page 220](#)
- [“Create Using Text Dialog Box” on page 511](#)
- [“Creating Fields Using Joins” on page 225](#)
- [“Undoing Field Operations” on page 226](#)

Splitting Fields

Within data load and dimension build rules files, you can split one field into two fields. For example, you can split the UPC100-10-1 field into the UPC field and the 100-10-1 field.

➤ To split one field into two fields:

- 1 [Open](#) or [create](#) a rules file.
- 2 Select a field.
- 3 Select **Field**, then **Split**.
- 4 In the **Split Field** dialog box, in **Number of characters in a column**, enter the number of characters to place in the first of the two fields.

The remaining characters are placed in the second field.

- 5 Click **OK**.

The first field is displayed to the left of the second field.

Related Information

- [“About Field Operations” on page 220](#)
- [“Ignoring Fields” on page 223](#)
- [“Joining Fields” on page 224](#)
- [“Undoing Field Operations” on page 226](#)
- [“Split Field Dialog Box” on page 644](#)

Undoing Field Operations

Within data load and dimension build rules files, you can undo field operations (including move, split, join, create using text, and create using join).

Field operations are undone sequentially (from most to least recent).

➤ To undo the most recent field operation, select **Edit**, and then **Undo**.

➤ To undo multiple field operations:

- 1 [Open](#) or [create](#) the rules file.

- 2 Select **Options**, and then **Data source properties**.
- 3 In the **Data Source Properties** dialog box, select the **Field Edits** tab.
- 4 Select the bottom (most recent) operation, and click **Delete**.

The originally second most recent operation becomes the most recent (bottom) operation.

- 5 Repeat step 4 until all operations that you want to undo are deleted.
- 6 Click **OK**.

Related Information

[“About Field Operations” on page 220](#)

Mapping Field Names

Data-load rules files specify how data-source fields are mapped to database members.

Data Prep Editor provides mapping methods for non-duplicate and duplicate members. Duplicate members can be specified by level (if data-source fields that are organized bottom-up) or by generation (if data-source fields that are organized top-down).

➤ To map data source fields to database members:

- 1 [Open](#) or [create](#) the rules file.
- 2 Select the field.
- 3 Select **Field**, then **Properties**.
- 4 In the **Field Properties** dialog box, select the **Data Load Properties** tab.
- 5 In **Field**, enter the target member or member combination, or select the members in the **Dimension** node. If you enter a substitution variable name, the substitution variable value that is set at the time the data load is performed is used.
- 6 To specify a unique member name, in the **Field name** text box under the **Default** option, enter the target member or member combination, or select the member in the **Dimension** node.
- 7 If the **Dimension** node is empty, click the **Outline** button to associate the rules file with an outline.
- 8 To map to a [duplicate member name](#), select **Use reference method**, specify the generation or level number as applicable, and specify the dimension.
- 9 Click **OK**.

Related Information

- [“About Field Operations” on page 220](#)
- [Field Properties Dialog Box, Data Load Properties Tab](#)

Replacing Field Names

Within data load and dimension build rules files, you can specify that, during data loads and dimension builds, some field names be replaced. For example, you can replace the data-source member name NY with New York.

► To replace field names:

- 1 [Open](#) or [create](#) a rules file.
- 2 Select the field to change.
- 3 Select **Field**, then **Properties**.
- 4 In the **Field Properties** dialog box, select the **Global Properties** tab.
- 5 Enter the string to be replaced and the new string, and select the preferred options.
- 6 Click **OK**.

Related Information

- [“About Field Operations” on page 220](#)
- [Field Properties Dialog Box, Global Properties Tab](#)

Placing Text in Empty Fields

Placing text (for example, default values or #MI) within the empty fields of a column requires three steps:

1. Place temporary strings in empty fields.
2. Within fields that contain only temporary strings, replace the temporary strings with preferred values.
3. Within fields that contain temporary strings and other values, delete the temporary strings.

► To place temporary strings in empty fields:

- 1 [Open](#) or [create](#) a rules file.
- 2 Select a column that contains empty fields.
- 3 Select **Field**, then **Create using text**.
- 4 In **Text in field**, enter a string, such as `temp`, that cannot be a true column value.
- 5 Select the field that contains the temporary string and the empty fields.
- 6 Select **Field**, then **Join**, and click **OK**.

The empty fields contain the temporary string.

► Within fields that contain only temporary strings, to replace temporary strings with preferred values:

- 1 Select the joined column that contains the temporary strings, and select **Field**, then **Properties**.

- 2 Select the [Global Properties](#) tab.
- 3 In **Replace**, enter the temporary string.
- 4 In **With**, enter the preferred value, for example, #MI.
- 5 Select **Match whole word** and **Replace all occurrences**, and click **OK**.

➤ Within fields that contain temporary strings and other values, to delete temporary strings:

- 1 Select the joined column that contains temporary strings, and select **Field**, then **Properties**.
- 2 Select the [Global Properties](#) tab.
- 3 In **Replace**, enter the temporary string.
- 4 In **With**, enter nothing.
- 5 Select **Replace all occurrences**, clear **Match whole word**, and click **OK**.

Related Information

- [“About Field Operations” on page 220](#)
- [Field Properties Dialog Box, Global Properties Tab](#)
- [“Replacing Field Names” on page 228](#)
- [“Using Text to Create Fields” on page 225](#)

Changing the Case of Fields

Within the fields of data-load and dimension-build rules files, you can change case. For example, if the data source uses JAN and the database uses jan, you may want to change JAN to jan.

➤ To change the case of a field:

- 1 [Open](#) or [create](#) the rules file.
- 2 Select a field.
- 3 Select **Field**, then **Properties**.
- 4 In the **Field Properties** dialog box, select the **Global Properties** tab.
- 5 In the **Case** node, select the desired case.
- 6 Click **OK**.

Related Information

- [“About Field Operations” on page 220](#)
- [Field Properties Dialog Box, Global Properties Tab](#)

Dropping Spaces around Fields

Within data load and dimension build rules files, you can drop leading and trailing spaces within fields.

► To drop leading and trailing spaces:

- 1 [Open](#) or [create](#) a rules file.
- 2 Select a field.
- 3 Select **Field**, then **Properties**.
- 4 In the **Field Properties** dialog box, select the **Global Properties** tab.
- 5 Select **Drop leading/trailing spaces**.
- 6 Click **OK**.

Related Information

- [“About Field Operations” on page 220](#)
- [Field Properties Dialog Box, Global Properties Tab](#)

Converting Spaces to Underscores

Within data load and dimension build rules files, you can convert spaces within fields to underscores; for example, New York to New_York.

► To convert spaces to underscores:

- 1 [Open](#) or [create](#) a rules file.
- 2 Select a field.
- 3 Select **Field**, and then **Properties**.
- 4 In the **Field Properties** dialog box, select the **Global Properties** tab.
- 5 Select **Convert spaces to underscores**.
- 6 Click **OK**.

Related Information

- [“About Field Operations” on page 220](#)
- [Field Properties Dialog Box, Global Properties Tab](#)

Adding Prefixes and Suffixes

Within data load and dimension build rules files, you can add prefixes or suffixes to data-source values. For example, you can prefix member names with ESS, provided that the resulting names are valid member names.

- To add prefixes or suffixes to data-source values:
- 1 [Open](#) or [create](#) a rules file.
 - 2 Select a field.
 - 3 Select **Field**, then **Properties**.
 - 4 In the **Field Properties** window, select the **Global Properties** tab.
 - 5 In **Prefix** or **Suffix**, enter a prefix or suffix, respectively.
 - 6 Click **OK**.

Related Information

- [“About Field Operations” on page 220](#)
- [Field Properties Dialog Box, Global Properties Tab](#)

Operating on Data with Rules Files

In this section:

- [“About Data Operations” on page 231](#)
- [“Defining Columns as Data Fields” on page 232](#)
- [“Adding to Data Values” on page 232](#)
- [“Subtracting from Data Values” on page 233](#)
- [“Clearing Data Values Before Loading Data” on page 233](#)
- [“Flipping Signs” on page 234](#)
- [“Scaling Data Values” on page 235](#)

About Data Operations

Within data load rules files, you can perform only data operations. You cannot build dimensions.

In data load rules files, you can determine how Essbase modifies database values during data loads:

- If all data values in a data source are in one column, you must [define that column as a data field](#).
- You can [add to and subtract from database values](#).
- You can [clear database values](#).
- You can [scale data-source values](#).
- You can [flip the sign of data-source values](#).

Related Information

- [About Data Loading or Dimension Building](#)

- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)
- [“About Field Operations” on page 220](#)
- [“About Record Operations” on page 216](#)

Defining Columns as Data Fields

If, within a data load rules file, each record contains a column for every dimension and one data column, you must define the data column as a data field in the data load rules file. You can only define one field in a record as a data field.

► To define a column as a data field:

- 1 [Open](#) or [create](#) the rules file.
- 2 Select the field that contains the data values.
- 3 Select **Field**, then **Properties**.
- 4 In the **Field Properties** dialog box, select the **Data Load Properties** tab.
- 5 In the **Field definition** node, select **Data field**.
- 6 Click **OK**.

Related Information

- [“Data Sources” in the *Oracle Essbase Database Administrator's Guide*](#)
- [“Rules Files” in the *Oracle Essbase Database Administrator's Guide*](#)
- [Field Properties Dialog Box, Data Load Properties Tab](#)

Adding to Data Values

During a data load, by default, Essbase overwrites database values with data-source values. However, you can add data-source values to database values. For example, if you load weekly data values, you can add them to create cumulative data values in the database. The data source is not changed.

If you are not using [committed transactions](#), adding data-source values to database values complicates recovery from database interruptions that occur while data is being loaded.

► To add to existing data values during a data load:

- 1 [Open](#) or [create](#) the rules file.
- 2 Select a data value field.
- 3 Select **Options**, then **Data load settings**.
- 4 In the **Data Load Settings** dialog box, select the **Data Values** tab.
- 5 In the **Data values** node, select **Add to existing values**.

6 Click **OK**.

Related Information

- [“Subtracting from Data Values” on page 233](#)
- [Data Load Settings Dialog Box, Data Load Values Tab](#)
- [“Setting Data Integrity Options” on page 326](#)
- “Adding to and Subtracting From Existing Values” in the *Oracle Essbase Database Administrator's Guide*
- import data (aggregate storage) (MaxL) in the *Oracle Essbase Technical Reference*

Subtracting from Data Values

During data loads, by default, Essbase overwrites database values with data-source values. However, you can subtract data-source values from database values. For example, to track available budget by week, you can subtract weekly data expenditures from previous week budget values.

If the subtraction option is used and [committed transactions](#) are not used and a failure occurs, recovery may be difficult.

► To subtract from data values:

- 1 [Open](#) or [create](#) a rules file.
- 2 Select a field.
- 3 Select **Options**, then **Data load settings**.
- 4 In the **Data Load Settings** dialog box, select the **Data Values** tab.
- 5 In the **Data values** node, select **Subtract from existing values**.
- 6 Click **OK**.

Related Information

- [“Adding to Data Values” on page 232](#)
- [Data Load Settings Dialog Box, Data Load Values Tab](#)
- [“Setting Data Integrity Options” on page 326](#)
- “Adding to and Subtracting From Existing Values” in the *Oracle Essbase Database Administrator's Guide*
- import data (aggregate storage) (MaxL) in the *Oracle Essbase Technical Reference*

Clearing Data Values Before Loading Data

During data loads, by default, Essbase overwrites database values with data-source values.

In some cases (for example, when adding or subtracting values), you may want to clear selected database values before you load data-source values.

Note: This functionality does not apply to [aggregate storage](#) databases.

► To clear data values before performing a data load:

- 1 [Open](#) or [create](#) the rules file.
- 2 Select the field to clear.
- 3 Select **Options**, then **Data load settings**.
- 4 In the **Data Load Settings** dialog box, select the **Clear Data Combinations** tab.
- 5 In **Clear combinations**, enter one or more member combinations (enclosing each name in quotation marks; for example, "New York"), or in the **Dimension** node, double-click one or more members.
- 6 **OPTIONAL:** If the **Dimension** node is empty, click **Outline**, and associate the rules file with an outline.
- 7 Click **OK**.

Related Information

- [Data Load Settings Dialog Box, Clear Data Combinations Tab](#)
- [“Clearing Data” on page 112](#)
- “Clearing Existing Data Values” in the *Oracle Essbase Database Administrator's Guide*

Flipping Signs

In data load rules files, you can reverse the values of data fields by flipping their signs. Sign flips are based on UDAs that are defined in the outline.

► To flip data-field signs while loading data:

- 1 [Open](#) or [create](#) the rules file.
- 2 Select the field to flip.
- 3 Select **Options**, then **Data load settings**.
- 4 In the **Data Load Settings** dialog box, select the **Data Load Values** tab.
- 5 Expand the **Sign Flip** node.
- 6 Select **On UDA**.
- 7 If the **Dimension** node is empty, click the **Outline** button to associate the rules file with an outline.
- 8 In the **Dimension** node, double-click the dimension containing the UDA.
- 9 In the text box, enter the UDA that is required to flip the sign of the selected field.
- 10 Click **OK**.

Related Information

- “Flipping Field Signs” in the *Oracle Essbase Database Administrator's Guide*
- Creating UDAs
- [Data Load Settings Dialog Box, Data Load Values Tab](#)

Scaling Data Values

You can use rules files to scale data values during data loads.

For example, assume that a Sales value of \$5,460 is tracked as 5,460 in an Essbase database and as 54.6 in a data source (because the data source tracks values in hundreds). If you load the value from the data source to the Essbase database, you must scale it.

► To scale a data value while performing a data load:

- 1 [Open](#) or [create](#) a rules file.
- 2 Select a field.
- 3 Select **Field**, then **Properties**.
- 4 In the **Field Properties** dialog box, select the **Data Load Properties** tab.
- 5 Expand the **Scale** node.
- 6 Select **Scale**.
- 7 Enter the value by which to scale the data value; for example, by 10 or .01.
- 8 Click **OK**.

Related Information

[Field Properties Dialog Box, Data Load Properties Tab](#)

9

Viewing and Analyzing Logs

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About Essbase Logs

Essbase maintains two types of logs that record Essbase Server activity, one for Essbase Servers and one for each application. You can specify what type of information is recorded in a log.

Essbase writes all actions and commands related to Essbase to the Essbase Server log, which is a text file on the Essbase Server. This log contains Agent process information and activity for the server. The Essbase Server log is stored in the `MIDDLEWARE_HOMEuser_projects/epmsystem1/diagnostics/logs/essbase/instance` directory and is named `ESSBASE.LOG`. All application-related activity, including calculations and database restructuring, is written to the application log, which is a text file on an Essbase Server.

Application logs are stored in the application directory (`MIDDLEWARE_HOMEuser_projects/epmsystem1/diagnostics/logs/essbase/instance/appname`) and are named `appname.log`.

For information about using Essbase logs, see the *Oracle Essbase Database Administrator's Guide*.

You can use [Log Analyzer](#) to filter, search, and analyze logs. To view the text of a log, use the [Log Viewer](#) window.

You need Administrator permissions for Essbase to view the server log. You need Application Manager permissions for an application to view the application log.

Essbase also maintains an outline change log that saves detailed outline modification information to a text file. You cannot open outline change logs in Log Viewer. For more information about outline change logs, see the *Oracle Essbase Database Administrator's Guide*.

Related Information

- [“About Log Viewer” on page 241](#)
- [“Viewing Logs” on page 242](#)
- [“About Log Analyzer” on page 238](#)
- [“Viewing Log Charts” on page 239](#)
- [“Using Essbase Logs” in the *Oracle Essbase Database Administrator's Guide*](#)

About Log Analyzer

Related Information

- [“About Essbase Logs” on page 237](#)
- [“Using Essbase Logs” in the *Oracle Essbase Database Administrator's Guide*](#)
- [“Log Analyzer Charts Window” on page 588](#)
- [“Log Viewer Window” on page 590](#)

You can use Log Analyzer to filter, search, and analyze Essbase Server logs and application logs. Based on filters that you choose or create, you can view robust graphical charts for a log. An auto-refresh option enables you to monitor log information dynamically.

Log Analyzer retrieves log information from the log file on Essbase Server and parses the information into the relational database on the middle-tier Essbase Administration Server. As logs are updated and opened in Log Analyzer, the size of the log database on Essbase Administration Server increases. If you use settings in the `essbase.cfg` configuration file to control the size of log files or to set delimiters, those settings also help control the size of the log database on Essbase Administration Server. For information about using Essbase logs, see the *Oracle Essbase Database Administrator's Guide*.

You need Administrator permissions to open Essbase Server logs and Application Manager permissions to open application logs.

You can perform the following tasks using Log Analyzer:

- [“Generating Log Charts” on page 239](#)
- [“Viewing Log Charts” on page 239](#)
- [“Creating or Editing Custom Log Filters” on page 240](#)
- [“Deleting Log Charts” on page 240](#)

Generating Log Charts

Before you can view and filter log charts, you must generate log chart information. When you generate charts for a log, the log is parsed into the relational database on Essbase Administration Server. Each subsequent time that you view log charts, you click Refresh to update the log database with messages written to the log since the last time you viewed log charts. You generate log charts only once for each log.

A log is not altered when it is loaded to the log database on Essbase Administration Server, and the log file on Essbase Server is unaffected. Log chart information is stored in the log database until you [delete the log charts](#).

Log chart generation runs as a background process so that you can continue working in Administration Services Console. While the generation processes in the background, you can exit the console, but you cannot shut down Essbase Administration Server until the generation process is complete.

► To generate log charts for a log:

- 1 From Enterprise View or a custom view, select an Essbase Server or an application.
- 2 Right-click, and select **Generate log charts**.

A message indicates that the generation process has been launched in the background and an ID for the process is displayed. You can use the ID to [track the status](#) of the background process in the Background Process Status window.

- 3 Click **OK**.

You can now [view the generated log charts](#).

Related Information

- [“About Log Analyzer” on page 238](#)
- [“Viewing Log Charts” on page 239](#)

Viewing Log Charts

After log charts are generated for a log, you can view and [filter](#) the charts.

► To view charts for a log:

- 1 From Enterprise View or a custom view, select an Essbase Server or an application.
- 2 Right-click, and select **View**, then **Log charts**.

If log charts have not been generated for the selected log, you are prompted to generate them. Click **Yes** to generate the log charts. Log Analyzer displays the default chart for the log.

- 3 Click **Refresh** to update the log chart.
- 4 **Optional:** Make selections for filtering the log and for chart viewing options, and click **Refresh** to update the window.

- 5 **Optional:** Specify a rate for auto-refreshing the log chart.
- 6 **Optional:** Create a custom filter for the log chart and change the chart axes.

Related Information

- [“About Log Analyzer” on page 238](#)
- [“Generating Log Charts” on page 239](#)
- [“Creating or Editing Custom Log Filters” on page 240](#)
- [“Log Analyzer Charts Window” on page 588](#)

Creating or Editing Custom Log Filters

You can create custom filters for log charts in Log Analyzer. You can filter a log chart by application, database, user, message number, message type, duration, and text. You can also specify the X-axis and Y-axis for a log chart.

After you create a filter for a log, it is available each time you view charts for the log. When you delete log charts for a log, custom filters defined for the log also are deleted.

► To create or edit a custom filter for log charts:

- 1 From Enterprise View or a custom view, select the Essbase Server or the application for which you want to view log charts.
- 2 Right-click and select **View**, then **Log charts**.
The **Log Analyzer Charts** window opens.
- 3 Click **Add Filter** to add a custom filter.
- 4 In **View by filter**, select the filter and click **Edit Filter** to edit a custom filter.
- 5 In **Add/Edit Custom Filter**, [specify filter criteria](#).
- 6 Click **OK**.

Log Analyzer refreshes the log chart based on the filter.

Related Information

- [“Add/Edit Custom Filter Dialog Box” on page 453](#)
- [“Viewing Log Charts” on page 239](#)
- [“About Log Analyzer” on page 238](#)

Deleting Log Charts

When you [generate log charts](#) for an Essbase Server or application log, the charts consume disk space on Essbase Administration Server. You can delete log charts to free up space on Essbase

Administration Server. When you delete log charts, any [custom filters](#) defined for the log are also deleted.

If you delete a log from an Essbase Server and you have not yet deleted log charts for the log, you are prompted to delete log charts.

When you delete an application, log chart information for that application is also deleted.

➤ To delete log charts from an Essbase Server or application:

- 1 From Enterprise View or a custom view, select the Essbase Server or the application for which you want to delete log charts.
- 2 Right-click and select **Delete**, then **Log charts**.
- 3 Click **OK**.

Related Information

- [“Viewing Log Charts” on page 239](#)
- [“About Log Analyzer” on page 238](#)
- [“Deleting Logs” on page 243](#)

Changing Log Levels

Administration Services enables you to modify Essbase log levels at the server and application level.

- To modify application log levels, use the [“Application Properties—General Tab” on page 475](#)
- To modify server log levels, use the [“Essbase Server Properties—Environment Tab” on page 470](#)

Related Information

- [“Using Essbase Logs” in the *Oracle Essbase Database Administrator's Guide*](#)
- [“Essbase Server Properties—Environment Tab” on page 470](#)
- [“Application Properties—General Tab” on page 475](#)

About Log Viewer

Log Viewer enables you to view Essbase Server logs and application logs in a text window. Log Viewer displays a maximum of 5 MB of log information. If a log contains more information, Log Viewer displays the most recent information in the log.

To filter logs and view graphical charts based on your filters, use [Log Analyzer](#).

Any activities that take place while you view a log are not reflected until you click Refresh.

You can use Log Viewer to perform the following tasks:

- [View logs](#)
- [Delete logs](#)

Logs consume disk space on Essbase Server. You can use settings in the `essbase.cfg` configuration file to control the size of log files. For information about using Essbase logs, see the *Oracle Essbase Database Administrator's Guide*.

Related Information

- [“About Essbase Logs” on page 237](#)
- [“Using Essbase Logs” in the Oracle Essbase Database Administrator's Guide](#)
- [“Log Viewer Window” on page 590](#)
- [“About Log Analyzer” on page 238](#)

Viewing Logs

Essbase maintains two types of logs that record Essbase activity, one for Essbase Server and one for each application. You can open server and application logs in Log Viewer. For more information, see [“About Log Viewer” on page 241](#).

Log Viewer presents a read-only snapshot of the log at the time of your request. To view an updated snapshot of the log, click Refresh.

You need Administrator permissions to open Essbase Server logs and Application Manager permissions to open application logs.

To filter logs and view graphical charts based on your filters, use [Log Analyzer](#).

► To view a log:

- 1 From Enterprise View or a custom view, select an Essbase Server or an application.
- 2 Right-click and select **View**, then **Log**.
- 3 In the [Log Viewer Options dialog box](#), specify whether to view recent log entries or to view log entries starting on a specific date.
- 4 Click **OK**.

Log Viewer displays up to 5 megabytes (5MB) of the log. There may be a delay as the log is loaded.

By default, the oldest message is displayed first in the [Log Viewer window](#).

Related Information

- [“About Essbase Logs” on page 237](#)
- [“About Log Viewer” on page 241](#)
- [“Viewing Log Charts” on page 239](#)
- [“Using Essbase Logs” in the Oracle Essbase Database Administrator's Guide](#)

Deleting Logs

Logs consume disk space on Essbase Server. If you have Administrator permissions, you can delete logs from Essbase Server. For more information, see the *Oracle Essbase Database Administrator's Guide*.

Before you delete a log from the Essbase Server, consider copying the log to a different location as a backup. An Essbase Server log is stored in the `MIDDLEWARE_HOMEuser_projects/epmsystem1/diagnostics/logs/essbase/instance` directory and is named `ESSBASE.LOG`. An application log is stored in the application directory (for example, `MIDDLEWARE_HOMEuser_projects/epmsystem1/diagnostics/logs/essbase/instance/appname`) and is named `appname.log`.

► To delete a log:

- 1 From Enterprise View or a custom view, select an Essbase Server or an application.
- 2 Right-click and select **Delete**, then **Log**.
- 3 Click **OK**.

If [log chart](#) information exists for the log, you are prompted to delete that information from the Log Analyzer database.

Related Information

- [“About Log Viewer” on page 241](#)
- [“Viewing Logs” on page 242](#)
- “Using Essbase Logs” in the *Oracle Essbase Database Administrator's Guide*
- [“Deleting Log Charts” on page 240](#)

Related Commands

- `alter system (MaxL)` in the *Oracle Essbase Technical Reference*
- `alter application (MaxL)` in the *Oracle Essbase Technical Reference*
- `deletelog (ESSCMD)` in the *Oracle Essbase Technical Reference*

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About Shared Services User Management

EPM System security uses Shared Services as a centralized system for managing user and group access to EPM System products. EPM System security consists of corporate or native Shared Services user directories and a common user interface, called Oracle Hyperion Shared Services Console. The Shared Services user management system enables you to manage and provision users for multiple EPM System products from a central location. Provisioning refers to the process of assigning roles and access permissions to users and groups for Essbase applications.

When using the default deployment option, Administration Services, Essbase, and Oracle Hyperion Provider Services are deployed in EPM System security mode.

For Essbase Administration Server, when you ran the Configuration Utility after installation, if you specified a Shared Services server, Essbase Administration Server was converted to EPM System security mode at that point. You can view Shared Services configuration information in the Essbase Administration Server properties window (Configuration tab).

If you choose not to deploy Essbase in EPM System security mode, Essbase uses its own native security mode to manage security for Essbase applications, databases, and artifacts. You can convert an Essbase Server that is in Essbase native security mode to EPM System security mode from Shared Services Console.

Once converted, Essbase Administration Servers and Essbase Servers cannot be converted back to native security mode. For instructions to convert an Essbase Server to EPM System security mode, see [“Converting Essbase Server and Migrating Users to Shared Services” on page 247](#).

When a server runs in EPM System security mode, you use the Shared Services Console to perform all user management tasks. You can view whether or not an Essbase Server is in EPM System security mode in the Essbase Server properties window (Security tab).

Note: In this help system, all procedures apply to both EPM System security mode and Essbase native security mode, unless noted otherwise.

Related Information

“User Management and Security in EPM System Security Mode” in the *Oracle Essbase Database Administrator's Guide*

EPM System Security Mode

In order to use Shared Services for user management, existing users need to be migrated to Shared Services. This includes "native" users who were externally authenticated in a previous release. For instructions to migrate users to Shared Services, see [“Converting Essbase Server and Migrating Users to Shared Services” on page 247](#).

When an Essbase Administration Server, Essbase Server, or Provider Services runs in EPM System security mode, all functionality that is related to managing users (for example, creating, renaming, deleting, and assigning access permissions) can be performed only via the Shared Services Console. You cannot use Administration Services Console to perform most user management tasks. For Essbase Servers, you can continue to view information about users who are currently provisioned for Essbase via Shared Services, but you cannot edit user information.

When Essbase is in EPM System security mode, some security information is stored by Shared Services and external user directories, and some security information is stored in the Essbase security file (`essbase.sec`). See [“About the Essbase Security File” on page 293](#).

Because Essbase obtains user and group details (including user and group information and provisioning to Essbase applications) from Shared Services, an Essbase Administrator does not need to explicitly synchronize security between Essbase and Shared Services.

When a user logs on to Essbase, Essbase queries Shared Services for that user's information. The privileges with which a user starts a session are preserved throughout the session, regardless of whether the user's privileges are changed in Shared Services during the session.

For information about security for users and groups in EPM System security mode and Essbase user roles for Shared Services, see the *Oracle Essbase Database Administrator's Guide*.

The only role that can be provisioned for Provider Services is Administrator. Provider Services does not have any users, therefore, migration of users from native mode to EPM System security mode is not required.

In EPM System security mode, Essbase Administration Server users do not have roles associated with them; therefore, any users who are authenticated through Shared Services can connect to any Essbase Administration Server. There are no provisioning assignments needed for Essbase Administration Server users. The currently logged-on Essbase Administration Server user is the only user visible in Administration Services Console. You can continue to map users to Essbase Servers via Administration Services Console, but you cannot edit other user information.

For information about using Shared Services Console to manage and provision users, see the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

Essbase Native Security Mode

For Essbase Servers, you can continue to use Essbase native authentication if you want to continue managing users and groups as you did in previous releases. If Essbase runs in EPM System security mode, Essbase Administration Server must also. However, Essbase Administration Server can run in EPM System security mode with Essbase running in Essbase native security mode.

For Provider Services, the security mode must match that of Administration Services. For example, if Administration Services is in EPM System security mode, then Provider Services must be in EPM System security mode. If Administration Services is in native mode, then Provider Services must be in native mode.

In Essbase native security mode, you continue to manage users via Administration Services Console. Any users created in EPM System security mode are not visible from the console when Essbase is running in native security mode. In Essbase native mode, you can continue to create native and external users as you did before; external users in native mode are still authenticated via Shared Services but cannot be provisioned using the Shared Services Console.

Converting Essbase Server and Migrating Users to Shared Services

When using the default deployment option, Essbase and Administration Services are deployed in EPM System security mode.

After configuring Administration Services for EPM System security mode, you must [migrate Essbase Administration Server users](#) to Shared Services.

To use EPM System security for Essbase deployments that are in Essbase native security mode, you must migrate any Essbase Server applications and any existing Essbase users and groups to Shared Services, as described in this topic.

Once converted, Essbase Administration Servers and Essbase Servers cannot be converted back to native security mode. When a server runs in EPM System security mode, you use the Shared Services Console to perform all user management tasks.

When you convert Essbase Server, all native Essbase users and groups that do not already exist in an external authentication directory are converted to native Shared Services users and groups in the native Shared Services user directory and are given equivalent roles. Any externally authenticated users are registered with Shared Services but are still stored in their original authentication directory. Users that do not successfully migrate are retained in the Essbase security file (`essbase.sec`).

If a user's database permissions changed during migration to Shared Services, information is written to a text file named `AccessModifiedUsers_n.txt`, where *n* represents the sequence id for the instance of Essbase that is registered with Shared Services. This file is located in the `ARBORPATH/bin` directory.

Applications are also registered with Shared Services during this process. For more information about this automatic user migration process, see the *Oracle Essbase Database Administrator's Guide*.

You must be an Essbase Administrator to convert the server. Also, Essbase Administration Server must be running in EPM System security mode when you convert Essbase Server.

► To convert an Essbase Server to EPM System security mode:

- 1 From Enterprise View or a custom view, under the Essbase Server node, select the **Security** node.
- 2 Right-click and select **Externalize users**.
- 3 At the confirmation prompt, click **Yes** to proceed.

Note: Once converted, the server cannot be converted back to native mode.

- 4 In the **Conversion Settings dialog box**, specify server and port information for an Essbase Administration Server.
- 5 Specify how passwords should be created for those users who will be created as native Shared Services users.
- 6 Click **OK** to start the conversion.
- 7 If necessary, **re-migrate users and groups that failed the initial migration** using the Externalize Users Wizard.

Related Information

- [“Conversion Settings Dialog Box” on page 487](#)
- [“About Shared Services User Management” on page 245](#)
- “Migrating Essbase to EPM System Security” topic in the “User Management and Security in EPM System Security Mode” chapter in the *Oracle Essbase Database Administrator's Guide*

Related Commands

alter system (MaxL) in the *Oracle Essbase Technical Reference*

Migrating Users to Shared Services

Before you can use Shared Services to manage security, you must migrate (externalize) any existing native users and groups to Shared Services.

When you first [convert Essbase Server](#) to EPM System security mode, users and groups are migrated automatically to Shared Services. Users and groups that fail migration are retained in the Essbase security file (*ARBORPATH/essbase.sec*). If a user's database permissions changed during migration to Shared Services, information is written to a text file named *AccessModifiedUsers_n.txt*, where *n* represents the sequence ID for the instance of Essbase that is registered with Shared Services. (The sequence ID is incremented each time Essbase is externalized.) This file is located in the *ARBORPATH/bin* directory.

Essbase Administration Server users are not migrated automatically when the server is converted. If you want to migrate Essbase Administration Server users to Shared Services, you must use the Externalize Users Wizard.

Note: The currently logged-on Essbase Administration Server user is the only user visible under the Essbase Administration Server node (under Users) in Enterprise View. However, the Externalize Users Wizard enables you to migrate all users who exist on Essbase Administration Server, even though you cannot view the users in Enterprise View.

When you use the Externalize Users Wizard to migrate Administration Services users or to re-migrate Essbase users that previously failed migration, these migration errors are logged in the file that you specify in the wizard and in the Essbase Server log.

You must be an Essbase Administrator to migrate users for a server.

Caution! When you migrate to Shared Services, Essbase users and groups are converted to equivalent roles in Shared Services. Shared Services creates a read-only superuser with the user ID named “admin.” If Essbase contains a user ID named “admin,” that user ID cannot be migrated to Shared Services. Before migrating, change the “admin” user ID (for example, from “admin” to “asadmin”). To edit the security file in your Essbase installation, use Administration Services Console or MaxL.

➤ To migrate Essbase users to Shared Services:

- 1 From Enterprise View or a custom view, under the Essbase Server node, select the **Security** node.
- 2 Right-click and select **Externalize users**.
- 3 In the [Externalize Users Wizard](#), click **Help** for more information.

➤ To migrate Essbase Administration Server users to Shared Services:

- 1 Right-click the Essbase Administration Server node and select **Externalize users**.
- 2 In the [Externalize Users Wizard](#), click **Help** for more information.

Related Information

- [“About Shared Services User Management” on page 245](#)
- “Migrating Essbase to EPM System Security” topic in the “User Management and Security in EPM System Security Mode” chapter in the *Oracle Essbase Database Administrator's Guide*

Related Commands

alter system (MaxL in the *Oracle Essbase Technical Reference*)

Assigning Database Calculation and Filter Access

Note: This topic does not apply to Essbase native security mode.

After provisioning users for Essbase applications in Shared Services Console, you can assign access permissions to users and groups for a specific Essbase application and database. For example, after assigning a user access and a role for the application, you can assign an Essbase filter to the user, or assign the user access to a specific calculation script. The Shared Services Console displays Essbase-specific screens that allow you perform these tasks.

When you assign database calculation and filter access, you automatically log in to Administration Services and Essbase as the Shared Services Console logged-in user. This user must be a valid Essbase Administrator, Application Manager, or Database Manager. The user must have the Provisioning Manager role for the appropriate applications.

Note: The calculation scripts and filters must be created using Essbase.

For information about how to provision users in Shared Services, see the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

- To assign database calculation and filter access to users and groups:
 - 1 In **Shared Services**, expand the **Projects** node and select an Essbase application.
 - 2 Right-click, and select **Assign Access Control**.
 - 3 From **Available Users and Groups**, select an item to display only users, only groups, or both.
Essbase Administrators and Application Managers are not listed.
 - 4 Select the users, groups, or users and groups that you want to work with for the application.
 - 5 **Optional:** To make sure all recently provisioned users and groups are displayed, click **Refresh**.
 - 6 Click the arrow button to move selections to **Selected Users and Groups**. To move all users and groups, click the double arrow button.
 - 7 Click **Next**.
This screen lists the users who have access to the application and displays their user roles.
 - 8 From **Database**, select an Essbase database.
 - 9 To assign an Essbase filter to users and groups:
 - a. Select the check box next to each user and group to which you want to assign a filter.
 - b. From **Filter**, select a filter.
The filter list shows the filters for the selected database on Essbase Server.
 - 10 To assign users and groups access to an Essbase calculation script:
 - a. Select the check box next to each user and group you want to assign calculation script access to.

- b. From the **Calc** drop-down, select the appropriate calculation scripts, or select **All** or **None** as appropriate.

The calculation list is populated with the calculation scripts that exist for the selected database on Essbase Server.

11 Optional: Perform an action:

- To assign only calculation access, from **Filter**, select **No update**.
- To assign only filter access, from **Calc**, select **No update**.

12 Click the apply check mark next to **Calc to apply your selections.**

Note: If you have not clicked **Save**, you can click **Reset** to revert to the original settings (or the last saved settings).

13 Click **Save.**

Status messages are displayed on a new screen. The changes are reflected immediately in Administration Services Console.

Related Information

- [“About Shared Services User Management” on page 245](#)
- “User Management and Security in EPM System Security Mode” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

grant (MaxL) in the *Oracle Essbase Technical Reference*

Reregistering Applications with Shared Services

When Essbase Server is [converted to EPM System security mode](#), applications are automatically registered with Shared Services. You may need to reregister applications in these situations:

- If you move an application from a project to Unassigned Applications in the Shared Services Console, you need to reregister it.
- If you use MaxL or the API to change the Essbase Administration Server location (used during callback from Shared Services), you need to reregister all applications on Essbase Server.
- If you use MaxL or the API to convert Essbase Server to EPM System security mode, you need to reregister all applications on Essbase Server.
- If you delete a project in the Shared Services Console, you need to reregister all applications in the project. To get the global application back, you need to reregister all applications on Essbase Server.
- If the Essbase Administration Server machine name or port number is changed, you need to reregister all applications on Essbase Server.

- If the Essbase Server machine name or port number is changed, you need to reregister all applications on Essbase Server.

You do not need to register newly created applications or applications that have been renamed. Those types of changes are automatically propagated to Shared Services.

➤ To reregister an application with Shared Services:

- 1 From Enterprise View or a custom view, select the application.
- 2 Right-click and select **Register**.

The application is registered with Shared Services and the Shared Services Console is updated.

➤ To register all applications on Essbase Server with Shared Services:

- 1 From Enterprise View or a custom view, select the **Applications** container node.
- 2 Right-click and select **Register all**.

All applications on Essbase Server are registered with Shared Services and the Shared Services Console is updated.

Related Information

“User Management and Security in EPM System Security Mode” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

alter application (MaxL) in the *Oracle Essbase Technical Reference*

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About Security and Permissions

Note: This topic applies to Essbase native security mode. If you are using Shared Services to manage security, see [“About Shared Services User Management” on page 245](#).

Essbase security addresses a wide variety of database security needs. Various levels of permissions can be granted to users and groups, or permissions can be defined at the server, application, or database level. You can apply security in the following ways:

- **Users and groups:** You can grant permissions to individual users and to groups of users. When higher, these permissions take precedence over minimum permissions defined for applications and databases. Ordinary users have no inherent permissions. You can grant server-wide permissions when you create a user or group, and you can grant user and group permissions for specific applications and databases by editing user or group properties. For more information, see [“Managing Users and Groups” on page 256](#).
- **Minimum permissions for applications and databases:** To set a default level of access that applies to all users of an application or database, you can set minimum permissions for an application or database. Users and groups with equal or higher than the minimum permissions for the application or database gain access independent of their ability to access other items; users and groups with higher granted permissions are not affected. For more information, see [“Setting Minimum Permissions for Applications” on page 258](#) and [“Setting Minimum Permissions for Databases” on page 259](#).
- **Server-wide permissions and settings:** You can specify server-wide settings when you create a user or group; for example, you can grant permissions to a user that apply to the entire

server, and you can set options for managing user names and passwords, login attempts, and user inactivity. You can view and terminate user sessions and requests that are running on an Essbase Server, or that are running only on particular applications and databases. You can also manage user locks on data at the server, application, or database level. For more information, see [“Managing Security at the Server Level” on page 254](#).

- **Database filters:** You can create filters for a database that define permissions that users and groups can have for particular members, down to an individual data value (cell). For more information, see [“Managing Filters” on page 288](#).

Related Information

- [“About Aggregate Storage Security” on page 69](#)
- [“User Management and Security in Essbase Native Security Mode” in the *Oracle Essbase Database Administrator's Guide*](#)

Managing Security at the Server Level

Note: Most of these tasks do not apply if Essbase Server is in EPM System security mode. If you are using Shared Services to manage security, see [“About Shared Services User Management” on page 245](#).

You can specify security settings that apply to an entire Essbase Server, and you can manage the activities of all users connected to a server. To manage security at the server level, you may need to perform some or all of the following tasks:

Task	More Information
Create users and groups for the server, and grant server-wide permissions to those users and groups.	<ul style="list-style-type: none"> ● “Creating Users on Essbase Servers” on page 262 ● “Creating Groups on Essbase Servers” on page 263
Manage cross-server security.	<ul style="list-style-type: none"> ● “Copying Essbase Server Users” on page 275 ● “Propagating Passwords Across Servers” on page 283 ● “Copying Essbase Server Groups” on page 277 ● “Migration Wizard” on page 597
View current users and groups for the server.	<ul style="list-style-type: none"> ● Viewing Essbase Server Users and Groups
Manage password longevity and rules for disabling user names.	<ul style="list-style-type: none"> ● “Managing Password Longevity” on page 287 ● “Disabling User Names” on page 284 ● “Viewing or Activating Disabled User Names” on page 286
View active user sessions, disconnect users, and terminate specific user requests.	<ul style="list-style-type: none"> ● “Viewing Active User Sessions” on page 299 ● “Disconnecting User Sessions and Requests” on page 300

Task	More Information
View and remove user locks on data.	<ul style="list-style-type: none"> • “Viewing Data Locks” on page 301 • “Unlocking Data” on page 302

Related Information

- [“About Security and Permissions” on page 253](#)
- [“Managing Users and Groups” on page 256](#)
- [“Managing Security for Applications and Databases” on page 255](#)
- “User Management and Security in Essbase Native Security Mode” in the *Oracle Essbase Database Administrator's Guide*

Managing Security for Applications and Databases

You can manage security at the application and database levels. Application and database security settings enable you to manage connections to data and create a lowest-common-security profile for each application and database.

To manage security for applications and databases, you may need to perform some or all of the following tasks:

Task	More Information
Set minimum permissions for applications and databases.	<ul style="list-style-type: none"> • “Setting Minimum Permissions for Applications” on page 258 • “Setting Minimum Permissions for Databases” on page 259
Disable security temporarily for an application.	“Disabling Application-Level Security” on page 260
Prevent updates, requests, and connections to an application during maintenance operations.	“Clearing Applications of User Activity” on page 261
Grant permissions to individual users and groups for different applications and databases. Note: This functionality does not apply to EPM System security mode .	“Managing User/Group Permissions for Applications and Databases” on page 269

Related Information

- [“About Security and Permissions” on page 253](#)
- [“Managing Users and Groups” on page 256](#)
- [“Managing Security at the Server Level” on page 254](#)
- “User Management and Security in Essbase Native Security Mode” in the *Oracle Essbase Database Administrator's Guide*

Managing Users and Groups

Note: This topic does not apply if Essbase Server is in [EPM System security mode](#).

You can grant security permissions to individual users and to groups of users on an Essbase Server. You can assign users to a security group so that they can share identical minimum permissions assigned at the group level. Users inherit all permissions of the group and can also have permissions that exceed those of the group. Users and groups are managed on a server-by-server basis; users and groups defined on an Essbase Server exist for all applications and databases on the server.

Permissions granted to users and groups take precedence over minimum permissions granted at the application or database level. For more information about security permissions, see [“About Security and Permissions” on page 253](#).

To manage security for users and groups, you may need to perform some or all of the following tasks:

Task	More Information
Create users and groups on Essbase Servers and manage external authentication.	<ul style="list-style-type: none">● “Creating Users on Essbase Servers” on page 262● “Creating Groups on Essbase Servers” on page 263● “Managing External Authentication” on page 265
View current users and groups for the server.	<ul style="list-style-type: none">● Viewing Essbase Server Users and Groups
Manage group membership.	<ul style="list-style-type: none">● “Managing Group Membership” on page 267
Grant permissions to users and groups for specific applications and databases.	<ul style="list-style-type: none">● “Managing User/Group Permissions for Applications and Databases” on page 269● Managing Calculation Permissions for Users/Groups
Manage active user sessions.	<ul style="list-style-type: none">● “Viewing Active User Sessions” on page 299● “Disconnecting User Sessions and Requests” on page 300
Manage user locks on data.	<ul style="list-style-type: none">● “Viewing Data Locks” on page 301● “Unlocking Data” on page 302
Copy and migrate users and groups, and propagate passwords to other servers.	<ul style="list-style-type: none">● “Copying Essbase Server Users” on page 275● “Propagating Passwords Across Servers” on page 283● “Copying Essbase Server Groups” on page 277
Edit security properties for users and groups.	<ul style="list-style-type: none">● “Editing Essbase Server User Properties” on page 273● “Editing Group Properties” on page 274● “Changing Passwords for Essbase Server Users” on page 282● “Propagating Passwords Across Servers” on page 283
Rename users and groups.	<ul style="list-style-type: none">● “Renaming Essbase Server Users” on page 279● “Renaming Groups” on page 279

Task	More Information
Delete users and groups.	<ul style="list-style-type: none"> • “Deleting Essbase Server Users” on page 280 • “Deleting Groups” on page 281
Manage password longevity and disabled user names.	<ul style="list-style-type: none"> • “Disconnecting Users Automatically” on page 257 • “Managing Password Longevity” on page 287 • “Disabling User Names” on page 284

Related Information

- [“About Security and Permissions” on page 253](#)
- [“Managing Security at the Server Level” on page 254](#)
- [“Managing Security for Applications and Databases” on page 255](#)
- “User Management and Security in Essbase Native Security Mode” in the *Oracle Essbase Database Administrator's Guide*

Disconnecting Users Automatically

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

If you have Administrator permissions, you can specify if and when users should be automatically disconnected from an Essbase Server after a specified period of inactivity. The default settings are 0, meaning that the options are turned off and therefore users remain connected until the server is shut down.

Connection settings apply to all users on the server and are effective immediately after you click Apply.

➤ To specify when users are automatically disconnected from an Essbase Server:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click and select **Edit**, then **Properties**.
- 3 In the **Essbase Server Properties** window, select **Security**.
- 4 Expand the **Auto logoff** node.
- 5 For the **Inactive limit** option, specify the number of minutes of user inactivity permitted before Essbase disconnects the user.
- 6 For the **Check every** option, specify how often Essbase checks for inactivity, in minutes.

Note: This setting also controls how often the [security backup file is updated](#).

- 7 Click **Apply**.

Related Information

- [“Essbase Server Properties—Security Tab” on page 472](#)
- [“Connecting to Essbase Servers” on page 83](#)
- [“Disconnecting from Essbase Servers” on page 84](#)

Related Commands

`alter system (MaxL)` in the *Oracle Essbase Technical Reference*

Application and Database Security

In this section:

- [“Setting Minimum Permissions for Applications” on page 258](#)
- [“Setting Minimum Permissions for Databases” on page 259](#)
- [“Disabling Application-Level Security” on page 260](#)
- [“Clearing Applications of User Activity” on page 261](#)

Setting Minimum Permissions for Applications

If you have Application Manager permissions for an application, you can use an application-level setting to grant all users a minimum level of permissions to all databases in the application. The setting applies to all users and to all databases within the application, unless a higher permission is granted to a specific database or to a specific user or group.

For example, assume that an application contains two databases and that the minimum permission for the application containing the databases is Write. If you change the minimum permission for one database to Calculate, all users can execute calculations on that database, but the minimum permission for the other database remains at Write—the lower, application-level setting.

Likewise, if the minimum permission for an application is Read, but a specific user has Write permission for the same application, the user-level permission takes precedence over the application-level permission.

- To set the minimum permission for an application:
 - 1 From Enterprise View or a custom view, select the application.
 - 2 Right-click and select **Edit properties**.
 - 3 In the **Application Properties** window, select the **General** tab.
 - 4 For the **Minimum access level** option, select an access level.

For example, if you want all users to have at least Write access to all databases in the application (meaning that all users can update data values), select **Write**.

The default setting is **None**, meaning that no minimum permission is set; all users can access the application according to their user-level permissions.

5 Click Apply.

Related Information

- [“About Security and Permissions” on page 253](#)
- [“Application Properties—General Tab” on page 475](#)
- [“Managing User/Group Permissions for Applications and Databases” on page 269](#)
- [“Setting Minimum Permissions for Databases” on page 259](#)

Related Commands

- `alter application` (MaxL) in the *Oracle Essbase Technical Reference*
- `setappstate` (ESSCMD) in the *Oracle Essbase Technical Reference*

Setting Minimum Permissions for Databases

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

If you have Database Manager permissions for a database, you can use a database setting to grant all users a minimum level of permissions for a database. The setting applies to all users of the specific database and overrides application-level permissions. Minimum permissions for a database are overridden by higher permissions granted to individual users and groups.

For example, if the minimum permission for a database is Read but a specific user has Write permission for the database, the user-level permission takes precedence over the database-level permission. The user is able to update data values in the database.

► To set the minimum permission for a database:

- 1 From Enterprise View or a custom view, select the database.
- 2 Right-click and select **Edit**, then **Properties**.
- 3 In **Database Properties**, select the **General** tab.
- 4 In **Minimum access level**, select an access level. For example, to grant all users at least Write access to the database (meaning that all users can update data values), select **Write**.

The default setting is **None**, meaning that no minimum permission is set; all users can access the database according to their user-level permissions.

5 Click Apply.

Related Information

- [“About Security and Permissions” on page 253](#)

- “Database Properties Window—General Tab” on page 532
- “Managing User/Group Permissions for Applications and Databases” on page 269
- “Setting Minimum Permissions for Applications” on page 258
- “Managing Filters” on page 288

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*

Disabling Application-Level Security

If you have Application Manager permissions, you can disable security settings for an application. By default, security is enabled, which means that security settings are in effect. When you disable security, Essbase ignores current security settings and treats all users as Application Managers. Application Manager permissions allow complete access to all objects in the application.

When you disable security, you override user-level security settings. There is no database-level equivalent for this action.

► To disable security for an application and treat all users as Application Designers:

- 1 From Enterprise View or a custom view, select the application.
- 2 Right-click and select **Edit properties**.
- 3 In **Application Properties**, select **General**.
- 4 Expand the **Security** node.
- 5 Clear the **Enable security** check box.
- 6 Click **Apply**.

Related Information

- “Setting General Application Connection Options in Essbase Native Security Mode” in the *Oracle Essbase Database Administrator's Guide*
- “User Management and Security in Essbase Native Security Mode” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- alter application (MaxL) in the *Oracle Essbase Technical Reference*
- setappstate (ESSCMD) in the *Oracle Essbase Technical Reference*

Clearing Applications of User Activity

Before performing application-wide updates and maintenance operations, you may want to clear an application of user activity. Within applications for which you have Application Manager permissions, you can clear various types of activity.

For information about user activity settings, see [“Application Properties—General Tab” on page 475](#).

► To temporarily clear applications of user activity:

- 1 From Enterprise View or a custom view, select an application.
- 2 Right-click, and select **Edit properties**.
- 3 In the **Application Properties** window, select the **General** tab.
- 4 Expand the **Security** node.
- 5 Clear one or more of the Allow options.

For information about setting persistence, see “Setting General Application Connection Options” in the *Oracle Essbase Database Administrator's Guide*.

- 6 Click **Apply**.

Related Information

- [“Application Properties—General Tab” on page 475](#)
- [“Viewing Active User Sessions” on page 299](#)
- [“Disconnecting User Sessions and Requests” on page 300](#)

Related Commands

- `alter application` (MaxL) in the *Oracle Essbase Technical Reference*
- `setappstate` (ESSCMD) in the *Oracle Essbase Technical Reference*

User and Group Security

In this section:

- [“Creating Users on Essbase Servers” on page 262](#)
- [“Creating Groups on Essbase Servers” on page 263](#)
- [“Viewing Essbase Server Users and Groups” on page 264](#)
- [“Managing External Authentication” on page 265](#)
- [“Managing Group Membership” on page 267](#)
- [“Setting Application Access Type for Users” on page 268](#)
- [“Managing User/Group Permissions for Applications and Databases” on page 269](#)
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- “Editing Essbase Server User Properties” on page 273
- “Editing Group Properties” on page 274 “Copying Essbase Server Users” on page 275
- “Copying Essbase Server Groups” on page 277
- “Renaming Essbase Server Users” on page 279
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- “Deleting Essbase Server Users” on page 280
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- “Forcing a Password Change” on page 282
- “Changing Passwords for Essbase Server Users” on page 282
- “Propagating Passwords Across Servers” on page 283
- “Disabling User Names” on page 284
- “Viewing or Activating Disabled User Names” on page 286
- “Managing Password Longevity” on page 287

Creating Users on Essbase Servers

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

If you have Create/Delete Users and Groups permissions, you can create a user on Essbase Server. You can create a user as an Administrator or as an ordinary user with specific permissions. You can also create a user by [copying the security properties of an existing user](#). When you create a user, you can grant permissions that are equal to or lower than your own.

You can create a user who logs in using native Essbase authentication or [external authentication](#). If you want an Essbase user to use external authentication, Essbase Server and Essbase Administration Server must be properly configured, as described in the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.

The permissions that you grant a new user apply to all applications and databases on Essbase Server. After you create a user, you can modify the user's permissions for specific applications and databases. For information about permissions, see [“About Security and Permissions” on page 253](#).

If the user that you are creating needs to use Administration Services to manage Essbase, you also need to [create the user on Essbase Administration Server](#).

► To create a user on Essbase Server:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Under the server node, expand the **Security** node.
- 3 Select the **Users** node, right-click, and select **Create user**.
- 4 In **Create User**, enter the user name.

- 5 If desired, select a different Essbase Server on which to create the user.
- 6 On the [User Info](#) tab, select the authentication model and the security type for the user.
- 7 Select and edit the [Groups](#) tab to manage the user's membership in groups.
- 8 Select and edit the [App/Db Access](#) tab to grant additional permissions to the user for specific applications and databases.
- 9 Click **Apply** to create the user.
Essbase creates the user on Essbase Server and updates the [Users Window](#).
- 10 To create the same user name on another Essbase Server and give it the same properties as the one you just created, select a different Essbase Server and repeat these steps.
- 11 When you are finished creating users, click **Close**.

Related Information

- [“Users Window” on page 666](#)
- [Create User Dialog Box](#)
- “User Management and Security in Essbase Native Security Mode” in the *Oracle Essbase Database Administrator's Guide*
- [“Creating Users on Essbase Administration Server” on page 59](#)
- [“Managing External Authentication” on page 265](#)
- [“Find External User Dialog Box” on page 577](#)

Related Commands

- create user (MaxL) in the *Oracle Essbase Technical Reference*
- createuser (ESSCMD) in the *Oracle Essbase Technical Reference*

Creating Groups on Essbase Servers

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

If you have Create/Delete Users and Groups permissions, you can create groups of users on an Essbase Server. A group is a collection of users who have the same minimum security permissions. Creating groups saves you the time of assigning identical permissions to users. A group member may have permissions beyond those assigned to the group, if such permissions are assigned individually to that user.

After you create a group, you can add users to the group and grant the group additional permissions for specific applications and databases.

➤ To create a group of users on Essbase Server:

- 1 From Enterprise View, select an Essbase Server.

- 2 Under the server node, expand the **Security** node.
- 3 Select the **Groups** node, right-click, and select **Create group**.
- 4 In **Create Group**, enter the name of the group.
- 5 If desired, select a different Essbase Server on which to create the group.
- 6 On the **Group Info** tab, enter the group type and description.
- 7 Select the **Users** tab to add users to the group.
- 8 Select the **App/Db Access** tab, if you want to grant group permissions for specific applications or databases.
- 9 Click **Apply** to create the group. Essbase creates the group on the Essbase Server and updates the **Groups Window**.
- 10 To create the same group name on another Essbase Server and give it the same properties as the one you just created, select a different Essbase Server and repeat these steps.
- 11 When finished with creating groups, click **Close**.

Related Information

- [“Groups Window” on page 581](#)
- [Create Group Dialog Box](#)
- [“Managing Group Membership” on page 267](#)
- [“About Security and Permissions” on page 253](#)
- “User Management and Security in Essbase Native Security Mode” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- `create group` (MaxL) in the *Oracle Essbase Technical Reference*
- `creategroup` (ESSCMD) in the *Oracle Essbase Technical Reference*

Viewing Essbase Server Users and Groups

Each Essbase Server has its own set of users defined separately from Essbase Administration Server users. Using Administration Services Console, you can create, view, assign permissions for, and delete users on Essbase Server.

A group is a collection of users who have the same minimum security permissions. Using Administration Services Console, you can create, view, assign permissions, and delete groups on Essbase Server.

For more information, see [“Managing Users and Groups” on page 256](#).

► To view a table listing users or groups on Essbase Server:

- 1 From Enterprise View, select an Essbase Server.
- 2 Under the server node, expand the **Security** node.

- 3 As desired, select the **Users** node or the **Group** node, right-click, and select **Display users table** or **Display group table**.

Administration Services Console displays the [Users Window](#) or the [Groups Window](#) which show, in tabular format, users or groups on Essbase Server.

Related Information

- [“Users Window” on page 666](#)
- [“Groups Window” on page 581](#)
- [“Managing Users and Groups” on page 256](#)

Related Commands

- display user (MaxL) in the *Oracle Essbase Technical Reference*
- display group (MaxL) in the *Oracle Essbase Technical Reference*
- listusers (ESSCMD) in the *Oracle Essbase Technical Reference*
- listgroups (ESSCMD) in the *Oracle Essbase Technical Reference*

Managing External Authentication

Note: This topic applies to managing external authentication when Essbase Server is running in native security mode. For more information about using the EPM System security platform for external authentication in native security mode, see the *Oracle Essbase Database Administrator's Guide*. To manage external authentication using EPM System security mode, see [“About Shared Services User Management” on page 245](#).

By default, Essbase Server authentication is selected for new users in native security mode.

You can enable external authentication for an [Essbase](#) user or for an [Administration Services](#) user.

➤ To enable external authentication for an Essbase user:

- 1 From Enterprise View or a custom view, under the appropriate Essbase Server, expand the **Security** node.
- 2 Select the **Users** node, right-click, and select **Display users table**.
- 3 In the [Users window](#), if creating a user:
 - a. Click **New** and select the **User Info** tab in the **Create User** dialog box.
 - b. [Enter other information for the new user](#).
- 4 In the [Users window](#), if editing an existing user:
 - a. Right-click the user and select **Edit properties**.
 - b. In the **User Properties** dialog box, select the **User Info** tab.

5 Select Use Single Sign On.

Selecting this option enables the **Search** button.

6 Click Search.

7 In the [Find External User dialog box](#), perform the following tasks:

- a. Select a search option (by user name, by first and last name, or by e-mail address) and enter the appropriate information for the user.
- b. Click **Search** to find and select the next occurrence of the text specified in one of the search options.
- c. Click **OK**.

You are returned to the **Create User** or **User Properties** dialog box.

8 Click OK.

► To enable external authentication for an Administration Services user:

1 From Enterprise View, expand the node for the Essbase Administration Server.

2 Below that node, select Users.

3 Right-click and select Create user.

4 In Create User on Administration Server, select External.

5 Click Search.

6 In [Find External User](#), select a search option, enter the user's applicable search information, and click Search.

Note: If multiple providers are defined in the search order and one of the providers is misconfigured, Administration Services stops processing the search. Contact the database administrator if expected users are not found.

7 Select a user from the list provided and click OK.

8 Click OK again to close the dialog box.

Administration Services creates the user and updates Enterprise View.

Related Information

- “Using EPM System Security for External Authentication in Essbase Native Security Mode” in the *Oracle Essbase Database Administrator's Guide*
- [“Creating Users on Essbase Servers” on page 262](#)
- [“Users Window” on page 666](#)

Related Commands

- authenticationmodule (essbase.cfg setting) in the *Oracle Essbase Technical Reference*
- create user (MaxL) in the *Oracle Essbase Technical Reference*

Managing Group Membership

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

After you create Essbase Server users or groups, you can manage group membership by adding or removing users and by editing properties for a user or a group, as necessary. You cannot add users to a group that has higher permissions than your own.

You need Create/Delete Users and Groups permissions for an Essbase Server to edit user and group properties.

➤ To manage group membership for a user:

- 1 From Enterprise View or a custom view, under the appropriate Essbase Server node, expand the **Security** node.
- 2 Under the **Security** node, double-click the **Users** node.
- 3 In the [Users window](#), select the user.
- 4 Right-click and select **Edit properties**.

Note: You cannot edit properties for multiple users simultaneously.

- 5 In the **User Properties** window, select [Groups](#).

The **Member of groups** list box lists the names of all groups to which the user belongs. The **Not member of groups** list box lists the groups on the Essbase Server to which the user can be added (to which the user does not belong).

- 6 To add the user to a group:
 - a. In the **Not member of groups** list box, select the appropriate group.
 - b. Click the single-arrow button that points to the **Member of groups** list box.
- 7 To remove the user from a group:
 - a. In the **Member of groups** list box, select the appropriate group.
 - b. Click the single-arrow button that points to the **Not member of groups** list box.
- 8 To move all groups from one list box to another, click the appropriate double-arrow button.
- 9 Click **Apply**.

The user is now a member of only the groups listed in the **Member of groups** list box.

➤ To manage user membership for a group:

- 1 From Enterprise View or a custom view, under the appropriate Essbase Server node, expand the **Security** node.
- 2 Under the **Security** node, double-click the **Groups** node.
- 3 In the [Groups window](#), select the group.

4 Right click and select **Edit properties.**

Note: You cannot edit properties for multiple groups simultaneously.

5 In the **Group Properties window, select **Users**.**

The Members list box lists the names of all users in the group. The Non-members list box lists the Essbase Server users that can be added to the group (are not members of the group).

6 To add a user to the group:

- a. In the **Non-members** list box, select a user.
- b. Click the single-arrow button that points to the **Members** list box.

7 To remove a user from the group:

- a. In the **Members** list box, select a user.
- b. Click the single-arrow button that points to the **Non-members** list box.

8 To move all users from one list box to another, click the appropriate double-arrow button.

9 Click **Apply.**

The group now includes only the users listed in the **Members** list box.

Related Information

- [“Creating Users on Essbase Servers” on page 262](#)
- [“Creating Groups on Essbase Servers” on page 263](#)
- [“Groups Window” on page 581](#)
- [“Create User/User Properties Dialog Box—Groups Tab \(Essbase Server\)” on page 509](#)
- [Create Group/Group Properties - Users Tab](#)
- [“User Management and Security in Essbase Native Security Mode” in the *Oracle Essbase Database Administrator's Guide*](#)

Related Commands

- [alter user \(MaxL\) in the *Oracle Essbase Technical Reference*](#)
- [adduser \(ESSCMD\) in the *Oracle Essbase Technical Reference*](#)
- [removeuser \(ESSCMD\) in the *Oracle Essbase Technical Reference*](#)

Setting Application Access Type for Users

When Essbase users are created, they are assigned as having an "application access type" of "Essbase," meaning that they have access to Essbase applications as defined by Essbase security. Other EPM products, such as Oracle Hyperion Planning, may also assign an application access type to their users. Depending on licensing agreements, users may have access to more than one type of application. For example, users may have access to Essbase applications and Planning applications.

The Essbase application access type setting can be changed only using an Essbase administration tool, such as Administration Services or MaxL. Because the Planning application access type setting can be changed only using the Planning interface, the **Planning** check box is read-only.

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#). You must use the Shared Services Console to set application access type for users when Essbase Server is in EPM System security mode.

► To set the application access type for a user:

- 1 In Enterprise View or a custom view, under the appropriate Essbase Server node, expand the **Security** node.
- 2 Under the **Security** node, double-click the **Users** node.
- 3 In the [Users window](#), click **New** to create a user, or select a user and click **Edit**.
- 4 In the **Create User** or **User Properties** window, select the [User Information](#) tab.
- 5 Under the **Application access type** node, select an application access type, as appropriate.
- 6 Click **Apply**.

Related Information

[“Create User Dialog Box and User Properties Dialog Box \(Essbase Server\)” on page 507](#)

Related Commands

- create user (MaxL) in the *Oracle Essbase Technical Reference*
- createuser (ESSCMD) in the *Oracle Essbase Technical Reference*

Managing User/Group Permissions for Applications and Databases

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

By default, users and groups inherit the minimum permission that is set for an application or database. For example, if the minimum permission for an application is Read, all users who connect to the application have, at a minimum, read-only permission for all databases in the application.

If you have permissions to Create/Delete Users and Groups, you can grant a user or group permissions for a specific application or database that are higher than the application-level or database-level permissions. You can only grant permissions that are equal to or lower than your own.

You do not need to define application or database permissions for Administrators. Administrators are automatically granted Application Manager permissions to every application on an Essbase Server.

You can define user/group permissions from different perspectives:

- [When editing user/group permissions](#)
 - [When defining applications/databases](#)
- To manage user/group permissions for applications and databases while editing user/group permissions:
- 1 From Enterprise View or a custom view, under an Essbase Server, expand the **Security** node.
 - 2 Under the **Security** node, double-click the **Users** or **Groups** node.
 - 3 In the [Users window](#) or the [Groups window](#), select a user or group.
 - 4 Right-click and select **Edit properties**.

If you selected a user, the **User Properties** window opens.

If you selected a group, the **Group Properties** window opens.

Note: You cannot edit properties for multiple users or groups at one time.

- 5 Select **App/Db Access** and expand the **Applications** node.

If the user or group has Administrator permissions, the **App/Db Access** tab is not selectable because Administrators have full access to all applications and databases.

All applications and databases on the Essbase Server are displayed in a navigation tree. For each application and database, the current permissions for the user or group are displayed.

- 6 Click next to an application, and select a permission from the drop-down list box.

If you grant Application Manager permissions to the user or group, the databases in the tree below the selected application are not selectable because Application Managers have full access to all databases within the application.

- 7 To grant specific permissions to one or more databases in an application, select **Access Databases** as the application permission.

- 8 Expand the application node, and select a permission for each database.

If you selected **Calculation** as the user or group's database permission, you can specify which calculation scripts the user or group is allowed to execute. See [Managing Calculation Permissions for Users and Groups](#).

- 9 If you want to assign a database filter to a user or group, below the appropriate database node, select **Filter** and select a filter from the drop-down list.

If you selected **None** as the database permission, the **Filter** option is not selectable.

A user or group can be assigned only one filter per database. For more information, see [Managing Filters](#).

- 10 Click **Apply**.

- To manage user/group permissions for applications and databases while working with applications or databases:

- 1 From Enterprise View or a custom view, select the application or database.

- 2 Right-click and select **User/group access**.

The [User/Group Access](#) window displays a hierarchical tree view of applications and databases on the left and tables of users or groups on the right.

- 3 Select a tab: **Users** or **Groups**.

- 4 Select the option to display all users or groups or to display only users or groups with permissions to access the selected application or database.

- 5 Select a user or group and click in the appropriate table cells to make assignments: Application access, Database access, Filters.

Note: To make assignments for multiple users or groups, select the users/groups and click **Edit**. Then make assignments in the **Edit User/Group Access** dialog box.

- 6 To apply all assignments, click **Apply**.

- 7 To assign users or groups to another application or database, select the application or database from the left pane, then make the assignments.

- 8 When finished, click **Close**.

Related Information

- [“Users Window” on page 666](#)
- [User Properties - App/Db Access Tab](#)
- [User Properties - Groups Tab](#)
- [“User/Group Access Window” on page 663](#)
- [“About Security and Permissions” on page 253](#)
- [“Managing Users and Groups” on page 256](#)
- [“Setting Minimum Permissions for Applications” on page 258](#)
- [“Setting Minimum Permissions for Databases” on page 259](#)
- [“Assign Calculations Dialog Box” on page 483](#)
- [“Managing Filters” on page 288](#)

Managing Calculation Permissions for Users and Groups

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#). You must use the Shared Services Console to [manage calculation permissions](#) when Essbase Server is in EPM System security mode.

If you have permissions to Create/Delete Users and Groups for an Essbase Server, you can grant specific calculation permissions to users and groups on a per-database basis. If you grant Calculation permissions to a user or group for a database, you can also specify which calculation scripts the user or group is allowed to execute. You can grant permission to execute all calculation scripts saved on the Essbase Server, or you can select from the calculation scripts that are associated with the database. If you grant permissions to execute all calculation scripts, any scripts defined thereafter are automatically added to the user's or group's calculation permissions. You can modify user and group calculation permissions at any time.

Selecting calculation scripts is relevant only for users or groups with Database Access permissions. By default, Administrators, Application Managers, and Database Managers can execute all calculation scripts.

You can define calculation permissions for a user different perspectives:

- [When editing user/group permissions](#)
- [When defining databases](#)

➤ To grant calculation permissions to a user or group while editing user/group permissions::

- 1 From Enterprise View or a custom view, under the appropriate Essbase Server, expand the **Security** node.
- 2 Under the **Security** node, double-click the **Users** or **Groups** node.
- 3 In the [Users window](#) or the [Groups window](#), select a user or group.
- 4 Right-click and select **Edit properties**.

If you selected a user, the **User Properties** window is displayed.

If you selected a group, the **Group Properties** window is displayed.

Note: You cannot edit properties for multiple users or groups simultaneously.

- 5 Select **App/Db Access**.

If the user or group has Administrator permissions, the App/Db Access tab is not selectable because Administrators have full access to all applications and databases. All applications and databases on the Essbase Server are displayed in a navigation tree. For each application and database, the current permissions for the selected user or group are displayed.

- 6 Find the application that contains the appropriate database, and select **Access Databases** as the application permission.
- 7 Expand the application node and then find the database for which you want to grant calculation permissions.
- 8 Click next to the desired database, and select **Calculation**.
- 9 Expand the database node, and for the **Calculations** node, do one of the following:
 - To grant the user or group permission to execute all calculation scripts, select **Allow all calculations**.

- To grant the user or group permission to execute only specific calculation scripts, select **Select calculation scripts**, and select the appropriate scripts.

10 Click Apply.

➤ To grant database calculation permissions while working with databases:

1 From Enterprise View or a custom view, select the database.

2 Right-click and select User/group access.

The [User/Group Access](#) window displays a hierarchical tree view of applications and databases on the left and tables of users or groups on the right.

3 Select the option to display all users or groups or only to display users or groups with permissions to access the selected application or database.

4 Select a tab: Users or Groups.

5 Select a user or group.

6 For a user or group with the Application Access permission defined as Access Databases:

- To grant permissions for performing calculations, in the **Database Access** column, select Calculations.
- To remove permissions for performing calculations, in the **Database Access** column, select an option different from Calculations.

7 To make calculation script assignments for a user or group with Calculations permission, click Assign Calculations.

8 In Assign Calculations, to enable or disable use of all calculation scripts, click or clear Assign all calculations.

9 To assign individual calculation scripts, click the single-arrow or double-arrow buttons to move calculation scripts between Available Calculations and Selected Calculations.

10 When finished, click Close.

Related Information

- [“Managing User/Group Permissions for Applications and Databases” on page 269](#)
- [“Users Window” on page 666](#)
- [User Properties - App/Db Access Tab](#)
- [“User/Group Access Window” on page 663](#)
- [About Calculation Scripts](#)

Editing Essbase Server User Properties

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

If you have permissions to Create/Delete Users and Groups for an Essbase Server, you can edit a user's security properties. When you edit a user, you modify the security properties established when you created the user. In addition to changing any of the properties that you set when you created the user, you can manage the following areas:

- Change the user's password
- Change the authentication model (external, custom, or native)
- Manage the user's membership in groups
- Manage the user's permissions for specific applications and databases
- Manage the user's calculation permissions
- Prevent the user from connecting to Essbase Server

➤ To edit user properties:

- 1 From Enterprise View or a custom view, under the appropriate Essbase Server, expand the **Security** node.
- 2 Under the **Security** node, double-click the **Users** node.
- 3 In the **Users window**, select a user.
- 4 Right-click and select **Edit properties**.
- 5 In the **User Properties** dialog box, edit properties as desired.

Note: You cannot edit properties for multiple users simultaneously.

Related Information

- [“Users Window” on page 666](#)
- [“Creating Users on Essbase Servers” on page 262](#)
- [User Properties Dialog Box](#)
- [“Changing Passwords for Essbase Server Users” on page 282](#)
- [“Managing External Authentication” on page 265](#)
- [“Managing Users and Groups” on page 256](#)

Editing Group Properties

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

If you have permissions to Create/Delete Users and Groups for an Essbase Server, you can edit a group's security properties. When you edit a group, you modify the security properties established when you created the group. In addition to changing any of the properties that you set when you created the group, you can manage the group's membership and permissions for specific applications and databases.

- To edit the properties of an Essbase Server group:
 - 1 From Enterprise View or a custom view, under the appropriate Essbase Server, expand the **Security** node.
 - 2 Under the **Security** node, double-click the **Groups** node.
 - 3 In the **Groups window**, select a group.
 - 4 Right-click and select **Edit group properties**.
 - 5 In the **Group Properties** dialog box, edit properties.

Note: You cannot edit properties for multiple groups at one time.

Related Information

- [“Groups Window” on page 581](#)
- [“Creating Groups on Essbase Servers” on page 263](#)
- [Group Properties Dialog Box](#)

Copying Essbase Server Users

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

If you have permissions to Create/Delete Users and Groups, you can copy one or more users from one Essbase Server to another. Also, through copying an existing user you can create a new user based the properties of the existing user.

You can copy users as described in this topic or by migrating all users from one Essbase Server to another as part of application migration. See [“Migration Wizard” on page 597](#). Passwords and security permissions are copied differently depending on the copy method you use.

When copying users to a different Essbase Server from the Users window (as described in this topic), keep in mind the following information:

- You need Create/Delete Users and Groups permissions for the target server.
- Before copying users to a different server, make sure that the target server is running.
- On the target server, the copied users are assigned the same user type as on the source server (either Administrator or User). For example, if a user has permissions to Create/Delete Users and Groups and/or Create/Delete Applications on the source server, those permissions are carried over to the target server.
- For users being copied, you can specify a new password to use on the target server.
- Copied users are not assigned to any group on the target server, and groups to which copied users belong are not copied with the users.

► To copy one or more users:

- 1 From Enterprise View or a custom view, select an Essbase Server and expand the **Security** node.
- 2 Under the **Security** node, double-click the **Users** node.
- 3 In the **Users window**, select the user or users that you want to copy.
- 4 Right-click and select **Copy user(s)**.
- 5 In **Copy User**, select an Essbase Server. If you are copying multiple users, the target Essbase Server must be different than the source Essbase Server.
- 6 If you are copying a single user, you can [enter a name](#) for the user in the **New user name** text box.
- 7 If you are copying multiple users:
 - To continue working in Administration Services Console during the copy process, select [Execute in the background](#).
 - To require users to change their passwords when they next log in to the target server, select **Force password change next login**.
 - To enable users to use their existing passwords the first time they log in, deselect **Force password change next login**.
- 8 If you are copying a single user, **Use Essbase Server authentication** is selected and cannot be cleared. This option sets Essbase native authentication for the user on the target server.
- 9 Enter and confirm the user password.
 - If you are creating a user by copying an existing user on the same Essbase Server, you must enter and confirm the password.
 - If you are copying multiple users, you must assign the same password to all users being copied.
- 10 If you are copying multiple users, select the **Copy Administrators** check box if you want to copy users with Administrator permissions.
- 11 If you want the new users to replace existing users with the same name, select **Replace existing user(s)**.
- 12 Click **OK**.

Essbase copies the users.

After copying, you can [edit a user's properties](#) on the target server to change any of the following security properties:

- Change the user type
- Grant permissions for specific applications and databases to the new user
- Manage the new user's membership in groups
- Change the authentication model used

Related Information

- [“Users Window” on page 666](#)

- [“Copy User Dialog Box” on page 495](#)
- [“Managing External Authentication” on page 265](#)
- “User Management and Security in Essbase Native Security Mode” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

create user (MaxL) in the *Oracle Essbase Technical Reference*

Copying Essbase Server Groups

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

If you have permissions to Create/Delete Users and Groups, you can copy one or more groups from one Essbase Server to another. Also, through copying an existing group, you can create a new group based on the properties of an existing group.

You can copy groups as described in this topic or by migrating all groups from one Essbase Server to another as part of application migration. See [“Migration Wizard” on page 597](#). Security permissions are copied differently depending on the copy method you use.

When copying a group to a different Essbase Server from the Groups window (as described in this topic), keep in mind the following information:

- You need Create/Delete Users and Groups permissions for the target server.
- Before copying a group from one server to another, ensure that the target server is running.
- On the target server, the group is assigned the same group type as the source server (either Administrator or User). For example, if the group has permissions to Create/Delete Users and Groups and/or Create/Delete Applications on the source server, those permissions are carried over to the target server. The group is not granted permissions to applications and databases on the target server. This safeguard prevents the group from being granted inappropriate permissions on the target.
- If the group does not exist on the target server and if users in the group do not exist on the target, the group and its users are copied to the target, and the users are assigned to the group.
- If a user in the group being copied exists on the target server, the existing user is not assigned to the copied group on the target server. This safeguard prevents existing users from being assigned to the wrong group inadvertently.
- If a user in the group being copied exists on the target server, the existing user is not replaced with the user in the group being copied.
- If the group being copied exists on the target server, the existing group is replaced with the copied group only if the Replace existing group option is selected. Users in the group are not replaced.

➤ To copy a group to Essbase Server:

- 1 From Enterprise View or a custom view, under the appropriate Essbase Server, expand the **Security** node.
- 2 Under the **Security** node, double-click the **Groups** node.
- 3 In the **Groups window**, select the group or multiple groups that you want to copy.
- 4 Right-click and select **Copy group(s)**.
- 5 In the **Copy Group** dialog box, select the Essbase Server to which you want to copy the group(s).
If you are copying multiple groups, the Essbase Server that you select must be different than the existing Essbase Server.
- 6 If you are copying a single group, you can enter a name for the new group in the **New group name** text box.
- 7 If you are copying multiple groups, select **Execute in the background** if you want to continue working in Administration Services Console during the copy process.
- 8 If you are copying multiple groups, select **Copy Administrators** if you want to copy groups with Administrator permissions.
- 9 Select **Replace existing group(s)**, if you want the new group(s) to replace existing group(s) with the same name.
- 10 Click **OK**.

Essbase copies the group(s).

After copying, [edit a group's properties](#) on the target server to change any of the following security properties:

- Change the group type
- Grant permissions for specific applications and databases to the new group
- Manage the group's membership

Related Information

- [“Groups Window” on page 581](#)
- [“Copy Group Dialog Box” on page 492](#)
- [“About Security and Permissions” on page 253](#)
- [“User Management and Security in Essbase Native Security Mode” in the *Oracle Essbase Database Administrator's Guide*](#)

Related Commands

create group (MaxL) in the *Oracle Essbase Technical Reference*

Renaming Essbase Server Users

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

If you have Create/Delete Users and Groups permissions for an Essbase Server, you can rename a user. You cannot rename yourself, and you cannot rename users who are currently connected to the Essbase Server.

When you rename a user, the user name is updated in all groups to which the user belongs. In addition, if the user is also an Administration Services user, the name is updated automatically in the user's Essbase Administration Server [user properties](#) (Essbase Servers tab). The user's Essbase Administration Server user name is not affected.

If you rename an Essbase Server user outside Administration Services (for example, through MaxL or ESSCMD), to synchronize the user names, you need to manually update the user's Essbase Administration Server user properties (Essbase Servers tab).

➤ To rename a user:

- 1 In Enterprise View or a custom view, under the appropriate Essbase Server node, expand the **Security** node.
- 2 Under the **Security** node, double-click the **Users** node.
- 3 In the [Users window](#), select a user.
- 4 Right-click and select **Rename user**.
- 5 In the **Rename User** dialog box, enter a name.
- 6 Click **OK**.

Essbase renames the user, updates the Users window, and updates the user's Essbase Administration Server user profile.

Related Information

- [“Users Window” on page 666](#)
- [“Rename User Dialog Box” on page 630](#)
- [“Renaming Groups” on page 279](#)

Related Commands

- alter user (MaxL in the *Oracle Essbase Technical Reference*)
- renameuser (ESSCMD) in the *Oracle Essbase Technical Reference*

Renaming Groups

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

If you have Create/Delete Users and Groups permissions for an Essbase Server, you can rename a group. Renaming a group does not affect users in the group.

► To rename a group:

- 1 In Enterprise View or a custom view, under the appropriate Essbase Server node, expand the **Security** node.
- 2 Under the **Security** node, double-click the **Groups** node.
- 3 In the **Groups window**, select a group.
- 4 Right-click and select **Rename group**.
- 5 In **Rename Group**, enter a name.
- 6 Click **OK**.

Essbase renames the group and updates the Groups window.

Related Information

- [“Groups Window” on page 581](#)
- [“Rename Group Dialog Box” on page 629](#)
- [“Renaming Essbase Server Users” on page 279](#)

Related Commands

alter group (MaxL) in the *Oracle Essbase Technical Reference*

Deleting Essbase Server Users

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

If you have Create/Delete Users and Groups permissions for an Essbase Server, you can delete users from that server.

Deleting a user from Essbase Server does not delete the user from Essbase Administration Server.

► To delete a user from Essbase Server:

- 1 In Enterprise View or a custom view, under the appropriate Essbase Server node, expand the **Security** node.
- 2 Under the **Security** node, double-click the **Users** node.
- 3 In the **Users window**, select one or more users.
- 4 Right-click and select **Delete user(s)**.
- 5 Click **OK**.

Essbase deletes the user(s) and updates the Users window. Deleted users are also deleted from any groups to which they belong.

Related Information

- [“Users Window” on page 666](#)
- [“Editing Essbase Server User Properties” on page 273](#)
- [“Deleting Groups” on page 281](#)

Related Commands

- drop user (MaxL) in the *Oracle Essbase Technical Reference*
- deleteuser (ESSCMD) in the *Oracle Essbase Technical Reference*

Deleting Groups

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

If you have Create/Delete Users and Groups permissions for Essbase Server, you can delete a group of users from Essbase Server.

When you delete a group, members of the group are not affected, except that they are no longer members of the deleted group.

➤ To delete a group:

- 1 From Enterprise View or a custom view, under the appropriate Essbase Server node, expand the **Security** node.
- 2 Under the **Security** node, double-click the **Groups** node.
- 3 In the [Groups window](#), select one or more groups.
- 4 Right-click and select **Delete group(s)**.
- 5 Click **OK**.

Essbase deletes the group and updates the Groups window.

Related Information

- [“Groups Window” on page 581](#)
- [“Editing Group Properties” on page 274](#)
- [“Deleting Essbase Server Users” on page 280](#)

Related Commands

- drop group (MaxL) in the *Oracle Essbase Technical Reference*
- deletigroup (ESSCMD) in the *Oracle Essbase Technical Reference*

Forcing a Password Change

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#) or to users who are externally authenticated in Essbase native security mode.

You can force other users to change their passwords the next time they log in to Essbase Server. Forcing a password change enables you to assign a default password to all new users and then prompt users to change the default when they begin using Essbase Server.

You cannot force a password change for users who are currently logged on. If a currently logged on user is part of a multiple-user selection, the forced password change is only applied to the users who are not currently logged on.

You can force a password change as described in this topic, or you can use the [User Properties dialog box \(User Info tab\)](#).

► To force one or more users to change passwords at next login:

- 1 From Enterprise View or a custom view, under the appropriate Essbase Server, expand the **Security** node.
- 2 Under the **Security** node, double-click the **Users** node.
- 3 In the [Users window](#), select one or more users.
- 4 Right-click and select **Force password change**.
- 5 At the confirmation prompt, click **OK**.

Related Information

- [“Users Window” on page 666](#)
- [“Changing Passwords for Essbase Server Users” on page 282](#)
- [“Managing Password Longevity” on page 287](#)
- [“User Management and Security in Essbase Native Security Mode” in the *Oracle Essbase Database Administrator's Guide*](#)

Related Commands

alter user (MaxL) in the *Oracle Essbase Technical Reference*

Changing Passwords for Essbase Server Users

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

If you have permissions to Create/Delete Users and Groups for Essbase Server, you can change a user's Essbase Server password.

If the user is also an Administration Services user, the user's Essbase Administration Server [user properties](#) (Essbase Servers tab) are updated automatically. The user's Essbase Administration Server password is not affected.

If you change a user's Essbase Server password outside Administration Services (for example, through MaxL or ESSCMD), to synchronize the passwords, you must manually update the user's Essbase Administration Server user properties.

► To change a user's Essbase Server password:

- 1 From Enterprise View or a custom view, under the appropriate Essbase Server node, expand the **Security** node.
- 2 Under the **Security** node, double-click the **Users** node.
- 3 In the [Users window](#), select a user.
- 4 Right-click and select **Edit user properties**.
- 5 In the **User Properties** window, select the **User Info** tab, and enter the new password.
- 6 In **Confirm password**, reenter the new password.
- 7 Click **Apply**.

Essbase changes the user's password on Essbase Server and, if applicable, updates the user's Essbase Administration Server user profile.

- 8 **Optional:** [Propagate the user's password](#) to other Essbase Servers.

Related Information

- [“Propagating Passwords Across Servers” on page 283](#)
- [“Managing External Authentication” on page 265](#)
- [“Creating Users on Essbase Servers” on page 262](#)
- [“Editing Essbase Server User Properties” on page 273](#)
- [“Users Window” on page 666](#)
- [User Properties - User Info tab](#)

Related Commands

- `alter user` (MaxL) in the *Oracle Essbase Technical Reference*
- `setpassword` (ESSCMD) in the *Oracle Essbase Technical Reference*

Propagating Passwords Across Servers

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

If you have Create/Delete Users and Groups permissions for an Essbase Server, you can change a user's password and then propagate the new password to other Essbase Servers. You need

Create/Delete Users and Groups permissions for both the source and the target servers. The user whose password you are changing must exist on the target servers, and the target servers must be running.

If you use Administration Services to change a user's Essbase Server password, and if the user is also an Administration Services user, the user's Essbase Administration Server [user properties](#) (Essbase Servers tab) are updated automatically. The user's Essbase Administration Server password is not affected.

If you change a user's Essbase Server password outside Administration Services (for example, through MaxL or ESSCMD), to synchronize the passwords, you must manually update the user's Essbase Administration Server user properties.

► To change a user's Essbase Server password and propagate the new password to other Essbase Servers:

- 1 From Enterprise View or a custom view, under the appropriate Essbase Server node, expand the **Security** node.
- 2 Under the **Security** node, double-click the **Users** node.
- 3 In the [Users window](#), select a user.
- 4 Right-click and select **Propagate password**.
- 5 In the **Propagate Password to Essbase Servers** dialog box, enter and confirm the user's new password.
- 6 In the **Available** list box, select the servers to which you want to propagate the user's password and click the single-arrow button that points toward the **Selected** list box.

To move all servers in the **Available** list box to the **Selected** list box, click the double-arrow button.

- 7 When all servers to which you want to propagate the password are listed in the **Selected** list box, click **OK**.

Essbase changes the user's password on the selected servers and, if applicable, updates the user's Essbase Administration Server user profile.

Related Information

- [“Users Window” on page 666](#)
- [“Propagate Password to Essbase Servers Dialog Box” on page 624](#)
- [“Copying Essbase Server Users” on page 275](#)
- [“Changing Passwords for Essbase Server Users” on page 282](#)

Disabling User Names

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#). You must use the Shared Services Console to disable users if Essbase Server is in [EPM System security mode](#).

If you have Administrator or Create/Delete Users and Groups permissions for Essbase Server, you can prevent a user from logging in to that server by disabling the user name. A user name is disabled automatically when the user exceeds limitations specified in the Essbase Server Properties window. Also, a user name can be disabled manually.

Only Administrators can view and activate disabled user names.

You can disable user names in any of the following ways:

- [Disable user names manually](#)
- [Disable user names automatically when users exceed a specific number of unsuccessful login attempts](#)
- [Disable user names automatically when users exceed a specific number of days of inactivity](#)

➤ To disable a user name manually:

- 1 In Enterprise View or a custom view, under the appropriate Essbase Server, expand the **Security** node.
- 2 Under the **Security** node, double-click the **Users** node.
- 3 In the [Users window](#), select one or more user names.
- 4 Right-click and select **Disable user(s)**.
- 5 Click **OK**.

Essbase updates the Users window, the User Properties window, and the Disabled User names window.

Note: You can also disable a user name from the [User Properties dialog box](#).

➤ To disable user names automatically after a specific number of consecutive, unsuccessful login attempts:

- 1 From Enterprise View or a custom view, select the appropriate Essbase Server.
- 2 Right-click and select **Edit**, then **Properties**.
- 3 In the **Essbase Server Properties** window, select the **Security** tab.
- 4 Expand the **User name and password management** node.
- 5 Enter a value for **Login attempts allowed before user name is disabled**.
- 6 Click **Apply**.

➤ To disable user names automatically after a specific number of days of inactivity:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click and select **Edit properties**.
- 3 In the **Essbase Server Properties** window, select the **Security** tab.
- 4 Expand the **User name and password management** node.
- 5 Enter a value for **Number of inactive days before user name is disabled**.
- 6 Click **Apply**.

Related Information

- [“Disabled User Names Window” on page 554](#)
- [“Users Window” on page 666](#)
- [“Viewing or Activating Disabled User Names” on page 286](#)
- [“Essbase Server Properties—Security Tab” on page 472](#)

Related Commands

- `alter user (MaxL)` in the *Oracle Essbase Technical Reference*
- `alter system (MaxL)` in the *Oracle Essbase Technical Reference*

Viewing or Activating Disabled User Names

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#). You must use the Shared Services Console to disable or enable users when Essbase Server is in EPM System security mode.

A user name is disabled when the user exceeds limitations specified in the Essbase Server Properties window or when an administrator disables the username at the user level. To learn how to disable a user name, see [“Disabling User Names” on page 284](#).

If you have Administrator permissions for an Essbase Server, you can view and activate disabled user names.

Note: You can also activate disabled user names from the [Users window](#).

► To view and activate disabled user names:

- 1 In Enterprise View or a custom view, under the appropriate Essbase Server, expand the **Security** node.
- 2 Right-click the **Disabled User names** node, and select **Edit disabled user name list**.
- 3 To activate a user name:
 - a. In the **Disabled user names** list, select a user name.
 - b. Click the single-arrow button that points to the **Enabled** list box.
 - c. Click **Apply**.

Related Information

- [“Disabled User Names Window” on page 554](#)
- [“Disabling User Names” on page 284](#)

Related Commands

`alter user (MaxL)` in the *Oracle Essbase Technical Reference*

Managing Password Longevity

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

If you have Administrator permissions, you can limit the number of days users are allowed to have the same Essbase Server password. The limitation applies to all users on the Essbase Server and is effective immediately after clicking Apply.

This setting does not affect passwords for Essbase Administration Server users.

► To limit the number of days a user can have the same Essbase Server password:

- 1 From Enterprise View or a custom view, select the appropriate Essbase Server.
- 2 Right-click and select **Edit**, then **Properties**.
- 3 In the **Essbase Server Properties** window, select the **Security** tab.
- 4 Expand the **User name and password management** node.
- 5 Enter a value for the **Number of days before user must change password**.
- 6 Click **Apply**.

After the specified number of days, the user is prompted when logging on to change the password.

Related Information

- [“Essbase Server Properties—Security Tab” on page 472](#)
- [“Changing Passwords for Essbase Server Users” on page 282](#)

Related Commands

alter system (MaxL) in the *Oracle Essbase Technical Reference*

Managing Filters

In this section:

- [“Managing Filters” on page 288](#)
- [“Creating or Editing Filters” on page 289](#)
- [“Assigning Filters” on page 290](#)
- [“Copying Filters” on page 290](#)
- [“Renaming Filters” on page 291](#)
- [“Deleting Filters” on page 292](#)

Managing Filters

Filters control security access to data values, or cells, in a database. Filters are the most granular form of security available in Essbase.

When you use Filter Editor to create a filter, you designate a set of restrictions on particular database cells or on a range of database cells. You can then assign the filter to any users or groups on the Essbase Server. Filter information is stored in the Essbase security file (`essbase.sec`). For complete information about filters and controlling access to database cells, see the *Oracle Essbase Database Administrator's Guide*.

Your own security permissions determine how you can create, assign, edit, copy, rename, or delete filters:

- If you have Administrator permissions, you can manage any filter for any user or group. Filters do not affect you.
- If you have Create/Delete Applications permissions, you can manage filters for the applications that you created.
- If you have Application Manager or Database Manager permissions, you can manage filters within your applications or databases.

► To manage filters for a database:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click and select **Edit**, then **Filters**.

The Filters window displays all filters for that database. From the Filters window, you can perform the following tasks:

- [“Creating or Editing Filters” on page 289](#)
- [“Assigning Filters” on page 290](#)
- [“Copying Filters” on page 290](#)
- [“Renaming Filters” on page 291](#)
- [“Deleting Filters” on page 292](#)

Related Information

- [“Filters Window” on page 576](#)
- [“Filter Editor Window” on page 575](#)
- [“About Security and Permissions” on page 253](#)
- “Controlling Access to Database Cells” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

`alter filter` (MaxL) in the *Oracle Essbase Technical Reference*

Creating or Editing Filters

Filters are the most specific form of security in Essbase. Filters control access to specific cells or to ranges of cells within a database. You can also define metadata security with filters. Metadata security adds a layer of security for metadata (dimensions and members) in outlines, similar to read-only security for data cells.

You create a filter and then assign it to users or groups. You can create multiple filters for a database. If you edit a filter, modifications made to its definition are automatically inherited by all users of that filter the next time they connect to the database.

➤ To create or edit a filter for a database:

- 1 From **Enterprise View** or a custom view, select a database.
- 2 Right-click and select **Edit**, then **Filters**.
- 3 In the **Filters window**, perform an action:
 - To create a filter, click **New**.
 - To edit a filter, select the filter and click **Edit**.

Filter Editor is displayed.

- 4 If you are creating a filter, in the **Filter name** text box, enter a name for the filter.
- 5 In the **Access** column, select or edit the access level for the corresponding member specification.
- 6 In the **Member Specification** column, to specify the dimensions or members to which you want to apply the specified access level, perform an action:
 - Enter members from one or more dimensions, or enter member combinations. Separate members and member combinations by commas. It is best practice to enclose all member names in double quotation marks (“”).
 - From the outline tree, double-click the dimensions or members that you want to insert.
You can [search](#) for members in the outline tree. To insert alias names instead of member names, check **Use aliases** and select an alias table from the **Alias table** drop-down list box.
 - To use an Essbase calculation function to apply the specified access level to particular dimensions and members, select a function from the function tree, and enter the arguments for the function. Select **Insert arguments** to insert the argument template with the function.
- 7 To verify that the syntax is correct for the entire filter sheet, click **Verify**.
- 8 Click **Save** to return to the **Filters** window.

Related Information

- [“Managing Filters” on page 288](#)
- [“Filter Editor Window” on page 575](#)
- [“Filters Window” on page 576](#)

Related Commands

- create filter as (MaxL) in the *Oracle Essbase Technical Reference*
- alter filter (MaxL) in the *Oracle Essbase Technical Reference*

Assigning Filters

Note: This functionality does not apply if Essbase Server is in [EPM System security mode](#).

After you [create](#) a filter, you can assign it to users or groups who require the settings included in the filter definition. Modifications to a filter definition are automatically inherited by users of that filter the next time they connect to the database. Filters do not affect users who have Administrator permissions.

Only one filter per database can be assigned to a user or group.

See [“Managing Filters” on page 288](#) for information about permissions needed to assign filters.

You can also migrate filter associations across servers as part of application migration. See [“Migration Wizard” on page 597](#).

► To assign a filter to a user or group:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click and select **Edit**, then **Filters**.
- 3 In the **Filters** window, select the filter.
- 4 Click **Assign** to display the **Assign Filter** dialog box.
- 5 In the **Available Users and Groups** list box, select the users and/or groups to which you want to assign the filter.
- 6 Click the single-arrow button that points towards the **Assigned Users and Groups** list box.
To move all users and groups, click the double-arrow button.
- 7 Click **OK**.

Related Information

- [“Managing Filters” on page 288](#)
- [“Assign Filters Dialog Box” on page 483](#)

Copying Filters

After you create a filter, you can copy it to another database on any Essbase Server to which you have appropriate access. See [“Managing Filters” on page 288](#) for information about permissions needed to manage filters.

You can also migrate filters and filter associations across servers as part of application migration. See [“Migration Wizard” on page 597](#).

➤ To copy a filter to a new location:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click and select **Edit**, then **Filters**.
- 3 In the [Filters window](#), select one or more filters.
- 4 Right-click and select **Copy filter(s)**.
- 5 In the **Copy Filter** dialog box, select the Essbase Server, application, and database to which you want to copy the filters.

To copy the filters to all databases in the selected application, select **(all dbs)**.

- 6 In the **Filter name** text box, enter the name for the filter copy.
- 7 Specify whether to replace an existing filter by selecting the **Replace existing filter** check box.
- 8 Click **OK** to return to the Filters window.

Related Information

- [“Managing Filters” on page 288](#)
- [“Filters Window” on page 576](#)
- [“Copy Filter Dialog Box” on page 491](#)

Related Commands

- alter object (MaxL) in the *Oracle Essbase Technical Reference*
- create filter as (MaxL) in the *Oracle Essbase Technical Reference*
- copyfilter (ESSCMD) in the *Oracle Essbase Technical Reference*

Renaming Filters

You can rename a filter. See [“Managing Filters” on page 288](#) for information about permissions needed to manage filters.

➤ To rename a filter:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click and select **Edit**, then **Filters**.
- 3 In the [Filters window](#), select the filter that you want to rename.
- 4 Right-click and select **Rename filter**.
- 5 In **Rename Filter**, enter a name.
- 6 Click **OK** to return to the Filters window.

Related Information

- [“Managing Filters” on page 288](#)
- [“Filters Window” on page 576](#)
- [“Rename Filter Dialog Box” on page 628](#)

Related Commands

- alter object (MaxL) in the *Oracle Essbase Technical Reference*
- renamefilter (ESSCMD) in the *Oracle Essbase Technical Reference*

Deleting Filters

You can delete filters from a database. See [“Managing Filters” on page 288](#) for information about permissions needed to manage filters.

► To delete a filter:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click and select **Edit**, then **Filters**.
- 3 In the [Filters window](#), select one or more filters.
- 4 Right-click and select **Delete filter(s)**.
- 5 Click **Yes**.

Essbase deletes the filter and updates the Filters window.

Related Information

- [“Managing Filters” on page 288](#)
- [“Filters Window” on page 576](#)

Related Commands

drop filter (MaxL) in the *Oracle Essbase Technical Reference*

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About the Essbase Security File

When Essbase is in EPM System security mode, some security information is stored by Shared Services and external user directories, and some security information is stored in the Essbase security file (`essbase.sec`).

The following information is stored by Shared Services or by the external user directories:

- Users
- Groups
- Passwords
- User and group role information for applications

The following information is stored in `essbase.sec`:

- Calculation script access
- Filter access
- Application access type
- Application and database properties, including substitution variables and DISKVOLUMES settings (block storage databases only)

When Essbase is in native security mode, all information about users, groups, passwords, permissions, filters, applications, databases, and their corresponding directories is stored in `essbase.sec`.

The `essbase.sec` file is located in the `ARBORPATH/bin` directory.

The contents of the `essbase.sec` file is encrypted; however, the contents can be exported to a readable, text file format, which is useful for review purposes. When exporting `essbase.sec`,

follow your company's security procedures to ensure the integrity of the data. See [“Exporting the Security File” on page 296](#).

Related Information

- [“Compacting the Security File” on page 295](#)
- [“Exporting the Security File” on page 296](#)
- [“About the Essbase Security Backup File” on page 294](#)

About the Essbase Security Backup File

Each time you successfully start Essbase Server, a backup copy of the security file is created as `essbase_timestamp.bak`. You can manage the number of security backup files that Essbase maintains (from 2 to 10); the interval at which the security backup files are created; and whether to switch to the latest, valid security backup file on startup if the `essbase.sec` file is invalid. You can also update the security backup file manually; see [“Updating the Security Backup File” on page 294](#).

Note: You can no longer start Essbase from within Administration Services. For information on starting Essbase, see “Starting and Stopping Essbase using OPMN” in the *Oracle Essbase Database Administrator's Guide*.

Related Information

- [“Updating the Security Backup File” on page 294](#)
- [“About the Essbase Security File” on page 293](#)

Related Commands

- `alter system sync security backup (MaxL)` in the *Oracle Essbase Technical Reference*
- `alter system reconcile (MaxL)` in the *Oracle Essbase Technical Reference*
- `SECFILEBACKUPINTERVAL` (`essbase.cfg` setting) in the *Oracle Essbase Technical Reference*
- `NUMBEROFSECFILEBACKUPS` (`essbase.cfg` setting) in the *Oracle Essbase Technical Reference*
- `ENABLESWITCHTOBACKUPFILE` (`essbase.cfg` setting) in the *Oracle Essbase Technical Reference*

Updating the Security Backup File

➤ To manually update the security backup file:

- 1 From Enterprise View or a custom view, select the **Security** node under the appropriate Essbase Server.

2 Right-click and select **Update security backup file for <Essbase Server name>**.

3 At the confirmation prompt, click **Yes**.

Essbase determines whether the security file (`essbase.sec`) has changed since the latest security backup file (`essbase_timestamp.bak`) was created. If the security file has changed, a new security backup file is created.

➤ To specify how often Essbase checks for differences between the security file and the security backup file, and updates the security backup file if needed:

1 From Enterprise View or a custom view, select the Essbase Server.

2 Right-click and select **Edit properties**.

3 In the **Essbase Server Properties** window, select the **Security** tab.

4 Expand the **Auto logoff** node.

5 For the **Check every** option, specify how often, in minutes, Essbase should compare the security file with the security backup file.

Note: This setting also controls how often [user inactivity](#) is checked.

6 Click **Apply**.

Related Information

- [“About the Essbase Security Backup File” on page 294](#)
- [“About Security and Permissions” on page 253](#)
- [“Exporting the Security File” on page 296](#)
- “Managing the Essbase Security File (`essbase.sec`)” in the *Oracle Essbase Database Administrator's Guide*

Compacting the Security File

All security information is stored in the security file (`essbase.sec`) in the `ARBORPATH/bin` directory. Changing or deleting the following Essbase security entities can cause fragmentation in the security file: filters, users, groups, applications, databases, substitution variables, disk volumes, passwords, and other Essbase objects. Too much fragmentation in the security file can slow down security-related performance.

Essbase compacts (defragments) the security file automatically each time Essbase Server is stopped. You can check the defragmentation status of the security file and, if desired, you can compact it without stopping Essbase Server.

Note: Compacting the security file while Essbase Server is running slows down Agent activity until the operation is completed, which could take a few minutes.

- To manually compact the security file:
- 1 From Enterprise View or a custom view, select the **Security** node under the appropriate Essbase Server.
 - 2 Right-click and select **Compact security file**.

Related Information

- [“About Security and Permissions” on page 253](#)
- “Managing the Essbase Security File (essbase.sec)” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- display system security file fragmentation_percent (MaxL) in the *Oracle Essbase Technical Reference*
- alter system security file fragmentation_percent (MaxL) in the *Oracle Essbase Technical Reference*
- compact (Essbase Agent) in the *Oracle Essbase Technical Reference*
- SECURITYFILECOMPACTIONPERCENT (essbase.cfg setting) in the *Oracle Essbase Technical Reference*

Exporting the Security File

The contents of the `essbase.sec` security file and the `essbase_timestamp.bak` security backup files are encrypted. To review the contents of the `essbase.sec` file, an Essbase Administrator can export the contents to a readable, text file format.

Caution! When exporting the `essbase.sec` file, follow your company's security procedures to ensure the integrity of the data.

- To export the contents of the `essbase.sec` file for an Essbase Server instance:
- 1 From Enterprise View or a custom view, select the **Security** node under the appropriate Essbase Server.
 - 2 Right-click and select **Export security file**.
 - 3 Enter the name, including the path, of the text file to which the exported information is to be written.

The path must be to a location on the system where Essbase Server resides. The file cannot be written to a client system. If a path is not specified, the text file is created in the `ARBORPATH\bin` directory.

- 4 Click **OK**.

Related Information

- [“About Security and Permissions” on page 253](#)
- [“Updating the Security Backup File” on page 294](#)

- export security_file (MaxL) in the *Oracle Essbase Technical Reference*
- “Managing the Essbase Security File (essbase.sec)” in the *Oracle Essbase Database Administrator's Guide*

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Viewing Active User Sessions

The Sessions window lists active user sessions for an Essbase Server, application, or database. A user can have more than one session open at any given time. For example, one user may have open sessions on two databases.

If you have Administrator or Application Manager permissions, you can disconnect a user session or terminate a specific request made during a session.

➤ To view active user sessions for an Essbase Server:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click and select **Edit**, then **Sessions**.

The **Sessions** window displays a list of active sessions. If you have Administrator permissions, the window lists active user sessions for all users on the Essbase Server. If you have Application Manager permissions, the window lists active sessions for all users, including yourself, who are connected to any application for which you have Application Manager permissions.

- 3 To sort the list of sessions by column:

- To sort a column in ascending order, click the column header.
For example, to sort the **User** column in alphabetical order, click the column header.
- To sort a column in descending order, press **Shift** and click the column header.
For example, to sort the **Login Time** column so that the longest login time appears first in the list, press **Shift** and click the column header.

- 4 To manage sessions from the **Sessions** window, see [Disconnecting User Sessions and Requests](#).

Related Information

- [“Disconnecting User Sessions and Requests” on page 300](#)
- [“Sessions Window” on page 639](#)

Related Commands

- `display session (MaxL)` in the *Oracle Essbase Technical Reference*
- `alter system (MaxL)` in the *Oracle Essbase Technical Reference*

Disconnecting User Sessions and Requests

The Sessions window lists active user sessions for an Essbase Server, application, or database. To view or disconnect sessions or to terminate requests made during sessions, you must have Administrator permissions for Essbase Server or Application Manager permissions for the application. You can view and terminate sessions or requests only for users with permissions equal to or lower than your own.

A session is the time between login and logout for a user connected to Essbase Server at the server, application, or database level. A user can have more than one session open at any time. For example, a user may be logged in to different databases. If you have appropriate permissions, you can log off sessions based on any criteria that you choose; for example, you can log off a user from all databases or from one database.

A request is a query sent to Essbase Server by a user or by another process. For example, a default calculation of a database and a restructuring of the database outline are requests. A session can process only one request at a time. If a user loses connection with an Essbase Server during a request (such as a calculation), the abandoned request may cause the application to stop responding to further requests. You can terminate the abandoned request without disconnecting the user. The user can continue the session and issue new requests. When terminating a request, Essbase allows the request to process to a point at which it is safe to terminate.

► To disconnect a session or terminate a request:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click and select **Edit**, then **Sessions**.

The **Sessions** window displays a list of active sessions. If you have Administrator permissions, the window lists active user sessions for all users on Essbase Server. If you have Application Manager permissions, the window lists active sessions for all users, including yourself, who are connected to any application for which you have Application Manager permissions.

- 3 From the drop-down lists, select one or more user sessions from the grid to disconnect users or terminate requests.

To view a table that lists the combinations available to you as you select options, see [Sessions and Request Termination Options](#). The **log off** options are for terminating a user session. The **kill** options are for terminating specific requests within a session, without logging the user off the entire session.

- 4 Click **Apply** to execute the operations indicated by your selections.
- 5 To update your view with current session and request activity, click **Refresh**.

Note: To terminate your own current request, click **Cancel**.

Related Information

- [“Viewing Active User Sessions” on page 299](#)
- [“Sessions Window” on page 639](#)

Related Commands

- display session (MaxL) in the *Oracle Essbase Technical Reference*
- alter system (MaxL) in the *Oracle Essbase Technical Reference*
- logoutuser (ESSCMD) in the *Oracle Essbase Technical Reference*
- logoutuser (Essbase Agent) in the *Oracle Essbase Technical Reference*

Viewing Data Locks

If you have Administrator permissions, you can view a list of users who hold locks on data for an Essbase Server. For example, you can find out which Spreadsheet Add-in users currently hold locks on data. Locks on data expire after a specified timeout period, as set in the Application Properties window. You may need to release locks before the allotted time expires. See [“Unlocking Data” on page 302](#).

User locks on data are different from locks on database objects, such as calculation scripts and rules files. For more information on object locks, see [“Locking and Unlocking Objects” on page 105](#).

Note: Data locks do not apply to aggregate storage databases.

➤ To view a list of current locks on data:

- 1 In Enterprise View or a custom view, select the Essbase Server for which you want to view data locks.
- 2 Right-click and select **Edit**, then **Locks**.

The [Locks window](#) displays a list of users who currently hold at least one locked data block for the server.

- 3 To refresh the list of locks, click **Refresh**.
- 4 To remove a lock, see [Unlocking Data](#).

Related Information

- [“Unlocking Data” on page 302](#)

- [“Locks Window” on page 587](#)
- [“Setting Timeout for Data Locks” on page 303](#)

Related Commands

- listlocks (ESSCMD) in the *Oracle Essbase Technical Reference*
- removelocks (ESSCMD) in the *Oracle Essbase Technical Reference*

Unlocking Data

The maximum time that a user can hold a lock on data is set in the Application Properties window. Occasionally, you may need to release a lock before the allotted time expires. For example, if you are calculating a database that has active locks on data, and the calculation encounters a lock, the calculation must wait. If you release the lock, the calculation can resume.

You can manage data locks at the Essbase Server level. You need Administrator permissions to view and unlock user locks on data.

Releasing a user's lock disconnects the user from the current session.

User locks on data are different from locks on database objects, such as calculation scripts and rules files. For more information on object locks, see [“Locking and Unlocking Objects” on page 105](#).

Note: Data locks do not apply to aggregate storage databases.

► To unlock one or more user locks on data:

- 1 In Enterprise View or a custom view, select the Essbase Server for which you want to manage data locks.
- 2 Right-click and select **Edit**, then **Locks**.
- 3 In the **Locks** window, select a row.
To select multiple adjacent rows, select the first row, press **Shift**, and select the last row.
To select multiple nonadjacent rows, select the first row, press **Ctrl**, and select the other rows.
- 4 Click **Unlock**.
- 5 Click **OK**.
- 6 To refresh the list of data locks, click **Refresh**.

Related Information

- [“Viewing Data Locks” on page 301](#)
- [“Locks Window” on page 587](#)
- [“Setting Timeout for Data Locks” on page 303](#)

Related Commands

- listlocks (ESSCMD) in the *Oracle Essbase Technical Reference*
- removelocks (ESSCMD) in the *Oracle Essbase Technical Reference*

Setting Timeout for Data Locks

For block storage applications for which you have Application Manager permissions, you can specify the amount of time that users can hold data locks.

Changes to data-lock timeout settings become effective after applications are restarted.

➤ To set data-lock timeouts:

- 1 From Enterprise View or a custom view, select a block storage application.
- 2 Right-click, and select **Edit properties**.
- 3 In the **Application Properties** window, select the **General** tab.
- 4 For **Timeout on data block locks**, enter the maximum number of minutes that data blocks can be locked by users.

The default is 60 minutes.

- 5 Click **Apply**.

Related Information

- [“Application Properties—General Tab” on page 475](#)
- [“Viewing Data Locks” on page 301](#)
- [“Unlocking Data” on page 302](#)
- [“Locks Window” on page 587](#)

Related Commands

- alter application (MaxL) in the *Oracle Essbase Technical Reference*
- display application (MaxL) in the *Oracle Essbase Technical Reference*
- getappinfo (ESSCMD) in the *Oracle Essbase Technical Reference*
- getappstate (ESSCMD) in the *Oracle Essbase Technical Reference*

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Monitoring Essbase Servers

In this section:

- “About Essbase Server Monitoring” on page 305
- “Checking the Status of Background Processes” on page 306
- “Viewing License and Installation Information” on page 307
- “Checking Available Ports” on page 307
- “Viewing Path Information” on page 308
- “Viewing Server Computer Information” on page 309
- “Viewing Disk Drive Information” on page 309
- “Viewing Configuration File Settings (essbase.cfg)” on page 310
- “Checking Available Memory” on page 310
- “Viewing Runtime Statistics” on page 310

About Essbase Server Monitoring

You can view and edit properties for Essbase Server from one window, and you can open properties windows for multiple servers at the same time. This topic provides a list of Essbase Server properties that you can monitor.

► To open the Essbase Server Properties window:

- 1 From **Enterprise View** or a custom view, select an Essbase Server.
- 2 Right-click and select **Edit**, then **Properties**.

You can monitor the following Essbase Server properties:

- “Viewing License and Installation Information” on page 307
- “Viewing Runtime Statistics” on page 310
- “Checking Available Ports” on page 307
- “Viewing Path Information” on page 308
- “Viewing Configuration File Settings (essbase.cfg)” on page 310
- “Viewing Server Computer Information” on page 309
- “Checking Available Memory” on page 310
- “Viewing Disk Drive Information” on page 309

Related Information

- “Essbase Server Properties Window” on page 469
- “Setting Essbase Server Properties” on page 85

Related Commands

- alter system (MaxL) in the *Oracle Essbase Technical Reference*
- display system (MaxL) in the *Oracle Essbase Technical Reference*

Checking the Status of Background Processes

You can check the status of processes that are running in the background. If you have Administrator privileges on Essbase Administration Server, this window displays the status of background processes initiated by you or by other administrators. If you do not have Administrator privileges, this window displays only those background processes initiated by you.

All background processes are listed in this window until you delete them manually.

► To check the status of background processes:

1 Select **Tools**, then **View background processes**.

The [Background Process Status](#) window lists processes that are currently running in the background or that have completed, according to your permissions. All background processes are displayed in this list until you manually delete them.

2 If applicable, to view the output from a successful operation, such as a report script, select the row containing the operation and click the **View** button.

If an operation failed to execute without errors, "Failed" is displayed in the Status column. To view the errors for a failed operation, select the row and click the **View** button. Unless you have Administrator privileges on Essbase Administration Server, you can view the errors only for operations that you executed.

Note: For data loads and dimension builds, if you run multiple data loads or dimension builds, the error file is overwritten with each process unless you change the default location for the error file or change the error file name.

3 To sort the table by a particular column, click the column header.

By default, columns are sorted by Essbase Administration Server user name and Start Time. Clicking the Refresh button defaults to the original sort order.

4 To delete a row from the list, select the row and click **Delete.**

5 To refresh the window, click **Refresh.**

Related Information

[“Background Process Status Window” on page 485](#)

Viewing License and Installation Information

You can view information about the Essbase license and installation on the Essbase Server computer. Use this information to verify whether Essbase is correctly installed and to determine which Essbase options are available. You can also view a list of Essbase system files and find out which network protocol is installed on the Essbase Server computer.

You can also [view runtime statistics](#) on the Statistics pane for information about named and concurrent user connections as allowed per the license agreement.

► To view information about the Essbase license and installation:

- 1 From Enterprise View or a custom view, select an Essbase Server.**
- 2 Right-click and select **Edit**, then **Properties**.**
- 3 In **Essbase Server Properties**, select [License](#).**

Related Information

- [“Essbase Server Properties - License Tab” on page 470](#)

Related Commands

- display system (MaxL) in the *Oracle Essbase Technical Reference*
- version (MaxL Shell command) in the *Oracle Essbase Technical Reference*
- version (Essbase Server Agent) in the *Oracle Essbase Technical Reference*

Checking Available Ports

You can view the following information about ports on Essbase Server:

- The total number of ports licensed with Essbase Server
- The number of ports in use on Essbase Server

- The number of ports still available on Essbase Server

You can also enable Essbase Server to check port use statistics and write that information to the Essbase Server log, using the `PORTUSAGELOGINTERVAL` setting in the `essbase.cfg` configuration file.

► To check the number of ports in use and the number of ports available on Essbase Server:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click and select **Edit**, then **Properties**.
- 3 In the **Essbase Server Properties** window, select the **Statistics** tab.

Port information is located in the **Ports in use** area and the **Ports available** area.

- 4 To view the total number of ports on Essbase Server, click the **License** tab.

Related Information

- [“Essbase Server Properties Dialog Box—Statistics Tab” on page 474](#)
- “Multithreading” in the *Oracle Essbase Database Administrator's Guide*
- “Running Essbase Servers, Applications, and Databases” in the *Oracle Essbase Database Administrator's Guide*
- [Specifying Communication Ports for Essbase Administration Server](#)

Related Commands

- ports (Essbase Server Agent) in the *Oracle Essbase Technical Reference*
- display system (MaxL) in the *Oracle Essbase Technical Reference*

Viewing Path Information

To verify path information, you can view information about Essbase environment variables.

► To view Essbase path information:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click and select **Edit**, then **Properties**.
- 3 In **Essbase Server Properties**, select **Environment**.
- 4 Expand the [environment variables](#) node on the tree.

Related Information

[“Essbase Server Properties—Environment Tab” on page 470](#)

Viewing Server Computer Information

You can view information about the operating system on the Essbase Server computer and about resource usage. For example, you can view the number and type of CPUs in the server machine, memory information, and disk swapping information. Use this information to determine whether computer or operating system constraints are affecting Essbase performance.

- To view information about the Essbase Server computer:
 - 1 From Enterprise View or a custom view, select an Essbase Server.
 - 2 Right-click and select **Edit**, then **Properties**.
 - 3 In **Essbase Server Properties**, select **OS**.
 - 4 Expand each node to view all [server computer information](#).

Related Information

[“Essbase Server Properties—OS Tab” on page 471](#)

Viewing Essbase Cluster Information

You can view information about Essbase server clusters on the Essbase Server computer.

- To view information about Essbase server clusters:
 - 1 In Enterprise View, right-click **Essbase Servers**.
 - 2 Select **Show cluster information**.

Viewing Disk Drive Information

You can view information about disk drive types, disk drive use, and file system types on the Essbase Server computer. Use this information to determine whether lack of disk space or incompatible file system types are affecting Essbase performance.

- To view information about disk drives on the Essbase Server computer:
 - 1 From Enterprise View or a custom view, select the appropriate Essbase Server.
 - 2 Right-click and select **Edit**, then **Properties**.
 - 3 In **Essbase Server Properties**, select [Disk Drives](#).

Related Information

[“Essbase Server Properties—Disk Drives Tab” on page 469](#)

Viewing Configuration File Settings (essbase.cfg)

The `essbase.cfg` file is a text file that enables you to customize certain configurations for an entire Essbase Server. Settings specified in the `essbase.cfg` file override all Essbase defaults and apply to all databases within all applications on the Essbase Server.

If the `essbase.cfg` file has been created by an administrator, you can view settings that are currently defined in it.

- To view current settings in the `essbase.cfg` file for Essbase Server:
 - 1 From Enterprise View or a custom view, select the appropriate Essbase Server.
 - 2 Right-click and select **Edit**, then **Properties**.
 - 3 In the **Essbase Server Properties** window, select the **Environment** tab.
 - 4 Expand the **Essbase config settings** node to view parameters and their current values.

You cannot edit `essbase.cfg` settings from this window. To add, modify, or delete a setting, you must modify the actual text file. See the *Oracle Essbase Technical Reference* for more information.

Related Information

- [“Essbase Server Properties—Environment Tab” on page 470](#)
- `essbase.cfg` Configuration Settings in the *Oracle Essbase Database Administrator's Guide*

Checking Available Memory

You can view information about the operating system and about resource usage on the Essbase Server computer. Use this information to determine whether computer or operating system constraints are affecting Essbase performance.

- To view information about the Essbase Server computer:
 - 1 From Enterprise View or a custom view, select an Essbase Server.
 - 2 Right-click and select **Edit**, then **Properties**.
 - 3 In the **Essbase Server Properties** window, select the **OS** tab.
 - 4 Expand the **Memory** node to view memory statistics.

Related Information

[“Essbase Server Properties—OS Tab” on page 471](#)

Viewing Runtime Statistics

You can view runtime statistics for Essbase Servers, applications, and databases. Statistics include start/stop status, connection information, user connection statistics, and elapsed time running.

Note: For specific information about aggregate storage runtime statistics, see [“Viewing Aggregate Storage Statistics” on page 79](#).

Use `getperfstats` (ESSCMD) to view performance statistics for applications and databases.

► To view runtime statistics for an Essbase Server, application, or database:

- 1 From Enterprise View or a custom view, select an Essbase Server, application or database.
- 2 Select an option:
 - For databases, select **Edit**, then **Properties**.
 - For applications, select **Edit Properties**.
- 3 In the properties window, select **Statistics**.
- 4 Expand the **Statistics** node on the tree.
- 5 Click **Help** to view information about each statistic.

Related Information

- [“Essbase Server Properties Dialog Box—Statistics Tab” on page 474](#)
- [“Application Properties—Statistics Tab” on page 476](#)
- [“Database Properties Window—Statistics Tab” on page 534](#)

Related Commands

- `query database` (MaxL) in the *Oracle Essbase Technical Reference*
- `getappinfo` (ESSCMD) in the *Oracle Essbase Technical Reference*
- `getdbinfo` (ESSCMD) in the *Oracle Essbase Technical Reference*
- `getperfstats` (ESSCMD) in the *Oracle Essbase Technical Reference*

Monitoring Applications

In this section:

- [“About Application Monitoring” on page 311](#)
- [“Viewing Application and Database Status” on page 312](#)
- [“Application and Database Icons in Enterprise View” on page 313](#)

About Application Monitoring

You can view and edit properties for an Essbase application in one window, and you can open properties windows for multiple applications at the same time.

- To open the Application Properties window:
 - 1 From Enterprise View or a custom view, select an application.
 - 2 Right-click and select **Edit properties**.

Related Information

- [“Application Properties Window” on page 474](#)
- [“Setting Application Properties” on page 93](#)

Related Commands

- alter application (MaxL) in the *Oracle Essbase Technical Reference*
- display application (MaxL) in the *Oracle Essbase Technical Reference*
- getappinfo (ESSCMD) in the *Oracle Essbase Technical Reference*
- getappstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- setappstate (ESSCMD) in the *Oracle Essbase Technical Reference*

Viewing Application and Database Status

You can view the start/stop status of applications and databases that you are authorized to use.

You need to refresh the Applications node manually to reflect changes made by other administrators during the current session.

- To view application and database status for Essbase Server:
 - 1 From Enterprise View or a custom view, select an Essbase Server.
 - 2 Right-click the **Applications** node below that server, and select **Show databases**.

The console displays the Application/Database Status window, which displays start/stop status for all applications and databases to which you have access for that Essbase Server.

Note: [Icons](#) next to application and database nodes in Enterprise View also indicate status.

Related Information

- [“Application/Database Status Window” on page 478](#)
- [“Starting Applications” on page 91](#)
- [“Starting Databases” on page 99](#)
- [“Stopping Applications” on page 93](#)
- [“Stopping Databases” on page 100](#)







Related Commands

- display database (MaxL) in the *Oracle Essbase Technical Reference*

- getappinfo (ESSCMD) in the *Oracle Essbase Technical Reference*
- getdbinfo (ESSCMD) in the *Oracle Essbase Technical Reference*

Application and Database Icons in Enterprise View

In Enterprise View, the following icons indicate the type and status of applications and databases:

Icon	Description
	Aggregate storage application or database that is started
	Aggregate storage application or database that is stopped
	Block storage application or database that is started
	Block storage application or database that is stopped
	Unicode block storage application or database that is started
	Unicode block storage application or database that is stopped

Monitoring Databases

In this section:

- [“About Database Monitoring” on page 313](#)
- [“Viewing Properties for All Databases” on page 314](#)
- [“Checking Data Block Statistics” on page 315](#)
- [“Checking Read/Write Statistics” on page 316](#)
- [“Viewing Dimension Information” on page 316](#)
- [“Viewing Database Modifications” on page 317](#)
- [“Viewing Fragmentation Statistics” on page 317](#)
- [“Checking Calculation State of a Database” on page 318](#)

About Database Monitoring

You can view and edit properties for an Essbase database from the same window, and you can open properties windows for multiple databases at the same time. This topic provides a list of database properties that you can monitor.

To view properties for all databases from the same window, see [“Viewing Properties for All Databases” on page 314](#).

- To open the Database Properties window:
- 1 From Enterprise View or a custom view, select a database.
 - 2 Right-click and select **Edit**, then **Properties**.

You can monitor the following database properties:

- [“Viewing Dimension Information” on page 316](#)
- [“Viewing Runtime Statistics” on page 310](#)
- [“Checking Data Block Statistics” on page 315](#) (block storage databases only)
- [“Checking Read/Write Statistics” on page 316](#)
- [“Checking the Compression Ratio” on page 325](#) (block storage databases only)
- [“Viewing Fragmentation Statistics” on page 317](#) (block storage databases only)
- [“Checking Index and Data File Sizes” on page 324](#) (block storage databases only)
- [“Viewing Database Modifications” on page 317](#)

Related Information

- [“Database Properties Window” on page 527](#)
- [“Viewing Properties for All Databases” on page 314](#)
- [“Setting Database Properties” on page 101](#)

Related Commands

- `alter database (MaxL)` in the *Oracle Essbase Technical Reference*
- `display database (MaxL)` in the *Oracle Essbase Technical Reference*
- `getdbstate (ESSCMD)` in the *Oracle Essbase Technical Reference*
- `getdbstats (ESSCMD)` in the *Oracle Essbase Technical Reference*
- `setdbstate (ESSCMD)` in the *Oracle Essbase Technical Reference*
- `setdbstateitem (ESSCMD)` in the *Oracle Essbase Technical Reference*

Viewing Properties for All Databases

You can view properties for all databases on Essbase Server from one window. Only those databases for which you have appropriate permissions are displayed. You cannot edit properties from this window.

This window displays properties such as:

- Database type (for example, aggregate or block)
- Database start/stop status
- Cache and buffer sizes
- Compression method used

- Number of users connected
- Lock information
- Number of dimensions

➤ To view properties for all databases on Essbase Server:

- 1 From **Enterprise View** or a custom view, select an **Essbase Server**.
- 2 Right-click the **Applications** node below that server, and select **Show databases**.

The Database Information window displays properties for all databases to which you have access for the Essbase Server.

Related Information

- [“Database Information Window” on page 526](#)
- [“Setting Database Properties” on page 101](#)

Related Commands

- display database (MaxL) in the *Oracle Essbase Technical Reference*
- getdbinfo (ESSCMD) in the *Oracle Essbase Technical Reference*
- getdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- getdbstats (ESSCMD) in the *Oracle Essbase Technical Reference*
- getperfstats (ESSCMD) in the *Oracle Essbase Technical Reference*

Checking Data Block Statistics

You can check the efficiency of a database by viewing statistics on data blocks, such as block size, block density, and compression ratio.

Note: These statistics do not apply to aggregate storage databases.

➤ To check block statistics for a database:

- 1 From **Enterprise View** or a custom view, select a database.
- 2 Right-click and select **Edit**, then **Properties**.
- 3 In the **Database Properties** window, select **Statistics**.
- 4 Expand the **Blocks** node to view block statistics.

Related Information

- [“Database Properties Window—Statistics Tab” on page 534](#)
- “Basic Architectural Elements” in the *Oracle Essbase Database Administrator's Guide*
- Improving Essbase Performance in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- getdbstats (ESSCMD) in the *Oracle Essbase Technical Reference*
- getperfstats (ESSCMD) in the *Oracle Essbase Technical Reference*

Checking Read/Write Statistics

You can view information about read/write operations for a database.

► To check read/write statistics for a database:

- 1 From Enterprise View or a custom view, select the database.
- 2 Right-click and select **Edit**, then **Properties**.
- 3 In **Database Properties**, select **Statistics**.
- 4 Expand the **Run-time** node to view read/write statistics.

Related Information

- [“Database Properties Window—Statistics Tab” on page 534](#)
- “Basic Architectural Elements” in the *Oracle Essbase Database Administrator's Guide*
- Improving Essbase Performance in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- display database (MaxL) in the *Oracle Essbase Technical Reference*
- getdbstats (ESSCMD) in the *Oracle Essbase Technical Reference*
- getperfstats (ESSCMD) in the *Oracle Essbase Technical Reference*

Viewing Dimension Information

You can view information about dimensions in the database outline, such as storage configuration, number of members, and number of stored members.

► To view information about dimensions in a database:

- 1 From Enterprise View or a custom view, select the database.
- 2 Right-click and select **Edit**, then **Properties**.
- 3 In **Database Properties**, select **Dimensions**.

Related Information

[“Database Properties Window—Dimensions Tab” on page 531](#)

Related Commands

display system (MaxL) in the *Oracle Essbase Technical Reference*

Viewing Database Modifications

You can view a list of the last successful operations performed on a database, such as data loads, calculations, and outline updates.

- To view a list of the last successful outline update, data load, or calculation performed against a database:
 - 1 From Enterprise View or a custom view, select the database.
 - 2 Right-click and select **Edit**, then **Properties**.
 - 3 In **Database Properties**, select **Modifications**.

Related Information

[“Database Properties Window—Modifications Tab” on page 534](#)

Related Commands

getdbstats (ESSCMD) in the *Oracle Essbase Technical Reference*

Viewing Fragmentation Statistics

- To view fragmentation statistics for a database:
 - 1 From Enterprise View or a custom view, select the database.
 - 2 Right-click and select **Edit**, then **Properties**.
 - 3 In **Database Properties**, select **Statistics**.
 - 4 Expand the **Blocks** node to view the average clustering ratio.

Note: The average clustering ratio database statistic is an approximate indication of the ordering in which data blocks are laid out in data (.pag) files. The maximum value of 1 indicates that the blocks are laid out in block key order within data files. The reported value of the clustering ratio may be less than 1, even upon restructure, due to the scalability enhancements as well as support for parallel operations. This statistic does not apply to aggregate storage databases.

Related Information

- [“Database Properties Window—Statistics Tab” on page 534](#)
- “Eliminating and Measuring Fragmentation” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- display database (MaxL) in the *Oracle Essbase Technical Reference*
- getdbstats (ESSCMD) in the *Oracle Essbase Technical Reference*

Checking Calculation State of a Database

You can check the calculation state of a database to find out whether a calculation is in progress and whether data values have been modified since the last calculation.

Note: This functionality does not apply to aggregate storage databases.

- To check the current calculation state of a database:
 - 1 From Enterprise View or a custom view, select the database.
 - 2 Right-click and select **Execute calculation**.
 - 3 View the information in the **Database state** text box.
 - 4 Click **Cancel**.

Related Information

- [Calculate Database Dialog Box](#)
- [“Calculating Block Storage Databases” on page 330](#)

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Enabling Cache Memory Locking

You can enable cache memory locking for databases for which you have Database Manager permissions. By default, cache memory locking is turned off.

Note: This setting does not apply to aggregate storage databases.

Memory locking may improve database performance, because the system memory manager does not have to swap and reserve memory for Essbase caches.

Memory-locking changes become effective after the database is stopped and restarted.

► To enable cache memory locking for databases:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Edit**, and then **Properties**.
- 3 In the **Database Properties** window, select the **Caches** tab.
- 4 Select **Cache memory locking**.
- 5 Click **Apply**.

Related Information

- [“Database Properties Window—Caches Tab” on page 528](#)
- “Optimizing Essbase Caches” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- `alter database (MaxL)` in the *Oracle Essbase Technical Reference*
- `setdbstateitem (ESSCMD)` in the *Oracle Essbase Technical Reference*

Setting Cache Sizes

For block storage databases for which you have Database Manager permissions, you can set the size of Essbase memory caches (index cache, data file cache, and data cache).

Cache sizes significantly impact database and general server performance. Appropriate cache sizes are determined by many factors, including database size, block size, index size, and available memory on the Essbase Server.

Cache-size settings become effective after databases are restarted.

► To specify the sizes of database index caches, data file caches, and data caches:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Edit**, and then **Properties**.
- 3 In the **Database Properties** window, select the **Caches** tab.
- 4 Expand the **Cache sizes** node.
- 5 For each cache, enter a value, in kilobytes, for the size of the cache.
- 6 Click **Apply**.

Related Information

- [“Database Properties Window—Caches Tab” on page 528](#)
- “Optimizing Essbase Caches” in the *Oracle Essbase Database Administrator's Guide*
- [“Checking Index and Data File Sizes” on page 324](#)

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- setdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdbstateitem (ESSCMD) in the *Oracle Essbase Technical Reference*
- getperfstats (ESSCMD) in the *Oracle Essbase Technical Reference*

Checking Cache Hit Ratios

Every cache has a "hit ratio," which indicates the percentage of time that a requested piece of information is available in the cache. You can check the hit ratio of Essbase caches to help determine whether to increase the cache size.

► To check hit ratios for database caches:

- 1 From Enterprise View or a custom view, select the database.
- 2 Right-click and select **Edit**, then **Properties**.
- 3 In **Database Properties**, select **Statistics**.
- 4 Expand the **Run-time** node.

- 5 Click **Help** to view information about each statistic.

Related Information

- [“Database Properties Window—Statistics Tab” on page 534](#)
- [“Setting Cache Sizes” on page 320](#)
- [“Enabling Cache Memory Locking” on page 319](#)
- “Optimizing Essbase Caches” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- `getdbstats` (ESSCMD) in the *Oracle Essbase Technical Reference*
- `getperfstats` (ESSCMD) in the *Oracle Essbase Technical Reference*

Setting Retrieval-Buffer Sizes

For databases for which you have Database Manager permissions, you can set the sizes of data retrieval buffers.

Essbase uses retrieval buffers to process and optimize retrievals from Spreadsheet Add-in and from report scripts and uses retrieval sort buffers to hold data to be sorted during retrievals. If a retrieval sort buffer is full, Essbase returns an error message.

To determine optimum buffer size, test a report script with different settings.

➤ To set retrieval-buffer size for databases:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Edit**, and then **Properties**.
- 3 In the **Database Properties** window, select the **General** tab.
- 4 Expand the **Data retrieval buffers** node.
- 5 For **Buffer size** and **Sort buffer size**, enter values, in kilobytes.
- 6 Click **Apply**.

Related Information

- [“Database Properties Window—General Tab” on page 532](#)
- “Optimizing Reports and Other Types of Retrieval” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- `alter database` (MaxL) in the *Oracle Essbase Technical Reference*
- `setdbstate` (ESSCMD) in the *Oracle Essbase Technical Reference*
- `setdbstateitem` (ESSCMD) in the *Oracle Essbase Technical Reference*

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Setting Disk Volumes

Essbase allocates storage for data and index files on the Essbase Server. If you have Database Manager permissions, you can control how storage is allocated.

Note: Disk volumes do not apply to aggregate storage databases.

Files are written to the disk volume in the following directory structure:

```
.../app/app_name/db_name
```

For new files, disk volume settings become effective after the database is restarted. Previously existing files and volumes are not affected.

Note: A SAN device can be designated as a disk volume.

If disk volumes are not specified, Essbase stores files only on the volume where the ARBORPATH directory resides. If the ARBORPATH variable is not set, Essbase stores files only on the volume where Essbase Server was started.

➤ To set disk volumes for databases:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Edit**, and then **Properties**.
- 3 In the **Database Properties** window, select the **Storage** tab.
- 4 In the columns of the disk volumes area, make your selections.

- 5 Click **Set**.
- 6 Click **Apply**.
- 7 **Optional:** To stop Essbase from storing files on a volume, select the relevant row, and click **Delete**.

Essbase does not write new files to the designated volume but continues to access and use files previously stored on the volume.

Related Information

- [“Database Properties Window—Storage Tab” on page 537](#)
- “Storage Allocation” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- setdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdbstateitem (ESSCMD) in the *Oracle Essbase Technical Reference*

Checking Index and Data File Sizes

You can view index file (.ind) and data file (.pag) names, counts, sizes, and totals, and you can determine whether a file is open in Essbase. You may need this information when sizing Essbase caches. You can also see where these files are stored and see whether they span multiple volumes.

Note: These types of files do not apply to aggregate storage databases.

► To check index (.ind) and data file (.pag) sizes for a database:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click and select **Edit**, and then **Properties**.
- 3 In **Database Properties**, select **Storage**.
- 4 For files listed in the **Data/Index File Type** column, check the file size.

Related Information

- [“Database Properties Window—Storage Tab” on page 537](#)
- [“Setting Cache Sizes” on page 320](#)
- “Allocating Storage and Compressing Data” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- listfiles (ESSCMD) in the *Oracle Essbase Technical Reference*

- `getperfstats` (ESSCMD) in the *Oracle Essbase Technical Reference*

Selecting Data Compression Methods

If you have Database Manager permissions, you can select a data compression method for a database (bitmap compression, run-length encoding, or ZLIB compression). When data compression is enabled, Essbase compresses data blocks as it writes them to disk. During retrievals, compressed blocks are swapped into the data cache; the blocks, including empty cells, are fully expanded.

Generally, data compression optimizes storage. You can evaluate compression efficiency by reviewing the compression ratio statistic. See [“Checking the Compression Ratio” on page 325](#).

Note: Data compression does not apply to aggregate storage databases.

Compression-scheme changes affect only blocks that are subsequently written to disk, not blocks that are on disk.

► To enable data compression methods for databases:

- 1 From **Enterprise View** or a custom view, select a database.
- 2 Right-click, and select **Edit**, and then **Properties**.
- 3 In the **Database Properties** window, select the **Storage** tab.
- 4 From **Data compression**, select a data compression method.
- 5 Click **Apply**.

Related Information

- [“Database Properties Window—Storage Tab” on page 537](#)
- [“Checking the Compression Ratio” on page 325](#)
- “Data Compression” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- `alter database` (MaxL) in the *Oracle Essbase Technical Reference*
- `setdbstate` (ESSCMD) in the *Oracle Essbase Technical Reference*
- `setdbstateitem` (ESSCMD) in the *Oracle Essbase Technical Reference*

Checking the Compression Ratio

The compression ratio represents the ratio of compressed block size (including overhead) to expanded block size, regardless of the compression method in effect (bitmap or RLE). The larger the number, the more compression.

Note: This statistic does not apply to aggregate storage databases.

- To check the compression ratio for a database:
 - 1 From Enterprise View or a custom view, select a database.
 - 2 Right-click and select **Edit**, then **Properties**.
 - 3 In the **Database Properties** window, select the **Statistics** tab.
 - 4 Expand the **Blocks** node and find Compression ratio in the list.

Related Information

- [“Database Properties Window—Statistics Tab” on page 534](#)
- “Data Compression” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- display database (MaxL) in the *Oracle Essbase Technical Reference*
- getdbstats (ESSCMD) in the *Oracle Essbase Technical Reference*

Setting Data Integrity Options

For databases, Essbase automatically commits data to disk. By specifying isolation levels and related settings, you can tell Essbase how to commit data blocks to disk. For transactions, Essbase offers two isolation levels: committed access and uncommitted access (the default). Using committed access optimizes data integrity.

Note: These options do not apply to aggregate storage databases.

You need Database Manager permissions to change isolation level settings. Changes become effective the next time that there are no transactions.

- To specify isolation levels and related settings for databases:
 - 1 From Enterprise View or a custom view, select a database.
 - 2 Right-click, and select **Edit**, and then **Properties**.
 - 3 In the **Database Properties** window, select the **Transactions** tab.
 - 4 Select **Committed access** or **Uncommitted access** (the default).
 - 5 If you selected **Committed access**:
 - a. Expand the **Concurrency** node.
 - b. Select a wait time.
 - c. Optional: Select **Pre-image access**.

- 6 If you selected **Uncommitted access**, expand the **Synchronization point** node, and specify a number for **Commit block** and/or **Commit row**.
- 7 Click **Apply**.

Related Information

- [Database Properties - Transaction Tab](#)
- “Understanding Isolation Levels” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- setdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdbstateitem (ESSCMD) in the *Oracle Essbase Technical Reference*
- getperfstats (ESSCMD) in the *Oracle Essbase Technical Reference*

Selecting I/O Access Modes

By default, Essbase uses buffered I/O (input/output) access mode for databases, but direct I/O is available on most operating systems and file systems that Essbase supports. For databases for which you have Database Manager permissions, you can change I/O access mode. Changes become effective after databases are restarted.

Note: This setting does not apply to aggregate storage databases.

- To select I/O access modes for databases:
- 1 From Enterprise View or a custom view, select a database.
 - 2 Right-click, and select **Edit**, and then **Properties**.
 - 3 In the **Database Properties** window, select the **Storage** tab.
 - 4 In **Pending I/O access mode**, select an [I/O access mode](#).
 - 5 Click **Apply**.

Related Information

- “Understanding Buffered I/O and Direct I/O” in the *Oracle Essbase Database Administrator's Guide*
- [“Database Properties Window—Storage Tab”](#) on page 537

Related Commands

alter database (MaxL) in the *Oracle Essbase Technical Reference*

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Calculating Block Storage Databases

In this section:

- “Setting Default Calculations” on page 329
- “Calculating Block Storage Databases” on page 330
- “Enabling Create Blocks on Equations” on page 331
- “Previewing Data” on page 331

Setting Default Calculations

The default calculation command for databases is CALC ALL. Thus, during full database calculations, Essbase consolidates all dimensions and members and all outline formulas.

For databases for which you have Database Manager permissions, you can specify any calculation script or calculation string as the default database calculation. For example, you can assign a frequently used script as the default, rather than load the script each time you want to run its calculation against the database.

Changes to the default-calculation setting become effective immediately.

Note: This functionality does not apply to aggregate storage databases.

► To set the default calculations:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Set**, and then **Default calculation**.
- 3 In the **Set Default Calculation** dialog box, select the [default calculation method](#).

4 Click **OK**.

Related Information

- [“Set Default Calculation Dialog Box” on page 641](#)
- [“Calculating Block Storage Databases” on page 330](#)

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- setdefaultcalc (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdefaultcalcfile (ESSCMD) in the *Oracle Essbase Technical Reference*

Calculating Block Storage Databases

You can calculate [block storage](#) databases for which you have Calculation permissions. You can run default calculations or calculation scripts.

When you execute calculations in the background, you can work as the calculation processes, or you can exit the console. However, you cannot shut down Essbase Administration Server until the calculation is completed.

► To calculate block storage databases:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Execute calculation**.

The **Execute Database Calculation** dialog box is displayed.

- 3 In **Calculation scripts**, perform an action:
 - To run the [default calculation](#), select **Default**.
 - Select a calculation script.
- 4 **Optional:** To run the calculation in the background, so that you can work as the calculation processes, select **Execute in the background**.
- 5 Click **OK** to start the calculation.

If the calculation is executing in the background, an ID for the calculation process is displayed. You can use the ID to track the status of the background calculation in the [Background Process Status](#) window.

Related Information

- [“Execute Database Calculation Dialog Box” on page 561](#)
- [“Executing Calculation Scripts” on page 345](#)
- “Calculating Essbase Databases” in the *Oracle Essbase Database Administrator's Guide*
- “Defining Calculation Order” in the *Oracle Essbase Database Administrator's Guide*
- [“Using Aggregations to Improve Retrievals” on page 74](#)

Related Commands

- execute calculation (MaxL) in the *Oracle Essbase Technical Reference*
- calc (ESSCMD) in the *Oracle Essbase Technical Reference*
- calcdefault (ESSCMD) in the *Oracle Essbase Technical Reference*
- calcline (ESSCMD) in the *Oracle Essbase Technical Reference*

Enabling Create Blocks on Equations

If you assign anything other than a constant to a member of a sparse dimension and a data block does not exist for the member, you must enable Essbase to create blocks on equations. For databases for which you have Database Manager permissions, you can enable Essbase to create blocks on equations. Your selection becomes effective immediately after you click Apply.

Note: This functionality does not apply to aggregate storage databases.

➤ To enable Essbase to create blocks on equations:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Edit**, and then **Properties**.
- 3 In the **Database Properties** window, select the **General** tab.
- 4 Expand the **Calculation** node.
- 5 Select **Create blocks on equations**.
- 6 Click **Apply**.

Related Information

- [“Database Properties Window—General Tab” on page 532](#)
- “Constant Values Assigned to Members in a Sparse Dimension” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- setdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdbstateitem (ESSCMD) in the *Oracle Essbase Technical Reference*
- set createblockoneq (calculation command) in the *Oracle Essbase Technical Reference*

Previewing Data

From Administration Services Console, you can preview the data values of aggregate-storage and block-storage databases for which you have Read permission. A data preview grid displays the data in spreadsheet format, similar to Spreadsheet Add-in.

On data grids, you can perform a limited set of operations, including basic and conditional retrievals, zoom operations, keep-only and remove-only operations, pivots, and member selections. You can view grids in HTML and print and e-mail grids.

Data preview grids do not reflect true retrieval times from other client applications.

Note: The data preview feature is not supported in duplicate member outlines.

► To preview data for databases:

1 From **Enterprise View** or a custom view, select a database.

2 Right-click, and select **Preview data**.

The data preview grid is displayed; the [Cubeview tab](#) is selected.

3 **Optional:** Using the toolbar, perform various operations on the grid.

4 **Optional:** Select the [Properties tab](#), and set properties for the grid.

Related Information

[Data Preview Grid Window](#)

Managing Calculation Scripts

In this section:

- [“About Calculation Scripts” on page 333](#)
- [“About Calculation Script Editor” on page 334](#)
- [“Guidelines for Calculation Script Syntax” on page 334](#)
- [“Customizing Script Color-Coding” on page 335](#)
- [“Customizing Script Formatting” on page 335](#)
- [“Finding Lines Within Scripts” on page 336](#)
- [“Clearing Script Editor Windows” on page 336](#)
- [“Creating Scripts” on page 337](#)
- [“Opening Scripts” on page 338](#)
- [“Adding Comments to Scripts” on page 339](#)
- [“Using Auto-Completion” on page 339](#)
- [“Inserting Dimension and Member Names into Scripts” on page 340](#)
- [“Inserting Functions and Commands into Scripts” on page 341](#)
- [“Hiding Left-Hand Pane in Script Editors” on page 342](#)
- [“Using Substitution Variables in Scripts” on page 342](#)
- [“Saving Scripts” on page 343](#)

- [“Checking Script Syntax” on page 344](#)
- [“Executing Calculation Scripts” on page 345](#)
- [“Reviewing Calculation Information” on page 346](#)
- [“Troubleshooting and Optimizing Calculation Scripts” on page 347](#)
- [“Copying Scripts” on page 347](#)
- [“Renaming Scripts” on page 348](#)
- [“Deleting Scripts” on page 349](#)
- [“Printing Scripts” on page 349](#)
- [“Using Calculation Scripts as Default Calculations” on page 350](#)

About Calculation Scripts

Calculation scripts specify how databases are calculated and, thus, override outline-defined database consolidations. For example, you can calculate database subsets or copy data values between members. Within an application, you can associate one calculation script with one database or with multiple databases. In Enterprise View, a container node for calculation scripts is displayed under each application and database that contains at least one script.

Using [Calculation Script Editor](#), you construct calculation scripts from calculation commands, equations, and member formulas. Within Calculation Script Editor, you can type calculation scripts item-by-item or use user interface features to select items. Because calculation scripts are text files, you can create calculation scripts in any text editor and paste them into Calculation Script Editor.

By default, calculation scripts use the `.csc` extension. From Administration Services Console, you can view and execute only calculation scripts that have the `.csc` extension.

For information about developing calculation scripts and formulas, see the *Oracle Essbase Database Administrator's Guide*.

Note: Calculation scripts do not apply to aggregate storage applications.

Related Information

- [“About Calculation Script Editor” on page 334](#)
- “Developing Calculation Scripts” in the *Oracle Essbase Database Administrator's Guide*
- “Calculation Commands” in the *Oracle Essbase Technical Reference*
- “Calculation Functions” in the *Oracle Essbase Technical Reference*

About Calculation Script Editor

- To open Calculation Script Editor, from the console menu bar, select **File**, then **Editors**, and then **Calculation Script Editor**, or [open](#) or [create a script](#).

To open calculation scripts, see [“Opening Scripts” on page 338](#).

Note: Calculation scripts do not apply to aggregate storage applications.

Calculation Script Editor features a text editing window, a customized right-click menu, a toolbar, and a message pane. Within the editor, you can perform these tasks:

- [Associate outlines with scripts](#)
- [Search outline trees for members](#)
- [Insert members into scripts from outline trees](#)
- [Insert functions and commands into scripts](#)
- [Use syntax auto-completion](#)
- [Review script syntax](#)
- [Execute scripts](#)
- [View and customize color-coded script elements](#)
- [Search for text within scripts](#)
- [Clear script content](#)

Related Information

- [“About Calculation Scripts” on page 333](#)
- [“Creating Scripts” on page 337](#)
- [“Opening Scripts” on page 338](#)
- [“Executing Calculation Scripts” on page 345](#)
- [“Saving Scripts” on page 343](#)

Guidelines for Calculation Script Syntax

When creating calculation scripts, you must follow the guidelines for calculation script syntax and use the proper syntax for each calculation command and function.

Related Information

- [“About Calculation Scripts” on page 333](#)
- [“About Calculation Script Editor” on page 334](#)
- [“Developing Calculation Scripts” in the *Oracle Essbase Database Administrator's Guide*](#)

Naming Files

When using Administration Services to create and save files for calculation scripts, report scripts, data loads, and other files used by Essbase, filenames should be chosen independent of the operating system. Administration Services treats all filenames without respect to case. For example, Sheila1 and SHEILA1 are considered the same file by Administration Services.

Additionally, the ESSLANG variable must match the operating system locale.

Customizing Script Color-Coding

In MaxL Script Editor, Calculation Script Editor, Formula Editor, and Report Script Editor, the different elements of scripts are color-coded to improve readability. You can change the default color for each script element. Any changes that you make apply to all script editors.

► To customize color-coding in script editors:

1 From the menu bar, select **Tools, and then **Console options**.**

2 Select the **Script Editor Options tab.**

3 To change the color for a script element:

- To apply a standard color, in the **Color** column next to the element, select a color from the drop-down list.
- To create a custom color, select **Custom** from the drop-down list and then select a color in the **Set Editor Color** dialog box.

4 Click **Apply to save the settings.**

The settings take effect immediately.

5 Click **Close to close the dialog box.**

Related Information

- [Options Dialog - Script Editor Options](#)
- [“Customizing Script Formatting” on page 335](#)
- [“Guidelines for Calculation Script Syntax” on page 334](#)
- [“Understanding Guidelines for Report Script Syntax” on page 364](#)
- [“About Formulas” on page 179](#)

Customizing Script Formatting

You can specify tab stops and enable line/word wrapping for script editors, such as MaxL Script Editor, Calculation Script Editor, and Formula Editor. Any changes that you make apply to all script and formula editors.

- To customize formatting in script editors:
- 1 From the menu bar, select **Tools**, and then **Console options**.
 - 2 Select the **Script Editor Options** tab.
 - 3 To set a tab stop, in the **Tab size** text box, specify the number of characters to indent text when the **Tab** key is pressed.
 - 4 To enable line wrapping, select **Enable line wrap**.
 - 5 To enable word wrapping, select **Enable word wrap**.
 - 6 Click **Apply** to save the settings.
The settings take effect immediately.
 - 7 Click **Close** to close the dialog box.

Related Information

- [Options Dialog - Script Editor Options](#)
- [“Customizing Script Color-Coding” on page 335](#)

Finding Lines Within Scripts

Within calculation and report scripts, you can find any one line. For example, you can locate a line for which the Messages pane returns an error.

- To find lines within calculation and report scripts:
- 1 In a script, right-click, and select **Go to line**.
 - 2 In the **Go to Line** dialog box, enter a line number.
 - 3 Click **OK**.

Related Information

[“Finding Text in Editors” on page 143](#)

Clearing Script Editor Windows

You can clear the contents of Calculation Script Editor or Report Script Editor without closing the editor window.

- To clear contents of Calculation Script Editor or Report Script Editor:
- 1 Within a script, perform an action:
 - To clear an area of text, select it.
 - To clear all text, right-click, and select **Select all**.
 - 2 Select **Edit**, and then **Clear**.

- To clear the Messages pane, within the pane, right-click, and select **Clear**.

Related Information

- [“About Calculation Script Editor” on page 334](#)
- [“About Report Script Editor” on page 364](#)

Creating Scripts

Use Calculation Script Editor to create calculation scripts that specify how Essbase calculates a database. Use Report Script Editor to create report scripts that contain instructions for data retrieval, formatting, and output.

When you create a script, you can associate it with one database or with all databases of one application.

- To create calculation or report scripts:

- 1 From Enterprise View or a custom view, select the application or database with which you want to associate the script.
- 2 Select **File**, and then **New** to open the **New** dialog box.
- 3 Select the **Scripts** tab, select **Calculation script** or **Report script**, and click **OK**.

A blank script opens in the appropriate editor.

- 4 If the outline tree is not populated, [associate an outline](#) with the script.

If you select a database from Enterprise View before you open the New dialog box, the script is automatically associated with the selected database, and the outline tree is populated.

- 5 Compose the script, and [check script syntax](#).
- 6 [Save](#) or [execute](#) the script.

Related Information

- [“About Calculation Scripts” on page 333](#)
- [“About Report Scripts” on page 363](#)
- [“Inserting Dimension and Member Names into Scripts” on page 340](#)
- [“Inserting Functions and Commands into Scripts” on page 341](#)
- [“Using Substitution Variables in Scripts” on page 342](#)
- [“Adding Comments to Scripts” on page 339](#)
- [“Naming Files” on page 335](#)

Related Commands

create calculation (MaxL) in the *Oracle Essbase Technical Reference*

Opening Scripts

You can open, edit, and execute calculation scripts and report scripts in Calculation Script Editor and Report Script Editor, respectively. You can open scripts as described in this topic or directly from Enterprise View.

➤ To open calculation or report scripts that are saved as objects on Essbase Server:

- 1 From Enterprise View or a custom view, locate the application or database with which the script is associated.
- 2 Under the application or database name, expand the **Calculation Scripts** node or **Report Scripts** node.
- 3 Select the script that you want to open, right-click, and select **Edit**.

The script opens in an editor.

- 4 If you are prompted to lock the script and you plan to modify the script and save your changes, lock the script.

See [Locking and Unlocking Objects](#).

➤ To open calculation or report scripts that are saved locally or on a network:

- 1 Select **File**, and then **Open**.
- 2 In the **Open** dialog box, select the **File System** tab.
- 3 **Optional:** To display scripts of only one type, from **Files of type**, select a script type.
- 4 Navigate to the location of the script that you want to open.
- 5 Select the script, and click **OK**.

The script opens in an editor.

- 6 If you are prompted to lock the script and you plan to modify the script and save your changes, lock the script.

See [Locking and Unlocking Objects](#).

- 7 If you are prompted for the encoding, perform an action:

- For a Unicode-mode application, select UTF-8 or a locale.
- For a non-Unicode-mode application, select the default value.

See [About File Encoding and Locales](#).

Related Information

- [“About Calculation Scripts” on page 333](#)
- [“About Calculation Script Editor” on page 334](#)
- [“About Report Scripts” on page 363](#)
- [“About Report Script Editor” on page 364](#)
- [“Creating Scripts” on page 337](#)

Adding Comments to Scripts

To annotate calculation and report scripts, you can include comments. When Essbase executes scripts, it ignores comments.

Note: In the editor window, only the first comment row is color-coded.

➤ To add comments to calculation or report scripts:

- 1 **Open** or **create** a script.
- 2 In the script, click where you want to add a comment.
- 3 Enclose the comment with `/* ... */`; for example: `/* This is a comment. */`

In report scripts, you can add comments by starting each line with `//`.

Comments are displayed in green in Calculation Script Editor and Report Script Editor.

Related Information

- [“About Calculation Scripts” on page 333](#)
- [“About Report Scripts” on page 363](#)

Using Auto-Completion

Calculation Script Editor, Report Script Editor, and Formula Editor provide an auto-completion feature that helps you build scripts interactively as you type. When you start typing, a list of possible matches is displayed. When you select an item, the text required for the item is inserted into the script, and the cursor is placed where the arguments are to be entered.

For block storage databases, auto-completion applies to Essbase calculation functions and commands and to report commands (not to member names). For example, in an editor, for a block storage database, if you type `@a` (no case-sensitivity), you are prompted to select from a list of calculation functions that start with `@a`, such as `@ABS` and `@ACCUM`. Auto-completion can also be used for [insertion of argument templates](#).

For aggregate storage databases, auto-completion applies to MDX syntax. For information about how auto-completion works with MDX, see [“Using Auto-Completion in MaxL and MDX Script Editors” on page 381](#)

➤ To use auto-completion in Calculation Script Editor, Report Script Editor, or Formula Editor:

- 1 **Open** or **create** a script.

In the lower left pane of the editor window, relevant functions and commands are displayed in a tree view.

- 2 **Select Enable auto-completion.**

- 3 If you want to insert an argument template with functions or commands into the script, select **Insert arguments**.
- 4 In the script, click where you want to insert text, a command, or a function.
- 5 Start typing, and then select a command or function from the drop-down list.

The selected command or function is inserted into the script.

Note: To close a list, press Esc.

Related Information

- [“About Calculation Script Editor” on page 334](#)
- [“About Report Script Editor” on page 364](#)
- [“Inserting Dimension and Member Names into Scripts” on page 340](#)
- [“Inserting Functions and Commands into Scripts” on page 341](#)
- [“Customizing Script Color-Coding” on page 335](#)
- [“Using Auto-Completion in MaxL and MDX Script Editors” on page 381](#)

Inserting Dimension and Member Names into Scripts

An outline that is associated with an editor (such as Calculation Script Editor or Formula Editor) is displayed in a tree view in the upper left pane of the editor window. Tree views can display aliases, rather than names, and can be searched for names.

To insert dimension and member names into scripts, you can select from the tree. You need not enter names manually. However, if entering formula text manually, you must enclose in quotation marks member names that contain blanks or special characters.

For duplicate members, qualified member names must be entered. For example, if the outline contains two New York members, one of the two qualified member names must be inserted (such as "[State].[New York]" rather than "New York"). You can view the qualified member names for a duplicate member in the Member Properties dialog box in Outline Viewer. If you select names from the tree (rather than entering them manually), qualified member names are inserted automatically.

► To insert dimension and member names into scripts:

- 1 **Open or create** a script.
- 2 If the outline tree in the editor window is not populated, **associate an outline** with the script.
- 3 In the outline tree, complete one or more of the following tasks to locate the member that you want to insert in the script:
 - To expand a dimension, select the dimension, right-click, and select **Expand to descendants**.
 - To locate a dimension or member in the outline tree:

- a. Select any dimension or member.
- b. Right-click, and select **Find members** to open the Find Members dialog box.
- c. On the **Find Results** tab, double-click the preferred dimension or member name.
- To display and insert alias names, instead of member names:
 - a. Select **Use aliases**.
 - b. From **Alias table**, select an alias table.

4 Select the preferred dimension or member name or alias, right-click, and select Insert member.

Note: To insert level 0 members, you can double-click the member name.

The name or alias is inserted in the script at the cursor position; the name is enclosed in double quotation marks ("*name*").

Related Information

- [“Associating Outlines with Essbase Objects That Are Being Edited” on page 365](#)
- [“Finding Members in Editors” on page 182](#)
- [“Inserting Functions and Commands into Scripts” on page 341](#)
- [“Customizing Script Color-Coding” on page 335](#)

Inserting Functions and Commands into Scripts

Editors (such as Calculation Script Editor and Formula Editor) display a tree view of relevant commands and functions. For example, Calculation Script Editor displays Essbase calculation functions, custom-defined functions and macros, calculation commands, and calculation operators; and Report Script Editor displays report commands. Items selected from the current tree are inserted into the current script or formula. You need not enter the items manually.

As you insert functions and commands, you can insert argument templates. You can then modify the arguments.

Also see these topics in the *Oracle Essbase Technical Reference*:

- Calculation Function Categories
- Calculation Command Groups
- Report Writer Command Groups

Note: Various functions and commands may be displayed, depending upon the Essbase Server release level to which you are connected.

➤ To insert commands, functions, and operators into scripts and formulas:

1 Open an editor.

In the lower left pane of the editor window, relevant functions, commands, and operators are displayed in a tree view.

2 Optional: Perform an action:

- To view the list by category, click the **Categorical** tab.
- To view the list alphabetically, click the **Alphabetical** tab.

3 In the script or formula area, click where you want to insert the function, command, or operator.

4 In the **Commands and functions** tree, locate the item that you want to insert.

5 Optional: To insert an argument template with the function or command, select **Insert arguments**.

You can preview the argument template by right-clicking the function or command.

6 Double-click the selected item.

Essbase inserts the function, command, or operator at the cursor position in the script or formula.

7 If you inserted an argument template, replace the template with the preferred values.

Related Information

- [“Inserting Dimension and Member Names into Scripts” on page 340](#)
- [“Customizing Script Color-Coding” on page 335](#)

Hiding Left-Hand Pane in Script Editors

You can hide the left-hand pane, containing elements such as member lists, in Report Editor, MDX Editor, Formula Editor, and Calculation Script Editor. This enables a larger script editing window.

► To hide the left-hand pane in an editor:

- 1** Double-click the **Script** tab.
- 2** Double-clicking the **Script** tab a second time restores the left-hand pane.

Using Substitution Variables in Scripts

You can use substitution variables in calculation and report scripts. Typically, you use substitution variables to reference information that changes frequently.

You create substitution variables in the [Substitution Variables](#) window. When you execute scripts that include substitution variables, Essbase replaces each variable with the value that is specified in the variable definition.

► To use substitution variables in calculation or report scripts:

- 1** [Open](#) or [create](#) a script.
- 2** Click where you want to insert a substitution variable.

- 3 Type an ampersand (&) followed by the substitution variable name (for example, &CurQtr).
- 4 **Save** and execute the script.

Essbase replaces the substitution variable with the value that you specified in the substitution variable definition.

Related Information

- [“Managing Substitution Variables” on page 88](#)
- “Using Substitution Variables in Calculation Scripts” in the *Oracle Essbase Database Administrator's Guide*
- [“Substitution Variables Window” on page 646](#)

Saving Scripts

You can save calculation and report scripts as Essbase objects on Essbase Server or as text files on a network or client computer.

Scripts saved as Essbase objects are associated with an Essbase application or database. Only scripts that are saved as Essbase objects are displayed in Enterprise View. Scripts saved as Essbase objects are saved on the Essbase Server as follows:

`ARBORPATH\app\appname\scriptname.csc`

or `ARBORPATH\app\appname\dbname\scriptname.rpt`

Scripts not saved to the Essbase Server directory structure are not saved as Essbase objects. If you want to work on a script locally, save it on your client machine or on a network.

➤ To save scripts to the locations from which they were opened, select **File**, and then **Save**.

➤ To save scripts to Essbase Server:

- 1 **Open** or **create** a script.
- 2 Select **File**, and then **Save as**.
- 3 In the **Save As** dialog box, select the **Essbase Server** tab.
- 4 In **Look in**, select the Essbase Server on which you want to save the script.
- 5 Navigate to the application or database where you want to save the script.
- 6 In **File name**, enter a name for the script.

See the *Oracle Essbase Database Administrator's Guide* for file name length limitations.

By default, calculation scripts use a `.csc` extension, and report scripts use a `.rep` extension. Only scripts with the default extensions can be viewed or executed from Administration Services Console.

- 7 Click **OK**.

Essbase saves the script and updates Enterprise View.

► To save scripts locally or on a network:

- 1 In the **Save As** dialog box, select the **File System** tab.
- 2 Navigate to the file-system directory where you want to save the script.
- 3 In **File name**, enter a name for the script.

By default, calculation scripts use a `.csc` extension, and report scripts use a `.rep` extension. Only scripts with the default extensions can be viewed or executed from Administration Services Console.

- 4 If you are prompted for encoding, perform an action:
 - For Unicode-encoding, select **UTF-8**.
 - For non-Unicode encoding, accept the default selection.
- 5 Click **OK**.

Essbase saves the script in the specified location.

Related Information

- [“Save As Dialog Box” on page 635](#)
- [“About Calculation Scripts” on page 333](#)
- [“About Report Scripts” on page 363](#)
- [“Creating Scripts” on page 337](#)
- [“Executing Calculation Scripts” on page 345](#)
- [“Executing Report Scripts” on page 366](#)
- [“Naming Files” on page 335](#)
- [“About File Encoding and Locales” on page 117](#)

Checking Script Syntax

Calculation Script Editor and Report Script Editor provide syntax checkers that identify and explain syntax errors in calculation and report scripts. For example, syntax checkers identify incorrectly spelled function names and omitted end-of-line semicolons. Syntax checkers also verify dimension names, member names, and, for calculation scripts, custom-defined macros and functions against the database with which a script is associated.

Syntax checkers cannot identify semantic (logic) errors. Semantic errors occur when scripts do not produce the expected results. To identify semantic errors, execute scripts and review the results, to ensure that the results are as you expect.

For syntax checks and script executions, error and status messages are displayed in the Messages pane at the bottom of the console window. Syntax checks and executions produce identical messages.

► To check calculation-script or report-script syntax:

- 1 [Open](#) or [create](#) a script.

- 2 If the outline tree in the editor window is not populated, [associate an outline](#) with the script.
- 3 Select **Syntax**, and then **Check syntax**.

Essbase displays the results of the syntax check in the Messages pane at the bottom of the console window. Each error message is displayed individually.
- 4 If an error is associated with a line number, go directly to the line by right-clicking in the script area and selecting **Go to line**.
- 5 If an error is associated with multiple line numbers, repeat step 3 for each line number.

Related Information

- [“Executing Calculation Scripts” on page 345](#)
- [“Executing Report Scripts” on page 366](#)
- [“Guidelines for Calculation Script Syntax” on page 334](#)
- [“Troubleshooting and Optimizing Calculation Scripts” on page 347](#)
- [“Understanding Guidelines for Report Script Syntax” on page 364](#)
- [“Troubleshooting and Optimizing Report Scripts” on page 368](#)

Executing Calculation Scripts

After creating and saving calculation scripts, you execute the scripts to perform the prescribed calculations. You can execute calculation scripts against databases for which you have Calculation permissions.

You can specify whether Essbase executes multiple calculations automatically or whether you are prompted for each calculation. See [“Setting Essbase Default Options” on page 97](#). You can review syntax by opening scripts and clicking the Check Syntax button.

You can execute calculation scripts from Calculation Script Editor or Spreadsheet Add-in or by calculating the associated database. See [“Calculating Block Storage Databases” on page 330](#).

➤ To execute calculation scripts from Calculation Script Editor:

- 1 Perform an action:
 - From Enterprise View or a custom view, select a calculation script, right-click, and select **Execute**.
 - [Open](#) or [create](#) a calculation script, and click **Execute**.

Essbase displays the Execute Calculation Script dialog box.

- 2 If the script is saved to the file system or at the application, rather than the database level, select the database against which to execute the script.
- 3 **Optional:** Select **Execute in the background**.

As the script executes in the background, you can work in the console or exit the console. You cannot shut down Essbase Administration Server until script execution is completed.

4 Click **OK**.

Essbase runs the calculation script against the database. Error and status messages are displayed in the Messages pane at the bottom of the console window. If you executed the script in the background, an ID for the process is displayed. You can use the ID to [track the status](#) of the calculation in the Background Process Status window.

5 Using a tool (such as [Data Preview Grid](#) or [Spreadsheet Add-in](#)), verify the calculation results.

6 In the application log, review calculation information.

See [Opening Logs](#).

Related Information

- [“Execute Calculation Script Dialog Box” on page 561](#)
- [“About Calculation Scripts” on page 333](#)
- [“Checking Script Syntax” on page 344](#)
- [“Reviewing Calculation Information” on page 346](#)

Related Commands

- `execute calculation` (MaxL) in the *Oracle Essbase Technical Reference*
- `runcalc` (ESSCMD) in the *Oracle Essbase Technical Reference*

Reviewing Calculation Information

For completed calculations, calculation messages are displayed in application logs. You can use the log information, such as calculation time and order, to tune calculations.

To view application logs, you can use Log Viewer or open log files from the Essbase Server. See [“About Essbase Logs” on page 237](#).

► To view calculation information:

- 1 [For an application that contains a database that you calculated, open the application log.](#)
- 2 Filter the log so that it displays only messages for the current date.
- 3 In the Log Viewer window, review the calculation messages.

The messages indicate which data values were calculated and the duration of the calculation.

- 4 Within the messages, review the **fixed members** [] items, and ensure that all members that you fixed on were included in the calculation.

To display detailed calculation entries, you can use the SET MSG calculation command.

Related Information

- [“Executing Calculation Scripts” on page 345](#)
- [“About Essbase Logs” on page 237](#)

- [Opening Logs](#)

Related Commands

- SET MSG (calculation command) in the *Oracle Essbase Technical Reference*
- SET NOTICE (calculation command) in the *Oracle Essbase Technical Reference*

Troubleshooting and Optimizing Calculation Scripts

Administration Services Console features a Messages pane. As you [review script syntax](#) or execute scripts, the pane displays error messages.

If an error message includes a line number, you can move directly to the error line by right-clicking in the script and selecting Go to line. If an error message displays an Essbase error message number, you can use the number to locate information about the error, including possible solutions. For explanations of error message numbers, see the Error Message Reference.

- For information about calculation script syntax and guidelines, see the *Oracle Essbase Database Administrator's Guide*.
- For information about optimizing calculations, see the *Oracle Essbase Database Administrator's Guide*.
- For syntax information and examples for calculation commands and functions, see the *Oracle Essbase Technical Reference*.

Related Information

- [“About Calculation Scripts” on page 333](#)
- [“About Calculation Script Editor” on page 334](#)
- “Developing Calculation Scripts” in the *Oracle Essbase Database Administrator's Guide*
- “Optimizing Calculations” in the *Oracle Essbase Database Administrator's Guide*
- *Oracle Essbase Technical Reference*

Copying Scripts

When you copy a calculation or report script, Essbase copies the script to the application or database directory on the destination Essbase Server. To copy such scripts, you can use the method described in this topic or the file system.

You can also copy scripts across servers as part of application migration. See [“Migration Wizard” on page 597](#).

➤ To copy scripts to new locations:

- 1 From Enterprise View or a custom view, select a script.
- 2 Right-click, and select **Copy**.

Essbase displays the **Copy Calculation Script** dialog box or the **Copy Report Script** dialog box.

- 3 Select the name of the Essbase Server that contains the application and database to which you want to copy the script.
- 4 In **Application name**, select the application with which you want to associate the script.
- 5 Perform an action:
 - To associate the script with one database, in **Database name**, select the database.
 - To associate the script with all databases of the selected application, select **(all dbs)**.
- 6 In **Calculation script name** or **Report script name**, enter a new name for the script.
- 7 Click **OK**.
- 8 If Administration Services asks whether you want to overwrite the existing script, click **Yes**.

Essbase copies the script and updates Enterprise View.

Related Information

- [“Copy Calculation Script Dialog Box” on page 489](#)
- [“Copy Report Script Dialog Box” on page 493](#)
- [“Copying Databases” on page 102](#)

Related Commands

- alter object (MaxL) in the *Oracle Essbase Technical Reference*
- create calculation as (MaxL) in the *Oracle Essbase Technical Reference*
- copyobject (ESSCMD) in the *Oracle Essbase Technical Reference*

Renaming Scripts

You can rename calculation and report scripts by using the method described in this topic or the file system.

You cannot rename scripts that are locked by other users.

► To rename calculation and report scripts:

- 1 From Enterprise View or a custom view, select a script.
- 2 Right-click, and select **Rename**.

Essbase displays the **Rename Calculation Script** dialog box or the **Rename Report Script** dialog box.

- 3 Enter a new name for the script.
- 4 Click **OK**.

Essbase renames the script and updates Enterprise View.

Related Information

- [“Rename Calculation Script Dialog Box” on page 627](#)
- [“Rename Report Script Dialog Box” on page 629](#)

Related Commands

- alter object (MaxL) in the *Oracle Essbase Technical Reference*
- renameobject (ESSCMD) in the *Oracle Essbase Technical Reference*

Deleting Scripts

With appropriate permissions, you can delete calculation and report scripts from Essbase Server. You can use the method described in this topic or the file system. To delete scripts that are saved at the application level, you need at least Application Manager permissions for the application. To delete scripts that are saved at the database level, you need at least Database Manager permissions for the database.

Deleted scripts are deleted from the application or database directory in which they were saved on the Essbase Server.

➤ To delete calculation and report scripts from an Essbase Server:

- 1 From Enterprise View or a custom view, select a script.
- 2 Right-click, and select **Delete**.
- 3 At the confirmation prompt, click **Yes**.

If the script is locked, Essbase prompts you to remove the lock (by clicking OK). If you are not an administrator, you can unlock only scripts that you locked.

Assuming that the script was not locked or was successfully unlocked, the script is deleted, and Enterprise View is updated.

Related Commands

- drop calculation (MaxL) in the *Oracle Essbase Technical Reference*
- drop object (MaxL) in the *Oracle Essbase Technical Reference*

Printing Scripts

You can print calculation or report scripts that are open in editors.

➤ To print calculation and report scripts:

- 1 [Open](#) or [create](#) a script.
- 2 Select **File**, and then **Print**.
- 3 **Optional:** In the **Print** dialog box, specify one or more options.

4 Click **OK**.

Related Information

- [“Saving Scripts” on page 343](#)
- [“Printing Member Formulas” on page 182](#)

Using Calculation Scripts as Default Calculations

For databases for which you have Database Manager permissions, you can specify calculation scripts as the default database calculations. Thus, for example, you can assign a frequently used script as the default, rather than loading the script each time you want to run its calculation against the database.

Changes to default calculation settings become effective immediately.

► To use calculation scripts as default calculations:

- 1 From **Enterprise View** or a custom view, select the database that is associated with the calculation script that you want to use as the default.
- 2 Right-click, and select **Set**, and then **Default calculation**.
- 3 In the **Set Default Calculation** dialog box, select **Use calculation script**.
- 4 From the list, select a calculation script.
- 5 Click **OK**.

Related Information

- [“Setting Default Calculations” on page 329](#)
- [“About Calculation Scripts” on page 333](#)
- [“Calculating Block Storage Databases” on page 330](#)

Related Commands

- `alter database (MaxL)` in the *Oracle Essbase Technical Reference*
- `setdefaultcalc (ESSCMD)` in the *Oracle Essbase Technical Reference*
- `setdefaultcalcfile (ESSCMD)` in the *Oracle Essbase Technical Reference*

Using Custom-Defined Functions and Macros

In this section:

- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Viewing Custom-Defined Functions” on page 352](#)
- [“Creating Custom-Defined Functions” on page 352](#)

- [“Editing Custom-Defined Functions” on page 353](#)
- [“Using Custom-Defined Functions” on page 354](#)
- [“Copying Custom-Defined Functions” on page 354](#)
- [“Renaming Custom-Defined Functions” on page 355](#)
- [“Deleting Custom-Defined Functions” on page 355](#)
- [“Viewing Custom-Defined Macros” on page 356](#)
- [“Creating Custom-Defined Macros” on page 356](#)
- [“Editing Custom-Defined Macros” on page 357](#)
- [“Using Custom-Defined Macros” on page 358](#)
- [“Copying Custom-Defined Macros” on page 358](#)
- [“Renaming Custom-Defined Macros” on page 358](#)
- [“Deleting Custom-Defined Macros” on page 359](#)

About Custom-Defined Functions and Macros

You can extend the Essbase calculator language by creating and using custom-defined calculation functions and macros.

Note: Custom-defined functions and macros do not apply to aggregate storage applications.

Custom-Defined Functions

Custom-defined functions enable you to create calculation functions that are not supported by the Essbase calculation scripting language. You develop custom-defined functions in Java, create custom-defined functions in Essbase, associate custom-defined functions with applications or Essbase Servers, and use custom-defined functions in formulas and calculation scripts (as you use native Essbase calculation functions).

For conceptual information about developing custom-defined calculation functions, see the *Oracle Essbase Database Administrator's Guide*. For examples, see the *Oracle Essbase Technical Reference*.

Custom-Defined Macros

Custom-defined macros enable you to combine multiple Essbase functions into one function. Custom-defined macros can include macro functions, variables, and other macros. You can use macros in formulas and calculation scripts, as you use native Essbase calculation functions.

For conceptual information about developing custom-defined calculation macros, see the *Oracle Essbase Database Administrator's Guide*. For details about macro language syntax and rules and for examples of macro use, see the *Oracle Essbase Technical Reference*.

Related Information

- [“Creating Custom-Defined Functions” on page 352](#)
- [“Creating Custom-Defined Macros” on page 356](#)
- [“Using Custom-Defined Functions” on page 354](#)
- [“Using Custom-Defined Macros” on page 358](#)

Viewing Custom-Defined Functions

By viewing custom-defined functions, you can determine whether functions were successfully created and whether functions are local or global. Only custom-defined functions that are created and registered are displayed. Essbase does not provide sample custom-defined functions.

► To view custom-defined functions:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click, and select **Edit**, and then **Functions**.

The Custom Defined Function Manager window displays existing functions. You can [create](#), [edit](#), [rename](#), or [delete](#) functions from this window.

Related Information

- [“Custom-Defined Function Manager” on page 512](#)
- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Editing Custom-Defined Functions” on page 353](#)
- [“Using Custom-Defined Functions” on page 354](#)

Related Commands

display function (MaxL) in the *Oracle Essbase Technical Reference*

Creating Custom-Defined Functions

You can create custom-defined calculation functions for use with the Essbase calculator framework. You must develop custom-defined functions in the Java programming language and then use the Custom Defined Function Manager to create the functions in Essbase. For information about Java requirements for custom-defined functions, see “Developing Custom-Defined Calculation Functions” in the *Oracle Essbase Database Administrator's Guide*.

Note: Custom-defined functions do not apply to aggregate storage applications.

► To create custom-defined functions:

- 1 From Enterprise View or a custom view, select an Essbase Server.

- 2 Right-click, and select **Create**, and then **Function**.
- 3 In the text boxes of the **New Function** dialog box, enter the appropriate information.
- 4 Click **OK**.

Essbase creates the function and displays it in the Custom Defined Function Manager window. You can use the function as you use a native Essbase calculation function. See [Using Custom-Defined Functions](#).

Related Information

- [“New Function Dialog Box” on page 603](#)
- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Editing Custom-Defined Functions” on page 353](#)
- [“Using Custom-Defined Functions” on page 354](#)

Related Commands

create function (MaxL) in the *Oracle Essbase Technical Reference*

Editing Custom-Defined Functions

You can edit custom-defined functions. You need at least Application Manager permissions to edit local (application-level) functions and Administrator permissions to edit global (server-level) functions.

► To edit custom-defined functions:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click, and select **Edit**, and then **Functions**.
- 3 In the **Custom Defined Function Manager** window, select a function, and click **Edit**.
- 4 In the **Edit Function** dialog box, edit one or more fields.
- 5 Click **OK**.

Essbase updates the function.

Related Information

- [“Edit Function Dialog Box” on page 556](#)
- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Creating Custom-Defined Functions” on page 352](#)

Related Commands

create function (MaxL) in the *Oracle Essbase Technical Reference*

Using Custom-Defined Functions

Within calculation scripts and formulas, you can use custom-defined functions as you use native Essbase calculation functions. Functions created at the local (application) level can be used only in calculation scripts and formulas that are associated with the application. Functions created at the global (Essbase Server) level can be used in all calculation scripts and formulas on the Essbase Server.

Related Information

- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Creating Custom-Defined Functions” on page 352](#)
- [“About Calculation Scripts” on page 333](#)

Copying Custom-Defined Functions

You can copy custom-defined functions to any Essbase Server and application to which you have appropriate access. You can also copy custom-defined functions across servers as part of application migration. See [“Migration Wizard” on page 597](#).

► To copy custom-defined functions:

- 1 From Enterprise View or a custom view, select the Essbase Server that is associated with the functions that you want to copy.
- 2 Right-click, and select **Edit**, and then **Functions**.
- 3 In the **Custom Defined Function Manager** window, select one or more functions, and click **Copy**.
- 4 In the **Copy All Functions** dialog box, select the Essbase Server and application to which to copy the functions.
- 5 **Optional:** To overwrite functions that duplicate the names of the copied functions, select **Overwrite existing functions**.
- 6 Click **OK**.

Related Information

- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Copy All Functions Dialog Box” on page 488](#)
- [“Creating Custom-Defined Functions” on page 352](#)

Related Commands

create function (MaxL) in the *Oracle Essbase Technical Reference*

Renaming Custom-Defined Functions

➤ To rename custom-defined functions:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click, and select **Edit**, and then **Functions**.
- 3 In the **Custom Defined Function Manager** window, select a function, and click **Rename**.
- 4 In the **Rename Function** dialog box, enter the new name for the function.
- 5 **Optional:** To overwrite a function that duplicates the name of the renamed function, select **Overwrite existing function**.
- 6 Click **OK**.

Essbase renames the function.

Related Information

- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Rename Function Dialog Box” on page 628](#)

Related Commands

create function (MaxL) in the *Oracle Essbase Technical Reference*

Deleting Custom-Defined Functions

With Administrator permissions, you can delete custom-defined functions that are defined at the global (server) level. With Application Manager permissions, you can delete custom-defined functions that are defined for the application for which you have permissions.

When you delete a local (application-level) function, the Essbase application associated with the function must be restarted. When you remove a global (server-level) function, all running Essbase applications on the server must be restarted. When applications are restarted, each function catalog is refreshed.

Before deleting a function, ensure that no calculation scripts or formulas reference the function.

Caution! Global custom-defined functions should be deleted only when no users are accessing Essbase databases and no calculations are being performed.

➤ To delete custom-defined functions:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click, and select **Edit**, and then **Functions**.
- 3 In the **Custom Defined Function Manager** window, select a function, and click **Delete**.
- 4 At the confirmation message, click **Yes**.

Essbase deletes the function from Essbase Server.

5 Restart all applications associated with the function.

Related Information

- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Creating Custom-Defined Functions” on page 352](#)
- [“Editing Custom-Defined Functions” on page 353](#)

Related Commands

drop function (MaxL) in the *Oracle Essbase Technical Reference*

Viewing Custom-Defined Macros

You can view custom-defined macros to determine whether macros were successfully created and whether macros are local or global.

► To view custom-defined macros:

- 1 From Enterprise View or a custom view, select an Essbase Server.**
- 2 Right-click, and select **Edit**, and then **Macros**.**

The Custom Defined Macro Manager window displays existing macros. From the window, you can [create](#), [edit](#), [rename](#), or [delete](#) macros.

Related Information

- [“Custom-Defined Macro Manager Window” on page 514](#)
- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Editing Custom-Defined Macros” on page 357](#)
- [“Using Custom-Defined Macros” on page 358](#)

Related Commands

display macro (MaxL) in the *Oracle Essbase Technical Reference*

Creating Custom-Defined Macros

You can create custom-defined calculation macros for use with the Essbase calculator framework. When you create macros, you specify scope, syntax rules, and expansion instructions, and, as needed, other optional information.

Note: Custom-defined macros do not apply to aggregate storage applications.

➤ To create custom-defined macros:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click, and select **Create**, and then **Function**.
- 3 In the fields of the [New Macro](#) dialog box, enter information.
- 4 Click **OK**.

Essbase registers the macro and displays it in the Custom Defined Macro Manager window. You can use the macro just as you use a native Essbase calculation function.

Related Information

- [“New Macro Dialog Box” on page 604](#)
- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Using Custom-Defined Macros” on page 358](#)
- [“Deleting Custom-Defined Macros” on page 359](#)

Related Commands

create macro (MaxL) in the *Oracle Essbase Technical Reference*

Editing Custom-Defined Macros

You can edit custom-defined macros. You need at least Application Manager permissions to edit local (application-level) macros and Administrator permissions to edit global (server-level) macros.

➤ To edit custom-defined macros:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click, and select **Edit**, and then **Macros**.
- 3 In the **Custom Defined Macro Manager** window, select a macro, and click **Edit**.
- 4 In the [Edit Macro](#) dialog box, edit one or more fields.
- 5 Click **OK**.

Essbase updates the macro.

Related Information

- [“Edit Macro Dialog Box” on page 557](#)
- [About Custom-Defined Functions and Macros](#)
- [Creating Custom-Defined Macros](#)

Related Commands

create macro (MaxL) in the *Oracle Essbase Technical Reference*

Using Custom-Defined Macros

Within calculation scripts and formulas, you can use custom-defined macros as you use native Essbase calculation functions. Macros created at the local (application) level can be used only in calculation scripts or formulas that are associated with the application. Macros created at the global (Essbase Server) level can be used in all calculation scripts and formulas on the Essbase Server.

Related Information

- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Creating Custom-Defined Macros” on page 356](#)
- [“About Calculation Scripts” on page 333](#)

Copying Custom-Defined Macros

You can copy custom-defined macros to Essbase Servers and applications to which you have appropriate access. You can also copy custom-defined macros across servers as part of application migration. See [“Migration Wizard” on page 597](#).

► To copy custom-defined macros:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click, and select **Edit**, and then **Macros**.
- 3 In the **Custom Defined Macro Manager** window, select one or more macros, and click **Copy**.
- 4 In the **Copy All Macros** dialog box, select the Essbase Server and application to which to copy the macro.
- 5 **Optional:** To replace macros that duplicate the names of the copied macros, select **Overwrite existing macros**.
- 6 Click **OK**.

Related Information

- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Copy All Macros Dialog Box” on page 488](#)
- [“Creating Custom-Defined Macros” on page 356](#)

Related Commands

create macro (MaxL) in the *Oracle Essbase Technical Reference*

Renaming Custom-Defined Macros

► To rename custom-defined macros:

- 1 From Enterprise View or a custom view, select an Essbase Server.

- 2 Right-click, and select **Edit**, and then **Macros**.
- 3 In the **Custom Defined Macro Manager** window, select a macro, and click **Rename**.
- 4 In the **Rename Macro** dialog box, enter the new name for the macro.
See naming conventions in the *Oracle Essbase Database Administrator's Guide*.
- 5 **Optional:** To overwrite macros that duplicate the name of the renamed macro, select **Overwrite existing macro**.
- 6 Click **OK**.

Essbase renames the macro and updates Enterprise View.

Related Information

- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Rename Macro Dialog Box” on page 629](#)

Related Commands

create macro (MaxL) in the *Oracle Essbase Technical Reference*

Deleting Custom-Defined Macros

With Administrator permissions, you can delete custom-defined macros that are defined at the global (server) level. With Application Manager permissions for an application, you can delete custom-defined macro that are defined for the application.

When you delete local (application-level) macros, the Essbase application associated with the macros must be restarted. When you delete global (server-level) macros, all running Essbase applications on the server must be restarted. When applications are restarted, each macro catalog is refreshed.

Before deleting macros, ensure that no calculation scripts or formulas are using the macros.

Caution! Global custom-defined macros should be deleted only when no users are accessing Essbase databases and no calculations are being performed.

➤ To delete custom-defined macros:

- 1 From Enterprise View or a custom view, select an Essbase Server.
- 2 Right-click, and select **Edit**, and then **Macros**.
- 3 In the **Custom Defined Macro Manager** window, select a macro, and click **Delete**.
- 4 At the confirmation message, click **Yes**.
Essbase removes the macro from Essbase Server.
- 5 Restart all applications associated with the macro.

Related Information

- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Creating Custom-Defined Macros” on page 356](#)
- [“Editing Custom-Defined Macros” on page 357](#)

Related Commands

drop macro (MaxL) in the *Oracle Essbase Technical Reference*

Optimizing Calculations

In this section:

- [“Using Two-Pass on Default Calculations” on page 360](#)
- [“Aggregating Missing Values During Calculation” on page 361](#)
- [“About Intelligent Calculation” on page 361](#)

Using Two-Pass on Default Calculations

You can enable Two-Pass calculation for databases for which you have Database Manager permissions. When Two-Pass calculation is enabled, during second calculation passes, Essbase recalculates members that are dependent on the calculated values of other members.

Note: This functionality does not apply to aggregate storage databases.

This feature is enabled by default. Changes to the Two-Pass setting become effective immediately after you click Apply.

► To enable Two-Pass calculation:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Edit**, and then **Properties**.
- 3 In the **Database Properties** window, select the **General** tab.
- 4 Expand the **Calculation** node.
- 5 Select **Two-Pass calculation**.
- 6 Click **Apply**.

Related Information

- [“Database Properties Window—General Tab” on page 532](#)
- “Using Two-Pass Calculation” in the *Oracle Essbase Database Administrator's Guide*
- “Defining Calculation Order” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- setdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdbstateitem (ESSCMD) in the *Oracle Essbase Technical Reference*

Aggregating Missing Values During Calculation

By default, during full database calculations, Essbase does not aggregate missing (#MISSING) values. When data is not loaded at parent levels, aggregating missing values may improve calculation performance. For databases for which you have Database Manager permissions, you can choose whether to aggregate missing values. Your decision becomes effective immediately after you click Apply.

Note: This functionality does not apply to aggregate storage databases.

► To elect to aggregate missing values during database calculations:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click, and select **Edit**, and then **Properties**.
- 3 In the **Database Properties** window, select the **General** tab.
- 4 Expand the **Calculation** node.
- 5 Select **Aggregate missing values**.
- 6 Click **Apply**.

Related Information

- [“Database Properties Window—General Tab” on page 532](#)
- “Consolidating #MISSING Values” in the *Oracle Essbase Database Administrator's Guide*
- [“Calculating Block Storage Databases” on page 330](#)

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- setdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdbstateitem (ESSCMD) in the *Oracle Essbase Technical Reference*

About Intelligent Calculation

When you perform full database calculations, Essbase identifies which data blocks are calculated. Assume that you perform a full calculation and then load a subset of data. On subsequent calculations, you can choose to calculate only the data blocks that need calculation and the blocks that are not yet calculated. In Essbase, this process is called Intelligent Calculation.

Note: Intelligent Calculation does not apply to aggregate storage databases.

By default, Intelligent Calculation is turned on. You can change the default by using the `UPDATECALC` setting in the `essbase.cfg` file, and you can turn Intelligent Calculation on or off within calculation scripts.

Related Information

- “Optimizing with Intelligent Calculation” in the *Oracle Essbase Database Administrator's Guide*
- [“Calculating Block Storage Databases” on page 330](#)

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About Report Scripts

Report scripts generate formatted data reports on a database. Using [Report Script Editor](#), you can create report scripts that specify exactly how you want to report on data. A report script consists of a series of Essbase report commands that define the layout, member selection, and format of a report.

You can type the contents of a report script directly into the text area of Report Script Editor, or you can use the user interface features of the script editor to build the script. Report scripts are text files. If desired, you can create a report script in the text editor of your choice and paste it into Report Script Editor.

You can associate a report script with a specific database or with all databases in an application. In Enterprise View, a container node for report scripts appears under each application and each database that contains at least one existing script. If no scripts are defined for an application or database, the container node is not displayed. Report scripts are given a `.rep` extension by default. From Administration Services Console, you can view and execute only report scripts that have the `.rep` extension.

For more information about developing report scripts, see the *Oracle Essbase Database Administrator's Guide*. For information about report commands, see the *Oracle Essbase Technical Reference*.

Related Information

- [“About Report Script Editor” on page 364](#)
- “Developing Report Scripts” in the *Oracle Essbase Database Administrator's Guide*

- “Optimizing Reports and Other Types of Retrieval” in the *Oracle Essbase Database Administrator's Guide*

About Report Script Editor

Using Report Script Editor, you can write scripts to generate large-scale reports that consist of many pages of multidimensional data. Reports of this scale often exceed the capabilities of even the most robust spreadsheet. In Report Script Editor, you use report commands to define formatted reports, export data subsets from a database, and produce free-form reports. You can then execute the script to generate a report.

Report Script Editor features a text editing window, a customized right-click menu, a toolbar, and a message pane. Within the editor, you can:

- [Associate an outline with a script](#)
- [Search the outline tree for members](#)
- [Insert members in a script from the outline tree](#)
- [Insert functions and commands in a script](#)
- [Use syntax auto-completion](#)
- [Check script syntax](#)
- [Execute scripts](#)
- [View and customize color-coded script elements](#)
- [Search for text in a script](#)
- [Clear script content](#)

To open Report Script Editor, [open an existing script](#) or [create a new one](#).

To open an existing report script, see “Opening Scripts” on page 338.

Related Information

- [“About Report Scripts” on page 363](#)
- [“Creating Scripts” on page 337](#)
- [“Opening Scripts” on page 338](#)
- [“Executing Report Scripts” on page 366](#)
- [“Saving Scripts” on page 343](#)

Understanding Guidelines for Report Script Syntax

When you create a report script, you must follow the guidelines for report script syntax in the *Oracle Essbase Database Administrator's Guide*. You also must use the proper syntax for each report command that you use in a script.

Related Information

- [“About Report Scripts” on page 363](#)
- [“About Report Script Editor” on page 364](#)
- [“Customizing Script Color-Coding” on page 335](#)

Associating Outlines with Essbase Objects That Are Being Edited

When you edit an Essbase object, such as a calculation script, rules file, or filter, you can associate the object with a database outline. The association populates the editor with the dimension and member names of the outline and, thus, enables you to select dimensions and members, instead of entering dimension and member names manually.

An outline that is associated with a calculation script, report script, or filter is displayed in a tree view in the upper left pane of the editor window. For an outline associated with a rules file, dimension and member names are displayed in dialog boxes within Data Prep Editor. By default, when an object is opened from Enterprise View, the appropriate editor is populated with the database outline with which the object is associated. You can change the default behavior for associating outlines. See [“Setting Essbase Default Options” on page 97](#).

Essbase associates outlines and objects only when objects are being edited. Closing the editor window cancels the association.

► To associate objects with database outlines during editing:

- 1 Create a [script](#), [rules file](#), or [filter](#).
- 2 Select **Options**, and then **Associate outline**.
- 3 In the **Associate Outline** dialog box, navigate to the database that contains the outline that you want to associate with the object.
- 4 Select the database, and click **OK**.

In the script editors, from the outline tree, you can [search for members](#) and [insert dimensions and members](#). Within Data Prep Editor, you can select dimensions and members from dialog boxes.

Related Information

- [“Associate Outline Dialog Box” on page 484](#)
- [“Finding Members in Editors” on page 182](#)
- [“Inserting Dimension and Member Names into Scripts” on page 340](#)

Executing Report Scripts

After you create and save a report script, you must execute the script to generate the report. To check syntax before executing a report script, open the script in Report Script Editor and click the Check Syntax button.

To work in the console as a report script processes, you can execute the report script in the background. When you execute a report script in the background, you can check its status and view the generated report from the [Background Process Status](#) window.

Note: When executing a report script that incorporates the WIDTH command, Administration Services sets the column width one character smaller and truncates the excess. For example, a script with WIDTH equal to 7 will set the displayed column width to 6. You must edit the script to compensate. This is a known issue.

You can specify whether Essbase always executes report scripts in the background or whether you are prompted each time you execute a script. For more information, see [“Setting Essbase Default Options” on page 97](#).

► To execute a report script:

1 Perform an action:

- From Enterprise View or a custom view, select the report script, right-click, and select **Execute**.
- [Open](#) or [create](#) the script, and click the **Execute** button.

Essbase displays the **Execute Report Script** dialog box.

- 2 If you are executing a script that is saved to the file system or is saved at the application level rather than at the database level, select the database against which to execute the report script.
- 3 To execute the report script in the background, select **Execute in the background**.
- 4 Select one or more destinations for the report (console, printer, or file).
- 5 Click **OK**.

Essbase runs the report script against the appropriate database. Errors and status messages are displayed in the Messages pane along the bottom of the console window. The report is sent to the selected destinations.

If you execute a report script in the background, an ID for the process is displayed. You can use the ID to [track the status](#) of the process. When the process is completed, you can view the report from the Background Process Status window.

Related Information

- [“Execute Report Script Dialog Box” on page 562](#)
- [“About Report Scripts” on page 363](#)

- [“Saving Reports” on page 367](#)
- [“Understanding Guidelines for Report Script Syntax” on page 364](#)
- [“Checking the Status of Background Processes” on page 306](#)
- [“Report Viewer Window” on page 633](#)

Related Commands

- export database (MaxL) in the *Oracle Essbase Technical Reference*
- runreport (ESSCMD) in the *Oracle Essbase Technical Reference*

Saving Reports

You can save reports from the Report Viewer window to another location. Reports are saved as text files with the .rpt extension and have the same [encoding](#) as the application from which they were generated.

You can also send a report directly to a file when you [execute the report script](#).

➤ To save a report to a file:

- 1 [Execute the report](#), and select **Console** as the destination.

The report is displayed in Report Viewer.

- 2 In the **Report Viewer** window, select **File**, then **Save as**.

- 3 In the **Save As** dialog box, navigate to the drive and folder where you want to save the report.

- 4 In the **File name** text box, enter a name for the file.

Reports are given a .rpt extension by default.

- 5 Click **OK**.

Essbase saves the report to the specified location.

- 6 If you want to open the saved report in Administration Services Console, choose **File**, then **Open**, and navigate to the file.

Related Information

- [“About Report Scripts” on page 363](#)
- [“Executing Report Scripts” on page 366](#)
- [“Printing Administration Services Console Windows” on page 41](#)
- [“About File Encoding and Locales” on page 117](#)
- [“Naming Files” on page 335](#)

Troubleshooting and Optimizing Report Scripts

Administration Services Console features a Messages pane that helps you troubleshoot report script errors. Errors are displayed in this pane when you [check syntax](#) in a script or when you execute a script.

If an error message indicates the line number containing the error, you can go directly to the line by right-clicking in the script and selecting Go to line. If an error message displays an Essbase error message number, you can use this number to look up information about the error, including possible solutions. To look up an error message number, see the *Oracle Essbase Error Message Reference*.

For information about report script syntax, commands, optimizing reports, guidelines, and examples for report commands, see the *Oracle Essbase Database Administrator's Guide*.

Related Information

- [“About Report Scripts” on page 363](#)
- [“About Report Script Editor” on page 364](#)

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About Linked Reporting Objects (LROs)

Related Information

- “Managing LROs” on page 370
- “Exporting LROs” on page 371
- “Importing LROs” on page 372
- “Limiting LRO File Sizes” on page 373
- “Linked Reporting Objects Window” on page 584

A linked reporting object (LRO) is an object that you associate with a specific data cell in an Essbase database; for example, a graphic file that more fully explains a cell value. LROs provide improved support for planning and reporting applications and can enhance data analysis capabilities by providing supplemental information about data. LROs can be linked files, brief cell notes, or URLs. For information about the different types of LROs, see the *Oracle Essbase Database Administrator's Guide*.

An LRO is created using Spreadsheet Add-in or Oracle Hyperion Smart View for Office, by selecting a data cell in the spreadsheet and attaching an LRO to that cell. Any number of objects can be linked to a cell. The objects are stored on Essbase Server where they are available to users with the appropriate permissions. For more information about how users work with LROs, see the *Spreadsheet Add-in User's Guide* or *Oracle Hyperion Smart View for Office User's Guide*. You can use the console to manage existing LROs.

Before you perform tasks related to LROs, be aware of these facts:

- Essbase uses the database index to locate and retrieve LROs. If you [clear data](#) from a database, the index is deleted, along with the LRO information. Before performing operations that remove LRO information from a database, export the LROs so that you can re-import them.

For more information, see [“Exporting LROs” on page 371](#) and [“Importing LROs” on page 372](#).

- If you restructure a database, the index and the LRO information are preserved.
- If you use Migration Wizard to migrate applications and databases across servers, LROs are not migrated with the applications and databases. You need to [export LROs](#) before migrating, and then [import LROs](#) after migration.
- Shared members do not share LROs. LROs are linked to specific member combinations, and shared members do not have identical member combinations. If you want a given LRO to be linked to shared members, you must link it to each shared member individually.

Managing LROs

You can view, edit, and delete existing linked reporting objects (LROs) for a database. You can filter your view based on selection criteria such as user name and last modification date. For example, you can view all objects that are older than a certain date or that belong to a certain user.

See the *Oracle Essbase Database Administrator's Guide* for information about permissions needed to manage LROs.

You cannot make changes to linked partitions from the Linked Reporting Objects window. For information about creating or changing linked partitions, see [“Creating Partitions” on page 397](#).

Note: Linked reporting objects do not apply to aggregate storage databases.

► To manage LROs for a database:

- 1 From Enterprise View or a custom view, select a database.
- 2 Under the database node, double-click the **Linked Reporting Objects** node.
- 3 In the **Linked Reporting Objects** window, specify filter criteria for the LROs that you want to view.

By default, the window contains all LROs modified on or before the current date.

4 Perform an action:

- To view the contents of an LRO, select the appropriate row and click **View**.
- To edit an LRO, select the appropriate row and click **Edit**.
- To delete an LRO from the Essbase Server, select the appropriate row and click **Delete**.
- To delete all LROs, go back to the **Linked Reporting Objects** node in Enterprise View, right-click, and select **Delete all linked reporting objects**.

Related Information

- [“About Linked Reporting Objects \(LROs\)” on page 369](#)
- [“Exporting LROs” on page 371](#)

- “Importing LROs” on page 372
- “Limiting LRO File Sizes” on page 373
- “Linked Reporting Objects Window” on page 584

Related Commands

- query database (MaxL) in the *Oracle Essbase Technical Reference*
- alter object (MaxL) in the *Oracle Essbase Technical Reference*
- drop object (MaxL) in the *Oracle Essbase Technical Reference*
- listlinkedobjects (ESSCMD) in the *Oracle Essbase Technical Reference*
- purgelinkedobjects (ESSCMD) in the *Oracle Essbase Technical Reference*

Exporting LROs

To prepare for backing up or clearing data, you can preserve linked reporting objects (LROs) by exporting them. LROs are not preserved when you clear data from a database, and they are not restored with databases that are restored from backups. To export LROs, you need Read permission for the database.

When you export LROs, you specify a directory to which to export LRO information. The LRO export directory contains the following:

- A text file with an .exp extension that contains LRO file locations, cell note text and URL text, and database index locations to use for importing to the correct data blocks
- LRO binary files (if the database from which LROs were exported contained file-type LROs)

Exported LROs can then be [imported](#) to another database.

➤ To export LROs:

- 1 From Enterprise View or a custom view, select a database.
- 2 Under the database node, right-click **Linked Reporting Objects** and select **Export linked reporting objects**.

Essbase opens the **Export LROs** dialog box.

- 3 Perform an action:

- To export LROs to a directory on Essbase Server:
 - a. Select **Essbase Server**.
 - b. In **LRO export directory**, specify the directory on the server to which you want to export LRO information.
- To export LROs to a directory on a client computer or network:
 - a. Select **Local file system**.

- b. In **LRO export directory**, specify the full path to the directory to which you want to export, or browse to the directory and click **Open**.

4 Click **OK**.

Related Information

- [“Export LROs Dialog Box” on page 564](#)
- [Importing LROs](#)
- [“About Linked Reporting Objects \(LROs\)” on page 369](#)
- [“Managing LROs” on page 370](#)

Related Commands

- `export lro` (MaxL) in the *Oracle Essbase Technical Reference*
- `import lro` (MaxL) in the *Oracle Essbase Technical Reference*

Importing LROs

To restore linked reporting objects (LROs) after you back up or clear a database, you import the LROs that you previously exported from the database. To import LROs, you need Write permissions for the database.

When you import LROs, you specify the directory that contains the LRO information that you want to import. This directory must exist from a previous export. The export directory contains an `.exp` file that contains LRO catalog information and individual attached LRO files.

► To import LROs to a database:

- 1 From Enterprise View or a custom view, select a database.
- 2 Under the database node, right-click **Linked Reporting Objects** and select **Import linked reporting objects**.

Essbase opens the **Import LROs** dialog box.

3 Perform an action:

- To import LROs from a directory on a local computer or network:
 - a. Select **Local file system directory**.
 - b. In the text box, specify the full path to the directory from which you want to import, or browse to the directory.
- To import LROs from a directory on Essbase Server:
 - a. Select **Essbase Server directory**.

Note: This option is available only if Essbase Server detects an export directory on the server.

- b. In **Essbase Server directory**, select the directory on the server from which you want to import LRO information.
- c. To delete the export directory after the import is completed, select **Delete LRO directory on server after import**.

4 Click **OK**.

Related Information

- [“Import LROs Dialog Box” on page 582](#)
- [“Exporting LROs” on page 371](#)
- [“About Linked Reporting Objects \(LROs\)” on page 369](#)
- [“Managing LROs” on page 370](#)

Related Commands

- `export lro (MaxL)` in the *Oracle Essbase Technical Reference*
- `import lro (MaxL)` in the *Oracle Essbase Technical Reference*

Limiting LRO File Sizes

Essbase stores linked reporting object (LRO) files on the Essbase Server. To prevent very large files from being stored on the server, you can limit the size of files that users can link to data cells. If you have Application Manager permissions, you can set the maximum LRO file size for an application. If a user attempts to link a file that is larger than the specified limit, an error message is returned.

The maximum file size applies only to linked files; it does not affect cell notes or URLs. To prevent users from attaching anything except very small files, enter 1. This setting prevents users from linking anything other than cell notes, URLs, and files less than 1 KB.

➤ To specify a maximum LRO file size for an application:

- 1 From Enterprise View or a custom view, select an application.
- 2 Right-click and select **Edit properties**.
- 3 In the **Application Properties** window, select the **General** tab.
- 4 For the **Max attachment file size** option, enter a value, in kilobytes, for the maximum LRO file size.
- 5 Click **Apply** to apply the setting.

Related Information

- [“Application Properties—General Tab” on page 475](#)
- [“About Linked Reporting Objects \(LROs\)” on page 369](#)
- [“Managing LROs” on page 370](#)
- [“Exporting LROs” on page 371](#)

- [“Importing LROs” on page 372](#)

Related Commands

- `alter application` (MaxL) in the *Oracle Essbase Technical Reference*
- `getappinfo` (ESSCMD) in the *Oracle Essbase Technical Reference*
- `getappstate` (ESSCMD) in the *Oracle Essbase Technical Reference*

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About MaxL Scripts

Related Information

- “About MaxL Script Editor” on page 376
- “Using the MaxL Shell” on page 377
- “Using MaxL Data Definition Language” in the *Oracle Essbase Database Administrator's Guide*

- MaxL DDL Statements

MaxL is the multidimensional database definition language (DDL) for Essbase Server. Using MaxL, you can easily automate administrative and query operations on Essbase Server.

A MaxL script contains a login statement and a sequence of MaxL statements, each terminated by a semicolon. If you use MaxL Script Editor to execute a MaxL script, the login statement is optional; you can select the Essbase Server that you want to connect to from the editor. Most MaxL statements begin with a verb and consist of grammatical sequences of keywords and variables. MaxL Script Editor [color-codes](#) the elements of the MaxL syntax and provides an [auto-complete feature](#) that helps you build statements as you type. For detailed information about MaxL syntax, see the MaxL section in the *Oracle Essbase Technical Reference*.

You can write MaxL scripts in MaxL Script Editor or in an external text editor. You can open existing scripts and modify or execute them from MaxL Script Editor. You cannot save MaxL scripts as Essbase objects on Essbase Server; therefore, MaxL scripts are not displayed in Enterprise View. You can, however, enable other users to access MaxL scripts by saving them to the middle-tier Essbase Administration Server. You can also save MaxL scripts as text files on a client computer or on a network, and you can open and manage the files in MaxL Script Editor. See [“Saving MaxL and MDX Scripts” on page 385](#) for instructions.

You do not have to save MaxL scripts in order to execute MaxL statements. You can interactively type, execute, and clear MaxL statements from within the editor to perform one or more operations at a time.

About MaxL Script Editor

To open MaxL Script Editor, from the console menu bar, select **File**, then **Editors**, and then **MaxL Script Editor**.

To open an existing MaxL script, see [“Opening MaxL and MDX Scripts” on page 378](#).

MaxL Script Editor features a text editing window, customized menus, a toolbar, a shortcut menu, color-coding and auto-completion of MaxL syntax, and an output pane. You can customize the editor to suit your preferences.

You can open existing MaxL scripts in MaxL Script Editor. MaxL scripts can have any naming format. However, to be opened in MaxL Script Editor, scripts must have an `.mxl` or `.msh` extension. The default extension given to scripts created and saved in MaxL Script Editor is `.mxl`. To use a file that does not have an `.mxl` or `.msh` extension (for example, a `.txt` file), [reference the file](#).

You need not modify existing scripts to open and execute them from MaxL Script Editor. The editor understands MaxL Shell syntax, such as the login, logout, spool, and echo commands. The following MaxL Shell commands are incorporated into the functionality of the editor itself and therefore are ignored during script execution: set, shell, version, and exit.

For information about how connections to Essbase Servers are handled and for information about using the login and logout commands, see [“Connecting to Essbase Servers in MaxL and MDX Script Editors” on page 379](#).

Within MaxL Script Editor, you can perform the following MaxL-related tasks:

- [Create, edit, save, and execute](#) MaxL scripts to automate Essbase administration tasks.
- [Type, execute, and clear](#) MaxL statements interactively to perform one or more Essbase operations at a time.
- Use [auto-completion](#) to help you build MaxL statements quickly.
- [Customize color-coding](#) that is used to highlight syntax elements.
- [Define and update variables](#).
- [Reference files](#) to execute with a script.
- [Expand scripts](#) to display variable values and the contents of referenced files.
- [View, save, and print](#) the results of executing a script.

Related Information

- [“About MaxL Scripts” on page 375](#)
- [“Using MaxL Data Definition Language” in the *Oracle Essbase Database Administrator's Guide*](#)
- [MaxL DDL Statements](#)

Using the MaxL Shell

You can pass MaxL statements to Essbase Server using the MaxL Shell. The MaxL Shell command-line interface is installed with Essbase Administration Server in:

`EAS_HOME\server\bin\essmsh.exe` (`EAS_HOME/server/bin/essmsh` on UNIX)

where `EAS_HOME` is the directory to which Administration Services is installed.

The MaxL Shell is also installed with Essbase Server. For complete information about using the MaxL Shell, see the *Oracle Essbase Database Administrator's Guide*.

Note: Oracle recommends launching the MaxL Shell from the Essbase Client, not by launching `essmsh.exe` directly.

Creating MaxL and MDX Scripts

You can use MaxL Script Editor to create MaxL scripts and MDX Script Editor to create MDX scripts. From the editor, you can select an Essbase Server to run the script against, define and update variables, reference other files to execute with the script, and expand scripts to display variable values and the contents of referenced files.

➤ To create a MaxL or MDX script:

1 Perform an action:

- To create a MaxL script, select **File**, then **Editors**, and then **MaxL Script Editor**.

- To create an MDX script, select **File**, then **Editors**, and then **MDX Script Editor**.
- 2 From the title bar of the script editor window, select the Essbase Server against which to execute the statements in the script.
See [Connecting to Essbase Servers in MaxL and MDX Script Editors](#).
 - 3 Type the contents of the script, using the [auto-completion feature](#) if desired.
The contents of the script may simply be individual statements that you interactively type, execute, and clear from within the editor. You do not have to save a script in order to execute statements within it.
 - 4 **Optional:**
 - [Reference external files](#) for use in the current script
 - [Define and update variables](#)
 - [Expand scripts](#) to display variable values and the contents of referenced files
 - [Change color-coding settings](#)
 - 5 [Save](#) or [execute](#), or save and execute the script.

Related Information

- [“About MaxL Scripts” on page 375](#)
- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Scripts” on page 391](#)
- [“About MDX Script Editor” on page 392](#)
- [“Opening MaxL and MDX Scripts” on page 378](#)

Opening MaxL and MDX Scripts

You can open, edit, and execute existing MaxL scripts and MDX scripts in the appropriate script editor. You need not modify existing scripts in order to execute them from the script editor.

MaxL Script Editor recognizes files with the `.mxl` or `.msh` extension. MDX Script Editor recognizes files with the `.mdx` extension.

Because MaxL and MDX scripts are not Essbase Server objects, you cannot open scripts from Enterprise View. You can open scripts that are saved on a client computer or on a network, or that are saved on Essbase Administration Server as a shared file. See [“Saving MaxL and MDX Scripts” on page 385](#).

► To open a MaxL script or an MDX script that is saved on Essbase Administration Server:

- 1 Select **File**, then **Open**.
- 2 In **Open**, navigate to the location of the script.

You can open files from the file system, from the Essbase Server machine, or from Essbase Administration Server.

3 Select the script and click **OK**.

The script opens in the appropriate script editor.

Related Information

- [“Creating MaxL and MDX Scripts” on page 377](#)
- [“About MaxL Scripts” on page 375](#)
- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Scripts” on page 391](#)
- [“About MDX Script Editor” on page 392](#)
- [“About File Encoding and Locales” on page 117](#)

Guidelines for MaxL and MDX Syntax

When you use MaxL Script Editor or MDX Script Editor to create scripts, you need to follow proper syntax rules.

For information about MaxL syntax, see the MaxL section of the *Oracle Essbase Technical Reference*.

For information about MDX syntax, see the MDX section of the *Oracle Essbase Technical Reference*.

Related Information

- [“About MaxL Scripts” on page 375](#)
- [“About MaxL Script Editor” on page 376](#)
- [“Using MaxL Data Definition Language” in the *Oracle Essbase Database Administrator's Guide*](#)
- [“About MDX Scripts” on page 391](#)
- [“About MDX Script Editor” on page 392](#)
- [“Writing MDX Queries” in the *Oracle Essbase Database Administrator's Guide*](#)

Connecting to Essbase Servers in MaxL and MDX Script Editors

When you open MaxL Script Editor or MDX Script Editor, the Essbase Servers that appear in your Enterprise View are displayed in a drop-down list on the toolbar. When you execute MaxL or MDX statements from the editor, the statements are executed against the Essbase Server that you select from the drop-down list. If you were not connected to the selected Essbase Server when you opened the script editor, you are connected to it when you execute the script. The connection remains intact until you [disconnect](#).

If you execute a MaxL script that contains a login statement to the Essbase Server that is selected in the drop-down list, and if you are already connected to the selected Essbase Server, the existing connection is used. If you are not yet connected, a connection is established. If the script also contains a logout statement, that statement is ignored; the connection remains intact until you [disconnect](#).

For MaxL scripts, if you want to send statements to multiple Essbase Servers, you can use the login and logout MaxL statements in combination with an Essbase Server selection from the drop-down list. For example, assume that you open MaxL Script Editor, select Server1 from the Essbase Server drop-down list, and open the following script:

```
display application; login user1 'password' on Server2; display  
application; display database; logout; display database;
```

The statements are executed as follows:

1. The first statement is executed on Server1.
2. The information in the second statement (**login user1 'password' on Server2**) is stored for use with the third statement.
3. The third statement is sent, with the connection information from the second statement, to Server2. If the connection is successful, the **display application** statement is executed against Server2. If the connection is not successful, an error is returned.
4. The fourth statement is sent, with the connection information from the second statement, to Server2. If the connection is successful, the **display database** statement is executed against Server2. If the connection is not successful, an error is returned.
5. The stored connection information from the second statement is removed.
6. The last statement is executed on Server1.

Note: A login statement by itself does not immediately establish a connection with Essbase Server. When MaxL Script Editor encounters a login statement, it stores the connection information contained in the statement for use with subsequent statements. Therefore, if a login statement contains invalid information (for example, an incorrect password), no error is returned until a following statement is encountered. In addition, a logout statement with no preceding login statement is ignored by the editor. A logout statement by itself does not disconnect a user from Essbase Server.

Related Information

- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Script Editor” on page 392](#)
- [“About Essbase Connections and Ports” on page 82](#)
- [“Executing MaxL and MDX Scripts” on page 387](#)

Using Auto-Completion in MaxL and MDX Script Editors

MaxL Script Editor and MDX Script Editor provide an auto-completion feature that helps you build MaxL and MDX statements interactively as you type. When you start typing text in the editor, a list of possible keywords is displayed. After you select the appropriate keyword and press the spacebar to continue, successive drop-down lists are displayed.

For example, in MaxL Script Editor, if you type “d” in the script area, you are prompted to select from a list of possible MaxL keywords: "display" and "drop." If you select "display," press Enter, and then press the spacebar, you are prompted to select from a list of additional keywords for "display" (for example, "application"). If you select "application," press Enter, and then press the spacebar, you are prompted to select from a list of possible values for "display application" (a list of all applications on Essbase Server).

For MaxL scripts only, you can also enable GUI help with the auto-completion feature. When GUI help is enabled with auto-completion, MaxL Script Editor launches the appropriate GUI component for the MaxL statement that you are typing. For example, if you are typing the **create filter** statement, Filter Editor is launched to help you complete the filter creation statement in a GUI environment.

Related Information

- [Options Dialog - MaxL Script Editor Tab](#)
- [“About MaxL Scripts” on page 375](#)
- [“About MaxL Script Editor” on page 376](#)
- [“Customizing Script Color-Coding” on page 335](#)
- [Overview of MaxL and MDX](#)

➤ To use auto-completion in MaxL Script Editor or MDX Script Editor:

- 1 [Open](#) or [create](#) the script.
- 2 Right-click and select **Set options**.
- 3 In the **Options** dialog box, select the **MaxL Editor** tab or the **MDX Editor** tab, as appropriate.
- 4 In the **Editor** option group, select **Enable auto-completion**.
- 5 For MaxL scripts, if you want to use GUI components to help you write MaxL statements, select **Enable GUI help with auto-completion**.
- 6 Click **Apply** to save the settings.
- 7 Click **Close** to close the dialog box.
- 8 In the script editor, type text and select the appropriate keywords from the drop-down lists, as necessary. For MaxL scripts, you can also select actual values, such as an application or database name.

To display subsequent drop-down lists, press the spacebar between words. To close a list, press the **Esc** key.

- 9 For MaxL scripts, if a GUI component is launched as you type, enter the appropriate information and close the component.

The information that you entered is translated into a corresponding MaxL statement.

Adding Comments to MaxL and MDX Scripts

You can use C-style comments to annotate MaxL scripts and MDX scripts. Essbase Server ignores the comments when it executes the script.

► To add a comment to a MaxL script or an MDX script:

- 1 [Open](#) or [create](#) a script.
- 2 Click where you want to add a comment.
- 3 Start the comment with `/*` and end the comment with `*/`. Enter the text of the comment in between. For example:

```
/*  
This is a MaxL script comment that spans two lines.    */
```

Comments are color-coded in MaxL Script Editor and MDX Script Editor.

Related Information

- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Script Editor” on page 392](#)

Defining Variables in MaxL and MDX Scripts

In MaxL and MDX scripts, you can use variables as placeholders for any data that is subject to change or that you reference frequently; for example, computer names, user names, and passwords. Using variables eliminates the need to create customized scripts for each user, database, or host.

Variables can be environment variables (for example, `$ARBORPATH`, which references the directory in which Essbase is installed) or positional parameters (for example, `$1`, `$2`). In a script, a variable always begins with a `$` (dollar sign).

Before executing a script or individual statement that contains variables, you need to define each variable in MaxL Script Editor or MDX Script Editor. Variable definitions remain intact until you close the editor window. Variables are not saved, so you need to define variables each time you need them for a script. You can update variable definitions as necessary.

► To define variables in MaxL Script Editor or MDX Script Editor:

- 1 [Open](#) or [create](#) a script.
- 2 Right-click and select **Set variables**.
- 3 In the **Script Variables** dialog box, click **New**.
- 4 Enter the variable and the value of the variable, and press **Enter**.

You do not need to include the dollar sign (\$) in the variable definition. For example, a variable such as *ARBORPATH* and a value such as *EPM_ORACLE_HOME\products\Essbase\EssbaseClient* is acceptable.

- 5 To update a variable, click in the appropriate **Value** field, and update the value.
- 6 Following the steps above, continue defining all variables used in the script.
- 7 To delete a variable, select the row containing the variable, and click **Delete**.
- 8 Click **OK** to save the variable definitions and close the dialog box.
- 9 To see the variable definitions in the script, [expand the script](#).
- 10 To ensure that you are prompted to define undefined variables when you execute a script, see [Resolving Undefined Variables](#).

Related Information

- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Script Editor” on page 392](#)
- [“Script Variables Dialog Box” on page 636](#)
- [“Expanding MaxL and MDX Scripts” on page 384](#)
- [“Resolving Undefined Variables” on page 383](#)

Resolving Undefined Variables

Before executing a MaxL script or an MDX script that contains variables, you must define each variable in MaxL Script Editor or MDX Script Editor. You can specify how undefined variables are resolved when you execute a script.

➤ To specify how undefined variables are resolved when you execute a MaxL or MDX script:

- 1 [Open](#) or [create](#) a script.
- 2 Right-click and select **Set options**.
- 3 In the **Options** dialog box, select **MaxL Editor** or **MDX Editor**, as appropriate.
- 4 In the **Undefined variables** option group, select an option for resolving undefined variables.
- 5 Click **Apply** to save the settings.
- 6 Click **Close**.

Related Information

- [Options Dialog - MaxL Script Editor Tab](#)
- [About MaxL Script Editor](#)
- [Options Dialog - MDX Script Editor Tab](#)
- [“Defining Variables in MaxL and MDX Scripts” on page 382](#)

Referencing Files in MaxL Scripts

Rather than executing multiple operations from one script, you can save individual automated tasks in individual MaxL scripts. Then, to perform a comprehensive set of tasks from the current script, you reference individual scripts as needed.

You can reference files that have any extension, for example, .mxl or .msh.

► To place a reference to an external file in a MaxL script:

- 1 **Open** or **create** a script.
- 2 Place the cursor where you want to insert the reference to the file.
- 3 Right-click and select **Reference script file**.
- 4 In **Open**, navigate to the drive and folder that contain the file.
- 5 Select the file and click **OK**.

A reference to the file is inserted in the current script, for example:

```
msh D:\MaxL\scripts\creatusr.mxl;
```

When you execute the script, the contents of the referenced file are processed.

Note: If you type a reference to a file manually instead of selecting it from the **Open** dialog box, enclose in double quotes any reference that includes spaces in directory or file names, for example: `msh "c:\my documents\this file.mxl"`

- 6 If, while in the current script, you want to view the contents of the referenced file, **expand the script**.

Related Information

- [“About MaxL Scripts” on page 375](#)
- [“About MaxL Script Editor” on page 376](#)
- [Opening MaxL Scripts](#)
- [Expanding MaxL Scripts](#)
- [Executing MaxL Scripts](#)

Expanding MaxL and MDX Scripts

A MaxL script or MDX script may contain variables; if you want to see the variable definitions, you expand the script. The desired information is displayed in the body of the script.

MaxL scripts may contain references to other MaxL files. To see the contents of referenced files, you expand the script. The desired information is displayed in the body of the script. Any changes that you make to the contents of an expanded file within the script editor do not affect the actual file.

➤ To expand a MaxL script or an MDX script:

- 1 **Open** or **create** a script.
- 2 Right-click and select **Expand script**.

All variables in the script are replaced with their defined values, and all referenced files are expanded.

Related Information

- [“Defining Variables in MaxL and MDX Scripts” on page 382](#)
- [“Referencing Files in MaxL Scripts” on page 384](#)
- [“About MaxL Scripts” on page 375](#)
- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Scripts” on page 391](#)
- [“About MDX Script Editor” on page 392](#)

Clearing MaxL and MDX Script Editors

You can clear the contents of MaxL Script Editor and MDX Script Editor without closing the editor.

- To clear the MaxL Script Editor or MDX Script Editor window, in the script area, right-click and select **Clear**.
- To clear only the Results pane, in the script area, right-click and select **Clear results**.

Related Information

- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Script Editor” on page 392](#)

Saving MaxL and MDX Scripts

You cannot save MaxL scripts and MDX scripts as Essbase objects on Essbase Server; therefore, these scripts are not displayed in Enterprise View. You can, however, enable other users to access a MaxL or MDX script by saving the script to the middle-tier Essbase Administration Server. You can also save MaxL and MDX scripts as text files on a client computer or on a network, and you can open and manage the files in the appropriate script editor.

You do not have to save a script in order to execute statements in the editor.

If you want to save the results of a MaxL script, see [“Saving MaxL and MDX Results” on page 389](#).

➤ To save a MaxL script or an MDX script:

- 1 **Create** or **open** the script.

2 Select **File**, then **Save script**.

3 Perform an action:

- To save the script as an object on Essbase Administration Server:
 - a. In **Save As**, select **Essbase Administration Server**.
 - b. In **Name**, enter a name for the script.
MaxL scripts are given an .mxl extension by default.
MDX scripts are given an .mdx extension by default.
 - c. **Optional:** To allow other users to open, edit, and save the script, select **Shared**.
 - d. **Optional:** To specify UTF-8 encoding, select **UTF-8**.
 - e. Click **OK**.
- To save the script locally or on a network:
 - a. In **Save As**, select **File System**.
 - b. Navigate to the drive and folder where you want to save the script.
 - c. In **File name**, enter a name for the script.
MaxL scripts are given an .mxl extension by default.
MDX scripts are given an .mdx extension by default.
 - d. **Optional:** To specify UTF-8 encoding, select **UTF-8**.
 - e. Click **OK**.

Related Information

- [Saving MaxL and MDX Results](#)
- [“Executing MaxL and MDX Scripts” on page 387](#)
- [“Save As Dialog Box” on page 635](#)
- [“Naming Files” on page 335](#)
- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Script Editor” on page 392](#)
- [Printing MaxL and MDX Scripts and Results](#)
- [“About File Encoding and Locales” on page 117](#)

Setting MaxL and MDX Execution Options

When you execute MaxL or MDX scripts or statements, syntax is checked and statements are passed to Essbase Server. You can configure how errors are handled when you execute a statement.

Related Information

- [Options Dialog - MaxL Script Editor Tab](#)
- [Options Dialog - MDX Script Editor Tab](#)
- [“Viewing MaxL and MDX Results” on page 388](#)
- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Script Editor” on page 392](#)

➤ To set execution options for MaxL Script Editor or MDX Script Editor:

- 1 [Open](#) or [create](#) the script.
- 2 Right-click and select **Set options**.
- 3 In the **Options** dialog box, select the **MaxL Editor** tab or the **MDX Editor** tab, as appropriate.
- 4 In the **Errors during execution** option group, select an execution option.
- 5 Click **Apply** to save the settings.
- 6 Click **Close** to close the dialog box.

Executing MaxL and MDX Scripts

When you execute a MaxL or MDX statement or script, Essbase Administration Server connects you to the Essbase Server that you are running the statement against. If you are executing a script that includes a login statement, Essbase Administration Server connects you to the Essbase Server that is specified in the login statement. Otherwise, you select the appropriate Essbase Server from within the script editor. After the script or statement is executed, Essbase Administration Server disconnects you from the Essbase Server. If you have other open sessions on the Essbase Server, the other connections remain intact.

When you execute MaxL or MDX scripts or statements, the results are displayed in the Results pane of the script editor. All results, informational messages, error messages, and warning messages are displayed in this pane. In the Options dialog box (MaxL Script Editor tab or MDX Script Editor tab), you can specify whether results for each statement are displayed on one Results tab or on multiple tabs and whether each statement is displayed along with its results.

➤ To execute a MaxL script or an MDX script:

- 1 [Open](#) or [create](#) a script.
- 2 From the server drop-down list on the toolbar, select the Essbase Server to execute the script against.

The list contains only Essbase Servers that are displayed in your Enterprise View. For more information about connections, see [Connecting to Essbase Servers in MaxL and MDX Script Editors](#).
- 3 Specify how errors should be handled during execution. See [Setting MaxL and MDX Execution Options](#).
- 4 On the **Results** tab, specify how you want results to be displayed. See [Viewing MaxL and MDX Results](#).

- 5 If the script contains variables, specify how undefined variables are resolved during execution. See [Resolving Undefined Variables](#).
- 6 To execute the entire script, right-click and select **Execute**.
- 7 To execute only part of the script, highlight the statement or statements that you want to execute, right-click, and select **Execute**.

The script executes against the specified Essbase Server, and the [results](#) are displayed in the **Results** pane.

Related Information

- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Script Editor” on page 392](#)
- [“Connecting to Essbase Servers in MaxL and MDX Script Editors” on page 379](#)
- [“Setting MaxL and MDX Execution Options” on page 386](#)
- [“Viewing MaxL and MDX Results” on page 388](#)

Viewing MaxL and MDX Results

When you execute statements in MaxL Script Editor and MDX Script Editor, the output, informational messages, error messages, and warning messages generated are displayed by default in the Results pane at the bottom of the editor. You can configure how results are displayed.

► To specify options for the Results pane and to view MaxL and MDX results:

- 1 [Open](#) or [create](#) a script.
- 2 Right-click and select **Set options**.
- 3 In **Options**, select **MaxL Editor** or **MDX Editor**, as appropriate.
- 4 In **Results panel**, select one or more options for displaying results.
- 5 Click **OK**.
- 6 Execute the script.

The results of the execution are displayed in the Results pane at the bottom of script editor.

- 7 If desired, [save the results](#).

Related Information

- [Options Dialog - MaxL Script Editor Tab](#)
- [Options Dialog - MDX Script Editor Tab](#)
- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Script Editor” on page 392](#)
- [“Executing MaxL and MDX Scripts” on page 387](#)

Saving MaxL and MDX Results

You can save the results of a MaxL or MDX session as an HTML file on a client or server computer. The HTML file includes both script contents and results.

For MaxL scripts, you can also use the MaxL Shell spool command within a script to send output to a file.

► To save the results of a MaxL script or an MDX script:

- 1 **Open** or **create** a script.
- 2 Enable the **Echo statements** MaxL execution option to save statements and their results. For instructions, see [Setting MaxL and MDX Execution Options](#).
- 3 **Execute** the script.
- 4 Select **File**, then **Save script results**.
- 5 In **Save As**, navigate to the drive and folder where you want to save the results.
- 6 In **File name**, enter a name for the file.
Results are saved in HTML.
- 7 Click **OK**.

Related Information

- [“Setting MaxL and MDX Execution Options” on page 386](#)
- [“Executing MaxL and MDX Scripts” on page 387](#)
- [Saving MaxL and MDX Scripts](#)
- [Printing MaxL and MDX Scripts and Results](#)
- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Script Editor” on page 392](#)

Copying MaxL and MDX Scripts

Because MaxL scripts and MDX scripts are stored by the operating system but are not saved as Essbase Server objects, use the file system to copy scripts from one location to another.

Related Information

- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Script Editor” on page 392](#)

Renaming MaxL and MDX Scripts

Because MaxL scripts and MDX scripts are stored by the operating system but are not saved as Essbase Server objects, use the file system to rename scripts.

Related Information

- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Script Editor” on page 392](#)

Deleting MaxL and MDX Scripts

Because MaxL scripts and MDX scripts are stored by the operating system but are not saved as Essbase Server objects, use the file system to delete scripts that you no longer use.

Related Information

- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Script Editor” on page 392](#)

Printing MaxL and MDX Scripts and Results

You can print the contents and results of a MaxL script or an MDX script.

► To print the contents and results of a MaxL script or an MDX script:

- 1 [Open](#) or [create](#) the script.
- 2 [Execute](#) the script.
- 3 Select **File**, then **Print script results**.
- 4 In the **Print** dialog box, specify any print options that are available with your default printer.
- 5 Click **OK**.

Related Information

- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Script Editor” on page 392](#)
- [“Executing MaxL and MDX Scripts” on page 387](#)
- [“Viewing MaxL and MDX Results” on page 388](#)
- [“Saving MaxL and MDX Results” on page 389](#)

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About MDX Scripts

MDX is an expressive, language-based data analysis mechanism to Essbase databases. The MDX language can greatly increase the flexibility of ad hoc analysis and can use a single pass to perform queries that require multiple passes in previous query interfaces. MDX is a joint specification of the XML for Analysis founding members. For more information about XML for Analysis, please visit <http://www.xmla.org>.

An MDX script contains one or more query statements, each terminated by a semicolon. Statements are passed from the editor to the Essbase Server that you choose to connect. MDX Script Editor **color-codes** the elements of the MDX syntax and provides an **auto-complete feature** that helps you build statements as you type. Results are returned in a grid within the editor window. For detailed information about MDX syntax, see the MDX section in the *Oracle Essbase Technical Reference*.

You can write MDX scripts in MDX Script Editor or in an external text editor. You can open scripts and modify or execute them from MDX Script Editor. You cannot save MDX scripts as Essbase objects on Essbase Server; therefore, MDX scripts are not displayed in Enterprise View. You can, however, enable other users to access MDX scripts by saving them to the middle-tier Essbase Administration Server. You can also save MDX scripts as text files on a client computer or on a network, and you can open and manage the files in MDX Script Editor. See “[Saving MaxL and MDX Scripts](#)” on page 385 for instructions.

You do not have to save MDX scripts in order to execute MDX statements. You can interactively type, execute, and clear MDX statements from within the editor to perform one or more operations at a time.

Related Information

- “[About MaxL Script Editor](#)” on page 376
- “Writing MDX Queries” in the *Oracle Essbase Database Administrator's Guide*

- MDX Functions

About MDX Script Editor

To open MDX Script Editor, from the console menu bar, select **File**, then **Editors**, and then **MDX Script Editor**.

MDX Script Editor features a text editing window, customized menus, a toolbar, a comprehensive right-click menu, color-coding and [auto-completion](#) of MDX syntax, and an output pane. You can customize the editor to suit your preferences.

MDX scripts can have any naming format. However, for an MDX script to be opened in MDX Script Editor, it must have an `.mdx` extension. You do not need to modify existing scripts in order to open and execute them from MDX Script Editor. The default extension given to scripts created and saved in MDX Script Editor is `.mdx`.

Within MDX Script Editor, you can perform the following tasks:

- [Create](#), [edit](#), [save](#), and [execute](#) MDX scripts to automate Essbase administration tasks.
- [Type](#), [execute](#), and [clear](#) MDX statements interactively to perform one or more operations at a time.
- Use [auto-completion](#) to help you build MDX statements quickly.
- Use the outline and function trees to [insert members](#) and [functions](#) in the script without having to type them manually.
- [Customize color-coding](#) that is used to highlight syntax elements.
- [Define and update variables](#).
- [Expand scripts](#) to display variable values.
- [View](#), [save](#), and [print](#) the results of executing a script.

Related Information

- [“About MDX Scripts” on page 391](#)
- “Writing MDX Queries” in the *Oracle Essbase Database Administrator's Guide*
- MDX Functions

Inserting MDX Functions in MDX Scripts

MDX Script Editor displays a tree view of MDX functions. When you select a function from the tree, you insert the function and its argument template into the open script without having to type it manually. You can then change the arguments, as appropriate.

Note: The functions displayed in the tree may be different depending on the Essbase Server release level to which you are connected.

➤ To insert an MDX function into an MDX script:

1 **Open or create a script.**

In the lower left pane of the script editor window, MDX functions are displayed in a tree view.

2 **Perform an action:**

- To view the list by category, click the **Categorical** tab.
- To view the list in alphabetical order, click the **Alphabetical** tab.

3 **In the script, click where you want to insert the function and its argument template.**

4 **In the functions tree, double-click the function that you want to insert.**

Essbase inserts the function at the cursor position in the script. Replace the argument template with the appropriate dimension or member from the outline tree. See [Inserting Dimension and Member Names in MDX Scripts](#).

Related Information

- [“Inserting Dimension and Member Names in MDX Scripts” on page 393](#)
- [“Using Auto-Completion in MaxL and MDX Script Editors” on page 381](#)
- [“Customizing Script Color-Coding” on page 335](#)

Inserting Dimension and Member Names in MDX Scripts

After you select an application and database to associate with an MDX script, you can select dimension and member names directly from an outline tree to insert them in a script. You use the outline tree in conjunction with the MDX function tree to build MDX statements quickly.

You can change the outline tree view to display alias names instead of member names, and you can search the tree for specific members.

For databases allowing [duplicate member names](#), if you choose to enter a member name instead of inserting it from the outline tree, you must enter the qualified member name for any duplicate member in order to differentiate the members. You can view the qualified member name for a duplicate member in the Member Properties dialog box in Outline Viewer. If you insert member names as described in this topic, the qualified member name is inserted automatically.

➤ To insert dimension and member names in an MDX script:

1 **Open or create a script.**

2 **If the outline tree in the editor window is not populated, [associate an outline](#) with the script.**

3 **In the outline tree, complete one or more of the following tasks to find the member that you want to insert in the script:**

- To expand all members under a dimension, select the dimension, right-click, and select **Expand to descendants**.

- To find a member in the outline tree, select a dimension or member, right-click, and select [Find members](#). On the **Find Results** tab, double-click the name to locate the member on the outline tree.
- To display and insert alias names instead of member names, select **Use aliases** and select an alias table.

4 Select the dimension, member, or alias that you want to insert into the script, right-click, and select **Insert member**.

Note: To insert level 0 members, double-click the member.

The name is inserted in the script at the cursor position. If the outline tree shows aliases instead of member names, Essbase inserts the alias in the script instead of the member name.

In outlines that allow duplicate member names, if you insert a [duplicate member name](#), the qualified member name is inserted in the script. For example, if the outline contains two members named New York, if you insert either New York member, the qualified member name is inserted in the script.

Related Information

- [“Associating Outlines with Essbase Objects That Are Being Edited” on page 365](#)
- [“Finding Members in Editors” on page 182](#)
- [“Inserting MDX Functions in MDX Scripts” on page 392](#)
- [“Using Auto-Completion in MaxL and MDX Script Editors” on page 381](#)
- [“Customizing Script Color-Coding” on page 335](#)

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About Partitions

Partitions enable you to access data that is shared between databases that may span applications or servers. When you create a partition, you specify which cells are part of the partition and how the source and target cells map to each other. You also specify the type of partition to use and the connection information for the source and target databases. When you create and save a partition, the partition definition is saved to two different `.ddb` files. One `.ddb` file is stored in the source database directory (`ARBORPATH\app\appname\sourcedbname`) and the other `.ddb` file is stored in the target database directory (`ARBORPATH\app\appname\targetdbname`).

How you access the partitioned data depends on the type of partition you use.

- Replicated partitions enable you to copy data inside the partitioned area from one database to another.
- Transparent partitions enable you to view data that is stored in two different databases as if it is all stored in one database. For example, when you drill down in a spreadsheet to view data for different member combinations, some of the data is stored locally, but the data inside of the partitioned area is stored remotely.
- Linked partitions enable you to specify one or more member combinations in one database to use as a link to the same combinations in another database. From a spreadsheet, you can drill down on one of the partitioned member combinations to launch the Linked Objects Browser. From there, you can open another spreadsheet; that spreadsheet is connected to the other database and displays the data cells for the corresponding member combination.

Two sample partitioning applications are provided with the Essbase Server software: Samppart and Sampeast. If these sample applications have been installed on Essbase Server, they appear in [Enterprise View](#) in Administration Services Console.

Related Information

- [“Viewing Partitions in Enterprise View” on page 396](#)
- [“Creating Partitions” on page 397](#)
- [“Repairing Partitions” on page 409](#)
- [“Exporting Partition Definitions” on page 411](#)
- [“Importing Partition Definitions” on page 411](#)
- “Designing Partitioned Applications” in the *Oracle Essbase Database Administrator's Guide*
- “Creating and Maintaining Partitions” in the *Oracle Essbase Database Administrator's Guide*

Viewing Partitions in Enterprise View

Enterprise View displays partitions under the Partitions node. A partition is displayed under the Source Databases node or the Target Databases node according to its relation to the database as either the source database or the target database for the partition.

If you are viewing a database that is the data source for a partition, you can view information about that partition and its data target under the Target Databases node. The partition name contains the name of the Essbase Server, application, and database on which the data target resides followed by the type of partition (transparent, replicated, or linked).

If you are viewing a database that is the data target for a partition, you can view information about the partition and its data source under the Source Databases node. The partition name contains the name of the Essbase Server, application, and database on which the data source resides followed by the type of partition (transparent, replicated, or linked).

For example, two databases, data1 and data2 are partitioned; data1 is the source database and data2 is the target database. Under the data1 database node, under the Partition node, the

partition is displayed under Target Databases. Under the data2 node, under the Partition node, the partition is displayed under Source Databases.

Related Information

- “Data Sources and Data Targets” in the *Oracle Essbase Database Administrator's Guide*
- [“About Partitions” on page 395](#)
- [“Creating Partitions” on page 397](#)
- [“Repairing Partitions” on page 409](#)

Creating Partitions

Partitions enable you to access data that is shared between databases that may span applications or servers. How you access the data depends on the type of partition that you use. See [“About Partitions” on page 395](#) for more information.

When you create a partition, you must specify all requested information on the Type, Connection, Areas, and Mappings tabs before you can validate and save the partition.

➤ To create a partition:

- 1 **Decide how to design the partition** (for details, see *Oracle Essbase Database Administrator's Guide*).
- 2 [Open the Create Partition or Edit Partition window.](#)
- 3 [Specify the partition type and settings.](#)
- 4 [Specify connection information.](#)
- 5 [Define partitioned areas.](#)
- 6 **Optional:** [Define area-specific member mappings .](#)
- 7 [Define global member mappings.](#)
- 8 [Validate the partition.](#)
- 9 [Save the partition.](#)
- 10 [If you are creating a replicated partition, replicate data.](#)

Related Information

- “Designing Partitioned Applications” in the *Oracle Essbase Database Administrator's Guide*
- [“Create and Edit Partition Windows” on page 501](#)
- [“Exporting Partition Definitions” on page 411](#)
- [“Importing Partition Definitions” on page 411](#)

Related Commands

- `create partition (MaxL)` in the *Oracle Essbase Technical Reference*
- `display partition (MaxL)` in the *Oracle Essbase Technical Reference*

- refresh replicated partition (MaxL) in the *Oracle Essbase Technical Reference*
- validatepartitiondeffile (ESSCMD) in the *Oracle Essbase Technical Reference*

Opening the Create Partition or Edit Partition Window

Open the Create Partition window to create replicated, transparent, or linked partitions. Open the Edit Partition window to edit replicated, transparent, or linked partitions.

To validate or save a partition, you must have Database Manager permissions for the source and target databases of the partition.

To open a partition that has been saved locally using Administration Services, [import the partition](#). You cannot open partitions that were saved locally using Application Manager.

► To open the Create Partition window:

- 1 From Enterprise View or a custom view, select a database.
- 2 Under the database node, right-click the **Partitions** node, and select **Create new partition**.

Essbase displays the **Create Partition** window.

- 3 Follow the [Creating Partitions](#) procedure to continue to create a partition.

► To open an existing partition that has been saved to Essbase Server:

- 1 From Enterprise View or a custom view, find the partitioned database.
- 2 Under the **Partitions** node under the partitioned database, right-click a partition definition and select **Edit partition**.

Note: If you do not see the **Edit partition** menu item, you need to first [repair the partition](#) before it can be opened for editing.

The **Edit Partition** window is displayed.

- 3 Make the necessary edits, and then [validate](#) and [save](#) the partition.

► To open an existing partition that has been saved to Essbase Administration Server:

- 1 Select **File**, then **Open**.
- 2 In the **Open** dialog box, select the **Essbase Administration Server** tab.
- 3 Select a partition, and click **OK**.

The **Edit Partition** window is displayed.

- 4 Make the necessary edits, and then [validate](#) and [save](#) the partition.

Related Information

- [“Viewing Partitions in Enterprise View” on page 396](#)

- [“Create and Edit Partition Windows” on page 501](#)
- [“Creating Partitions” on page 397](#)
- [“About Partitions” on page 395](#)
- [“Repairing Partitions” on page 409](#)
- “Designing Partitioned Applications” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- create partition (MaxL) in the *Oracle Essbase Technical Reference*
- display partition (MaxL) in the *Oracle Essbase Technical Reference*

Specifying the Partition Type and Settings

Essbase provides three types of partitions: replicated, transparent, and linked. For more information about deciding which type of partition to create, see [“About Partitions” on page 395](#).

If you are editing a partition, you cannot change the partition type.

Note: Replicated partitions do not apply to aggregate storage applications. For transparent partitions, aggregate storage databases can only be the source database in the partition.

► To specify the partition type and related settings:

- 1 [Open the Create or Edit Partition window.](#)
- 2 **Select Type.**
- 3 Select the [type of partition](#) to create a partition.
- 4 Select the direction in which you want to track outline changes. This setting applies only to [outline synchronization](#).
- 5 For replicated partitions, decide whether to allow users to update the target partition.
- 6 For linked partitions, enter the Default source login information.
- 7 Select **Connection** to [continue defining the partition](#) if you are creating a partition.
- 8 Either [validate](#) and [save](#) the partition, or select another tab and continue editing if you are editing a partition.

Related Information

- [“About Partitions” on page 395](#)
- [“Create or Edit Partition Window—Type Tab” on page 505](#)
- “Partition Types” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- create partition (MaxL) in the *Oracle Essbase Technical Reference*
- display partition (MaxL) in the *Oracle Essbase Technical Reference*

Specifying Connection Information for Partitions

You must specify a user name and password for Essbase to use when communicating between the source database and target database in a partition. Essbase uses the user name and password to transfer data between the two databases and to synchronize outlines. Local security filters apply to prevent users from seeing privileged data.

► To specify connection information for partitions:

- 1 [Open the Create or Edit Partition window.](#)
- 2 **Select Connection.**
- 3 **In the Data Source option group:**
 - Select the Essbase Server, application, and database of the data source.
 - Enter the user name and password to use as the default login to the data source.
- 4 **In the Data Target option group:**
 - Select the Essbase Server, application, and database of the data target.
 - Enter the user name and password to use as the default login to the data target.
- 5 **Select Areas to [continue defining the partition](#) if you are creating a partition.**
- 6 Either [validate](#) and [save](#) the partition, or select another tab and continue editing if you are editing a partition.

Related Information

- [“Create or Edit Partition Window—Connection Tab” on page 503](#)
- [“Repairing Partitions” on page 409](#)

Related Commands

- create partition (MaxL) in the *Oracle Essbase Technical Reference*
- display partition (MaxL) in the *Oracle Essbase Technical Reference*

Defining Areas in Partitions

The area definition in a partition specifies the areas of the source database to share with the target database. An area is a subcube within a database. For example, an area could be all Measures data at the lowest level for Actual data in the Eastern Region. A partition is comprises one or more areas.

When you define an area, ensure that the areas of the source database and target database contain the same number of cells and, thus, have the same shape. For example, if the source database area covers 18 cells, the target database area should cover 18 cells.

► To define areas in a partition:

- 1 [Open the Create or Edit Partition window.](#)
- 2 Select the **Areas** tab.
- 3 Select an editing option and then double-click in the **Source** or **Target** column.
- 4 Using the editing tool you selected, specify members for the partitioned area.
- 5 If you want to view cell counts for the source and target partitioned areas, select **Show cell count**.
- 6 If you want to [define advanced area-specific member mappings](#), click **Advanced**.
- 7 If the area definition requires mapping, click the **Mappings** tab to [continue defining the partition](#) or to [import selection rules](#) for the area mapping.
- 8 If the area definition does not require mapping, [validate](#) and [save](#) the partition.

Related Information

- [“Finding Members While Defining Partition Areas” on page 401](#)
- [Importing Area Definitions for Partitions](#)
- [“Create or Edit Partition Window—Areas Tab” on page 502](#)
- “Designing Partitioned Applications” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- create partition (MaxL) in the *Oracle Essbase Technical Reference*
- display partition (MaxL) in the *Oracle Essbase Technical Reference*

Finding Members While Defining Partition Areas

While using the member selection tool for mapping partition areas, you can use Find Members to more easily find outline members to add to the definition.

► To find members in the outline tree while using the member selection tool:

- 1 Open the **Create** or **Edit Partition** window.
- 2 Select **Areas**.
- 3 Select **Use member selection tool** and then double-click in the **Source** or **Target** column.
The [Area Mapping Member Selection](#) dialog box opens.
- 4 Select the view method you wish to use to display the outline dimensions and members.
- 5 Click **Find** to display the **Find Members** dialog box.
- 6 In **Find Members**, enter text and select the appropriate search options.

Related Information

- [“Area Mapping Member Selection Dialog Box” on page 480](#)
- [“Find Members Dialog Box” on page 578](#)

Defining Area-Specific Member Mappings in Partitions (Optional)

Area-specific member mappings control how Essbase maps members at a more granular level than global mappings. If you can map all of the members in the source database to their counterparts in the target database using standard member mapping, then you do not need to perform advanced area-specific mapping.

► To define area-specific member mappings:

- 1 [Open the Create or Edit Partition window.](#)
- 2 **Select Areas.**
- 3 **Select a row.**
- 4 Click **Advanced** to open the [Area-Specific Member Mapping dialog box](#).
- 5 Select an editing option and then double-click in the **Source** or **Target** column.
- 6 Using the editing tool you selected, specify members for the area-specific member mappings.
- 7 If the area definition requires mapping, select the **Mappings** tab to [continue defining the partition](#).
- 8 If the area definition does not require mapping, [validate](#) and [save](#) the partition.

Related Information

- [“Area-Specific Member Mapping Dialog Box” on page 479](#)
- “Creating Advanced Area-Specific Mappings” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- `create partition (MaxL)` in the *Oracle Essbase Technical Reference*
- `display partition (MaxL)` in the *Oracle Essbase Technical Reference*

Importing Selection Rules for Area Mapping in Partitions

To help create area mappings in partitions, you can import member selection rules that previously saved or exported from Application Manager.

To be imported, a selection rules file must have a `.txt` extension or `.sel` extension. The selection rules file should contain each rule on a separate line in the file.

When a file is imported, it is read line by line to populate the Rules list box in the Area Mapping Member Selection dialog box. Member names containing spaces must be enclosed in quotation marks.

► To import selection rules for area mappings in partitions:

- 1 [Open the Create or Edit Partition window.](#)
- 2 Select the **Areas** tab.
- 3 Select **Use member selection tool**, and then double-click in the **Source** or **Target** column.
The [Area Mapping Member Selection](#) dialog box is displayed.
- 4 Click **Import**.
- 5 In the **Import Selection Rules** dialog box, browse to the location of the selection rules file that you want to import.
- 6 Select the file, and click **OK**.

In the Area Mapping Member Selection dialog box, the Rules list box is populated with the contents of the selection rules file.

- 7 Click **OK** again.
- 8 [Validate](#) and [save](#) the partition.

Related Information

- [“Exporting Selection Rules from Area Mapping” on page 403](#)
- [“Defining Areas in Partitions” on page 400](#)
- [“Area Mapping Member Selection Dialog Box” on page 480](#)
- [“Defining Global Mappings in Partitions” on page 404](#)

Exporting Selection Rules from Area Mapping

You can export member selection rules that are used to create area mappings in partitions. You can export selection rules to the file system or to Essbase Administration Server.

You can then [import the selection rules](#) when creating other area mappings.

► To export selection rules from area mappings in partitions:

- 1 [Open the Create or Edit Partition window.](#)
- 2 Select **Areas**.
- 3 Select **Use member selection tool** and then double-click in the **Source** or **Target** column.
The [Area Mapping Member Selection](#) dialog box is displayed.
- 4 Populate the **Rules** list by specifying members for the partitioned area.
- 5 Click **Export**.

- 6 In [Export Selection Rules](#), navigate to where you want to export the selection rules file, either to the file system or to Essbase Administration Server.
- 7 Click **OK**.

Related Information

- [“Importing Selection Rules for Area Mapping in Partitions” on page 402](#)
- [“Defining Areas in Partitions” on page 400](#)
- [“Area Mapping Member Selection Dialog Box” on page 480](#)
- [“Defining Global Mappings in Partitions” on page 404](#)

Defining Global Mappings in Partitions

If the source database outline and target database outline contain different members or contain members with different names within the partitioned areas, you must map the source members to the target members.

You can define member mappings by using the method described in this topic or by [importing](#) the member mappings from a text file.

► To define global member mappings in partitions:

- 1 [Open the Create or Edit Partition window](#).
- 2 **Select Mappings**.
- 3 Select an editing option and then double-click in the **Source** or **Target** column.
- 4 Select or enter members for the mappings using the editing tool you selected.
- 5 Repeat this process for each pair of mappings that you want to create.
- 6 [Validate](#) and [save](#) the partition.

Related Information

- [“Create or Edit Partition Window—Mappings Tab” on page 504](#)
- “Mapping Members” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- `create partition (MaxL)` in the *Oracle Essbase Technical Reference*
- `display partition (MaxL)` in the *Oracle Essbase Technical Reference*

Importing Member Mappings for Partitions

You can import member mappings for partitions from an external text file instead of creating the mappings manually.

The mappings file must have a `.txt` extension and must contain two columns separated by tabs or spaces. One column contains the source members to be mapped and the other column contains the target members to be mapped. Member names containing spaces must be enclosed in quotation marks.

In the text file, the source members must be aligned with their corresponding target members so that the mappings import correctly.

► To import member mappings for partitions:

- 1 [Open the Create or Edit Partition window.](#)
- 2 Select the **Mappings** tab.
- 3 Click **Import**.
- 4 In the **Import Member Mappings** dialog box, populate the **Mapping file** text box using one of the following methods:
 - Enter the path and file name of a mappings file.
 - Click the **Browse** button and navigate to a drive and folder that contains a mappings file. Select the file and click **Open**.
- 5 In the **Format settings** option group, select **Source column first** (if the source member names are in the first column in the file) or **Target column first** (if the target member names are in the first column of the file).

The source and target columns must be separated by tabs or spaces.
- 6 Click **OK**.
- 7 [Validate](#) and [save](#) the partition.

Related Information

- [“Import Member Mappings Dialog Box” on page 582](#)
- [“Defining Global Mappings in Partitions” on page 404](#)

Validating Partitions

During validation, Essbase checks the partition definition files (`.ddb`) for both the source and target databases to ensure that the partition is valid.

Validation checks the partition to make sure that connection information is correct, that areas and mappings are valid, that cell counts match, and that the target area of a replicated or transparent partition does not overlap with the target area of another replicated or transparent partition.

You can validate a partition from the Create or Edit Partition window, or from Enterprise View (existing partitions only).

► To validate a partition from the Create or Edit Partition window:

- 1 [Open the Create or Edit Partition window.](#)
- 2 Create or edit the partition. See [Creating Partitions](#).
- 3 In the **Create or Edit Partition window**, click **Validate**.
Results of the validation are displayed on the **Validation** tab.
- 4 If the validation does not detect errors, you can [save the partition](#) to the Essbase Server.
- 5 If the validation detects errors, perform an action:
 - Correct the errors and save the partition on Essbase Server.
 - Save the invalid partition to a location in the file system or to Essbase Administration Server.

See [Saving Partitions](#) for more information.

► To validate a partition from Enterprise View:

- 1 Expand the **Partition** node and select the partition.
- 2 Right-click and select **Validate partition**.
- 3 If the validation does not detect errors, you can [save the partition](#) to Essbase Server.
- 4 If the validation detects errors, perform an action:
 - Correct the errors and save the partition on the Essbase Server.
 - Save the invalid partition to a location in the file system or to Essbase Administration Server.
- 5 See [Saving Partitions](#) for more information.

Related Information

- [“Create or Edit Partition Window—Validation Tab” on page 506](#)
- “Troubleshooting Partitions” in the *Oracle Essbase Database Administrator's Guide*
- [“About Partitions” on page 395](#)
- “Designing Partitioned Applications” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- create partition (MaxL) in the *Oracle Essbase Technical Reference*
- validatepartitiondeffile (ESSCMD) in the *Oracle Essbase Technical Reference*

Saving Partitions

Use this dialog box to save partitions locally, to Essbase Administration Server, or to Essbase Server as Essbase Server objects.

➤ To save a partition:

- 1 [Open the Create or Edit Partition window.](#)
- 2 [Create or edit](#) the partition.

If you are creating a partition, you cannot save until you have finished creating the partition.

- 3 **Select File, then Save.**

Essbase saves the partition definition to Essbase Server.

➤ To save a partition definition to a client, network, or to Essbase Administration Server:

- 1 [Create or edit](#) the partition.

If you are creating a partition, you cannot save until you have finished creating the partition.

- 2 **Select File, then Save as.**

- 3 **To save a partition definition file to the file system, select File System, navigate to the desired location, and name the partition file.**

The partition file is written in XML and has the .xml extension.

- 4 **To save the partition definition file to Essbase Administration Server, select Essbase Administration Server, name the partition file, and specify whether to share the file with other administrators.**

- 5 **Click OK.**

Essbase saves the partition definition file to the specified location.

Related Information

- [“Save As Dialog Box” on page 635](#)
- [“Exporting Partition Definitions” on page 411](#)

Related Commands

create partition (MaxL) in the *Oracle Essbase Technical Reference*

Replicating Data

When you update a replicated partition, Essbase copies the source area data to the corresponding target area cells. You can choose to update all of the cells in the partition, or only the cells in which data has changed.

➤ To update a replicated partition:

- 1 **From Enterprise View or a custom view, select a partitioned database.**
- 2 **Under the database node, expand the Partitions node.**
- 3 **Select a partition.**
- 4 **Right-click and select Replicate data to target.**

- 5 In the **Data Replication** dialog box, select either **Update changed cells only** (to update only the cells that have changed since the last replication) or **Update all cells** (to update all of the cells in the partition).
- 6 Click **OK**.

Related Information

- [“Data Replication Dialog Box” on page 523](#)
- “Replicated Partitions” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- getallreplcells (ESSCMD) in the *Oracle Essbase Technical Reference*
- getupdatedreplcells (ESSCMD) in the *Oracle Essbase Technical Reference*
- putallreplcells (ESSCMD) in the *Oracle Essbase Technical Reference*
- putupdatedreplcells (ESSCMD) in the *Oracle Essbase Technical Reference*
- refresh replicated partition (MaxL) in the *Oracle Essbase Technical Reference*

Deleting Partitions

If you have Database Manager permissions, you can delete partitions that are saved as objects on Essbase Server.

You can delete one partition from a database or you can delete all partitions from a database at once.

► To delete a partition:

- 1 From Enterprise View or a custom view, select a database.
- 2 Under the database node, expand the **Partitions** node and select a partition.
- 3 Right-click, and select **Delete partition**.

► To delete all partitions in a database:

- 1 From Enterprise View or a custom view, select a database.
- 2 Under the database node, select the **Partitions** node.
- 3 Right-click, and select **Delete all partitions**.

Related Information

- [“Exporting Partition Definitions” on page 411](#)
- [“Repairing Partitions” on page 409](#)

Related Commands

drop partition (MaxL) in the *Oracle Essbase Technical Reference*

Copying Partitions

You can copy a partition to a new location if the outlines for the source and target databases of the new partition are identical to the outlines for the source and target databases of the existing partition.

You can copy a partition to a new source database and a new target database, or you can copy the partition to the existing source and a new target.

Note: You cannot copy a partition to a new source and an existing target.

The partition is validated before copying. If the validation detects errors, the partition is not copied. If warnings are detected, you are prompted to continue or cancel the copy operation.

► To copy partitions:

- 1 From Enterprise View or a custom view, select a source database.
- 2 Under the database node, expand the **Partitions** node.
- 3 Select a partition.
- 4 Right-click and select **Copy partition**.
- 5 In the **Copy Partition** dialog box, perform the following:
 - a. Select the Essbase Server, application, and database of the data source to which you are copying the partition.
 - b. Select the Essbase Server, application, database, user, and password of the data target to which you are copying the partition.
- 6 **Optional:** In the **Comments** text box, enter comments.
- 7 Click **OK**.

Related Information

[“Copy Partition Dialog Box” on page 493](#)

Related Commands

`alter object (MaxL)` in the *Oracle Essbase Technical Reference*

Repairing Partitions

When you create a partition definition, the information for the partition is stored in two `.ddb` files—one in the database directory of the source and the other in the database directory of the target. If the connection information stored in one of these `.ddb` files is invalid, the partition needs to be repaired before you can open and edit it from Enterprise View. A partition cannot be restored if one of the `.ddb` files for the source or target is physically missing (for example, if the application or database is deleted using a tool other than Administration Services).

In general, if you rename, copy, or delete applications and databases that contain partitions using Administration Services, the corresponding partition definitions are updated or removed automatically to reflect the change.

Partitions may need repair in the following cases:

If applications or databases are renamed or copied using a different tool (such as MaxL), Administration Services may not be able to find the corresponding .ddb file for the second half of the partition. If for any reason Administration Services cannot determine both the source and target for the partition, the partition is displayed under the Orphan Partitions node in Enterprise View so that you can repair or delete it. If both .ddb files exist in their expected locations but are invalid, you can select the source or target partition under the Source Database or Target Database node in Enterprise View and repair the invalid information.

Note: This functionality is available only if you are connecting to a Release 6.5.3 or higher Essbase Server.

► To repair a partition:

- 1 From Enterprise View or a custom view, select a database.
- 2 Under the **Partitions** node, find the source or target partition definition that you want to repair, or find the partition definition under the **Orphan Partitions** node.
- 3 Right-click the partition and select **Repair partition**.
The **Repair Partition** dialog box opens. Only fields that need repair are editable.
- 4 Edit the invalid fields, and click **Repair**.
Essbase saves the corrected information to the .ddb partition definition file.
- 5 To edit the partition after the repair is complete, right-click the partition in Enterprise View and select **Edit partition**.
- 6 If an invalid partition cannot be repaired and you want to delete the available half of the partition, right-click the partition in Enterprise View and select **Delete partition**.

Related Information

- [“Repair Partition Dialog Box” on page 631](#)
- [“Viewing Partitions in Enterprise View” on page 396](#)
- [“Creating Partitions” on page 397](#)
- “Designing Partitioned Applications” in the *Oracle Essbase Database Administrator's Guide*
- “Creating and Maintaining Partitions” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- alter partition (MaxL) in the *Oracle Essbase Technical Reference*
- drop partition with force (MaxL) in the *Oracle Essbase Technical Reference*

Exporting Partition Definitions

If you have Database Manager permissions for a partitioned database, you can export the partition definitions. You can export partition definitions that have been saved to Essbase Server to the file system or network. The exported partition definitions are stored as `.xml` files.

Exporting partitions is a way to save backup copies of partition definitions.

➤ To export a partition definition:

- 1 From Enterprise View or a custom view, select a database.
- 2 Under the database node, expand the **Partitions** node.
- 3 Depending on the location of the partition that you want to export, expand the **Source Databases** node or the **Target Databases** node.
- 4 Select a partition.
- 5 Right-click, and select **Export partition**.
- 6 In **Export Partition**, navigate to the directory to which you want to export the partition.
- 7 In **File name**, enter the name of the export file.

By default, exported partition definition files are given the `.xml` extension. For a partition definition file to be imported, it must have the `.xml` extension.

- 8 Click **Save**.

Related Information

- [“Importing Partition Definitions” on page 411](#)
- [“Export Partition Dialog Box” on page 565](#)

Importing Partition Definitions

If you have Database Manager permissions, you can import partition definitions that were previously exported and save them to Essbase Server. You can import partition definitions from your file system or a network drive.

You can import only partition definition files with the `.xml` extension. When you export partitions using Administration Services, they are given the `.xml` extension. You cannot import `.ddb` files.

➤ To import a partition definition:

- 1 From Enterprise View or a custom view, select a database.
- 2 Under the database node, right-click on the **Partitions** node and select **Import partition**.
- 3 In **Import Partition File**, navigate to the directory containing the partition.
- 4 Select a file and click **Open**.
- 5 [Validate](#) and [save](#) the partition.

Related Information

- [“Exporting Partition Definitions” on page 411](#)
- [“Import Partition File Dialog Box” on page 583](#)

Synchronizing Outlines

When you partition databases, you must be able to map all dimensions and members inside the partitioned area of the source database to corresponding dimensions and members in the target database. If you make changes inside the partitioned area of the source or target database outline, the partition may become invalid. For partitions to continue to function properly, you must return the outlines to a state where all of the partitioned dimensions and members on the source and target can be mapped.

Outline synchronization is a tool to help keep your outlines synchronized and to maintain your partitions.

Note: You cannot use outline synchronization when an aggregate storage database is the source for a partition.

Outline changes may flow from a source database outline to a target database outline, or vice versa. Controlling the direction of outline changes between source and target databases is managed in the [Create or Edit Partition window \(Type tab\)](#). If you select the option **Outline changes move in the same direction as data changes**, the source and target outlines for outline synchronization are the same as the outlines for the source and target databases in the partition. If you do not select this option, the source and target outlines for outline synchronization are reversed; that is, the source outline for synchronization is actually the outline for the target database in the partition.

Note: Administration Services cannot synchronize non-Unicode-mode outlines that contain multi-byte characters. A workaround is to use the MaxL Shell (essmsh) or ESSCMD to synchronize such outlines.

► To synchronize outlines:

- 1 From Enterprise View or a custom view, select a source or target database.
- 2 Under the database node, expand the **Partitions** node.
- 3 Select the partition.
- 4 Right-click and select **Synchronize outline**.
- 5 In the [Synchronize Outline](#) dialog box, and under each of the following nodes—Dimension, Member, and Member property—select the changes to include in the outline synchronization and clear the changes you want to omit. If you choose to omit some changes, those changes cannot be applied later.

If you want to include all changes, click **Select All**. If you do not want to include any changes, click **Select None**.

6 If you want to purge out-of-date change logs on the target outline and the source outline, click **Purge.**

Essbase deletes all records from the change log that have been applied or rejected. If all records have been applied or rejected, Essbase deletes the change log as well. Essbase does not purge records that have not yet been applied to the target outline.

7 Click **Apply.**

Related Information

- [“Synchronize Outline Dialog Box” on page 646](#)
- “Synchronizing Outlines” in the *Oracle Essbase Database Administrator's Guide*
- [“About Partitions” on page 395](#)
- [“Viewing Partitions in Enterprise View” on page 396](#)

Related Commands

- applyotlchange (ESSCMD) in the *Oracle Essbase Technical Reference*
- getpartitionchanges (ESSCMD) in the *Oracle Essbase Technical Reference*
- purgeotlchange (ESSCMD) in the *Oracle Essbase Technical Reference*
- resetotlchangetime (ESSCMD) in the *Oracle Essbase Technical Reference*

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About Triggers

Triggers provide efficient monitoring of data changes in a database. If data meets conditions specified in a trigger, Essbase can send an email alert to a user or system administrator or record relevant information in a log file. For example, you might want to send an email to the sales manager if, in the Western region, sales for a month fall below sales for the equivalent month in the previous year.

Note: For aggregate storage databases, only after-update triggers are supported.

To manage triggers, you must have Database Designer permissions or higher. Essbase monitors and potentially activates triggers during the following activities:

- Data load
- Calculation
- Lock and send from Spreadsheet Add-in

Essbase does not activate triggers during a database restructure. You can see information about enabled and disabled triggers in the application log file for a running Essbase Server.

Note: To enable Essbase to send e-mail alerts, you must have Java Virtual Machine (JVM) installed.

Related Information

- [“Creating Triggers” on page 416](#)
- [“Editing Triggers” on page 417](#)
- [“Deleting Triggers” on page 418](#)
- [“Enabling and Disabling Triggers” on page 418](#)
- [“Monitoring Data Changes Using Triggers” in the *Oracle Essbase Database Administrator's Guide*](#)

Creating Triggers

You can create triggers to monitor data changes in a database. You need Database Manager permissions or higher to create a trigger.

You cannot create a trigger during a calculation or a data load (including a lock and send).

Note: You cannot define a trigger that requires data from Dynamic Calc members, hybrid analysis members, or members from another partition.

► To create a trigger:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click and select **Edit**, then **Triggers**.
- 3 In the **Database Triggers** window, click **New**.
- 4 In the **New Trigger** dialog box, enter the appropriate information in each text box.
- 5 Click **OK**.

Essbase creates the trigger and displays it in the Database Triggers window. The trigger is activated when its conditions are met during the following activities:

- Data load
- Calculation
- Lock and send from Spreadsheet Add-in (does not apply to aggregate storage databases or to after-update triggers in block storage or aggregate storage databases)

Related Information

- [“New/Edit Trigger Dialog Box” on page 605](#)
- [“About Triggers” on page 415](#)
- [“Editing Triggers” on page 417](#)
- [“Deleting Triggers” on page 418](#)
- [“Monitoring Data Changes Using Triggers” in the *Oracle Essbase Database Administrator's Guide*](#)

Related Commands

create trigger (MaxL) in the *Oracle Essbase Technical Reference*

Viewing Triggers

You can view triggers to determine how they are defined and whether they are enabled.

► To view triggers:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click and select **Edit**, then **Triggers**.

The [Database Triggers](#) window displays triggers that are defined for the database. You can [create](#), [edit](#), [enable/disable](#), or [delete](#) triggers from this window.

Related Information

- [“Database Triggers Window” on page 541](#)
- [“About Triggers” on page 415](#)
- [“Editing Triggers” on page 417](#)
- [“Enabling and Disabling Triggers” on page 418](#)
- [“Deleting Triggers” on page 418](#)
- Monitoring Data Changes Using Triggers in the *Oracle Essbase Database Administrator's Guide*

Related Commands

display trigger (MaxL) in the *Oracle Essbase Technical Reference*

Editing Triggers

You can edit a trigger definition. You need Database Manager permissions or higher to edit triggers.

► To edit a trigger:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click and select **Edit**, then **Triggers**.
- 3 In the **Database Triggers** window, select a trigger, and click **Edit**.
- 4 In the [Edit Trigger](#) dialog box, edit fields.
- 5 Click **OK**.

The trigger is updated.

Related Information

- [“New/Edit Trigger Dialog Box” on page 605](#)
- [“About Triggers” on page 415](#)
- [“Creating Triggers” on page 416](#)
- “Monitoring Data Changes Using Triggers” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

create trigger (MaxL) in the *Oracle Essbase Technical Reference*

Deleting Triggers

You can delete triggers that are no longer useful. You need Database Manager permissions or higher to delete a trigger.

► To delete a trigger:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click and select **Edit**, then **Triggers**.
- 3 In the **Database Triggers** window, select a trigger, and click **Delete**.
- 4 At the confirmation prompt, click **Yes**.

The trigger is removed.

Related Information

- [“About Triggers” on page 415](#)
- [“Creating Triggers” on page 416](#)
- [“Editing Triggers” on page 417](#)
- “Monitoring Data Changes Using Triggers” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

drop trigger (MaxL) in the *Oracle Essbase Technical Reference*

Enabling and Disabling Triggers

You can enable a trigger that is disabled or disable a trigger that is enabled. Triggers are enabled by default when they are created.

You can also disable all triggers for the duration of the application session.

- To enable a trigger:
 - 1 From Enterprise View or a custom view, select a database.
 - 2 Right-click and select **Edit**, then **Triggers**.
 - 3 In the **Database Triggers** window, select a disabled trigger, and click **Enable**.

- To disable a trigger:
 - 1 From Enterprise View or a custom view, select a database.
 - 2 From the nodes below that database, double-click **Triggers**.
 - 3 In the **Database Triggers** window, select an enabled trigger and click **Disable**.
 - 4 **Optional:** To disable all triggers for the duration of the current database session, click **Suspend All**.

Note: When the application is closed, triggers revert to the state (enabled or disabled) that they were in before you clicked Suspend All.

Related Information

- [“About Triggers” on page 415](#)
- [“Database Triggers Window” on page 541](#)
- “Monitoring Data Changes Using Triggers” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

alter trigger (MaxL) in the *Oracle Essbase Technical Reference*

Viewing Trigger Spool Files

You can view the spool files that triggers generate when they are activated.

- To view trigger spool files:
 - 1 From Enterprise View or a custom view, select a database.
 - 2 Right-click and select **Edit**, then **View spool files**.

The [Database Trigger Spool Files](#) window displays spool files. You can view or delete spool files from this window.
 - 3 Select a file and click **View** to see the contents of the file, or click **Delete** to delete the file.

You can delete all spool files by clicking Delete All.

Related Information

- [“Database Trigger Spool Files Window” on page 541](#)
- [“About Triggers” on page 415](#)

- [“Creating Triggers” on page 416](#)
- [“New/Edit Trigger Dialog Box” on page 605](#)
- [“Deleting Triggers” on page 418](#)
- “Monitoring Data Changes Using Triggers” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

display trigger spool (MaxL) in the *Oracle Essbase Technical Reference*

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About Essbase Currency Conversion

You use Essbase currency conversion to translate financial data from different countries into a single base currency. This conversion facilitates comparisons among identical measures for different countries. You also use currency conversion to consolidate financial data from multiple locations.

For example, consider an organization analyzing profitability data from the UK, reported in pounds, and Japan, reported in yen. To understand the relative contribution of each country, you would need to convert pounds into yen, yen into pounds, or both figures into another currency.

As another example, if United States, Mexico, and Canada all roll up into Total North America, the sum of each country's profitability figure is meaningless if data is kept in local currencies. Only by converting all local currencies to a single base currency and then rolling up into totals does the Total North America sum become meaningful.

To learn how to create currency conversion applications, see [“Converting Currency” on page 422](#).

Note: Currency conversion does not apply to aggregate storage applications.

Related Information

- [“Converting Currency” on page 422](#)
- [“Troubleshooting Currency Conversion” on page 429](#)
- “Designing and Building Currency Conversion Applications” in the *Oracle Essbase Database Administrator's Guide*

Converting Currency

In business applications requiring currency conversion, the Essbase database is divided into at least two "slices." One slice handles input of local data, and another slice holds a copy of this data converted to a single common currency for comparison and consolidation. Essbase holds the rates required for currency conversion in a currency database. The currency database outline, automatically generated by Essbase from the main database, typically maps a given conversion ratio onto a section of the main database.

Note: Currency conversion does not apply to aggregate storage application.

➤ To build a currency conversion application and perform conversions, follow this process:

- 1 [Create or open the main database outline.](#)
- 2 [Prepare the main database outline for currency conversion.](#)
- 3 [Generate the currency database outline.](#)
- 4 [Link the main and currency databases.](#)
- 5 [Calculate currency conversion.](#)
- 6 [Track currency conversions.](#)
- 7 If necessary, [troubleshoot currency conversion.](#)

Related Information

- [“About Essbase Currency Conversion” on page 421](#)
- “Designing and Building Currency Conversion Applications” in the *Oracle Essbase Database Administrator's Guide*

Preparing the Main Database Outline for Currency Conversion

Modifying dimensions and members in the main database outline enables Essbase to automatically generate the currency database outline, as follows:

- To modify the main database outline in preparation for currency conversion:
- 1 [Open or create the outline.](#)
 - 2 [Tag a dimension as time](#), if a time dimension does not exist.
 - 3 [Tag a dimension as accounts](#), if an accounts dimension does not exist.
 - 4 [Assign a currency category](#) to the accounts dimension and to members within this dimension to handle different categories of exchange rates. Tag all members that should not be converted as No Conversion. The No Conversion tag is not inherited.
 - 5 [Tag a dimension as country.](#)
 - 6 [Assign currency names](#) to individual countries.
 - 7 **Optional:** [Create a currency partition](#) to tell Essbase which part of the database holds local data and which holds base data.
 - 8 Apply the Label Only tag to dimensions and members that do not store data. See [Setting Member Consolidation Properties](#).
 - 9 [Save the outline.](#)
- If the database already contains data values, Essbase restructures the database to reflect changes to the outline.
- 10 [Generate the currency database outline.](#)

Related Information

- [“About Essbase Currency Conversion” on page 421](#)
- [Converting Currency](#)
- [“Generating a Currency Database Outline” on page 424](#)
- [Linking a Database to a Currency Database](#)
- [“Troubleshooting Currency Conversion” on page 429](#)

Tagging a Country Dimension

When preparing a main database outline for currency conversion, you need to tag a dimension as country in order to track business activities in multiple countries. Within a country dimension, you can specify the type of currency used for each member. See [Assigning Currency Names to Country Members](#).

- To tag a dimension as country:
- 1 [Open the outline.](#)
 - 2 Select the dimension, right-click, and select **Edit member properties**.
 - 3 In the **Member Properties** window, select the **Information** tab.
 - 4 For **Dimension type**, select **Country**.
 - 5 Click **OK**.

Related Information

- [About Essbase Currency Conversion](#)
- [Converting Currency](#)
- [“Assigning Currency Names to Country Members” on page 428](#)
- [“Member Properties Dialog Box—Information Tab” on page 595](#)

Creating a Currency Partition

When preparing a main database outline for currency conversion, you create a currency partition to tell Essbase which "slice" of the database holds local data and which holds base data. The dimension you tag as a currency partition contains members for both local and base values; this dimension holds the data that users input in their own currencies. The local data is converted to the base data using currency conversion calculation scripts. See [“Calculating Currency Conversions” on page 426](#).

Note: A currency conversion partition applies only to the currency conversion option. It is not related to the Partitioning option that enables data to be shared between databases using a replicated, linked, or transparent partition.

► To create a currency partition in the main database:

- 1 [Open the outline.](#)
- 2 Select a dimension to tag as a currency partition.
- 3 Right-click and select **Edit member properties**.
- 4 In the **Member Properties** dialog box, select the **Information** tab.
- 5 In the **Dimension type** drop-down list, select **Currency Partition**.
- 6 Click **OK**.

Related Information

- [“About Essbase Currency Conversion” on page 421](#)
- [Converting Currency](#)
- [“Calculating Currency Conversions” on page 426](#)
- [“Member Properties Dialog Box—Information Tab” on page 595](#)

Generating a Currency Database Outline

Assigning currency tags to members in the main database enables Essbase to automatically generate the currency database. A currency database always consists of the following four dimensions:

- A time dimension, which is typically the same as the time dimension in the main database. This allows the currency database to track currency fluctuations over time, and to accurately convert different time slices of the main database.
- A currency category dimension, which enables you to apply different rates to members of the dimension tagged as accounts in the main database. The categories defined for the accounts dimension are used to form the members in the currency category dimension of the currency database. For example, it may be necessary to convert Gross Profit and Net Profit using one category of rates, while other accounts use a different set of rates.
- A country dimension, which simply stores rates for each actual local currency (e.g., U.S. dollars, Canadian dollars, Germany Euro, and so forth).
- A currency type dimension, which enables different scenarios for currency conversion. For example, companies may wish to store Actual Rates and Plan Rates. To convert data between scenarios, select which type of rate to use.

This dimension is created when you generate the currency outline and is not directly mapped to the main database. Therefore, member names in this dimension are not required to match member names of the main database.

➤ To generate a currency database outline from an existing main database outline:

- 1 **Open** or **create** the main database outline.
- 2 **Prepare the main database for currency conversion.**
- 3 **Select Outline**, and then **Generate currency database.**
- 4 In the **Generate Currency Outline** dialog box, select the currency database, or enter the name for a new currency database, following the proper naming conventions in the *Oracle Essbase Database Administrator's Guide*.
- 5 **Click OK.**

Essbase generates and displays the currency database outline. You can now add members to any dimension in the currency outline.

- 6 **Link the currency database to the main database.**

Note: You can also create a currency database manually in the same way that you create a regular database. See [“Creating Databases” on page 98](#).

Related Information

- [“Generate Currency Outline Dialog Box” on page 580](#)
- [“About Essbase Currency Conversion” on page 421](#)
- [Converting Currency](#)
- [“Preparing the Main Database Outline for Currency Conversion” on page 422](#)
- [“Linking a Database to a Currency Database” on page 426](#)
- [“Troubleshooting Currency Conversion” on page 429](#)

Linking a Database to a Currency Database

Currency conversion applications consist of two databases: a main database and a currency database. Before currency conversion can be performed, you must link the main database to the currency database. If you have Database Manager permissions, you can select the currency database to link to, the conversion calculation method to use, and the default currency type member.

► To link a database to a currency database and to specify related settings:

- 1 From Enterprise View or a custom view, select a database.
- 2 Right-click and select **Edit**, and then **Properties**.
- 3 In the **Database Properties** window, select the **Currency** tab.
- 4 For the **Currency database** option, select a currency database to link.
- 5 For **Conversion method**, select **Divide** or **Multiply**.
- 6 In **Default currency type member**, enter the Currency Type member to use as a default in currency conversions. You can specify any valid member of the CurType dimension in the currency database.
- 7 Click **Apply** to apply the settings and create the link to the currency database.

Related Information

- [“Database Properties Window—Currency Tab” on page 530](#)
- [“About Essbase Currency Conversion” on page 421](#)
- [Converting Currency](#)
- [“Troubleshooting Currency Conversion” on page 429](#)

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- setdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdbstateitem (ESSCMD) in the *Oracle Essbase Technical Reference*

Calculating Currency Conversions

After you create a [currency conversion application](#), you convert data values from a local currency to a common, converted currency using the CCONV command in calculation scripts. For example, you might convert data from a variety of currencies into US\$. You can convert the data values back to the original, local currencies using the CCONV TOLOCALRATE command.

You can convert all or part of the main database using the rates defined in the currency database. You can overwrite the local values with the converted values, or you can keep both the local and converted values in the main database, depending on your tracking and reporting needs.

Note: When you convert currencies using the CCONV command, the resulting data blocks are marked as dirty for the purposes of Intelligent Calculation. This means that Essbase recalculates all the converted blocks when you recalculate the database.

To see sample currency conversion calculation scripts, see the *Oracle Essbase Technical Reference*.

Related Information

- [“About Essbase Currency Conversion” on page 421](#)
- [“Converting Currency” on page 422](#)
- [“Tracking Currency Conversions” on page 428](#)
- [“Troubleshooting Currency Conversion” on page 429](#)

Related Commands

- cconv (calculation command) in the *Oracle Essbase Technical Reference*
- set uptolocal (calculation command) in the *Oracle Essbase Technical Reference*
- currency (report command) in the *Oracle Essbase Technical Reference*
- set cctrackcalc (calculation command) in the *Oracle Essbase Technical Reference*
- clearcctrack (calculation command) in the *Oracle Essbase Technical Reference*

Calculating the Database

If you execute a CALC ALL command to consolidate the database after running a conversion, meaningful total-level data is generated in the converted base rate partition, but the local rate partition will contain a meaningless consolidation of local currency values. To prevent this, use the calculation command SET UPTOLOCAL, which restricts consolidations to those parents with the same defined currency. For example, all cities in the U.S. use dollars as the unit of currency. Therefore, all children of the U.S. consolidate to U.S. Consolidation stops at this level, however, because North America also contains countries that use other currencies.

Using Report Scripts

You can also calculate currency conversions in report scripts by using the CURRENCY command to set the output currency and currency type.

Note: Essbase cannot perform "on the fly" currency conversions across transparent partition databases. If you have two transparent partition databases that are calculated using different conversions, you cannot calculate currency conversions in reports.

Assigning Currency Names to Country Members

When preparing a main database outline for currency conversion, you must assign currency names to the country dimension and its members (for example, assigning dollars to the U.S., Euro to Germany, and so forth). Because many members can have the same currency name, the number of currency names is typically less than the total number of members in the dimension.

Assigning currency names to country members creates a member in the currency database for each individual currency. The top-level dimension member name in the country dimension should be given the currency name of the base currency (e.g., US\$) to ensure that the base currency is inherited down the country dimension hierarchy. When the children of a given member share a single currency, you only need to define a currency name for the parent member.

► To assign currency names to members of a country dimension:

- 1 If you have not already tagged a member as country, see [Tagging a Country Dimension](#).
- 2 Select the dimension tagged as Country, right-click and select **Edit member properties**.
- 3 Select the **Information** tab and find the **Currency name** node.
- 4 Specify a currency name for the country dimension; for example, US\$.
- 5 Repeat this procedure to define currency names for each appropriate member of the country dimension.

Related Information

- [About Essbase Currency Conversion](#)
- [“Converting Currency” on page 422](#)
- [Tagging a Country Dimension](#)
- [“Troubleshooting Currency Conversion” on page 429](#)
- [“Member Properties Dialog Box—Information Tab” on page 595](#)

Tracking Currency Conversions

You use the CCTRACK setting in the `essbase.cfg` file to control whether Essbase tracks which currency partitions have been converted and the exchange rates used for the conversions. By default, Essbase tracks which currency partitions have been converted. For more information about tracking currency conversions, see the *Oracle Essbase Database Administrator's Guide*.

Related Information

- [“About Essbase Currency Conversion” on page 421](#)
- [Converting Currency](#)
- [“Calculating Currency Conversions” on page 426](#)

Related Commands

- `cctrack` (`essbase.cfg` setting) in the *Oracle Essbase Technical Reference*

- `cconv tolocalrate` (calculation command) in the *Oracle Essbase Technical Reference*
- `set cctrackcalc` (calculation command) in the *Oracle Essbase Technical Reference*
- `clearcctrack` (calculation command) in the *Oracle Essbase Technical Reference*

Troubleshooting Currency Conversion

When troubleshooting currency conversion:

- If you receive an error when trying to link the currency database to the main database, make sure the main database meets these criteria:
 - A dimension is tagged as time.
 - A dimension is tagged as accounts.
 - The accounts dimension has a [currency conversion category](#) defined for the categories of accounts that you wish to convert.
 - All members of the accounts dimension that should not be converted are tagged as No Conversion. The No Conversion tag is not inherited.
 - A market dimension is tagged as country.
 - The country dimension is assigned a [currency name](#), even if each member in the dimension is individually assigned a currency name.
 - Each member of the country dimension has an associated currency name or inherits the currency defined at the dimension level.
- If you receive an error when trying to link the currency database to the main database, make sure that your currency database meets these criteria:
 - A dimension is tagged as time.
 - The time dimension contains each member that is defined in the time dimension in the main database. Make sure that each member is included and spelled correctly.
 - If you use Dynamic Time Series members in the main database, you must use Dynamic Time Series members in the currency database.
 - A dimension is tagged as accounts. The accounts dimension in the currency database contains the account categories defined in the main database.
 - A dimension is tagged as country and contains the names of the currencies used in the dimension tagged as country in the main database. Make sure that each currency is included and spelled correctly.
 - Make sure that the currency database is started.
- Errors linking the currency database with the main database (such as "Unable to Load Database") are often explained more fully in the [application log](#).
- Having the CCTRACK setting turned on in the `essbase.cfg` file can often be the cause of currency data not converting.
- If base data results in #Missing values after conversion, make sure that the associated rate in the currency database is not set to #Missing.

- In some cases, you might want to enter data in a base rate partition and convert it to a local rates partition with the CCONV TOLOCALRATE command. This does not work directly because Essbase reads the CCTRACK partition flag as "unconverted." As a workaround, first run the CCONV command against an empty partition (the one intended to hold the local data), and then move the data in. Running CCONV TOLOCALRATE against this partition should work because Essbase reads the CCTRACK flag as "converted" and thinks it has already converted the partition.

See *Oracle Essbase Error Message Reference* to troubleshoot specific currency-related error messages.

Related Information

- [“About Essbase Currency Conversion” on page 421](#)
- [“Converting Currency” on page 422](#)
- “Designing and Building Currency Conversion Applications” in the *Oracle Essbase Database Administrator's Guide*

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About Provider Services

Provider Services is a middle-tier data source provider for Java API, XMLA, and Smart View clients. This provider interacts with Essbase Server and provides scalability and reliability in a distributed Web-enabled enterprise environment.

Provider Services is administered through Administration Services Console.

Administration Services Console enables you to:

- Administer Provider Services
- Add, remove, and list standalone Essbase Servers being accessed by the Java API, XMLA, and Smart View clients
- Create, remove, and list Analytic Clusters
- Add and remove Essbase databases belonging to an Analytic Cluster
- Enable or disable any database components belonging to an Analytic Cluster
- Monitor Provider Services sessions
- Set the type of log messages to view

Adding Provider Services

You can add various Provider Services to administer in Administration Services.

► To add Provider Services:

- 1 From Enterprise View or a custom view, select the **Provider Services** node.
- 2 Right-click and select **Add Provider Services**.
- 3 In the **Add Provider Services** dialog box, enter the Provider Services server name in **Provider Name**, such as `localhost`.
- 4 Click the Provider Services provider URL in **URL** to automatically pick up the Provider Services server name that you entered. For example, `http://localhost:13080/aps/APS`.
- 5 Click **OK**.

The provider name will be displayed under the Provider Services node.

Related Information

- [“About Provider Services” on page 431](#)
- [“Monitoring Sessions” on page 434](#)
- [“Adding an Analytic Cluster” on page 440](#)
- [“Adding a Standalone Server” on page 437](#)
- [“Connecting to Provider Services” on page 433](#)
- [“Refreshing the List of Provider Services” on page 436](#)
- [“Removing Provider Services” on page 436](#)
- [“Removing a Standalone Server” on page 438](#)
- [“Removing Analytic Clusters” on page 441](#)

Automatically Deploying Client Upgrades

► To automatically deploy Smart View clients:

- 1 From Enterprise View or a custom view, select the provider node under the **Provider Services** node.
- 2 Right-click and select **Edit**, then **Properties**.
- 3 In **Provider Services Properties**, select **Client Deployment**.
- 4 Select an option:

- **Force Smart View client to upgrade**—Requires that users upgrade in order to continue using Smart View.
- **Warn Smart View client to upgrade**—Informs users that a new version of Smart View is available. Users can continue to use existing Smart View client without upgrading.
- **Apply Smart View client to upgrade**—Enables the administrator to apply new versions of Smart View and inform users without needing to restart Provider Services.

5 Click **Apply**.

6 Click **Close**.

7 In the **Provider Services** directory, `C:\Hyperion\AnalyticProviderServices\redist`, modify `version.xml` to add a line for the **Provider Services** URL after the `</externalVersion>` line:

```
http://<server_name>:13080/aps/SmartView>downloadClient
```

Connecting to Provider Services

Ensure Provider Services is connected so that clients can connect to it.

➤ To connect to Provider Services:

- 1 From **Enterprise View** or a custom view, select the server name under the **Provider Services** node.
- 2 Right-click and select **Connect**.

Provider Services is now online.

Related Information

- [“Adding Provider Services” on page 432](#)
- [“Disconnecting Provider Services” on page 433](#)
- [“Refreshing the List of Provider Services” on page 436](#)
- [“Removing Provider Services” on page 436](#)

Disconnecting Provider Services

When you need to take Provider Services offline, such as to upgrade it, you must disconnect from it.

➤ To disconnect Provider Services:

- 1 From **Enterprise View** or a custom view, select the provider node under the **Provider Services** node.
- 2 Right-click and select **Disconnect**.

The Provider Services is now offline.

Related Information

- [“Adding Provider Services” on page 432](#)
- [“Connecting to Provider Services” on page 433](#)
- [“Removing Provider Services” on page 436](#)

Monitoring Sessions

Use this window to monitor sessions of users connected to Provider Services. You can view sessions of all users or specific users, and which session types, Smart View, Java API, or XMLA, are running.

► To monitor Provider Services sessions:

- 1 From Enterprise View or a custom view, under the **Analytic Provider Services** node, select a provider.
- 2 Select **Show sessions for user** and select from user lists to see a user's activity.
- 3 Select **Show sessions for type** and select **JAVA**, **XMLA**, or **SMARTVIEW** to see a session.
- 4 Right-click and select **Sessions**.

The Smart View Provider Sessions window is displayed, listing the following information:

- Session—Active session ID
- Session Type—Type of request either from standalone server or cluster
- Mode—Standalone server mode (server) or Analytic cluster mode (cluster)
- User—User that generated the request
- Essbase Server—Name of the Essbase Server to which the request was made
- Application—Application name
- Database—Database name
- Request Time—Time the request was made
- Request—Name of current running request, if any

- 5 Click **Refresh** to update the view.

Related Information

[Specifying Session Timeout](#)

Specifying Idle Session Timeout

Use this procedure to specify how many minutes the session can be inactive before timing out.

➤ To specify idle session timeout limit:

- 1 From Enterprise View or a custom view, select the provider node under the **Provider Services** node.
- 2 Right-click and select **Edit**, then **Properties**.
- 3 In **Provider Services Properties**, select **Settings**.
- 4 In **Session timeout in minutes**, specify how many minutes the session can be inactive before timing out.

The default is 60 minutes. If the session times out, the Smart View client needs to reconnect to Provider Services using Connection Manager.

- 5 Click **Apply**.
- 6 Click **Close**.

Related Information

[“Monitoring Sessions” on page 434](#)

Specifying Logging Properties

Use this task to specify log message levels and enable XML tracing.

➤ To change log settings:

- 1 From Enterprise View or a custom view, select a server under the **Provider Services** node.
- 2 Right-click and select **Edit**, then **Properties**.
- 3 In the **Provider Services Properties** window, select **Logging**.
- 4 Under **Logging**, select **Enable Provider logging** to send messages to a log file, and specify the log file path.
- 5 Under **Minimum Log Level**, select a log level:
 - **Warning**—Displays warning, error, and fatal messages
 - **Information**—Displays information, warning, error, and fatal messages
 - **Debug**—Displays debug, information, warning, error, and fatal messages
- 6 Select **Display messages on Provider console** to send messages to the Provider Services start up message console window.
- 7 Under **Tracing**, select **Enable Provider logging** to enable tracing of XML request responses between the client and Provider Services.
- 8 Click **Apply**.
- 9 Click **Close**.

Specifying Maximum Rows and Columns

Use this procedure to specify the maximum rows and columns to retrieve in a grid.

- To specify maximum rows and columns:
 - 1 From Enterprise View or a custom view, select the provider node under the **Provider Services** node.
 - 2 Right-click and select **Edit**, then **Properties**.
 - 3 In **Provider Services Properties**, select **Settings**.
 - 4 In **Maximum number of rows**, specify the number of rows to retrieve.
The default is 1000.
 - 5 In **Maximum number of columns**, specify the number of columns to retrieve.
The default is 255.
 - 6 Click **Apply**.
 - 7 Click **Close**.

Note: Changes to the maximum row and column properties only take effect after the Smart View client connects to a new session of Provider Services, not for existing sessions.

Refreshing the List of Provider Services

Use this procedure to update the list of Provider Services, such as after adding or removing them.

- To update the list of Provider Services:
 - 1 From Enterprise View or a custom view, select the **Provider Services** node.
 - 2 Right-click and select **Refresh Provider Services list**.
The list of Provider Services is updated.

Related Information

- [“Adding Provider Services” on page 432](#)
- [“Removing Provider Services” on page 436](#)

Removing Provider Services

You can remove Provider Services when you no longer need to administer it, such as when the server machine is no longer in use.

- To remove Provider Services:
 - 1 From Enterprise View or a custom view, select a provider under the **Provider Services** node.

- 2 Right-click and select **Remove**.
- 3 In the **Remove Provider Services** dialog box, click **Yes**.

Related Information

- [“About Provider Services” on page 431](#)
- [“Adding Provider Services” on page 432](#)
- [“Connecting to Provider Services” on page 433](#)
- [“Disconnecting Provider Services” on page 433](#)
- [“Refreshing the List of Provider Services” on page 436](#)

Standalone Servers

In this section:

- [“About Standalone Servers” on page 437](#)
- [“Adding a Standalone Server” on page 437](#)
- [“Refreshing the Standalone Server List” on page 438](#)
- [“Removing a Standalone Server” on page 438](#)

About Standalone Servers

A standalone Essbase Server is one, non-clustered Essbase Server. The Essbase Server may host one or more Essbase databases. The standalone Essbase Server is not part of a clustered environment, which would enable load balancing or failover support.

Provider Services can connect to standalone Essbase Servers or Essbase Server clusters. Java API, XMLA, and Smart View users connect to Essbase Servers through Provider Services. To users, which database is being accessed is transparent; they connect to and retrieve data from one data source.

Adding a Standalone Server

In order for users to use any standalone Essbase Server, you need to add the standalone server to Provider Services through Administration Services Console. Before adding the standalone server to Provider Services, the Essbase Server should already be added to the User Properties window in Administration Services Console.

➤ To add a standalone server:

- 1 From Enterprise View or a custom view, select the **Essbase Servers** node.
- 2 Right-click and select **Add Essbase Server**. In the **Add Essbase Server** dialog box, enter the Essbase Server name, user name, password, and confirm password, then click **OK**.

- 3 Repeat Step 2 to add additional Essbase Servers.
- 4 From Enterprise View or a custom view, select a provider under the **Provider Services** node.
- 5 Right-click and select **Create**, then **Create Standalone Server**.
- 6 In **Add Standalone Server**, select an Essbase Server from the list containing the Essbase Servers added in Step 2.
- 7 Click **OK**.

The name of the standalone Essbase Server is displayed under the **Standalone Server** node.

Note: Alternatively, if you have existing standalone servers added, you can select the **Standalone Server** node under a provider's name, right-click and select **Create Standalone Server**.

Related Information

- [“About Standalone Servers” on page 437](#)
- [“Refreshing the Standalone Server List” on page 438](#)
- [“Removing a Standalone Server” on page 438](#)
- [“Adding Essbase Servers to Enterprise View” on page 45](#)

Refreshing the Standalone Server List

Use this procedure to update the list of standalone servers, such as after adding or removing them.

Related Information

► To refresh the list of standalone servers:

- 1 From Enterprise View or a custom view, select a provider under the **Provider Services** node.
- 2 Select the **Standalone Servers** node.
- 3 Right-click and select **Refresh**.

The list of standalone servers is updated.

- [“Adding a Standalone Server” on page 437](#)
- [“Removing a Standalone Server” on page 438](#)

Removing a Standalone Server

You can remove a standalone server from a cluster, such as when the server machine is no longer in use.

- To remove a standalone server:
- 1 From Enterprise View or a custom view, select a provider under the **Provider Services** node.
 - 2 Under the provider node, select the **Standalone Servers** node.
 - 3 Under the **Standalone Servers** node, select a server.
 - 4 Right-click and select **Remove**.
 - 5 In the **Remove Standalone Server** dialog box, click **Yes**.

Related Information

- [“About Standalone Servers” on page 437](#)
- [“Adding a Standalone Server” on page 437](#)

Analytic Clusters

In this section:

- [“About Analytic Clusters” on page 439](#)
- [“Adding an Analytic Cluster” on page 440](#)
- [“Refreshing the List of Analytic Clusters” on page 441](#)
- [“Removing Analytic Clusters” on page 441](#)
- [“Adding a Cluster Component” on page 442](#)
- [“Removing a Cluster Component” on page 442](#)
- [“Enabling Cluster Components” on page 443](#)
- [“Disabling Cluster Components” on page 444](#)
- [“Refreshing the Cluster Component List” on page 445](#)

About Analytic Clusters

A cluster of Essbase Servers is defined in several ways:

- A set of servers on separate computers running replicas of identical Essbase databases
- One Essbase Server running replicas of identical applications
- A combination of both

Analytic Clusters provide load balancing and failover support so that connections to the cluster are reliable and highly available. Load balancing enables requests to Essbase Servers to be distributed across a cluster of Essbase Servers running identical databases. Failover support detects service interruptions in a cluster, and reroutes requests to other available Essbase Servers in a cluster.

Provider Services can connect to Essbase Server clusters or to standalone Essbase Servers. Java API, XMLA, and Provider Services users connect to Essbase Servers through Provider Services.

To an end user, which database is being accessed is transparent. From a user perspective, users connect to a single data source and retrieve data from that source.

In summary, Analytic Clusters enable you to:

- Connect to a single Essbase Server instance
- Connect to a single Essbase database
- Connect to multiple Essbase Server instances
- Connect to multiple identical Essbase databases
- Support workload balancing
- Support failover

Adding an Analytic Cluster

► To add an Analytic Cluster:

- 1 From Enterprise View or a custom view, select a provider under the **Provider Services** node.
- 2 Right-click and select **Create**, then **Create Analytic Cluster**.
- 3 In **Add Analytic Cluster**, enter the cluster name under **Cluster name**, such as East Coast Sales.
- 4 In **Description**, enter a short description for the cluster, such as East Coast sales databases.
- 5 Click **Add** to add Essbase Servers to the cluster.
- 6 In the **Select Cluster Component Database** dialog box, specify the name of the Essbase Server, the application name, and database name.
- 7 Click **OK**.

The name of the Essbase Server and associated application and database is displayed under the **Cluster component** list box. For example, `localhost.Demo.Basic`. A cluster component consists of the Essbase Server, application, and database name.

- 8 Repeat Steps 5 - 7 to add cluster components to the cluster. To remove cluster components, select the component and click **Remove**.
- 9 In **Add Analytic Cluster**, click **OK**.

Under the **Analytic Clusters** node, the name of the cluster you just created is displayed.

Note: Unlike standalone Essbase Servers, newly created Analytic Clusters are not available to users until the next time Provider Services is restarted.

Related Information

- [“About Analytic Clusters” on page 439](#)
- [“Adding a Cluster Component” on page 442](#)

- [“Disabling Cluster Components” on page 444](#)
- [“Enabling Cluster Components” on page 443](#)
- [“Refreshing the List of Analytic Clusters” on page 441](#)
- [“Removing a Cluster Component” on page 442](#)
- [“Removing Analytic Clusters” on page 441](#)

Refreshing the List of Analytic Clusters

Use this procedure to update the list of Analytic Clusters, such as after adding or removing them.

► To refresh the list of clusters:

- 1 From Enterprise View or a custom view, under the **Provider Services** node, select a provider.
- 2 Select the **Analytic Clusters** node.
- 3 Right-click and select **Refresh**.

The Analytic Clusters list is updated.

Related Information

- [“Adding an Analytic Cluster” on page 440](#)
- [“Removing Analytic Clusters” on page 441](#)

Removing Analytic Clusters

You can remove Analytic Clusters from being administered in Administration Services Console.

► To remove a cluster:

- 1 From Enterprise View or a custom view, select a provider under the **Provider Services** node.
- 2 Under the provider node, select the **Analytic Clusters** node.
- 3 Under the **Analytic Clusters** node, select a cluster.
- 4 Right-click and select **Remove**.
- 5 In the **Remove Analytic Cluster** dialog box, click **Yes**.

Note: After removing an Analytic Cluster, you must restart Provider Services for the change to take effect.

Related Information

- [“About Analytic Clusters” on page 439](#)
- [“Adding an Analytic Cluster” on page 440](#)
- [“Refreshing the List of Analytic Clusters” on page 441](#)

Adding a Cluster Component

When creating an Analytic Cluster, you need to specify which Essbase Servers and application and databases will be included in the cluster.

➤ To add a database component to a cluster:

- 1 From Enterprise View or a custom view, select a provider under the **Provider Services** node.
- 2 Under the provider node, select the **Analytic Clusters** node.
- 3 Under the **Analytic Clusters** node, select a cluster.
- 4 Right-click and select **Edit**.
- 5 In **Analytic Cluster:<cluster name>**, click **Add**.
- 6 In **Select Cluster Component Database**, specify the name of the Essbase Server, the application name, and database name.
- 7 Click **OK**.

The database component is listed under **Analytic Cluster:<cluster name>**.

- 8 Repeat Steps 5 - 7 to add additional components.
- 9 Click **Apply** to save the changes to the provider.
- 10 Click **Close**.

Note: After you add a cluster component, you need to restart Provider Services for the change to take effect.

Related Information

- [“About Analytic Clusters” on page 439](#)
- [“Adding an Analytic Cluster” on page 440](#)
- [“Enabling Cluster Components” on page 443](#)
- [“Disabling Cluster Components” on page 444](#)
- [“Removing a Cluster Component” on page 442](#)
- [“Removing Analytic Clusters” on page 441](#)

Removing a Cluster Component

You can remove a database component from a cluster if you no longer want it to be part of the cluster.

➤ To remove a database component to a cluster:

- 1 From Enterprise View or a custom view, select a provider under the **Provider Services** node.
- 2 Under the provider node, select the **Analytic Clusters** node.

- 3 Under the **Analytic Clusters** node, select a cluster.
- 4 Right-click and select **Edit**.
- 5 In **Analytic Cluster:<cluster name>**, click **Remove**.

The database component is removed from **Analytic Cluster:<cluster name>**.

- 6 Repeat Steps 5 - 7 to remove additional components.
- 7 Click **Apply** to save the changes to the provider.
- 8 Click **Close**.

Note: After you remove an Analytic Cluster, you need to restart Provider Services for the change to take effect.

Related Information

- [“Adding a Cluster Component” on page 442](#)
- [“Adding an Analytic Cluster” on page 440](#)
- [“Disabling Cluster Components” on page 444](#)
- [“Enabling Cluster Components” on page 443](#)
- [“Refreshing the Cluster Component List” on page 445](#)
- [“Removing Analytic Clusters” on page 441](#)

Enabling Cluster Components

After taking a cluster component offline by disabling it, you can re-enable it.

► To enable a database component in a cluster:

- 1 From Enterprise View or a custom view, under the **Provider Services** node, select a provider.
- 2 Under the provider node, select the **Analytic Clusters** node.
- 3 Under the **Analytic Clusters** node, select a cluster.
- 4 Right-click and select **Edit**.
- 5 In **Analytic Cluster:<cluster name>**, click **Enable**.

The status of the database component changes to Enabled.

- 6 Repeat Step 5 to enable other components in the cluster.
- 7 Click **Close**.

Note: Components that were part of the cluster definition when Provider Services was started can be enabled and disabled dynamically without needing to restart Provider Services. However, if you add a component to a cluster or create a cluster, then you must restart Provider Services for the new cluster definition to take effect. You will not be able to enable or disable the newly added cluster components until you restart Provider Services.

Related Information

- [“Adding a Cluster Component” on page 442](#)
- [“Disabling Cluster Components” on page 444](#)
- [“Refreshing the Cluster Component List” on page 445](#)
- [“Removing a Cluster Component” on page 442](#)

Disabling Cluster Components

You can disable individual database components in a cluster. For example, you can take the component offline so that you can update the database.

► To disable a database component in a cluster:

- 1 From Enterprise View or a custom view, select the name of a provider under the **Provider Services** node.
- 2 Under the provider node, select the **Analytic Clusters** node.
- 3 Under the **Analytic Clusters** node, select the cluster name.
- 4 Right-click and select **Edit**.
- 5 In **Analytic Cluster:<cluster name>**, click **Disable**.

The status of the database component changes to Disabled.

- 6 Repeat Step 5 to disable other components in the cluster.
- 7 Click **Close**.

Note: Components that were part of the cluster definition when Provider Services was started can be enabled and disabled dynamically without needing to restart Provider Services. However, if you add a component to a cluster or create a cluster, you must restart Provider Services for the new cluster definition to take effect. You cannot enable or disable the newly added cluster components until you restart the Provider Services.

Related Information

- [“Adding a Cluster Component” on page 442](#)
- [“Enabling Cluster Components” on page 443](#)
- [“Refreshing the Cluster Component List” on page 445](#)
- [“Removing a Cluster Component” on page 442](#)

Refreshing the Cluster Component List

Use this task to update the list of cluster components, such as after adding or removing them.

➤ To refresh the database components in a cluster:

- 1 From Enterprise View or a custom view, select a provider under the **Provider Services** node.
- 2 Under the provider node, select the **Analytic Clusters** node.
- 3 Under the **Analytic Clusters** node, select a cluster.
- 4 Right-click and select **Edit**.
- 5 In **Analytic Cluster:<cluster name>**, click **Refresh**.

The list of database components is updated.

Related Information

- [“Disabling Cluster Components” on page 444](#)
- [“Enabling Cluster Components” on page 443](#)
- [“Removing a Cluster Component” on page 442](#)

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Add Administration Server Dialog Box

Use this dialog box to add an Essbase Administration Server to Enterprise View. You can add multiple Essbase Administration Servers to your view. You can connect to only one Essbase Administration Server at a time.

In the Administration Server text box, enter the name of a computer on which Essbase Administration Server is installed to add it to your view. If the [port setting](#) for the Essbase Administration Server that you are adding is not the default, you may need to specify a port value after the Essbase Administration Server name (for example, *AdminServerName:9002*).

Related Information

- [“Adding Essbase Administration Servers to Enterprise View” on page 57](#)
- [“Removing Essbase Administration Servers from Enterprise View” on page 59](#)
- [“Connecting to Essbase Administration Server” on page 33](#)
- [“Disconnecting from Essbase Administration Server” on page 57](#)

Add Essbase Server Dialog Box

Use items in the Add Essbase Server dialog box to add an Essbase Server to Enterprise View. You can add multiple Essbase Servers to your view.

- **Essbase node**—Enter the name of an Essbase Server or cluster. The Essbase Server name is the name of the computer on which Essbase Server is installed. Avoid using "localhost" as the Essbase Server name, as it may result in problems when displaying partitions or when Administration Services Console is running on a different computer than Essbase Administration Server.

If the [port setting](#) for Essbase Server is not the default, you may need to specify a port value after the Essbase Server name (for example, *ServerName:9002*).

- **Use Single Sign-On**—Select if the user is [externally authenticated](#), either through the Shared Services native directory or through a corporate authentication provider.
- **Use SSL**—Select if you are connecting to Essbase Server using SSL encryption.
- **Password and Confirm password**—Enter or reenter, respectively, the user's Essbase Server password exactly as it is defined on the Essbase Server that you are adding.

If the user is [externally authenticated](#) on Essbase Server, no password is needed and these text boxes are inactive.

Related Information

- [“Adding Essbase Servers to Enterprise View” on page 45](#)
- [“Removing Essbase Servers from Enterprise View” on page 46](#)
- [“About Essbase Connections and Ports” on page 82](#)
- [“Connecting to Essbase Servers” on page 83](#)
- [“Disconnecting from Essbase Servers” on page 84](#)

Add Cluster Dialog Box

You use the Add Cluster dialog box to add and remove database components to and from clusters.

The following boxes display cluster and component information:

- **Cluster name**—Domain name

- Description—URL of Provider Services. For example, `http://<server_name>:13080/aps/APS`
- Cluster components—A list of components, including identification of the domain to which each component belongs

To remove a component, you select it, and click the **Remove** button.

To add a component, you click the **Add** button and use the **Select Cluster Component Database** dialog box.

Add Provider Services Dialog Box

You use the Add Provider Services dialog box to add Provider Services to Enterprise View.

The Provider Name box displays the domain name of Provider Services.

In the URL box, you enter the URL of Provider Services; for example, `http://<your machine name>:13080/aps/APS`

Add Standalone Server Dialog Box

In the Essbase Server box of the Add Standalone Server dialog box, you enter the name of the Essbase Server instance to which Provider Services connects (for example, `localhost` or `east1`).

Add/Edit Custom Filter Dialog Box

You use (select from or enter information into) one or more boxes of the Add/Edit Custom Filter dialog box to create or edit custom filters for log charts.

The name that you enter in the “Filter name” box is displayed in the View by filter list of the Log Analyzer Charts window.

The selections that you make in the following boxes determine which log entries are returned:

- Application, User, and Message number—The three boxes list only the applications, users, and message numbers found in the log.
 - To return entries for one application, user, or message number, select an application, user, or message number.
 - To return entries for all applications, users, or message numbers in the log file, select **All**.
 - To return only entries that do not reference a specific application, user, or message number, select **None**.

Note: To look up an error number, in the Message number list, select **Look up**. Then, in **The Message Number Lookup** dialog box, select an error, and click **OK** to return to the Add/Edit Custom Filter dialog box.

- Predefined duration, Start date, and End date
 - Select a predefined duration or, from the “Predefined duration” list, select **Custom** (if you want to specify a start and end date).
 - To return all entries written on or before a certain date, specify the end date and do not specify a start date.
 - To return all entries written on or after a certain date, specify the start date and do not specify an end date.
- Text contains text—To return only entries that contain specified text, enter the text. The field is case-sensitive.
- Message type
 - To return only entries that reference a specific type of message, select error, info, or warning.
 - To return entries for all message types, select **All**.

The information that you enter and the selections that you make in the following boxes determine the layout and labeling of the log chart:

- X-axis title and Y-axis title
- X-axis and Y-axis—The X-axis category that you select determines how the count specified for the Y-axis is grouped. The Y-axis category that you select determines what is counted. The X-axis and Y-axis categories must be different; each is selected from the following list:
 - Application
 - Database
 - User
 - Log entry date
 - Message type
 - Message number
- Granularity—If you selected a log entry date for the X-axis, you can select hourly, daily, weekly, or monthly.
- Series—Select a series to further categorize the Y-axis. For example, to view a chart showing the count of each message type for each application, select Message type as the X-axis, Application as the Y-axis, and Application as the series. The series selection applies only to the Y-axis.

Related Information

- [“Creating or Editing Custom Log Filters” on page 240](#)
- [“Viewing Log Charts” on page 239](#)

- [“About Log Analyzer” on page 238](#)

Admin Server Properties Window

You use the Admin Server Properties window to manage Essbase Administration Server.

In the SMTP Server box of the Configuration tab, you specify the host that is running the SMTP system that you want to use to enable administrators to email information directly from Administration Services Console to other administrators or to Oracle Technical Support. The host entry can be a DNS host name or an IP address. Essbase Administration Server verifies that it can connect to the specified server. See [“Specifying an E-mail Server” on page 65](#).

Also, in the Configuration tab, you can view Essbase Administration Server version and variable information:

- Admin Server Version
- ARBORPATH—The location is set internally when Essbase Administration Server is started and overrides (but does not replace) the value for the ARBORPATH system environment variable, if the environment variable is set on the Essbase Administration Server computer.
- ESSLANG—For information about ESSLANG, see the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.

If native security mode is not being used (if the EPM System security mode option is selected), and Administration Services is configured to reference a Shared Services installation, the Configuration tab also displays Shared Services information:

- Shared Services server name
- Shared Services server port
- Security configuration—The path to the Shared Services security configuration
- SSL—Indicates whether Essbase Administration Server communicates with Essbase Server in SSL mode

You use the Data Storage tab to specify information about the embedded database that is used to store Log Analyzer information:

- JDBC RDBMS—Name of the embedded database
- JDBC archive—Name of the .jar file that contains the JDBC driver (blank because the JDBC driver is installed with Administration Services)
- JDBC driver
- JDBC URL—Path to the Administration Services repository
- JDBC user name
- JDBC password
- JDBC pool size—Initial size of the connection pool for the database

Related Information

- [“Starting Administration Services” on page 32](#)
- [“About Administration Services” on page 31](#)
- [“Administration Services Architecture” on page 31](#)

Aggregate Storage Database Restructure Dialog Box

When a modified aggregate storage outline is saved, the database may be restructured. For information about managing aggregate storage database restructuring, see the *Oracle Essbase Database Administrator's Guide*.

For restructures that do not require that all data be cleared, you can specify whether data is retained or cleared. You define this specification by selecting, in the Aggregate Storage Database Restructure dialog box, one of the following options:

- Retain all data and proceed with the restructure
- Clear all data and proceed with the restructure

Related Information

[“Saving Outlines” on page 130](#)

Aggregate Storage Outline Conversion Wizard

You use the Aggregate Storage Outline Conversion wizard to convert a block storage outline to an aggregate storage outline. The conversion process does not modify the block storage outline.

Note: Not all features of block storage outlines apply to aggregate storage outlines. For information about aggregate storage outlines, see [“About Aggregate Storage Outlines” on page 69](#).

The wizard runs a copy of the block storage outline through the verification process for aggregate storage outlines and generates a list of errors. You correct the errors automatically or manually and specify a destination for the converted outline. Outlines are converted to a pageable format. For information about outline paging, see the *Oracle Essbase Database Administrator's Guide*.

Note: If the block storage database accepts [duplicate member names](#), the aggregate storage database accepts duplicate member names.

Related Information

- [“Launching the Aggregate Storage Outline Conversion Wizard” on page 457](#)
- [“Aggregate Storage Outline Conversion Wizard Pages” on page 457](#)

- [“Converting Block Storage Outlines to Aggregate Storage” on page 70](#)
- [“About Aggregate Storage” on page 67](#)
- [“About Aggregate Storage Outlines” on page 69](#)
- “Aggregate Storage Applications, Databases, and Outlines” in the *Oracle Essbase Database Administrator's Guide*
- “Comparison of Aggregate and Block Storage” in the *Oracle Essbase Database Administrator's Guide*

Launching the Aggregate Storage Outline Conversion Wizard

- To launch the Aggregate Storage Outline Conversion wizard, perform one of the following actions:
 - Select **Wizards**, and then **Aggregate Storage Outline Conversion**.
 - Select **File**, then **New**, and then, from the **Wizards** tab, select **Aggregate storage outline conversion wizard**.

Aggregate Storage Outline Conversion Wizard Pages

Click a link below to view information about each page in the wizard:

- [Select Source Outline](#)
- [Verify Corrections to Outline](#)
- [Select Destination for Aggregate Storage Outline](#)
- [Outline Conversion Completed Page](#)

Select Source Outline Page

On this page, on either of the following tabs, you select the block storage outline that you want to convert to an aggregate storage outline:

- **File System**—In the file system, select the outline file.
- **Essbase Server**—In the **Look in** box, select an Essbase Server instance and then select an application, a database, and an outline file. The selected file is identified in the **File name** box, and, in the **File of type** box, `.otl` is selected by default.

When you select the block storage outline and click **Next**, the wizard examines the block storage outline and returns a list of the corrections that are required to convert the block storage outline to an aggregate storage outline.

Verify Corrections to Outline Page

This page displays the Verification Warnings and Errors tree, which lists the errors and warnings that were identified during verification.

On the page, you select a method for correcting the errors:

- Automatic outline correction—After all errors are corrected, the list of outline modifications is displayed.

Note: The automatic option does not convert formulas to MDX. For information about how to use MDX to rewrite formulas, see “MDX Outline Formulas” in the *Oracle Essbase Technical Reference*

- Interactive outline correction—The Verification tab of Outline Editor displays a list of outline errors. You correct each error manually.

Note: You cannot use the interactive option to delete DTS members. For outlines that contain DTS members, use the automatic option or use the interactive option to correct all but DTS errors and then use the automatic option to correct DTS errors.

Outline information reflects error corrections. For example, the conversion process tags Dynamic Calc members as stored members. Therefore, the pre-conversion and post-conversion Members Stored values, as displayed on the Dimensions tab of the Database Properties window, may differ.

Select Destination for Aggregate Storage Outline Page

You select one of the tabs of this page to navigate to where you want to save the aggregate storage outline:

- File System—In the file system, select a location.
- Essbase Server—In the **Look in** box, select an Essbase Server instance and then select an application, a database, and an outline file. The selected file is identified in the **File name** box, and, in the **File of type** box, `.otl` is selected by default.

To create an aggregate storage application to contain the outline, you click the **Create Aggregate Storage Application** button. Then, in the Create Aggregate Storage Application, you create an application and a database. The converted outline is saved to the newly created application and database.

Outline Conversion Completed Page

If you want to restart the wizard and convert another outline to aggregate storage, select the **Convert another block storage outline** option.

Aggregate Storage Partition Wizard

You use the Aggregate Storage Partition wizard to create a transparent partition that joins a source aggregate storage database and a target block storage database.

Note: To use the wizard, you must have Database Manager permissions for the source and target databases. If the source database accepts [duplicate member names](#), the target database must accept duplicate member names.

The transparent partition provides a seamless view of the databases and enables data to be written back to the partitioned area that is defined in the target (for example, from a spreadsheet lock and send operation).

Related Information

- [“About Aggregate Storage” on page 67](#)
- [About Block Storage](#)
- [“About Partitions” on page 395](#)
- [“Using a Transparent Partition to Enable Write-Back for Aggregate Storage Databases” in the *Oracle Essbase Database Administrator's Guide*](#)
- [“Launching the Aggregate Storage Partition Wizard” on page 459](#)
- [“Aggregate Storage Partition Wizard Pages” on page 459](#)

Launching the Aggregate Storage Partition Wizard

- To launch the Aggregate Storage Partition wizard, select **Wizards**, and then **Aggregate Storage Partition**.

Aggregate Storage Partition Wizard Pages

Click a link below to view information about each page in the wizard:

- [Select Partition Source and Target](#)
- [Select Target Dimensions](#)
- [Add Members to Write-back Dimension](#)
- [Define Partition on Time Dimension](#)
- [Add Time Members to Partition](#)
- [Verify and Create Partition](#)

Select Partition Source and Target Page

On this page, you specify connection information.

In the Data Source and Data Target groups, you specify, respectively, information for the aggregate storage database (the source) and the block storage database (the target):

- Essbase Server—Name of the Essbase Server instance on which the database resides
- Application—Name of the application that contains the database
- Database—Name of the database
- User and Password—Username and password that you want the partition to use to connect to the Essbase Server instance
- Comment—An explanatory note (optional)

The aggregate storage database exists. The block storage database may or may not exist. If the specified block storage database does not exist, it is created. If it does exist, it is overwritten.

Select Target Dimensions Page

On this page, the outline tree displays the source dimensions, any of which can be included within the partition definition.

To select the dimensions to be used to create the target database, you perform one of the following actions:

- In the outline tree, select the preferred dimensions. By selecting a subset of dimensions, you reduce the size of the target database and, thus, enable faster and more efficient calculations and retrievals.
- Select the “Select all dimensions” button.
- Select the “Clear all dimensions” button.

You should select dimensions carefully. Non-selection of some dimensions may negatively affect calculation or cause outline errors.

Add Members to Write-back Dimension Page

On this page, in the “Write-back dimension” box, you select the write-back dimension (the dimension to which you want to write back). The selected dimension, as it currently exists, is added to the partitioned area.

To add members to the write-back dimension, you select the dimension, click Edit, and select members. Added members are not included in the partitioned area. Therefore, you can write to added members and then calculate data and generate reports based on updated data.

Note: The wizard does not recognize outline changes that occur outside the write-back dimension. Therefore, such changes are not included in the partition definition and, during partition validation, may produce warnings or errors.

The next wizard page is accessed from the window that is displayed when you click **Edit**.

Define Partition on Time Dimension Page

If data for some time periods is stored in the aggregate storage database and data for other time periods is stored in the block storage database, you may want to add time members to the partition definition. To do so, on this page, you select the “Define partition definition on time dimension” option.

Add Time Members to Partition Page

If you selected the “Define partition definition on time dimension” option, on this page, you specify the members of the time dimension that you want to include in the partition.

➤ To include time dimension members in partition definitions:

- 1 **Optional:** If you want to insert aliases, select **Use aliases**, and, in the **Alias table** box, select an alias table.
- 2 **Perform one or both of the following actions:**
 - In the outline tree, select one or more member names or aliases.
You can use the right-click menu to expand the outline tree.
 - In the **Commands and functions** tree, select one or more member set functions.

The specified member names or aliases are inserted in the partition definition at the cursor position. If you selected a member set function, the function argument is displayed.

Verify and Create Partition Page

On this page, you view, verify, and create the partition. You can save an invalid partition and then [edit it in the Edit Partition window](#).

The “Write-back partition definition” box displays the partition definition, which is a MaxL statement.

Note: For information about using MaxL to create partitions, see “Create Transparent Partition” in the *Oracle Essbase Technical Reference*.

When you click the Verify button, Essbase reviews the partition definition (.adb) files for the source and target databases.

A message indicates whether the partition is valid. If the definition is not valid, you correct it in the in the “Write-back partition definition” box. If the partition definition is valid, you click the Finish button.

For information about defining a partition area and validating partitions, see the *Oracle Essbase Database Administrator's Guide*.

Aggregation Design Wizard

You use the Aggregation Design wizard to precalculate and store aggregations for aggregate storage databases that contain data and to which you are granted Calculation permission.

The aggregation process includes two phases: view selection and materialization. You can perform the processes separately or simultaneously.

If you select the “Materialize aggregation in the background” option, as the aggregation processes:

- You can continue working.
- You cannot shut down Essbase Administration Server.
- You can check process status in the [Background Process Status](#) window.

For detailed information about aggregating aggregate storage databases, see the *Oracle Essbase Database Administrator's Guide*.

Launching the Aggregation Design Wizard

► To launch the Aggregation Design wizard:

- 1 From Enterprise View or a custom view, select an aggregate storage database.
- 2 Right-click, and select **Design aggregation**.

Select Aggregation Task Page

When you access this page, you may see the following message: “Multiple slices exist in the cube.” If you select the accompanying option, “Merge data before proceeding with view selection,” you must exit the wizard and merge data from Enterprise View.

On this page, you select a selection-materialization option:

- Use recommended views to materialize aggregation—The selection and materialization processes are combined into one, nonconfigurable operation that is performed by Essbase Server.
- Design, materialize, and save aggregation—The selection and materialization processes are separated and, thus, you have more control over the processes.
- Use saved aggregation—Materialization is performed through an aggregation script. Thus, you need not select views.

If you select **Use recommended views to materialize aggregation**, when you click **Next**, Essbase Server performs the following actions:

1. If the database contains values from previous aggregations, asks you whether you want to drop the values.
2. Selects the best set of aggregate views. The selection is based on query time and storage resources. The maximum number of aggregate views that can be selected for one database is 1,023.

3. Materializes the aggregation and stores the values.

If you select **Design, materialize, and save aggregation**, when you click **Next**, the wizard displays, in the following order, the following pages:

1. [“Consider Existing Aggregate Views Page” on page 464](#)
2. [“Specify Stop Criteria for Selection Process Page” on page 464](#)
3. [“Select Aggregate Views Page” on page 464](#)
4. [“Save and Materialize Aggregation Page” on page 466](#)

If you select the **Use saved aggregation** option, when you click **Next**, all aggregation scripts that are saved on the current database are displayed.

In the “Saved aggregations” list, you select a saved aggregation script. Then, you perform one of the following actions:

- To materialize the aggregation, select or clear the **Replace existing aggregation** option, and click **Next**.
- Click **Rename**, and rename the aggregation.
- Click **Delete**.

Note: When an aggregation script is executed, the views specified within it are materialized. To save an aggregation as a script, you select the **Design, materialize, and save aggregation** option (on the first page of the wizard). For information about working with aggregation scripts, see the *Oracle Essbase Database Administrator's Guide*.

Related Information

- [“About Aggregate Storage” on page 67](#)
- [“Using Aggregations to Improve Retrievals” on page 74](#)
- [“Calculating Aggregate Storage Databases” in the Oracle Essbase Database Administrator's Guide.](#)
- [Performing a Data Load or Dimension Build for Aggregate Storage Databases](#)
- [“Aggregation Design Wizard - Example” on page 466](#)

Related Commands

- execute aggregate process (MaxL) in the *Oracle Essbase Technical Reference*
- execute aggregate selection (MaxL) in the *Oracle Essbase Technical Reference*
- execute aggregate build (MaxL) in the *Oracle Essbase Technical Reference*
- query database (MaxL) in the *Oracle Essbase Technical Reference*

Consider Existing Aggregate Views Page

A view-selection process (as described in the [example scenario](#)) is based on values loaded since the last aggregation. However, for databases that contain views from previous aggregations, on this page, the wizard provides options that enable you to decide whether previously selected views are included:

- Replace existing aggregate view—To not include previously selected views, unless they are re-selected (based on their current merit)
- Add to existing view selection—To include previously selected views and, thus, to enable retention of view selections that produced satisfactory query performance and to reduce materialization time.

For information about guidelines for replacing aggregations, see the *Oracle Essbase Database Administrator's Guide*.

Specify Stop Criteria for Selection Process Page

This page provides the following information, expressed in megabytes:

- Current level 0 input size—Amount of storage space being used for level 0 values
- Existing aggregation data size—Size of existing aggregations, if any exist in the database

On the page, you specify one of the following options:

- Select all recommended aggregate views—You do not apply a stop criterion, and Essbase Server selects all views that it deems worthy of selection.
- Total storage space—You apply a stop criterion. When the specified amount of storage space (according to the number, in megabytes, that you specified in the “Total storage space” box) is used, Essbase Server stops selecting views.

By specifying a storage limit, you reduce the storage space and the time required to materialize the aggregation.

Note: The maximum number of aggregate views that can be selected for one database is 1,023.

Select Aggregate Views Page

This page displays a table that lists and provides information about each selected view. If you selected the “Add to existing view selection” option, the table lists previously selected rows and then newly selected rows.

In the Select column, as you select the views to be materialized, keep the following in mind:

- The first view, which is the level 0 view, is selected by default. You cannot clear the selection.
- The view selection is contiguous. Thus, for example, if you select the 10th view, all views from 1 to 10 are selected.

- If previously materialized views are listed, they are selected. You cannot clear the selections.

Note: For information about fine-tuning view selection, see the *Oracle Essbase Database Administrator's Guide*.

The following columns provide information about the views:

- **Level Info**—Level numbers, one number (thus, one member) per dimension. For dimensions that contain hierarchies, notations also identify hierarchy placement (*level number/hierarchy number*). Dimension hierarchies are numbered top down, starting with hierarchy 0.
- **Database Size (MB)**—Estimated size of the database if the view (and all views that it depends on) is materialized. Each size value is graphed on the X-axis in the Database Size/Query Cost Graph.
- **Query Cost**—Estimate of the average retrieval time required to retrieve values from the view. For the first view (selected by default), the estimation is the average of all possible queries. For views for which query tracking is used, the estimation is the average of the tracked queries. Therefore, a view may, under different conditions, display different estimates. To compute a percentage that evaluates the benefit of using a particular view, divide the query cost value for the view into the query cost value for using views that contain only level 0 values.

The following boxes display additional information:

- **Number of selected/all views**—Ratio between the number of views selected for materialization and the total number of views
- **Total size of selected/all views**—Ratio between the size of the database if the selected views are materialized and the size of the database if all views are materialized

When the view-selection process concludes, the Database Size/Query Cost graph is displayed. The graph plots the database size on the X-axis, and the cost of the query on the Y-axis. Individual-view and all-view values are identified by color.

As you review the graph, consider the following:

- The point at which the line begins to curve from vertical to horizontal may represent the point at which the selection of additional views stops reducing query cost and begins increasing database size.
- For optimum results, you may want to clear (not select) the views that follow the view associated with the vertical-to-horizontal point.

If you want to base view selection on query tracking data, you select the “Use query tracking data during view selection” option. Because queries are tracked continuously, if the option is selected, each run of the wizard may product a unique set of views. If the option is not selected, Essbase Server assumes that each view is equally likely to be queried.

For detailed information about query tracking, see the *Oracle Essbase Database Administrator's Guide*. For instructions on how to enable or disable query tracking for a database, see [Tracking Query Data for Aggregate View Selection](#).

Note: The query data option is valid only for databases that contain aggregations.

To begin the view-selection process, click **Start**. To stop the process, click **Stop**. If you click **Stop** and then **Start**, the selection begins anew; that is, views selected during the first process are not saved.

Save and Materialize Aggregation Page

Aggregations can be saved as scripts and/or materialized immediately.

On this page, you select one or more of the following options:

- Save aggregation as—In the text box, you enter a name. If you enter the name of an existing script, the existing script is replaced. Scripts are saved as text files with a .csc extension and are stored in the database directory on the Essbase Server machine. To materialize a saved script, you select the **Use saved aggregation** option (available on this first page of the wizard).
- Materialize aggregation—Essbase Server materializes the aggregation, thereby creating aggregate cells and storing values in them. During materialization, member formulas on dimensions tagged as accounts are not calculated. If applicable, you can replace existing aggregation values with new values.
- Replace existing aggregation—The option is available only if the database contains values from previous aggregations and the “Materialize aggregation” and “Replace existing aggregate view selection” options are selected.

For information about working with aggregation scripts, see the *Oracle Essbase Database Administrator's Guide*. For information about guidelines for replacing aggregations, see the *Oracle Essbase Database Administrator's Guide*.

Aggregation Design Wizard - Example

The following scenarios are based on a model that includes three dimensions:

- Product (3 levels)
- Market (4 levels)
- Measures

The total number of potential aggregate views is 12.

Assumptions

- The aggregate views are numbered from 1 to 12.

- Data was loaded, and an aggregation was performed. The aggregation materialized aggregate views **3, 5, 7, and 8**.
- A second data load was completed, so, since the aggregation, the level 0 input data has changed.
- You are designing a new aggregation. Thus, you are using option 2 of the wizard.

View-Selection Options

In the wizard, if you select the “Add to existing aggregate view selection” option:

- Views 3, 5, 7, and 8 are automatically selected.
- Select views 1 and 12.
- When the aggregation is materialized, aggregate views 1 and 12 are materialized.
- The database aggregation now contains aggregate views 1, 3, 5, 7, 8, and 12.

Note: If you were pleased with the query performance produced by the original aggregate view selections, you should select the Add option. Also, if the Add option is used, materialization time is reduced.

Aggregation Replacement Option

In the wizard, if you select the “Replace existing aggregate view selection” option:

- No views are automatically selected.
- Select views 1, 3, 7, 9, and 11.
- On the past page of the wizard, you must select or clear the “Replace existing aggregation” option.

If you selected the “Replace existing aggregate view selection” option, on the last page of the wizard, you must select or clear the “Replace existing aggregation” option.

If you select the “Replace existing aggregation” option:

- Aggregate views 3, 5, 7, and 8 are deleted.
- Aggregate views 1, 3, 7, 9, and 11 are materialized.
- The database aggregation now contains aggregate views 1, 3, 7, 9, and 11.

If you clear the “Replace existing aggregation” option:

- Aggregate views 3 and 7 exist.
- Aggregate views 1, 9, and 11 are materialized.
- The database aggregation now contains aggregate views 1, 3, 5, 7, 8, 9, and 11.

Essbase Administration Services Login Dialog Box

After you log on Administration Services, Essbase Server connections are handled by Essbase Administration Server. Therefore, you need not provide a username and password to establish an Essbase Server connection.

To log on Administration Services, in the following boxes, you enter your Essbase Administration Server information, which may or may not be the same as your Essbase Server information:

- Essbase Administration Server—The name of the computer on which Essbase Administration Server is installed. If the Essbase Administration Server [port setting](#) is not the default, you may need to specify a port value after the Essbase Administration Server name (for example, *AdminServerName:10081*).
- Username
- Password—Empty passwords are not supported. If you log on as an LDAP, NT, LAN Manager, or Active Directory user and your password is empty, you must change the password before you can use your external directory account to log on Administration Services.

Note: If you do not know any of the required information, contact your administrator.

Analytic Cluster:<cluster name> Window

You use the Analytic Cluster window to administer the cluster that is named in the window title.

In the Description box, you describe the cluster, such as "Sales information for the West Region."

The following columns display information about the cluster, one row per database component:

- Essbase Server
- Application
- Database
- Status—Enabled, Disabled, or Unavailable

To perform various actions, you click the following buttons:

- Add—Opens the Select Cluster Component Database dialog box, which you use to select databases to be added to the cluster
- Remove—To remove the selected database
- Enable—To enable the selected disabled database
- Disable—To disable the selected enabled database (You can update databases only offline. Therefore, before you update a database, you must disable it.)
- Refresh—To update the database list and the status markers
- Apply—To apply your changes

Essbase Server Properties Window

You use this window to view and edit properties for Essbase Server. You need Administrator permissions to view and edit server-level properties.

The dialog box includes the following tabs:

- [Security](#)—Used to specify auto-logoff behavior and to manage user name and password longevity
- [License](#)—Used to view information about the Essbase license and installation
- [Statistics](#)—Used to view runtime statistics for Essbase Server
- [Environment](#)—Used to view information about Essbase environment variables and `essbase.cfg` settings
- [OS](#)—Used to view information about the operating system and resource usage on the server computer
- [Disk Drives](#)—Used to view information about disk drive types, disk drive use, and file system types on the server computer

Related Information

- [“Setting Essbase Server Properties” on page 85](#)
- [“About Essbase Server Monitoring” on page 305](#)
- [“E-mailing Essbase Information” on page 87](#)

Related Commands

- `alter system (MaxL)` in the *Oracle Essbase Technical Reference*
- `display system (MaxL)` in the *Oracle Essbase Technical Reference*

Essbase Server Properties—Disk Drives Tab

The Disk Drives tab displays information about disk drive types, disk drive use, and file system types.

The columns of the tab provide information about the drives on the Essbase Server computer:

- Drive—Name of the drive
- Volume Label
- Type—Fixed, Removable, Ram, Remote, or Unknown
- File System—Such as FAT, HPFS, or NTFS
- Total Space—In kilobytes
- Used Space—In kilobytes
- Free Space—In kilobytes

Related Information

- [“Setting Essbase Server Properties” on page 85](#)
- [“About Essbase Server Monitoring” on page 305](#)
- [“Essbase Server Properties Window” on page 469](#)

Related Commands

display system (MaxL) in the *Oracle Essbase Technical Reference*

Essbase Server Properties—Environment Tab

The nodes of the Environment tab display the following information:

- Essbase environment variables—As defined during installation (for example, `ARBORPATH`). If an environment variable was not defined during installation, the default value is displayed. You can use the box next to the node to verify path information.
- Essbase config settings (`essbase.cfg`)—List of the parameters defined in the `essbase.cfg` server configuration file, if you created it. If you did not create the file, the box next to the node is blank. For information about how to create the file and for a list of available parameters, see the *Oracle Essbase Technical Reference*.

You can modify the server log level configuration setting, determining which messages get written to the Essbase Server log.

Related Information

- [“Setting Essbase Server Properties” on page 85](#)
- [“About Essbase Server Monitoring” on page 305](#)
- [“Configuration File Overview” in the Oracle Essbase Technical Reference](#)
- [“Essbase Server Properties Window” on page 469](#)

Related Commands

display system (MaxL) in the *Oracle Essbase Technical Reference*

Essbase Server Properties - License Tab

Use this tab to view information about Essbase licensing and installation.

Related Information

- [“Setting Essbase Server Properties” on page 85](#)
- [“About Essbase Server Monitoring” on page 305](#)
- [“Viewing License and Installation Information” on page 307](#)
- [“Essbase Server Properties Window” on page 469](#)

Related Commands

- display system (MaxL) in the *Oracle Essbase Technical Reference*
- version (MaxL Shell command) in the *Oracle Essbase Technical Reference*
- VERSION (Essbase Agent) in the *Oracle Essbase Database Administrator's Guide*

Window Items - License Tab	
Version node	Displays the current version of Essbase running on the Essbase Server computer.
License number node	Displays the Essbase license number.
License expiration date node	Displays the expiration date of the Essbase license.
Number of installed ports node	Displays the total number of ports installed on the server. Essbase provides one additional reserve port for Administrators. To find out how many ports are available for use, click the Statistics tab.
Network protocol node	Displays the network protocol installed on the server computer.
License type node	Displays one of the following types of Essbase licenses: <ul style="list-style-type: none">● Named: Essbase is licensed for named users, meaning that the license file specifies the maximum number of users that can be created on Essbase Server.● Concurrent: Essbase is licensed for concurrent users, meaning that the license file specifies the maximum number of users that can be logged on to Essbase Server at any given time. With this type of license, you can create the maximum number of users allowed on an Essbase Server, specified in the “Limits” appendix in the <i>Oracle Essbase Database Administrator's Guide</i>.● CPU: Essbase is licensed for a specific number of CPUs on the Essbase Server computer. For example, if the license specifies 4 CPUs, the computer on which Essbase Server runs must have 4 or fewer CPUs.● Unlimited: Essbase is licensed for concurrent users with unlimited ports. With this type of license, you can create the maximum number of users allowed on an Essbase Server, specified in the “Limits” appendix in the <i>Oracle Essbase Database Administrator's Guide</i>. There is no limitation for the number of users that can be logged on to Essbase Server at any given time. This is a legacy license type from previous releases.
Installed options node	Lists the features that were put in place when Essbase was installed.
Essbase system files node	Lists the system files in server memory, including their locations and version numbers.

Essbase Server Properties—OS Tab

The OS tab displays information about the Essbase Server computer.

The “Operating system” node displays the following information about the operating system that is running on the Essbase Server computer:

- Name—Name and version
- Start time—Relative to the time zone of the Essbase Server computer
- Elapsed time—In hours:minutes:seconds
- Current time—Relative to the time zone of the Essbase Server computer

The CPU node displays the following information about the CPUs on the Essbase Server computer:

- Count
- Type

The Memory node displays the following information about physical memory on the Essbase Server computer:

- Total (KB)
- Used (KB)
- Free (KB)

The “Virtual memory” node indicates whether disk swapping is enabled. Possible values are Enabled, Disabled, File not found, and Access denied. If the status is Disabled, File not found, or Access denied, swap-space information is not available. If the status is Enabled, the following swap-space information is displayed:

- Path—Windows NT and UNIX systems can have multiple swap files. In this tab, multiple files are separated by spaces.
- Total—In kilobytes
- Used—In kilobytes. For multiple swap files, used space is the combined sizes of the files.
- Free—In kilobytes

Related Information

- [“Setting Essbase Server Properties” on page 85](#)
- [“About Essbase Server Monitoring” on page 305](#)
- [“Essbase Server Properties Window” on page 469](#)

Related Commands

display system (MaxL) in the *Oracle Essbase Technical Reference*

Essbase Server Properties—Security Tab

You use the Security tab to perform security-related tasks.

Note: If Essbase Server is in [EPM System security mode](#), the username and password options and the automatic logoff options that are provided on the Security tab cannot be used.

In the “User name and password management” group, you specify username and password settings. By default, the settings are 0 (turned off). The values that you enter must be between 0 and 64,000.

- Login attempts allowed before user name is disabled—Specify the number of consecutive, incorrect username or password entries permitted before the system disabled the username. When you change the setting, all counts of login attempts are returned to 0.
- Number of inactive days before user name is disabled—Specify the number of days that a user account can remain inactive. The timer starts for all users when you apply the setting. The timer is reset for each user each time the user logs on or when an administrator reactivates or edits the user.
- Number of days before user must change password—Specify the number of days that a user can retain a password. After the specified number of days, the user is prompted at login to change the password. The day count is reset for each user each time the user or an administrator changes the user's password.

You use the options of the “Auto logoff” group to specify if and when users are logged off:

- Inactive limit (minutes)—Specify the number of minutes of user inactivity permitted before Essbase disconnects the user (default of 60; minimum of 5; and maximum of 0, which sets no limit)
- Check every (minutes)—Specify, in minutes, how often Essbase checks for user inactivity and [compares the security backup file](#) to the security file (default of 5; minimum of 1; maximum of 0, which sets no limit).

Note: If automatic logoff is disabled, users can remain connected until the server is shut down.

The “Permission to create Unicode-mode application” option indicates whether Essbase Server is in Unicode mode; that is, whether Essbase Server can create Unicode-mode applications or migrate applications to Unicode mode. To set Essbase Server to Unicode mode, you select the option. To set Essbase Server to non-Unicode mode (thus, to ensure that applications are not accidentally created as Unicode-mode applications), you clear the option.

The “EPM System security” option indicates whether Essbase Server is in [EPM System security mode](#); that is, whether users and groups are managed through Shared Services User Management Console. The option cannot be changed. Essbase Server must be manually [converted to EPM System security mode](#). After conversion, Essbase Server cannot be returned to native security mode.

Related Information

- [Managing Essbase Server Properties](#)
- [“About Essbase Server Monitoring” on page 305](#)
- [“Essbase Server Properties Window” on page 469](#)
- [“Managing Essbase Server Permissions to Create Unicode-Mode Applications” on page 86](#)

Related Commands

alter system (MaxL) in the *Oracle Essbase Technical Reference*

Essbase Server Properties Dialog Box—Statistics Tab

The nodes of the Statistics tab display runtime statistics for Essbase Server:

- Server start time—Relative to the time zone of the Essbase Server computer
- Server elapsed time—In hours:minutes:seconds
- Ports in use—Number of ports being used
- Port available—Number of ports available (If the value is -1, the reserve port, the port provided for administrators, and all licensed ports are being used.)

Note: To identify how many ports are installed, select the License tab.

- Maximum connections—Maximum number of connections per port (For example, if the value is 50, 50 connections can be made from each port.)
- Maximum number of named Essbase users—How many Essbase can connect to Essbase Server
- Maximum number of Planning users—How many Planning users can connect to Essbase Server
- Number of Planning users in use—How many Planning users are connected to Essbase Server

Related Information

- [“Setting Essbase Server Properties” on page 85](#)
- [“About Essbase Server Monitoring” on page 305](#)
- [“Essbase Server Properties Window” on page 469](#)

Related Commands

display system (MaxL) in the *Oracle Essbase Technical Reference*

Application Properties Window

Use the tabs in this window to view and edit properties for an application.

- [General](#)—Set options for application startup, minimum permissions, duration of data block locks, and maximum LRO file sizes.
- [Statistics](#)—View application runtime statistics.
- [Tablespaces](#)—Set and manage tablespaces for aggregate storage applications.

Related Information

- [“Setting Application Properties” on page 93](#)
- [“About Application Monitoring” on page 311](#)
- [“E-mailing Essbase Information” on page 87](#)

Related Commands

- alter application (MaxL) in the *Oracle Essbase Technical Reference*
- display application (MaxL) in the *Oracle Essbase Technical Reference*
- getappinfo (ESSCMD) in the *Oracle Essbase Technical Reference*
- getappstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- setappstate (ESSCMD) in the *Oracle Essbase Technical Reference*

Application Properties—General Tab

Use items in the Application Properties—General tab to set options for application startup, minimum permissions, expiration of locks on data, and maximum LRO file sizes.

- Log Level Information—Modifies the Essbase log level configuration setting determining which messages get written to the application log.
- Startup—Configure automatic startup from the following options:
 - Allow users to start application—Start the application automatically when a user attempts to retrieve data from a database within the application. Clear this check box to prevent users from loading an application; for example, as a temporary measure to avoid memory problems when multiple applications are being used. Selected by default.
 - Start application when Essbase Server starts—Start the application automatically when Essbase Server starts. Any user with at least Read access to an application can start the application. Only an Administrator or a user with Application Manager permissions can stop the application. Cleared by default.
- Security—Manage the following security settings:
 - Allow commands
 - Allow connects
 - Allow updates
 - Enable security

All settings are selected by default.

- Minimum access level—Define the minimum access level for an application and all databases within the application, unless the setting is changed at the database level, from the following options:
 - None—By default, no minimum permission is set for the application; users can access the application according to their individual permissions.
 - Read—Grants all users read-only access to all databases in the application. Read access enables users to view files, retrieve data values, and run report scripts.
 - Write—Grants all users write access to all databases in the application. Write access gives users Read access and enables them to update data values but does not permit calculations or outline modifications.

- Calculate—Grants all users calculation access to all databases in the application. Calculate access gives users Read and Write access and enables them to perform calculations but does not permit outline modifications.
- Database Manager—Grants all users Database Manager access to all databases in the application. Database Manager access gives users Read, Write, and Calculate access and enables them to modify database outlines and files.
- Unicode mode—If selected, migrates the application to Unicode mode. This migration cannot be undone.
- Pending cache size limit (MB)—Specify the maximum size to which the [aggregate storage cache](#) may grow. The default and minimum value is 32 MB. The aggregate storage cache grows until it reaches this limit. This setting takes effect after you restart the application.

The following items are only available for block storage applications:

- Timeout on data block locks—Specifies the maximum amount of time, in minutes, that a user can hold a lock on data. The default time is 60 minutes.
- Max attachment file size—Specifies a maximum file size, in KB, for Linked Reporting Object attachments. The default size is Unlimited.
- Data storage type—Displays the data storage type for the application.

Related Information

- [“Setting Application Properties” on page 93](#)
- [“About Application Monitoring” on page 311](#)
- [“Application Properties Window” on page 474](#)
- “Unicode and Non-Unicode Application Modes” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- `alter application (MaxL)` in the *Oracle Essbase Technical Reference*
- `setappstate (ESSCMD)` in the *Oracle Essbase Technical Reference*

Application Properties—Statistics Tab

Use the Application Properties—Statistics tab to view runtime statistics for the application:

- Application start time—Time when the application was started, according to the time zone of Essbase Server.
- Application elapsed time—How long, in hours:minutes:seconds, the application has been running.
- Number of connections—Number of users currently connected to the application.

Related Information

- [“Setting Application Properties” on page 93](#)
- [“About Application Monitoring” on page 311](#)
- [“Application Properties Window” on page 474](#)

Related Commands

- display application (MaxL) in the *Oracle Essbase Technical Reference*
- getappinfo (ESSCMD) in the *Oracle Essbase Technical Reference*
- getappstate (ESSCMD) in the *Oracle Essbase Technical Reference*

Application Properties—Tablespaces Tab

You use the Tablespaces tab of the Application Properties window to set properties for tablespaces used for physical storage for aggregate storage applications.

This window contains two tabs, one for each system-defined tablespace (default and temp).

- **File Location**—Enter the full path to an existing directory where data files will be stored.

If Essbase Server is running on a UNIX platform, this path is case-sensitive.

You cannot edit this column for existing file locations.

- **Max Disk Size**—Specify the maximum amount of disk space to be allocated to the file location.

For new file locations, you can specify a value or select Unlimited. The Unlimited value for disk size represents the largest possible value that the aggregate storage kernel can handle. If operating system limits take effect before this value is reached, the kernel attempts to use another file location in the tablespace. If you enter a value that is larger than the Unlimited value, the kernel ignores the setting. The initial system-defined file location also uses the Unlimited value.

- **Unit**—Select the unit for the Max Disk Size, MB or GB.
- **Max File Size**—Specify the maximum data file size before Essbase creates a new file.

For new file locations, you can specify a value or select Unlimited. The Unlimited value for file size represents the largest possible value that the aggregate storage kernel can handle. If operating system limits take effect before this value is reached, the kernel creates a new file. If you enter a value that is larger than the Unlimited value, the kernel ignores the setting. The initial system-defined file location also uses the Unlimited value.

- **Unit**—Select the unit for the Max File Size, MB or GB.
- **Add Location**—Click to add a new file location to the tablespace.
- **Drop Location**—Click to delete the selected file location from the tablespace. When a file location is deleted, all files in the file location are deleted, as well as the subdirectory containing the files.

You cannot delete a file location if it contains data. You cannot delete the tablespace itself.

Related Information

- [“Managing Tablespaces” on page 76](#)
- “Managing Storage for Aggregate Storage Applications” in the *Oracle Essbase Database Administrator's Guide*
- [“About Aggregate Storage” on page 67](#)
- [“Application Properties Window” on page 474](#)

Related Commands

- alter tablespace (MaxL) in the *Oracle Essbase Technical Reference*
- display tablespace (MaxL) in the *Oracle Essbase Technical Reference*
- query application (MaxL) in the *Oracle Essbase Technical Reference*

Application/Database Status Window

The Application/Database Status window displays information about the applications and databases that are started on Essbase Server.

Note: You can view information about only the applications and databases that you are authorized to use.

Information is provided in the following columns:

- Application—List of application names
- Application Status—For each application, running or not running
- Database—List of database names
- Database Status—For each database, running or not running

Related Information

- [“Viewing Application and Database Status” on page 312](#)
- [“Starting Applications” on page 91](#)
- [“Starting Databases” on page 99](#)
- [“Stopping Applications” on page 93](#)
- [“Stopping Databases” on page 100](#)
- [“E-mailing Essbase Information” on page 87](#)

Related Commands

- getappinfo (ESSCMD) in the *Oracle Essbase Technical Reference*
- getdbinfo (ESSCMD) in the *Oracle Essbase Technical Reference*

Archive Database Dialog Box

Use items in the Archive Database dialog box to back up a database to an archive file.

- Archive to file text box—Enter the path and name of the database archive file.
Oracle recommends that you name archive files with an `.arc` extension. The path must be to an existing directory on the Essbase Server computer. Essbase creates the archive file with the name you specify.
- Archive in the background check box—Select to perform archive as a background process.
- Force archive check box—Select to overwrite the archive file.

Related Information

- [“Backing Up Block Storage Databases” on page 108](#)
- [“Restoring Block Storage Databases” on page 109](#)

Related Commands

- `alter database` (MaxL) in the *Oracle Essbase Technical Reference*
- `query archive_file` (MaxL) in the *Oracle Essbase Technical Reference*

Area-Specific Member Mapping Dialog Box

Use items in this dialog box to create area-specific member mappings for partitions:

- Editing options—Defines partitioned areas using an option:
 - Use member selection tool—Select and then double-click in the Source or Target column to display the [Global Mapping Member Selection dialog box](#), and then select members for the partitioned area.
 - Use text editor—Select and then double-click in the Source or Target column to display the [Member Name dialog box](#), and then enter members manually for the partitioned area.
 - Use inline editing—Select and then double-click in the Source or Target column to type members directly in the column for the partitioned area.

In [duplicate member name databases](#), when using the text editor or inline editing options to type a duplicate member name, you must type the qualified member name in order to differentiate the duplicate members. You can view the qualified member name for a duplicate member in the Member Properties dialog box in Outline Viewer. If you use the member selection tool to insert a duplicate member name from the outline tree, the qualified member name is inserted automatically.
- Source Members—Displays the source database members.
- Target Members—Displays the target database members.

Related Information

- [“About Partitions” on page 395](#)
- [“Defining Area-Specific Member Mappings in Partitions \(Optional\)” on page 402](#)

Related Commands

- create partition (MaxL) in the *Oracle Essbase Technical Reference*
- display partition (MaxL) in the *Oracle Essbase Technical Reference*

Area Definition Dialog Box

Use this dialog box to enter or edit area definitions for partitions.

Enter a comma-separated list of member names and/or member set functions that define the area. Enclose member names in quotation marks ("*membername*") if the name contains any of the following:

- One or more numerals at the beginning of the name (for example, "100-Blue").
- Spaces or any of the following characters:
& (ampersand) * (asterisk) @ (at sign) \ (backslash) { } (braces) [] (brackets) : (colon) , (comma) - (dash, hyphen, or minus sign) = (equal sign) ! (exclamation point) > (greater than sign) < (less than sign) () (parentheses) % (percent sign) . (period) + (plus sign) ; (semicolon) / (slash) ~ (tilde)

You can also enter substitution variable names, preceded by an ampersand (&).

In [duplicate member name databases](#), when typing a duplicate member name, you must type the qualified member name in order to differentiate the duplicate members. You can view the qualified member name for a duplicate member in the Member Properties dialog box in Outline Viewer. If you use the member selection tool to insert a duplicate member name from the outline tree, the qualified member name is inserted automatically.

Related Information

- [“Defining Areas in Partitions” on page 400](#)
- [“Create or Edit Partition Window—Areas Tab” on page 502](#)

Related Commands

- create partition (MaxL) in the *Oracle Essbase Technical Reference*
- display partition (MaxL) in the *Oracle Essbase Technical Reference*

Area Mapping Member Selection Dialog Box

You use the Area Mapping Member Selection dialog box to select members for partition definitions.

Depending upon whether the dialog box was launched from the Source or Target column of the Areas tab, the Dimensions tab displays a tree view of the source or target database outline. You expand the dimension nodes to view and select members and right-click in the display area to access a menu that enables you to perform various actions (for example, to add all descendants of the selected member).

To specify how the outline is displayed and, thus, to specify how you view and select members, from the “View method” group, select an option:

- By member name—You can select a member name or a member set function. For example, if, directly below Sales, you select “All children,” all children of Sales are included in the partition.
- By generation name
- By level name
- By Dynamic Time Series—Available only for a time dimension

The Rules box lists the members and member set functions that are included in the current partition definition. For [duplicate members](#), qualified member names are listed. To empty the box, click the Remove All button. To modify the list, select an item, and click one of the following buttons:

- Move Item Up
- Move Item Down
- Remove Item

In the “Output options” group, select one or more options:

- Use aliases—Aliases from the current alias table, rather than member names, are displayed in the outline. For members without aliases, member names are displayed. The option is available only if the “By member name” option is selected.
- Suppress shared members—Shared members are listed only once in the [Member Preview](#) dialog box. The option is available only if the “By generation name” or “By level name” option is selected.

To initiate or perform various actions, you click the following buttons:

- Add—Add items selected in the outline tree to the Rules box
- Find Members—Open the [Find Members](#) dialog box, which you use to search the outline tree (Members that meet the search criteria are listed on the Results tab.)
- Information—Open the [Member Information](#) dialog box, which displays information about the member selected in the outline
- Subset—Open the [Subset](#) dialog box, which you use to apply additional rules to a subset of members
- Preview—Open the [Member Preview](#) dialog box, which lists the members that meet the selection rules
- Import—[Import selection rules](#), to import members into the Rules box

- Export—[Export selection rules](#), to export members from the Rules box

Related Information

- [“About Partitions” on page 395](#)
- [“Create or Edit Partition Window—Areas Tab” on page 502](#)
- [“Defining Areas in Partitions” on page 400](#)

Related Commands

- create partition (MaxL) in the *Oracle Essbase Technical Reference*
- display partition (MaxL) in the *Oracle Essbase Technical Reference*

Arrange Custom View Nodes Dialog Box

By default, objects in a custom view tree appear in the order in which you added them. Use items in this dialog box to arrange the order of objects in a custom view:

- Nodes—Displays objects that you have added to the custom view.
- Move Up—Moves the selected object up one place in the custom view tree.
- Move Down—Moves the selected object down one place in the custom view tree.

You can only arrange nodes that are directly under the root node.

Related Information

- [“Arranging Objects in Custom Views” on page 51](#)
- [“About Custom Views” on page 49](#)
- [“Creating Custom Views” on page 50](#)
- [“About Enterprise View” on page 43](#)

ASO MDX Formula Templates Dialog Box

You use the ASO MDX Formula Templates dialog box to create member formulas using predefined templates. You select a template in the Select MDX Template pane and populate the fields in the Specify variable elements pane. Within the dialog box, you can perform the following actions:

- Use either member names or alias names
- [Insert members in a script from the member tree](#)
- Preview the formula
- Insert the formula in the [“Member Properties Dialog Box—Formula Tab” on page 594](#)

Related Information

- [“Member Properties Dialog Box—Formula Tab” on page 594](#)
- [“Creating Formulas for Aggregate Storage Databases” on page 70](#)

Assign Calculations Dialog Box

You use the Assign Calculations dialog box to grant or deny to a user or group permission to run one or more calculation scripts. The current Essbase Server instance, application, database, and user or group are identified in the title bar of the dialog box.

Whether a user or group can be granted permission to run a calculation script depends on other security permissions. See [“Managing Calculation Permissions for Users and Groups” on page 271](#).

The dialog box opens when you click the Assign Calculations button on the applications tab of the [User/Group Access](#) window.

To enable the user or group to run all calculation scripts associated with the current application or database, you select the “Assign All Calculations” option.

The Selected Calculations box and the Available Calculations box list, respectively, the calculation scripts that the user or group can run and the calculation scripts associated with the current application and database that the user or group cannot run.

You move scripts from one to the other list (and, thus, grant or rescind permissions) in one of the following ways:

- To move one script, select it, and click the appropriate single-arrow button.
- To move all scripts of one box, click the appropriate double-arrow button.

Related Information

- [“Managing Calculation Permissions for Users and Groups” on page 271](#)
- [“Managing User/Group Permissions for Applications and Databases” on page 269](#)
- [“User/Group Access Window” on page 663](#)

Assign Filters Dialog Box

Use this dialog box to assign a security filter to users or groups. You can assign only one filter per database to a user or a group:

- Assigned Users and Groups—Users and groups to which a filter is currently assigned.
- Available Users and Groups—Users and groups to which you can assign a filter.
- Single-arrow—Moves selected items from one list to the other, in the direction indicated.
- Double-arrow—Moves all items from one list to the other, in the direction indicated.

Related Information

- [“Assigning Filters” on page 290](#)
- [“Managing Filters” on page 288](#)
- [“About Security and Permissions” on page 253](#)

Associate Outline Dialog Box

Use this dialog box to associate a calculation script, report script, or rules file with a database outline. When you associate an outline, you can insert dimensions and members directly without typing them manually.

Use the Essbase Servers tree to navigate to the database with which you want to associate the object that you are editing.

Outlines are not permanently associated with an object. You can subsequently associate an object with another outline.

Related Information

- [“Associating Outlines with Essbase Objects That Are Being Edited” on page 365](#)
- [“Inserting Dimension and Member Names into Scripts” on page 340](#)
- [“Validating Rules Files” on page 211](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)

Attribute Viewer Window

The Attribute Viewer window enables you to search an outline for attributes of a given member or dimension. It is read-only.

In the Attribute Viewer window, you can search on the following criteria:

- Base or attribute dimension member name that matches a pattern
- Varying attributes only

If you are searching on varying attributes, you can group search results by attribute name, member name or independent member range by dragging column headers.

Related Information

- [“Outline Viewer—Outline Tab” on page 622](#)

Background Process Status Window

The Background Process Status window displays the status of background processes that you and other administrators initiated (if you have Administrator privileges on Essbase Administration Server) or only the background processes that you initiated (if you do not have Administrator privileges on Essbase Administration Server).

All background processes that you are entitled to view and that you did not delete manually are displayed.

The following background-process information is displayed:

- User name—The Administration Services username (not the Essbase Server username) of the user who initiated the process
- Object ID—A unique ID for each process (matches the ID returned in the Messages pane when the process was launched)
- Action—Name of the command used to initiate the process
- Source—Name of the Essbase Server instance, application, and database from which the process was initiated and, perhaps, the object name (for example, a report script name)
- Target—Name of the Essbase Server instance, application, and database that is the target of the process (populated only for cross-server operations, such as an application copy from one server to another)
- Start Time and End Time—As defined by Essbase Administration Server
- Status—Started, Completed, or Failed

You can click **View** to open the results of a selected process (for example, a report or an error file for a process that failed) and click **Delete** to delete a selected row from the window.

Related Information

[“Checking the Status of Background Processes” on page 306](#)

Change File Attachment Dialog Box

You use the Change File Attachment dialog box to attach (link) a different LRO file to a member combination.

The “Member combination” box identifies the current member combination.

Note: You cannot change the member combination associated with an attached file from this dialog box. Therefore, to attach a file to a different member combination, delete the current link and use Spreadsheet Add-in to link to the preferred member combination.

To attach a different LRO file to the current member combination, you select the “Re-attach linked file” box. If you attempt to link a file that exceeds the [limit](#) set for the application, an error message is displayed.

In the Description box, you can enter text to describe the linked file. A description is not required.

Related Information

- [“About Linked Reporting Objects \(LROs\)” on page 369](#)
- [“Managing LROs” on page 370](#)
- [“Limiting LRO File Sizes” on page 373](#)

Change Password Dialog Box

When you use the Change Password dialog box to change your Essbase Server password, your password is updated in Essbase Server and, if you are an Administration Services user, in Essbase Administration Server [user properties](#) (Essbase Servers tab). Your Essbase Administration Server password is not affected.

Essbase Server passwords are not case-sensitive. For password length limitations, see the *Oracle Essbase Database Administrator's Guide*.

Compact Outline Dialog Box

You use the Compact Outline dialog box to compact aggregate storage outlines and, thus, to reduce the size of outline files.

If you want to work during the compaction process, select “Compact outline in the background.” During a background process, you can exit the console but cannot shut down Essbase Administration Server. You can view the status of the process in the [Background Process Status](#) window.

Related Information

[“Compacting Aggregate Storage Outline Files” on page 78](#)

Related Commands

alter database (MaxL) in the *Oracle Essbase Technical Reference*

Configure Plug-in Components Dialog Box

You use the Configure Plug-in Components dialog box to work with client plug-ins.

The Installed Plug-ins box lists the plug-ins that are installed on the client and displays the properties of the selected plug-in. Plug-ins are displayed as nodes in the Enterprise View tree in the order that they are displayed in the box.

To add, remove, or reposition a plug-in, select it, and click one of the following buttons:

- Add
- Remove

- Move Up
- Move Down

Related Information

[“Configuring Plug-in Components” on page 669](#)

Conversion Settings Dialog Box

You use items in the Conversion Settings dialog box when [converting an Essbase Server to EPM System security mode](#):

- Administration Server Location—Enter the machine name and port number for the Essbase Administration Server to which Shared Services will communicate. This information is required for the Oracle Hyperion Shared Services Console to assign calculation and filter access and application access type for users.
- Password creation settings—For native Shared Services users, specify how the passwords should be created for the Shared Services users when they are migrated:
 - Auto-generated—Automatically generates new passwords for users being migrated to Shared Services. The passwords are recorded in the text file specified in the text box. You must specify the extension for the file as `.txt`. You can also browse to the location of an existing password file to append new passwords to it.
 - Use native user name as password—Assigns the native user name as the password for each user being migrated to Shared Services. During migration, the user name is converted to an all lowercase password. For example, a native user named "Mark" will have "mark" as their password after migration.
 - Password and Confirm password—Specifies and confirm, respectively, a new password for all users created in Shared Services. You must specify the same password for all users being migrated.

Related Information

- [“Converting Essbase Server and Migrating Users to Shared Services” on page 247](#)
- [“About Shared Services User Management” on page 245](#)

Related Commands

`alter system (MaxL)` in the *Oracle Essbase Technical Reference*

Copy Alias Table Dialog Box

Using the Copy Alias Table dialog box, you can copy aliases from one table to another table within the same outline:

In the Destination box, you enter or select the alias table that will receive the copied aliases. For length limitations, see the *Oracle Essbase Database Administrator's Guide*.

You do or do not select the “Merge tables while copying” option:

- Not selected—All destination table aliases are deleted, and all copied aliases are added to the destination table.
- Selected—All destination table aliases for which there are no replacement values are retained, and all copied aliases are added to the destination table.

Related Information

- [“Copying Alias Tables” on page 175](#)
- “Setting Aliases” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- alter object (MaxL) in the *Oracle Essbase Technical Reference*
- copyobject (ESSCMD) in the *Oracle Essbase Technical Reference*

Copy All Functions Dialog Box

When you copy functions, you associate them with one application or all applications on the target server. You can copy functions within an Essbase Server instance or application or between Essbase Server instances and applications (provided that you have appropriate access privileges).

List boxes of the Copy All Functions dialog box:

- Essbase Server—Select the Essbase Server instance to which to copy the function.
- Application—Select the application to which to copy the function, or select <all apps> to copy the function to all applications on the selected Essbase Server instance.
- Functions—Select the function or functions to be copied.

If you want the copied functions to replace functions of the same name, select the “Overwrite existing functions” option.

Related Information

- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Copying Custom-Defined Functions” on page 354](#)

Copy All Macros Dialog Box

When you copy macros, you associate them with one application or all applications on the target server. You can copy macros to all applications on all Essbase Server instances to which you have appropriate access privileges and can copy within a server or between servers.

List boxes of the Copy All Macros dialog box:

- Essbase Server—Select the Essbase Server instance to which to copy the macro.

- Application—Select the application to which to copy the macro, or select <all apps> to copy the macro to all applications on the selected Essbase Server instance.
- Macros—Select the macro or macros to be copied.

If you want the copied macros to replace macros of the same name, select the “Overwrite existing macros” option.

Related Information

- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Copying Custom-Defined Macros” on page 358](#)

Copy Application Dialog Box

You use Copy Application dialog box to copy applications to any Essbase Server instance to which you have appropriate access privileges:

- In the Essbase Server box, select the target Essbase Server instance (same server, different server on the same platform, or server on a different platform).
- In the Application box, enter a name for the copied application. For naming restrictions, see the *Oracle Essbase Database Administrator's Guide*.

Note: The version of the target Essbase Server instance must be the same as or later than the version of the source Essbase Server instance.

Related Information

- [“Copying Applications” on page 94](#)
- [“Copying Databases” on page 102](#)
- [“Migration Wizard” on page 597](#)

Related Commands

- create application ... as (MaxL) in the *Oracle Essbase Technical Reference*
- copyapp (ESSCMD) in the *Oracle Essbase Technical Reference*

Copy Calculation Script Dialog Box

You can copy a calculation script to all databases of an application or to one database of an application. You can copy a script within an Essbase Server instance or application or between Essbase Server instances and applications (provided that you have appropriate access privileges).

Within the Copy Calculation Script dialog box:

- Select the Essbase Server instance and the application to which to copy the script
- Select the database to which to copy the script or select <all dbs> to copy to all databases of the selected application.
- Enter a name for the script. (For name length limitations, see the *Oracle Essbase Database Administrator's Guide*.)

Related Information

[“Copying Scripts” on page 347](#)

Related Commands

- alter object (MaxL) in the *Oracle Essbase Technical Reference*
- create calculation ... as (MaxL) in the *Oracle Essbase Technical Reference*
- copyobject (ESSCMD) in the *Oracle Essbase Technical Reference*

Copy Database Dialog Box

You use the Copy Database dialog box to copy block storage databases to applications on any Essbase Server instance to which you have appropriate access privileges:

- In the Essbase Server box, select the target Essbase Server instance (same server, different server on the same platform, different server on a different platform).
- In the Application box, select the target application.
- In the Database name box, enter a name for the copied database. For naming restrictions, see the *Oracle Essbase Database Administrator's Guide*.

For information about what information is copied with databases, see [“Copying Databases” on page 102](#).

Note: The version of the target Essbase Server instance must be the same as or later than the version of the source Essbase Server instance.

Related Information

- [“Copying Databases” on page 102](#)
- [“Copying Applications” on page 94](#)
- [“Migration Wizard” on page 597](#)

Related Commands

- create database ... as (MaxL) in the *Oracle Essbase Technical Reference*
- createdb (ESSCMD) in the *Oracle Essbase Technical Reference*

Copy Filter Dialog Box

You use the Copy Filter dialog box to copy security filters from one database to another:

Boxes in which you enter information:

- Essbase Server—Target server (same or different server, according to your permissions)
- Application—Target application
- Database—Target database or <all dbs> (to copy the filter to all databases within the application)
- Filter—Name for the filter copy (can contain letters, numbers, and spaces; for length limitations, see the *Oracle Essbase Database Administrator's Guide*)

If you want to replace any filter that has the name of the copied filter, select the “Replace existing filter” option.

Related Information

- [“Copying Filters” on page 290](#)
- [“Managing Filters” on page 288](#)

Related Commands

- alter object (MaxL) in the *Oracle Essbase Technical Reference*
- create filter as (MaxL) in the *Oracle Essbase Technical Reference*
- copyfilter (ESSCMD) in the *Oracle Essbase Technical Reference*

Copy Function Dialog Box

When you copy functions, you associate them with one application or all applications on the target server. You can copy functions within an Essbase Server instance or application or between Essbase Server instances and applications (provided that you have appropriate access privileges).

List boxes of the Copy Function dialog box:

- Essbase Server—Select the Essbase Server instance to which to copy the function.
- Application—Select the application to which to copy the function, or select <all apps> to copy the function to all applications on the selected Essbase Server instance.
- Functions—Select the function or functions to be copied.

If you want the copied functions to replace functions of the same name, select the “Overwrite existing functions” option.

Related Information

- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Copying Custom-Defined Functions” on page 354](#)

Copy Group Dialog Box

You use the Copy Group dialog box to copy groups of Essbase users within or between Essbase Server instances.

Boxes in which you enter information:

- Essbase Server—The target Essbase Server instance (same server or different server, according to your permissions).
- New group name—A name (not case-sensitive but limited in length—see the *Oracle Essbase Database Administrator's Guide*)

Options that you can select:

- Execute in background—During a background process, you can exit the console but you cannot shut down Essbase Administration Server. You can check the status of the process in the [Background Process Status](#) window.
- Copy Administrators—To copy groups that have administrator permissions
- Replace existing group(s)—To replace groups of the same name

Related Information

- [“Copying Essbase Server Groups” on page 277](#)
- [“Managing Users and Groups” on page 256](#)
- “User Management and Security in Essbase Native Security Mode” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

copy group (MaxL) in the *Oracle Essbase Technical Reference*

Copy Macro Dialog Box

When you copy macros, you associate them with one application or all applications on the target server. You can copy macros to all applications on all Essbase Server instances to which you have appropriate access privileges and can copy within a server or between servers.

List boxes of the Copy Macros dialog box:

- Essbase Server—Select the Essbase Server instance to which to copy the macro.
- Application—Select the application to which to copy the macro, or select <all apps> to copy the macro to all applications on the selected Essbase Server instance.
- Macro name—Select the macro or macros to be copied.

If you want the copied macros to replace macros of the same name, select the “Overwrite existing functions” option.

Related Information

- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Copying Custom-Defined Macros” on page 358](#)

Copy Partition Dialog Box

You use the Copy Partition dialog box to copy partitions and to specify connection information for source and target databases.

You can copy a partition between a new or existing source database and a new target database but not between a new source database and an existing target database.

Information that is provided and actions that can be performed in the Data Source and Data Target areas (relative to the source and target database, respectively):

- **Essbase Server**—Name of the Essbase Server instance on which the database resides. You can select a different Essbase Server instance.
- **Application**—Name of the application in which the database resides. You can select a different application.
- **Database**—Name of the database in which the partition resides. You can select a different database.
- **User and Password**—Username and password that the partition uses to connect to the server that contains the database. Essbase uses the username and password to transfer data between the source and target databases for replicated and transparent partitions. Local security filters apply to prevent end users from seeing privileged data.
 - For source databases, you cannot specify a username and password.
 - For target databases, you can specify a username and password. Essbase
- **Comment**—An explanatory note. You can modify or enter a note. For linked partitions, the comment text is displayed in Spreadsheet Add-in in the Linked Objects box.

Related Information

- [“Copying Partitions” on page 409](#)
- [“About Partitions” on page 395](#)

Related Commands

`alter object (MaxL)` in the *Oracle Essbase Technical Reference*

Copy Report Script Dialog Box

You can copy a report script to all databases of an application or to one database of an application.

You can copy a report script to any application on any Essbase Server instance for which you have appropriate permissions and to the server and application on which the report script resides or to a different server and application.

In the following boxes, you identify to where you are copying the report script:

- Essbase Server
- Application
- Database—Select a database, or select <all dbs>.

In the Report Name box, you enter a name for the report script copy. For length limitations, see the *Oracle Essbase Database Administrator's Guide*. By default, report scripts are assigned .rep extensions.

Related Information

[“Copying Scripts” on page 347](#)

Related Commands

- alter object (MaxL) in the *Oracle Essbase Technical Reference*
- copyobject (ESSCMD) in the *Oracle Essbase Technical Reference*

Copy Rules File Dialog Box

Rules files are used for data loading or dimension building. You can copy a rules file to all databases of an application or to one database of an application.

You can copy a rules file to any application on any Essbase Server instance for which you have appropriate permissions and to the server instance and application on which the rules file resides or to a different server instance and application.

In the following boxes, you identify to where you are copying the rules file:

- Essbase Server
- Application
- Database—Select a database, or select <all dbs>.

In the “Rules file name” box, you enter a name for the copy. For length limitations, see the *Oracle Essbase Database Administrator's Guide*. By default, rules files are assigned .rul extensions.

Related Information

[“Copying Rules Files” on page 212](#)

Related Commands

- alter object (MaxL) in the *Oracle Essbase Technical Reference*
- copyobject (ESSCMD) in the *Oracle Essbase Technical Reference*

Copy Substitution Variables Dialog Box

When copying substitution variables to a target server, you can copy to all applications and databases, to all databases of one application, or to one application and database.

You can copy a substitution variable to any application or database on any Essbase Server instance for which you have appropriate permissions and to the server and application on which the variable resides or to a different server and application.

Boxes in which you identify to where you are copying the substitution variable:

- Essbase Server
- Application—Select an application, or select <all apps>.
- Database—Select a database, or select <all dbs>.

Columns that list and provide information about variables:

- Name
- Value

Actions that you can perform:

- Click **Check all** (to copy all listed variables).
- In the Copy column, select one or more variables (to copy specific variables).
- Select **Overwrite existing variables** (to replace any variable that has the name of a copied variable).

Related Information

- [“Copying Substitution Variables” on page 89](#)
- [“Managing Substitution Variables” on page 88](#)

Copy User Dialog Box

You use the Copy User dialog box to copy users between Essbase Server instances or to use existing user profiles to create Essbase Server users.

Boxes in which you enter information:

- Essbase Server—The current server or a different server, according to your permissions
- New user name—Used if you are copying only one user
 - Limited in length (see the *Oracle Essbase Database Administrator's Guide*)
 - Not case-sensitive
 - Special characters are allowed
- Password—Password for Essbase Server authentication (not case-sensitive; for length limitations, see the *Oracle Essbase Database Administrator's Guide*). If you are copying multiple users, you must assign the same password to all users.

Note: The Password box is available only when the “Use authentication” option is selected.

The “Use Essbase Server authentication” option applies to the target server. If you are copying one user, the “Use Essbase Server authentication” option is selected (and cannot be cleared). The option enables Essbase native authentication for the user. The option is selected by default if the user is authenticated internally by Essbase on the source server.

The “Replace existing users” option is available whether you are copying one user or multiple users. If the option is selected, new users replace existing users of the same name.

Options that are available if you are copying multiple users:

- Execute in the background—During the background execution of the copy process, you can exit the console, but you cannot shut down Essbase Administration Server. You can check the status of the process in the [Background Process Status](#) window.
- Force password change next login—Native authentication users are prompted to change their passwords. Thus, you can assign a default password to all copied users and allow individual users to select their own passwords.
- Keep current password—Users can retain their passwords.
- Copy Administrators—You can copy users who have Administrator permissions.

Related Information

- [“Copying Essbase Server Users” on page 275](#)
- [“Managing Users and Groups” on page 256](#)
- “User Management and Security in Essbase Native Security Mode” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

create user (MaxL) in the *Oracle Essbase Technical Reference*

Create Alias Table Dialog Box

In the “Alias table name” box, you enter the name of the new alias table.

The new table is empty. You can add aliases to the table in the following ways:

- Copying an alias table into the empty table
- Importing aliases from a data source file
- Manually entering alias names as member properties

For alias table and alias naming restrictions, see the “Limits” appendix in the *Oracle Essbase Database Administrator's Guide*.

Related Information

- [“About Alias Tables” on page 170](#)

- [“Creating Alias Tables” on page 172](#)
- [“Creating Aliases for Dimensions and Members” on page 177](#)

Related Commands

- unloadalias (ESSCMD) in the *Oracle Essbase Technical Reference*
- loadalias (ESSCMD) in the *Oracle Essbase Technical Reference*

Create Application Dialog Box

Boxes of the Create Application dialog box in which you enter information:

- Essbase Server—Target Essbase Server instance
- Application—Name of the new application

For application naming conventions, see the *Oracle Essbase Database Administrator's Guide*.

If you select the **Unicode mode** option (thereby creating a unicode mode application), you cannot at a later time change the application to non-unicode.

Related Information

- [“Creating Applications” on page 90](#)
- “Creating Applications and Databases” in the *Oracle Essbase Database Administrator's Guide*
- [“Creating Unicode-Mode Applications” on page 119](#)

Related Commands

- create application (MaxL) in the *Oracle Essbase Technical Reference*
- createapp (ESSCMD) in the *Oracle Essbase Technical Reference*

Create Database Dialog Box

Boxes of the Create Database dialog box in which you enter information:

- Essbase Server—Target Essbase Server instance
- Application—Target application
- Database name—For naming conventions, see the *Oracle Essbase Database Administrator's Guide*.

For block storage databases, in the “Database type option” group, you specify a database type:

- Normal—The default
- Currency—See [“About Essbase Currency Conversion” on page 421](#).

You select or clear the “Allow [duplicate member names](#)” option.

Related Information

- [“Creating Databases” on page 98](#)
- [“Linking a Database to a Currency Database” on page 426](#)
- “Creating Applications and Databases” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- create database (MaxL) in the *Oracle Essbase Technical Reference*
- createdb (ESSCMD) in the *Oracle Essbase Technical Reference*

Create Field Using Join Dialog Box

You use the Create Field Using Join dialog box in two ways:

- To create a field—In the “Fields to join for create” box, select multiple fields
- To copy a field—In the “Fields to join for create” box, select one field

A new field is displayed to the left of the first field in the join.

Related Information

- [“Creating Fields Using Joins” on page 225](#)
- [“About Field Operations” on page 220](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)

Create Group/Group Properties Dialog Box

The title bar of the dialog box shows whether you are creating a new Essbase Server group (Create Group) or editing the properties of an existing one (Group Properties).

When you create or edit a group, you grant server-wide permissions to the users in the group. You can grant permissions that are equal to or lower than your permissions. Options that describe tasks that you do not have permissions to perform are disabled.

The dialog box includes the following tabs:

- [Group Info](#)—Used to create a group and to edit basic information about a group
- [Users](#)—Used to add users to or remove users from a group
- [App/Db Access](#)—Used to grant specific permissions (for each application and database on Essbase Server) to a group

Related Information

- [“Creating Groups on Essbase Servers” on page 263](#)
- [“Editing Group Properties” on page 274](#)

Create Group/Group Properties Dialog Box—App/Db Access Tab

You use the App/DB Access tab to grant application and database permissions that are, respectively, higher than the application-level and database-level permissions. In the tab, you can grant permissions only to groups, not to individual users. In any case, you can grant only permissions that are equal to or lower than your permissions.

The following boxes identify the group name and the Essbase Server instance on which the group was created.

- Group name
- Essbase Server

For each application listed under the Applications node, you can grant an application-level permission to the group:

- None—Although the group is not granted direct access to the application, the group may inherit access, if the minimum permission for an application or any database in an application is higher than None or if the group is granted a filter that upgrades permission to particular cells.
- Access Databases—The group can be granted permissions specific to each database.
- Application Manager—The group is granted most of the permissions available to an administrator. Users within the group have full access to the application and can create and delete databases, disconnect users, define and assign filters, and remove data locks.

For each database listed under the Databases node, you can grant a database-level permission to the group:

- None—The group cannot access any object or data value.
- Filter—Group access is defined by a filter, which you can select.
- Read—The group is granted read-only access, which includes the ability to execute (but not modify) report scripts.
- Write—The group can read and update (but not calculate) data values and can execute (but not modify) Essbase objects.
- Calculation—The group can read, update, and calculate data values. You can specify which calculation scripts the group can execute.
- Database Manager—The group can read, update, and calculate data values and modify all database-related files.

In the following nodes, you can more specifically define Filter and Calculation permissions:

- **Filter**—If you select any permission other than None, you can select a filter. The filter works in conjunction with the database permissions that you grant. See [“Managing Filters” on page 288](#).
- **Calculations**—If you grant Calculation permission, you can select which calculation scripts the group can execute, by selecting the “Allow all calculations” option or by selecting the “Select calculation scripts” option and selecting individual scripts.

Related Information

- [“Managing User/Group Permissions for Applications and Databases” on page 269](#)
- [“About Security and Permissions” on page 253](#)
- [“Editing Group Properties” on page 274](#)
- [“Create Group/Group Properties Dialog Box” on page 498](#)

Create Group/Group Properties Dialog Box—Group Info Tab

You use the Group Info tab to create a group or to edit basic group information.

In the following boxes, you enter or select information (if you are creating a group) or view information (if you editing a group):

- **Group name**—Group names must begin with a letter or number and are not case-sensitive. For length limits, see the *Oracle Essbase Database Administrator's Guide*.
- **Essbase Server**—The Essbase Server instance on which the group was or is being created

In the “Group type” group, you can select or modify the group type:

- **Administrator**—Group members have full access to all users, groups, and data on Essbase Server.
- **User**—Group members have no inherent permissions. Therefore, access, if any, must be granted through create/delete permissions, group membership, application or database permissions, or filters.

Note: If you are changing the type assigned to a group from Administrator to User, you must use the App/Db Access tab to grant the group permissions to specific applications and databases.

In the Description box, you can enter a brief description of the group.

Related Information

- [“About Security and Permissions” on page 253](#)
- [“Creating Groups on Essbase Servers” on page 263](#)
- [“Editing Group Properties” on page 274](#)
- [“Create Group/Group Properties Dialog Box” on page 498](#)

Create Group/Group Properties Dialog Box—Users Tab

You use the Users tab to add users to or remove users from a group. You cannot add a user to a group whose permissions are higher than yours.

The following boxes identify the group name and the Essbase Server instance on which the group was created.

- Group name
- Essbase Server

The Members and Non-members boxes display lists of members that are, respectively, members of the current group or not members of the current group. You can move member names from one list to another and, thus, add users to or remove users from the group, by selecting a user and clicking a single-arrow button or by clicking a double-arrow button (to move all members from one to another list).

Related Information

- [“Managing Group Membership” on page 267](#)
- [“Create Group/Group Properties Dialog Box” on page 498](#)

Create and Edit Partition Windows

A partition is a piece of a database that is shared with another database.

The title of the window that you use to work with partitions changes, depending upon whether you are creating or editing a partition and whether the source application is [aggregate storage](#) or [block storage](#).

Each window contains a set of tabs, each of which you use to perform a partition-related task:

- [Type](#)—Specify partition type and settings
- [Connection](#)—Specify connection information
- [Areas](#)—Define partitioned areas
- [Mappings](#)—Define global member mappings
- [Validation](#)—View the results of [partition validation](#)

Related Information

- [“About Partitions” on page 395](#)
- [“Viewing Partitions in Enterprise View” on page 396](#)
- [Opening the Create or Edit Partition Window](#)
- [“Creating Partitions” on page 397](#)
- [“Designing Partitioned Applications” in the *Oracle Essbase Database Administrator's Guide*](#)
- [“Creating and Maintaining Partitions” in the *Oracle Essbase Database Administrator's Guide*](#)

Related Commands

- create partition (MaxL) in the *Oracle Essbase Technical Reference*
- display partition (MaxL) in the *Oracle Essbase Technical Reference*

Create or Edit Partition Window—Areas Tab

When creating or editing partitions, you use the Areas tab to define the areas of the source database that you want to share with the target database.

From the “Editing options” group, you select an option, double-click in the Source or Target column, and then specify the members to be included in the partitioned area:

Options of the “Editing options” group:

- Use member selection tool—Displays the [Area Mapping Member Selection dialog box](#), which you use to select member names
- Use text editor—Displays the [Area Definition dialog box](#), which you use to enter member names manually
- Use inline editing—Enables you to enter member names manually in the column for the partitioned area

Note: When using the text editor or inline editing options, for duplicate member names, you must enter qualified names (to distinguish between duplicate members). You can view qualified names in the Member Properties dialog box in Outline Viewer. When you use the member selection tool, qualified names are inserted automatically.

The Source and Target columns list the member names and substitution variable names of the source and target databases.

You select the **Show cell count** option to display, in the #Cell area, the number of data cells within the partitioned area of the source and target databases.

Note: Cell count is calculated by multiplying the number of partitioned members within one dimension by the number of partitioned members within another dimension by the number of partitioned members within another dimension and so on. For dimensions that a partition definition does not reference, the total number of cells within the dimension is used. There should be a one-to-one correspondence between source and target cells. A difference between source cell count and target cell count is called a *cell count mismatch*. Replicated and transparent partitions with cell count mismatches are not valid. A cell count mismatch does not affect the validity of linked partitions.

You click the [Advanced](#) button if you want to set mapping information conditionally.

Related Information

- [“About Partitions” on page 395](#)

- [“Viewing Partitions in Enterprise View” on page 396](#)
- [“Defining Areas in Partitions” on page 400](#)
- [“Create and Edit Partition Windows” on page 501](#)

Related Commands

- create partition (MaxL) in the *Oracle Essbase Technical Reference*
- display partition (MaxL) in the *Oracle Essbase Technical Reference*

Create or Edit Partition Window—Connection Tab

You use the Connection tab of the Create or Edit Partition window to specify connection information for the source and target databases of partitions.

In the Data Source and the Data Target groups, you specify information for the source and target databases, respectively:

- Essbase Server—Name of the Essbase Server instance on which the database resides
- Application—Name of the application that contains the database
- Database—Name of the database

Within transparent partitions, source databases can be aggregate storage or block storage databases, and target databases can be only block storage databases.

- User and Password—Username and password that you want the partition to use to connect to the Essbase Server instance on which the database resides

For replicated and transparent partitions, Essbase uses the username and password to transfer data between the source and target databases. Local security filters apply to prevent end users from seeing privileged data.

- Comment—For linked partitions, comments are displayed in the Spreadsheet Add-in in the Linked Objects box. Therefore, you can use comments to enable users to distinguish between linked partitions.

Circumstances that may modify the display within the Create or Edit Partition window:

- If you launched the window from a block storage database in Enterprise View, only block storage databases are displayed in the Data Source and Data Target groups.
- If you launched the window from an aggregate storage database in Enterprise View, block storage and aggregate storage databases are displayed in the Data Source and Data Target groups.

Related Information

- [“About Partitions” on page 395](#)
- [“Viewing Partitions in Enterprise View” on page 396](#)
- [“Specifying Connection Information for Partitions” on page 400](#)

- [“Create and Edit Partition Windows” on page 501](#)

Related Commands

- create partition (MaxL) in the *Oracle Essbase Technical Reference*
- display partition (MaxL) in the *Oracle Essbase Technical Reference*

Create or Edit Partition Window—Mappings Tab

You use the Mappings tab of the Create or Edit Partition window to define member mappings within partitions.

The Source Members and Target Members columns display, respectively, the source and target member names that can be used in the partitioned area.

The option that you select in the “Editing options” group determines how you designate members:

- Use member selection tool—After selecting this option, double-click in the Source or Target column to display the [Global Mapping Member Selection dialog box](#) and select members.
- Use text editor—After selecting this option, double-click in the Source or Target column to display the [Member Name dialog box](#) and enter members manually.
- Use inline editing—After selecting this option, double-click in the Source or Target column, and enter members directly into the column.

Note: In [duplicate member name databases](#), when using a text editor or inline editing, you must enter qualified member names. You can view the qualified member name for a duplicate member in the Member Properties dialog box in Outline Viewer.

You can use the **Delete** and **Import** buttons to delete selected mappings and to select text files that contain source and target database members to [import](#).

Related Information

- [“About Partitions” on page 395](#)
- [“Viewing Partitions in Enterprise View” on page 396](#)
- [“Defining Global Mappings in Partitions” on page 404](#)
- “Mapping Members” in the *Oracle Essbase Database Administrator's Guide*
- [“Create and Edit Partition Windows” on page 501](#)

Related Commands

- create partition (MaxL) in the *Oracle Essbase Technical Reference*
- display partition (MaxL) in the *Oracle Essbase Technical Reference*

Create or Edit Partition Window—Type Tab

You use the Type tab of the create and edit partition windows to specify partition type and partition settings.

If you are creating a partition, from the “Partition type” group, you select a partition type:

- Replicated—Copy data from the partitioned area of one database to another database (For aggregate storage databases, you cannot create replicated partitions.)
- Linked—Enable spreadsheet users to link from a member combination in one database to a member combination in another database
- Transparent—View data that is stored in two databases as if it were stored in one database

Whether you are creating or editing a partition, you can select one or more of the following options:

- Outline changes move in the same direction as data changes—Select this option to propagate source-outline changes to the target outline during outline synchronization. Clear the option to propagate target-outline changes to the source outline during synchronization. (For information about synchronizing outlines, see the *Oracle Essbase Database Administrator's Guide*)

Note: If the source database uses aggregate storage, the outline changes option does not apply.

- The target partition can be updated—For replicated partitions, you can select this option to allow users to update data in the target database. If the option is cleared, users cannot update data in the target database. Before selecting or clearing the option, consider the following
 - When a replicated partition is updated, Essbase overwrites changes that users have made to the target database.
 - Users cannot calculate, load data into, or use Spreadsheet Add-in to change information within replicated areas that they cannot update. Therefore, in this case, data within a replicated area can be changed only at the source database.
 - If you do not select “The target partition can be updated,” security filters that allow user updates are overridden.
- Default source login—For linked partitions, you can enter the default login information for the source database. For length limits, See the *Oracle Essbase Database Administrator's Guide*. If the option is selected, client applications, such as Spreadsheet Add-in, use the entered information to connect to the source database.

The Synchronization Status box displays information about the synchronization of source and target outlines and data. See also [“Synchronizing Outlines” on page 412](#).

Related Information

- [“About Partitions” on page 395](#)

- [“Viewing Partitions in Enterprise View” on page 396](#)
- [“Specifying the Partition Type and Settings” on page 399](#)
- “Partition Types” in the *Oracle Essbase Database Administrator's Guide*
- “Synchronizing Outlines” in the *Oracle Essbase Database Administrator's Guide*
- [“Create and Edit Partition Windows” on page 501](#)

Related Commands

- create partition (MaxL) in the *Oracle Essbase Technical Reference*
- display partition (MaxL) in the *Oracle Essbase Technical Reference*

Create or Edit Partition Window—Validation Tab

You use the Validation tab of the create and edit partition windows to view partition-validation errors, if any.

During validation, Essbase reviews the partition definition (.adb) files for the source and target databases. See [“Validating Partitions” on page 405](#).

Related Information

- [“About Partitions” on page 395](#)
- [“Viewing Partitions in Enterprise View” on page 396](#)
- [“Validating Partitions” on page 405](#)
- [Create or Edit Partition Window](#)

Related Commands

- create partition (MaxL) in the *Oracle Essbase Technical Reference*
- validatepartitiondeffile (ESSCMD) in the *Oracle Essbase Technical Reference*

Create User on Administration Server Dialog Box

Existing Essbase users cannot use Administration Services until they have been created as users on Essbase Administration Server.

After you create users on Essbase Administration Server, those users can connect to Administration Services and populate Enterprise View with the Essbase Servers they want to manage. You can also use the [“User Setup Wizard” on page 658](#) to create users and populate Enterprise View.

You need Administrator privileges to create a user on Essbase Administration Server. Use items in this dialog box to create native or external users on Essbase Administration Server:

- Native—Enables native Administration Services authentication. By default, this option is selected. If selected, enter and confirm the user's Administration Services password.

- External—Enables [external authentication](#). If you select this option, search for external users by user name, first and last name, or by e-mail address.
- User name, Password, and Confirm password—Enter this information for the user. For user name and password guidelines, see the *Oracle Essbase Database Administrator's Guide*. Available only for native authentication.
- Search—Search for an externally-stored user. Available only for external authentication.
- E-mail full name and E-mail address—This name is used when the user emails information from Administration Services Console to other administrators or to Technical Support. See [“E-mailing Essbase Information” on page 87](#).
- Administrator privileges—Select True to give the user Administrator privileges for Essbase Administration Server. By default, this is set to False.

Related Information

- [“Creating Users on Essbase Administration Server” on page 59](#)
- [“Find External User Dialog Box” on page 577](#)
- [“Adding Essbase Servers to Enterprise View” on page 45](#)
- [“User Setup Wizard” on page 658](#)
- [“Setting Up Administration Services” on page 34](#)
- [“Creating Users on Essbase Servers” on page 262](#)
- [“Managing External Authentication” on page 265](#)

Create User Dialog Box and User Properties Dialog Box (Essbase Server)

The title on the title bar indicates whether you are creating an Essbase Server user (Create User) or editing the properties of an Essbase Server user (User Properties).

Each dialog box includes the following tabs:

- [User Info](#)—Used to create users and to view and edit information about existing users, such as user name, authentication information, and server-wide permissions
- [Groups](#)—Used to add users to or remove users from groups
- [App/Db Access](#)—Used to grant application and database permissions to users

If a user that you are creating needs to use Administration Services to manage Essbase, you must also create the user on Essbase Administration Server. See [“Creating Users on Essbase Administration Server” on page 59](#).

Related Information

- [“Creating Users on Essbase Servers” on page 262](#)
- [“Editing Essbase Server User Properties” on page 273](#)

- [“Changing Passwords for Essbase Server Users” on page 282](#)
- [“Propagating Passwords Across Servers” on page 283](#)

Create User/User Properties Dialog Box—App/Db Access Tab (Essbase Server)

You use the App/Db tab to grant application and database permissions that are higher than the application-level or database-level permissions. In this tab, you can grant permissions only to Essbase Server users. In any case, you can grant only permissions that are equal to or lower than your permissions.

The following boxes display basic user information:

- User name
- Essbase Server—The Essbase Server instance on which the user was created

For each application listed under the Application node, you can select one of the following application-level permissions:

- None—Users are denied access to the application and to any database within the application. However, if the minimum permissions for an application or a database is higher than None or if the user is granted a filter that upgrades permission to particular cells, the user may inherit access.
- Access Databases—Users are granted access to one or more of the databases of the application, depending upon which databases and how many databases you select.
- Application Manager—Users have full access to the application and can create and delete databases, disconnect users, define and assign filters, and remove data locks.

For each database listed under the Databases node, you can select one of the following database-level permissions:

- None—Users can access no object or data value within the database.
- Filter—Users have the permissions that are granted by the filter that you select.
- Read—Users can read data values and execute (but not modify) report scripts.
- Write—Users can read and update (but not calculate) data values and can execute (but not modify) Essbase objects.
- Calculation—Users can read, update, and calculate data values.

If you select Calculation, you can permit users to execute specific calculation scripts (by selecting one or more scripts in the Calculations node) or permit users to execute all calculation scripts (by selecting the “Allow all calculations” option).

- Database Manager—Users can read, update, and calculate data values and modify all database-related files.

Note: If you select any database permission other than None, you can select a filter from the Filter node. The filter works in conjunction with the database permissions that you granted the user.

Related Information

- [“Managing User/Group Permissions for Applications and Databases” on page 269](#)
- [“About Security and Permissions” on page 253](#)
- [Editing User Properties](#)
- [“Create User Dialog Box and User Properties Dialog Box \(Essbase Server\)” on page 507](#)

Create User/User Properties Dialog Box—Groups Tab (Essbase Server)

You use the Groups tab to add Essbase Server users to or remove Essbase Server users from groups. You cannot add users to or remove users from groups that have permissions higher than your permissions.

The following boxes display basic user information:

- User name
- Essbase Server—The Essbase Server instance on which the user was created

The “Member of groups” box and the “Not member of groups box” list, respectively, the groups to which the user belongs and the groups that have permissions equal to or lower than your permissions and to which the current user does not belong.

You add the user to a group by moving the group name from the “Not member of groups box” to the “Member of groups” box.” You remove the user from a group by moving the group name from the “Member of groups” box to the “Not member of groups box.” In both cases, in one box, you select a group name, and then you click the single-arrow button that moves the name to the other box.

You add the user to all groups and remove the user from all groups by clicking the double-arrow button that moves the groups of one box to the other box.

Related Information

- [“Managing Group Membership” on page 267](#)
- [“Create User Dialog Box and User Properties Dialog Box \(Essbase Server\)” on page 507](#)

Create User/User Properties Dialog Box—User Info Tab (Essbase Server)

You use the User Info tab to enter, modify, or view basic information about an Essbase Server user.

In the following boxes, if you are creating a user, you can enter or select information. For existing users, the boxes are read only.

- User name—Usernames are limited in length (see the *Oracle Essbase Database Administrator's Guide*), are not case-sensitive, and can contain special characters.
- Essbase Server—The Essbase Server instance on which the user is being created or was created

From the “Authentication type” group, you select the type of authentication that is applied to the user:

- Use Essbase Server authentication—When selected, users are created and stored as part of Essbase security. This option is the default setting.

If the “Use Essbase Server authentication” option is selected, you must perform the following actions:

- In the Password and Confirm Password boxes, enter and confirm the user's password. Passwords are not case-sensitive.
- Select or clear the “Prompt user to change password” option. Selecting the option enables users to change their passwords at first login. Clearing the option requires users to retain their assigned passwords. If you select the option, you can assign a default password to all new users and allow users to select their own passwords when they begin using Essbase.
- Use single sign on—If [single sign on](#) is selected, user login information is stored in a corporate authentication repository that is supported by EPM System security.

If the “Use single sign on” option is selected, you can click the **Search** button to search for an externally stored username.

If you have Administrator or Create/Delete Users and Groups permissions, you can select the “Disable user name” option to disable a username and prevent the user from connecting to Essbase Server. If you have Administrator permissions, you can clear the option to re-enable a disabled username. See [“Disabling User Names” on page 284](#)

In the “User type” group, you select one of the following [user types](#). Only the user types that you have permission to create are available.

- Administrator—Users have full access to all users, groups, and data on Essbase Server.
- User—Users have no inherent permissions; that is, user permissions, if any, are granted through create/delete permissions, group membership, application or database permissions, or filters.

Create/delete permissions include “Create/delete users and groups” permissions, which enable users to create and delete users and groups that have permissions equal to or lower than their own permissions, and “Create/delete applications” permissions, which enable users to create and delete applications and to control access to databases within applications.

- Application access type—Users can access Essbase applications (if the Essbase option is selected), Planning applications (if the Planning option is selected), or Essbase and Planning

applications (if both options are selected). You can select or clear only the Essbase option. The other options are read only.

Users created using an Essbase administration tool, such as Administration Services or MaxL, are assigned the “Essbase” application access type. Users created using the Oracle Hyperion Planning interface are assigned the “Planning” application access type.

Related Information

- [“About Security and Permissions” on page 253](#)
- [“Creating Users on Essbase Servers” on page 262](#)
- [Editing User Properties](#)
- [“Create User Dialog Box and User Properties Dialog Box \(Essbase Server\)” on page 507](#)
- [“Managing External Authentication” on page 265](#)

Create Using Text Dialog Box

Using the Create Using Text dialog box, you create a field between two adjacent fields of a rules file and populate the new field with text. For example, if one field contains 100 and the next field contains 10–1, you can create between the fields a field that contains a dash and thus create 100–10–1.

You enter text in the “Text in field” box. The new field is created to the left of the selected field.

Related Information

- [“Using Text to Create Fields” on page 225](#)
- [“About Field Operations” on page 220](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)

Created/Deleted Dimensions Dialog Box

You use the Created Dimensions dialog box to map data to the members of new standard dimensions. For example, if all Sample Basic data is associated with a channel or with the sum of all channels, you can create, in the Sample Basic outline, a dimension called *Channel* and map the data to the members of the Channel dimension.

The Deleted Dimensions dialog box is displayed when you attempt to delete a standard (non-attribute) dimension from the outline.

You use the Deleted Dimensions dialog box to retain the values of a selected member of a deleted dimension and to associate the retained values with members of non-deleted dimensions. The values of only one member per deleted dimension can be retained. For example, if you delete the Market dimension, the data that remains in the database is derived from one member of the Market dimension.

Note: If you delete an attribute dimension, Essbase deletes the associations to the associated base dimension.

Lists that are displayed in the Created Dimensions and Deleted Dimensions dialog boxes:

- **Dimensions**—The dimensions that have been created within or deleted from the outline since the outline was last saved
- **Members**—Members of the dimension that is selected in the Dimensions list (For a new dimension, you select the member to which you want to map data. For a deleted dimension, you select the member whose data values you want to retain.)

Related Information

- [“Saving Outlines” on page 130](#)
- [“Restructure Database Options Dialog Box” on page 634](#)
- “Database Restructuring” in the *Oracle Essbase Database Administrator's Guide*

Custom-Defined Function Manager

You use the Custom-Defined Function Manager window to view, create, edit, or delete custom-defined functions that are defined at the global (server) level or the local (application) level.

You do not edit fields in this window. Rather, to operate on a function, you select a row and click a button, or click New to create a function.

When you use the window to create functions, you are registering functions that were previously developed in Java in the custom-defined function and macro catalog and, thereby, adding the functions to the Essbase calculator framework. When you use the window to edit, delete, or refresh functions, you are modifying the function and macro catalog.

Note: Custom-defined functions enable you to extend the Essbase calculator language. For creation and use of custom-defined functions, Java Runtime Environment, which is installed with Essbase, is required. Custom-defined functions do not apply to aggregate storage applications.

The following columns of the Custom-Defined Function Manager window provide information about the listed functions:

- **Essbase Server**—Name of the current Essbase Server instance
- **Application**—For local functions, the current application name; for global functions, <all apps>
- **Name**—Name of the function; for example, @JSUM (For local functions, the name does not reflect the double-naming convention that is used in MaxL.)
- **Class Name**—Fully qualified name of the Java class associated with the function, for example, CalcFunc

- **Method Name**—Name of the Java class method associated with the function (For example, in `CalcFunc.sum`, `sum` identifies the method.)
- **Spec**—Essbase calculator-syntax specification string, if one was given when the function was registered; for example, `@COVARIANCE (expList1, expList2)`

Note: If the function is to be returned by the output string of the `EssListCalcFunctions` API function, a specification string must be used.

- **Comment**—Optional, and possible only if a specification string is used
- **Runtime**—Yes or No, whether the Runtime property is assigned to the function
- **State:**
 - **Loaded:** The function is validly defined in Java, and the application is started.
 - **Not Loaded:** The function is not validly defined in Java, the application is not started, or JRE is not installed.
 - **Unknown:** Essbase cannot determine whether the function is validly defined in Java. You may need to refresh the custom-defined function and macro catalog or restart the application. Unknown is the default setting.

Buttons available in the Custom-Defined Function Manager window:

- **New**—To add a function that was previously developed in Java
- **Edit**—To reregister or edit, but not rename, a function
- **Copy**—To copy a function to another server or application
- **Rename**—To rename a function, but not edit it
- **Delete**—If the function that you delete has been loaded into the application, the deletion may not become effective until you restart the application.
- **Refresh**—To load newly created or updated functions into the function and macro catalog, you may need to restart the application.

Related Information

- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Creating Custom-Defined Functions” on page 352](#)
- [“Editing Custom-Defined Functions” on page 353](#)
- [“Deleting Custom-Defined Functions” on page 355](#)
- [“Using Custom-Defined Functions” on page 354](#)
- [“E-mailing Essbase Information” on page 87](#)

Related Commands

- `create function` (MaxL) in the *Oracle Essbase Technical Reference*
- `display function` (MaxL) in the *Oracle Essbase Technical Reference*
- `drop function` (MaxL) in the *Oracle Essbase Technical Reference*

Custom-Defined Macro Manager Window

You use custom-defined macros to extend the Essbase calculator language.

The boxes of the Custom-Defined Macro Manager window display information about custom-defined macros.

You do not edit fields in this window. Rather, to operate on a macro, you select a row and click a button, or click New to create a macro.

- Essbase Server—Name of the current Essbase Server instance
- Application—Name of the application with which the macro is associated (for local macros) or <all apps> (for global macros)
- Name—Short way to refer to the macro expansion; for example, @MYMACRO

Macro names can include alphanumeric characters and the following symbols: @, #, \$, _. It is recommended that you start a macro name with @. Within an application, each macro name must be unique. However, a global macro and local macro can use the same name. In this case, the local macro takes precedence.

Note: The names that are displayed in the Name column do not reflect the double-naming convention that is used in MaxL to specify the scope of local macros. For a local macro, the selection in the Application list identifies the relevant application.

- Signature—Description of the style in which macro arguments are passed
For example, the following signature passes the macro as two comma-separated arguments followed by a list of arguments: (SINGLE, SINGLE, GROUP)
- Expansion—A string that determines how the signature is processed
For example, if you use the following macro, signature, and expansion, @SUM3 (x, y, z) is replaced with @SUM3 (x + y + z):
 - Name—@SUM3
 - Signature—(SINGLE, SINGLE, SINGLE)
 - Expansion—(@@1, @@2, @@3)
- Spec—Essbase calculator-syntax specification string; for example, @MYMACRO (mbrName, rangeList)
A specification string is not required. You use a specification string to return the macro and its syntax by the output string of the EssListCalcFunctions API function.
- Comment—Not required and possible only if a specification string is used
- State—Status of the macro
 - Loaded—The macro is validly defined in Java and loaded into the application process.
 - Not loaded—The macro is not validly defined, or the application is not started. Therefore, the macro is not loaded into the application process.

- Unknown—Essbase cannot determine whether the macro is validly defined. You may need to refresh the custom-defined function and macro catalog or restart the applications. Unknown is the default setting.

The buttons of the Custom—Defined Macro Manager window enable you to perform various macro-related actions:

- Create—Create a macro, which consists of the calculation functions or macros that you select from the Essbase calculator framework
- Copy—Copy the current macro into another server or application
- Delete—Delete the current macro
- Edit—Modify the properties (but not the name) of the current macro (Before you click Edit, select the macro that you want to modify.)
- Rename—Rename the current macro
- Refresh—Load a newly created or an edited macro into the custom-defined function and macro catalog

Macros that you create are registered in the custom-defined function and macro catalog. Actions that you perform on existing macros are reflected in the custom-defined function and macro catalog.

Note: Custom-defined macros do not apply to aggregate storage applications.

Related Information

- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Creating Custom-Defined Macros” on page 356](#)
- [“Editing Custom-Defined Macros” on page 357](#)
- [“Deleting Custom-Defined Macros” on page 359](#)
- [“Using Custom-Defined Macros” on page 358](#)
- [“E-mailing Essbase Information” on page 87](#)

Related Commands

- create macro (MaxL) in the *Oracle Essbase Technical Reference*
- display macro (MaxL) in the *Oracle Essbase Technical Reference*
- drop macro (MaxL) in the *Oracle Essbase Technical Reference*

Data Load Dialog Box

You use the Data Load dialog box to load data into databases and members into outlines.

The Data Load dialog box is used for aggregate and block storage databases. However, aggregate and block storage databases use different processes to load data and build dimensions. See the *Oracle Essbase Database Administrator's Guide* and [block storage](#).

Data loads from Essbase Server computers process faster than data loads from client computers (because data need not be transported over the network from the client to the server computer). Therefore, you should move a data source to the server computer and then load its data.

From the following columns of the of the Data Load dialog box, you perform the described actions:

- Data Source Type—Select “SQL” (to set the data source as an SQL database) or “Data files” (to set the data source as a file, including text and spreadsheet files).
- Mode—Select “Load only” (to load data), “Build only” (to build dimensions), or “Both” (to load data and build dimensions).
- Data Source—Select a data file, and click **Find Data File**.
- Rules File—Select a rules file, and click **Find Rules File**.

The SQL User Name and SQL Password columns, in which you enter your username and password are available only if the data source type is SQL, you enter your username and password on the SQL database.

If Abort on Error, Execute in background, and Deferred-restructure dimension build are not selected, you can enter information in the following columns:

- Error File—Specify the path to the error file (after selecting a data source and rules file). If no path is specified, errors are written to `EAS_HOME\client\dataload.err` on the machine where Administration Services Console is running.
- Overwrite—Overwrite the contents of an existing error file. This enables you to correct the outline and use the error file as a data source to load the earlier rejected records.

Related Information

- [“Loading Data and Building Dimensions” on page 199](#)
- “Preparing Aggregate Storage Databases” in the *Oracle Essbase Database Administrator's Guide*
- “Understanding Data Loading and Dimension Building (block storage)” in the *Oracle Essbase Database Administrator's Guide*
- [“Updating an Outline Dynamically Using a Rules File” on page 201](#)

Related Commands

For a data load:

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- import data (MaxL) in the *Oracle Essbase Technical Reference*
- import (ESSCMD) in the *Oracle Essbase Technical Reference*
- loaddata (ESSCMD) in the *Oracle Essbase Technical Reference*

For a dimension build:

- import dimensions (MaxL) in the *Oracle Essbase Technical Reference*
- buildddim (ESSCMD) in the *Oracle Essbase Technical Reference*
- alter system kill request (MaxL) in the *Oracle Essbase Technical Reference*

Data Load Results Dialog Box

In the columns of the Data Load Results dialog box, you can view the results of data loads and dimension builds:

- Operation Type—LoadOnly, BuildOnly, or Both
- Data File—For a data file, the path to the file; for a SQL file, “SQL”
- Rules File—The path to the rules file
- Status—Success, Error, or Warning

Select a row in the table to view results for each data source.

Note: For data and rules files stored on the Essbase Server computer, a path includes the server, application, and database in which the file is stored. For data and rules files stored locally, the path is the file system path.

You can click the **Try Again** button to return to the Data Load dialog box—to fix problems and rerun the data load. You can click **Close** to close the Data Load and the Data Load Results dialog boxes.

You can select a row to view detail information in the lower part of the dialog box.

Related Information

- [“Loading Data and Building Dimensions” on page 199](#)
- “Understanding and Using Dimension Build and Data Load Error Logs” in the *Oracle Essbase Database Administrator's Guide*

Data Load Settings Dialog Box

You use the tabs of the Data Load Settings dialog box to determine how data values are manipulated during data loads:

- [Data Load Values](#)—Change data values as they are loaded (including adding to and subtracting from the values and flipping the signs of the values).
- [Clear Data Combinations](#)—Clear existing data values before loading new data values.
- [Header Definition](#)—Define headers in the rules file.

You click the **Outline** button to associate the rules file with an outline and to populate dimension nodes.

Related Information

- “Adding to and Subtracting from Existing Values” in the *Oracle Essbase Database Administrator's Guide*
- [“Flipping Signs” on page 234](#)
- [“Combining Selection and Rejection Criteria” on page 219](#)
- [“Clearing Data Values Before Loading Data” on page 233](#)
- [“Specifying Data-Source Members in Rules Files” on page 217](#)
- [“Creating a Data Load Rules File” on page 198](#)

Data Load Settings Dialog Box—Clear Data Combinations Tab

You use the Clear Data Combinations tab to clear specified data values from block storage databases before new data values are loaded.

You must clear data values if you are adding and subtracting values. By default, Essbase overwrites values.

You can clear values in either of two ways:

- In the **Combinations to clear** box, enter one or more member combinations. Enclose each name in quotation marks, for example, “New York”.
- Expand the **Dimension** node, and double-click one or more member names.

As necessary, click the **Outline** button to associate the rules file with an outline and to populate the Dimension node.

Related Information

- [“Clearing Data Values Before Loading Data” on page 233](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Data Load Settings Dialog Box” on page 517](#)

Data Load Settings Dialog Box—Data Load Values Tab

You use the Data Load Values tab to specify how data values are changed as they are loaded.

In the “Data values” group, you specify how values are loaded:

- Overwrite existing values—Replace target values with source values (the default).
- Add to existing values—Add source values to target values.
- Subtract from existing values: Subtract source values from target values.

- Replace all data in the database: Removes the contents of an aggregate storage database and loads the contents of a data load buffer (applicable only to aggregate storage databases).

Note: For aggregate storage databases, the data values options are also provided in the Aggregate Storage Data Load dialog box.

You use the “Sign flip” group to reverse data-value signs during data loads. First, you select a dimension (by entering its name in the Dimension box or double-clicking it in the Dimension node). Then, you select **On UDA**, and specify a UDA. When Essbase encounters the specified UDA, it reverses the sign of the associated member. For example, typically, the sign of an accounts member is plus. But, you can specify that, during data loads, the sign of any accounts member that is assigned a UDA of Expense is changed to minus.

In the “Global select/reject Boolean” group, you specify how selection and rejection criteria are combined:

- And—If all fields of a record match the selection and rejection criteria, the record is selected or rejected.
- Or—If any field of a record matches the selection or rejection criteria, the record is selected or rejected.

If necessary, click the **Outline** button to associate the rules file with an outline and populate the dimension node.

Related Information

- “Adding to and Subtracting From Existing Values” in the *Oracle Essbase Database Administrator's Guide*
- [“Flipping Signs” on page 234](#)
- [“Combining Selection and Rejection Criteria” on page 219](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Data Load Settings Dialog Box” on page 517](#)

Data Load Settings Dialog Box—Header Definition Tab

You use the Header Definition tab to define headers for rules files.

A header describes the contents of the data source and indicates how data-source fields are mapped to the target database.

Within a header, you can specify dimensions and members. The specified dimensions and members are used for each data-source record. A header can specify only one member per dimension. For example, Feb, Mar is an invalid header because it specifies two members of the Year dimension.

You can specify names in either of two ways:

- In the “Name text” box, enter one or more member, dimension, or substitution variable names. Separate names with commas, and prefix substitution variables with ampersands (&).
- Expand the Dimension node, and double-click one or more member and dimension names.

If necessary, click the **Outline** button to associate the rules file with an outline and populate the Dimension node.

Related Information

- [“Specifying Data-Source Members in Rules Files” on page 217](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Data Load Settings Dialog Box” on page 517](#)

Data Preview Grid

You can use the Data Preview Grid window to preview the values of databases for which you have Read permission.

The window contains the following tabs:

- [Cubeview](#)—Displays a grid, similar to a spreadsheet, from which you can preview values.
- [Properties](#)—Displays a list of settings that control the behavior of the grid.

Related Information

[“Previewing Data” on page 331](#)

Data Preview Grid Window—Cubeview Tab

You use the Cubeview tab to preview database values and perform, within the displayed grid, a limited set of Spreadsheet Add-in operations.

Note: The grid does not reflect true retrieval times from other client applications.

On the grid, you can perform the following mouse actions (assuming that the left button is the primary button):

- Double-click a member cell—The member is expanded one level.
- Double-click a data cell—The Linked Reporting Objects dialog box opens.
- Double-right-click a member cell—The member is collapsed one level.
- Drag the right mouse on a member cell—The member is pivoted.

Using the toolbar buttons, you can perform various actions. The tooltips for the buttons and the actions related to the buttons are as follows:

- Retrieve—Retrieves data into the grid.
- Conditional Retrieve—Opens the Conditional Retrieve dialog box, in which you enter a string that contains Essbase report specification commands.
- Zoom In—On a member cell, expands the member one level, and, on a data cell, opens the Linked Reporting Objects dialog box.
- Zoom Out—On a member cell, collapses the member one level.
- Pivot—On a member cell, pivots the member from a row group to a column group or vice versa.
- Linked Objects—On a data cell, opens the Linked Reporting Objects dialog box, where you can attach or edit an external file, a cell note, or a URL for the cell.
- Keep Only—Retains only the selected member or member range in the grid.
- Remove Only—Removes only the selected member or member range from the grid.
- Undo—By default, reverses the most recent operation performed on the grid. (You can set the number of operations to undo by clicking the Preferences button.)
- Update—Refreshes the grid with the most recent data.
- Chart—Displays a chart view of the grid data. (Click Sheet1 to return to the grid view.)
- Member Selection—On a member cell, opens the Member Selection dialog box, in which you find and select members to include in the grid.
- Preferences—Opens a dialog box in which you can set grid preferences (number of operations to undo, grid class to use, and format of different types of member cells or data cells).
- View as HTML—Creates a sheet that displays the grid in HTML format.
- Print—Opens the Print dialog box.
- Email—Opens the Email Grid Output dialog box, where you can specify email addresses and a subject for emailing the grid output.

Related Information

[“Previewing Data” on page 331](#)

Data Preview Grid Window—Properties Tab

You use the Properties tab to specify how values are displayed in the data preview grid.

The tab provides the following read-only boxes:

- Name—Name of the grid worksheet
- Connection pool—Name of the Deployment Services connection pool, if the target database uses one

The tab provides the following boxes, which you use to edit grid properties.

- Description—Enter text (maximum of 128 characters) that describes the grid. Descriptions are not required.
- Drill level—Select the level at which a drill operation retrieves data. The default, Next level, retrieves the child members. For example, if Year is selected, Qtr1, Qtr2, Qtr3, and Qtr4 are retrieved.
- Indent Style—Select a setting (None not to indent values; “Sub items” to indent descendants; or Totals, the default, to indent ancestors).
- Latest member name—If working with a block storage database, enter the level 0 member of the time dimension. Also, select the “Specify latest member” option.
- Alias table name—Select the alias table that is used to display alias names.

The tab provides numerous options, which, when selected, modify the grid in some way:

- Include selection—The member on which a drill operation is performed is included in the list of retrieved members. For example, if you select the option and drill down on Qtr1, data is retrieved for Jan, Feb, Mar, and Qtr1.
- Selection only—Only the members on which a drill operation is performed are retained after zooming in.
- Within selected group—A drill operation is applied only to the members of the selected group. This setting, which is meaningful only if two or more dimensions as rows or columns contain data, also affects the behavior of Keep Only and Remove Only operations.
- Suppress missing—Missing rows are excluded.
- Suppress zero—Data rows that contain only zeros are excluded. When the option is cleared, Essbase does not redisplay data that contains zeros. To display zero data, you must clear the option, click **Save**, and reopen the grid.
- Suppress underscore—Underscore characters within member names are not displayed.
- Alias names—For retrievals, alias names, rather than member names, are displayed. This option is effective only if you selected an alias table from the “Alias table name” box.
- Enable dataless navigation—You can perform grid operations, such as drilling and pivoting, without retrieving data. Be sure to clear the option before you initiate a data retrieval.
- Empty grid error—If the grid is empty, an error is returned.
- Repeat member names—For retrievals, member names are repeated. Because you can immediately see the member names associated with the data, this feature may be particularly useful for large grids. When the option is cleared, Essbase does not remove repeated members from the grid. To remove repeated member names, clear the option, click **Save**, and reopen the grid.
- Use both for row dimensions—For each row member, member name and alias are displayed.
- Specify latest member—For retrieval from block storage databases, the member specified in the “Latest member name” box is used.
- Enable mid-tier caching—Grid data is stored in a middle-tier cache and, thus, retrieval time is reduced. Deployment Server runs as a servlet in the Essbase Administration Server application server. If the option is not selected, grid data is stored on Essbase Server.

- Enable hybrid analysis—Members from Hybrid Analysis relational sources are displayed. If the selection of this option contradicts an Outline Editor “Enable hybrid analysis” setting, this option takes precedence. For outlines that contain multiple levels of Hybrid Analysis members, a drill-up operation on the bottom-level Hybrid Analysis member moves directly to the Essbase parent member, thus bypassing all other Hybrid Analysis levels.
- Display unknown members—For retrievals, names that do not match database member names are displayed.

Related Information

[“Previewing Data” on page 331](#)

Data Replication Dialog Box

For replicated partitions, you can use the Data Replication dialog box to replicate data from source to target partitions.

The Source and Target boxes display, respectively, the names of the current source and target Essbase Server, application, and database.

In the “Replicate options” group, you select a replication option:

- Update changed cells only
- Update all cells

Related Information

- [“Replicating Data” on page 407](#)
- “Replicated Partitions” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- getallreplcells (ESSCMD) in the *Oracle Essbase Technical Reference*
- getupdatedreplcells (ESSCMD) in the *Oracle Essbase Technical Reference*
- putallreplcells (ESSCMD) in the *Oracle Essbase Technical Reference*
- putupdatedreplcells (ESSCMD) in the *Oracle Essbase Technical Reference*
- refresh replicated partition (MaxL) in the *Oracle Essbase Technical Reference*

Data Source Properties Dialog Box

You use the tabs of the Data Source Properties dialog box to define the global properties for a data source:

- [Delimiter](#)—To recognize delimiters between fields
- [Field Edits](#)—To undo field operations in a rules file
- [Header](#)—To view and specify the location of header records

- [Ignore Tokens](#)—To ignore a string across all fields

Related Information

- [“Setting File Delimiters” on page 206](#)
- [“About Field Operations” on page 220](#)
- [“Undoing Field Operations” on page 226](#)
- [“Setting Headers in the Data Source” on page 217](#)
- [Ignoring Fields Based on String Matching](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)

Data Source Properties Dialog Box—Delimiter Tab

You use the Delimiter tab to set file delimiters for data sources. Typically, immediately after you open a data source, you set the file delimiter (the character that separates the data source fields). By default, the rules file expects fields to be separated by tabs.

In the Delimiter tab, in the Delimiter group, you select the delimiter:

- Comma
- Tab
- All spaces
- Custom—To set the character that you enter in the text box as the delimiter. You can enter any standard ASCII character between 0 to 127.

To fix the width of data-source columns, select the “Column width” option, and enter a width in the text box. At minimum, a column must be able to contain a five-digit number.

Related Information

- [“Setting File Delimiters” on page 206](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Data Source Properties Dialog Box” on page 523](#)

Data Source Properties Dialog Box—Field Edits Tab

You use the Field Edits tab to undo one or more field operations (such as move, split, join, create using text, or create using join).

The columns of the Field Edits tab display information:

- Operation—Types of operations, such as move, split, join, create using join, and create using text

- Columns—Number of columns in the rules file that will be moved, split, joined, or created
- Split Characters—Number of characters in a split operation

You access the following dialog boxes by clicking the relevant buttons. For example, if you click the **Move** button, the **Move Field** dialog box is displayed, and, if you click the **Create Using Text** button, the **Create Using Text** dialog box is displayed.

- [Move Field dialog box](#)
- [Join Field dialog box](#)
- [Split Field dialog box](#)
- [Create Using Text dialog box](#)
- [Create Using Text dialog box](#)

To delete operations, you select an operation, and click **Delete**. You must delete operations in reverse order; that is, you must delete the most recent operation first.

Related Information

- [“About Field Operations” on page 220](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Data Source Properties Dialog Box” on page 523](#)

Data Source Properties Dialog Box—Header Tab

You use the Header tab to specify the location of data-source header records.

In the “Number of lines to skip” box, you specify how many header lines (counting from the top) can be skipped when data is loaded. You can skip from 0 to 999,999 records. You should skip all header records.

In the boxes of the “Data source header records” group, you identify header locations:

- Record containing header names—Enter the number of the record that specifies the dimensions and members that are used as data-source headers. The specified dimensions and members are used for each data-source record. Only one member from each dimension can be specified. For example, if the sample header name contains “Jan, Sales,” each record in the data source is mapped to the Jan member of the Year dimension and the Sales member of the Measures dimension.
- Record containing data load field names—Enter the number of the record that contains the data load field names of the data source. Data load field names are dimension or member names that tell Essbase how the data load fields of the data source are ordered. A sample data load field header is Year, Measures, Market, Product, Scenario.
- Record containing dimension building field names—Enter the number of the record that contains the dimension-build field names of the data source. Dimension-build, field-name

headers consist of dimension names and field types, such as Level 0, Product, Level 1, Product, Level 2, Product.

Related Information

- “Defining Header Records” in the *Oracle Essbase Database Administrator's Guide*
- “Data Source Headers” in the *Oracle Essbase Database Administrator's Guide*
- “Valid Data Source Header Field Types” in the *Oracle Essbase Database Administrator's Guide*
- [“Setting Headers in the Data Source” on page 217](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Data Source Properties Dialog Box” on page 523](#)

Data Source Properties Dialog Box—Ignore Tokens Tab

You use the Ignore Tokens tab to ignore, during a data load or dimension build, all data-source fields that match a specified string and, thus, you avoid loading the specified string. The specification that you set in the Ignore Tokens tab is applied throughout the data source, not to only one column.

In the “Tokens to ignore” box, you enter or edit the text string that you want to ignore.

You click the **New** button to enter a row, you press the **Enter** key to define a search operation, and you click the **Delete** button to delete the selected row.

Define tokens to be ignored if you do not want to load certain text strings in the data source.

Related Information

- [“Ignoring Fields” on page 223](#)
- [“Ignoring Fields By Specifying Tokens” on page 223](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Data Source Properties Dialog Box” on page 523](#)

Database Information Window

Use this window to view properties for all Essbase databases to which you have access. You cannot edit properties from this window.

The contents of this window differ for block storage databases and aggregate storage databases. Available information includes the following:

- Application, Database—The application and database names
- Data Cache Size—The size of the data cache, in kilobytes

- File Cache Size—The size of the data file cache, in kilobytes
- Index Cache Size—The size of the index cache, in kilobytes
- Index Page Size—The size of the index page, in kilobytes
- Compression—The compression setting
- Retrieve Buffer Size—The size of the retrieval buffer, in kilobytes
- Retrieve Sort Buffer Size—The size of the retrieval sort buffer, in kilobytes
- Lock Timeout—The setting for the timeout on data block locks, in minutes
- Db Status—Indicates whether the database is running
- Elapsed Time—Database run time in hours:minutes:seconds
- Number Dimensions—The number of dimensions in the database outline
- Current Data Cache, Current File Cache, Current Index Cache—Memory currently being used by the named cache, in KB (zero if there is no data in the database)

Related Information

- [“Viewing Properties for All Databases” on page 314](#)
- [“Setting Database Properties” on page 101](#)
- [“E-mailing Essbase Information” on page 87](#)

Related Commands

- display database (MaxL) in the *Oracle Essbase Technical Reference*
- getdbinfo (ESSCMD) in the *Oracle Essbase Technical Reference*
- getdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- getdbstats (ESSCMD) in the *Oracle Essbase Technical Reference*
- getperfstats (ESSCMD) in the *Oracle Essbase Technical Reference*

Database Properties Window

You use the Database Properties window to view and edit database properties. To edit the properties of a database, you must have Database Manager permissions for the database.

The following tabs of the Database Properties window apply to aggregate and block storage databases:

- [General](#)—Set options for startup, calculations, and minimum permissions.
- [Dimensions](#)—View information about dimensions.
- [Statistics](#)—View information about data blocks, hit ratios, and read/write operations.
- [Modifications](#)—View a list of operations performed against the database.

The following tabs of the Database Properties window apply only to block storage databases:

- [Caches](#)—Size Essbase caches and specify cache-related settings.
- [Transactions](#)—Specify when and how Essbase writes data to disk.
- [Storage](#)—Specify a data compression method and set multiple-disk storage parameters for data.
- [Currency](#)—Link to a currency database and set related options.

The [Compression](#) tab, in which you view compression estimates, applies only to aggregate storage databases.

Related Information

- [“Setting Database Properties” on page 101](#)
- [“About Database Monitoring” on page 313](#)
- [“E-mailing Essbase Information” on page 87](#)

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- query database (MaxL) in the *Oracle Essbase Technical Reference*
- display database (MaxL) in the *Oracle Essbase Technical Reference*
- getdbinfo (ESSCMD) in the *Oracle Essbase Technical Reference*
- getdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- getdbstats (ESSCMD) in the *Oracle Essbase Technical Reference*
- getperfstats (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdbstateitem (ESSCMD) in the *Oracle Essbase Technical Reference*

Database Properties Window—Caches Tab

You use the Caches tab to specify cache sizes and cache-related settings for block storage databases.

As you decide whether to select the “Cache memory locking” option, consider the following:

- A cleared option (the default) denies priority usage of system RAM to the Essbase Server kernel.
- You can select the option only if the input/output setting for Essbase is direct I/O. See [Selecting an Access \(I/O\) Mode](#).
- A selected option locks the memory used by the index, data file, and data caches into physical memory.
- A selected option may improve performance because the system memory manager does not need to swap and reserve space for the memory used by the database caches.

- If you select the option, you should leave at least one-third of the system RAM available for non-Essbase kernel use.

In the “Cache sizes” node, you specify the sizes of various buffers and, thereby, determine how much memory is allocated for the index, data file, and data caches. For default, minimum, and recommended values, see the *Oracle Essbase Database Administrator's Guide* and [“Checking Index and Data File Sizes” on page 324](#).

- Index cache setting
- Data file cache—For holding compressed data (.pag) files (not used if Essbase is using [buffered I/O](#))
- Data cache setting—For holding uncompressed data blocks

The following boxes of the “Cache sizes” node display the amount of memory being used for the index, data file, and data caches. In all cases, if the database contains no data, the value is 0.

- Index cache current value
- Data file cache current value
- Data cache current value

Changes to cache settings become effective when one of the following events occurs:

- The database is started.
- The RESETDB command (ESSCMD), which clears all data, is issued.
- All data is cleared.

The Index page setting box displays the size of the index page (8 KB and unchangeable). If the database contains data, the “Index page current value” node displays the value that is displayed for the index page setting. If the database does not contain data, the box displays 0.

Related Information

- “Optimizing Essbase Caches” in the *Oracle Essbase Database Administrator's Guide*
- “Understanding the Essbase Server Kernel” in the *Oracle Essbase Database Administrator's Guide*
- [“Setting Database Properties” on page 101](#)
- [“About Database Monitoring” on page 313](#)
- [“Database Properties Window” on page 527](#)

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- query database (MaxL) in the *Oracle Essbase Technical Reference*
- setdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdbstateitem (ESSCMD) in the *Oracle Essbase Technical Reference*

- `getperfstats` (ESSCMD) in the *Oracle Essbase Technical Reference*

Database Properties Window—Compression Tab

You use the Compression tab to view compression estimates for aggregate storage databases. Compression estimates, which are related to the size of the database on disk, change depending on which dimension is tagged as the compression dimension.

In the Compression tab, information about each database dimension and about the “No compression dimension” is displayed in a series of columns:

- Dimension Name
- Is compressed—True or False, whether the dimension is tagged as the compression dimension
- Stored Level 0 Members—The number of level 0 members that are stored
- Average bundle Fill—Estimated average number of values per compression dimension bundle
- Average Value Length—The estimated average number of bytes required to store a value
- Level 0 Size (MB)—The estimated size of the compressed database

Note: The values in the row labeled <No compression dimension> assume that no dimension is tagged as accounts.

Related Information

- [Managing Compression for Aggregate Storage Databases](#)
- “Understanding the Compression Dimension for Aggregate Storage Databases” in the *Oracle Essbase Database Administrator's Guide*
- [“Database Properties Window” on page 527](#)

Related Commands

query database (MaxL) in the *Oracle Essbase Technical Reference*

Database Properties Window—Currency Tab

You use the Currency tab to set currency-conversion options for block storage databases.

In each of the following boxes, you select a value:

- Currency database—To link the main database to the currency database that you select (If the current database is not linked to a currency database, the box displays “None.”)
- Conversion method—To multiply or divide the values of the main database by the exchange rates specified in the currency database (Divide is the default.)

- Default currency type member—To select a member of the currency type dimension of the currency database (The currency type dimension contains members that identify various currency scenarios.)

The following nodes display dimension names, as defined in the outline of the main database:

- Country dimension—If the current database is not linked to a currency database, “None” is displayed.
- Time dimension—The default is Year.
- Category dimension—The accounts dimension that is tagged as Cur Category (The default is Accounts.)
- Currency partition dimension—The dimension tagged as Currency Partition (If the currency database is not linked to a currency database, “None” is displayed.)

Related Information

- [“Setting Database Properties” on page 101](#)
- [“About Database Monitoring” on page 313](#)
- [“About Essbase Currency Conversion” on page 421](#)
- [“Converting Currency” on page 422](#)
- [“Database Properties Window” on page 527](#)

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- setdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdbstateitem (ESSCMD) in the *Oracle Essbase Technical Reference*

Database Properties Window—Dimensions Tab

The Dimensions tab displays information about the current database outline.

The “Number of dimensions” box displays the total number of standard and attribute dimensions. A series of columns displays information about each of the dimensions:

- Dimension—Dimension name
- Type—Sparse or dense (applies only to block storage databases)
- Members in Dimension—Total number of members, including shared and label-only members
- Members Stored—Number of members that can store data values

Note: For dimensions with shared and label-only members, the Member Stored number is less than the Members in Dimension number. In addition, when databases are converted from block to aggregate storage, attribute dimension members are tagged as Dynamic Calc, and standard dimension members tagged as Dynamic Calc are tagged as stored members. These changes affect the number of stored members shown in the Members Stored column.

Related Information

- [“Setting Database Properties” on page 101](#)
- [“About Database Monitoring” on page 313](#)
- [“Database Properties Window” on page 527](#)

Related Commands

- display database (MaxL) in the *Oracle Essbase Technical Reference*
- getdbstats (ESSCMD) in the *Oracle Essbase Technical Reference*

Database Properties Window—General Tab

You use the General tab to set options for database startup, calculations, and minimum permissions.

If you want to compose a description for the current database, in the Description box, you enter your text. For length limitations, see the *Oracle Essbase Database Administrator's Guide*.

For the current database, the “Database type” node displays Normal or Currency.

To set a block storage database to start automatically, in the Startup group, you select the first option or both options:

- Allow users to start database—The database starts when a user attempts to retrieve data from it. The option is selected by default. You might clear the option, for example, as a temporary measure to avoid memory problems when multiple databases are being used.
- Start database when application starts—The database starts when its parent application starts.

If the current database is a block storage database, in the Calculation group, you select an option:

- Aggregate missing values—If you never load data at parent levels, selecting the option may improve calculation performance. If the option is selected and you load data at the parent level, the parent-level values are replaced by the results of the database consolidation, even if the results are #MISSING values. The option is not selected by default.
- Create blocks on equations—If you select the option, when you assign a non-constant value to a member combination for which no data block exists, Essbase creates a data block. The option is not selected by default because its selection can produce a very large database.

When you assign a constant to a member on a sparse dimension, Essbase creates a data block. Therefore, when assigning constants to sparse members (for example, “West = 5”), you need

not select “Create blocks on equation.” However, when assigning anything other than a constant to a sparse member, if you want blocks created, you must select “Create blocks on equation.” For example, if no data exists for Actuals, a member of the sparse Scenario dimension, you must select “Create blocks on equation” to perform the following allocation:
 $2002\text{Forecast} = \text{Actuals} * 1.05;$

- Two-Pass calculation—If you select the option, after a default calculation, members that are tagged as two-pass are recalculated. The option is selected by default.

The two-pass tag is effective on members of the dimension tagged as accounts and on Dynamic Calc and Dynamic Calc and Store members of any dimension.

If the current database does not use EPM System security mode, from the “Minimum access level” list, you select a setting:

- None: Users can access the database according to their individual permissions. None is the default global permission for newly created applications and databases.
- Read: Users can view files, retrieve data values, and run report scripts.
- Write: Users can view files, retrieve data values, run report scripts, and update data values.
- Calculate: Users can view files, retrieve data values, run report scripts, update data values, and perform calculations.
- Database Manager: Users can perform any and all database tasks, including modifying database outlines and files.

In the Data retrieval buffers group, you specify, in kilobytes, the sizes of the retrieval buffers. Increasing the sizes of the buffers may improve retrieval performance. See the *Oracle Essbase Database Administrator's Guide* for default, minimum, and recommended values.

- Buffer size: Setting for the retrieval buffer, which is used to process and optimize retrievals from Spreadsheet Add-in and from report scripts. Increasing the size of the buffer may improve retrieval performance. See the *Oracle Essbase Database Administrator's Guide* for default, minimum, and recommended values.
- Sort buffer size: Setting for the retrieval sort buffer, which is used that is to be sorted during retrievals. Increasing the size of the buffer may improve retrieval performance. See the *Oracle Essbase Database Administrator's Guide* for default, minimum, and recommended values.

Related Information

- [“Setting Database Properties” on page 101](#)
- [“About Database Monitoring” on page 313](#)
- “Optimizing Calculations” in the *Oracle Essbase Database Administrator's Guide*
- “User Management and Security in EPM System Security Mode” in the *Oracle Essbase Database Administrator's Guide*
- “Optimizing Reports and Other Types of Retrieval” in the *Oracle Essbase Database Administrator's Guide*
- [“Database Properties Window” on page 527](#)

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- query database (MaxL) in the *Oracle Essbase Technical Reference*
- setdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdbstateitem (ESSCMD) in the *Oracle Essbase Technical Reference*
- getperfstats (ESSCMD) in the *Oracle Essbase Technical Reference*

Database Properties Window—Modifications Tab

The columns of the Modifications tab display information about the most recent operation (outline update, data load, or calculation) performed against the database:

- Operation—Type of operation, such as data load or calculation
- User—Name of the user who performed the operation
- Start Time—The time, according to Essbase Server, that the operation began, including preparatory tasks, such as locking data (For the duration of the operation, see the elapsed time entry in the [application log](#).)
- End Time—The time, according to Essbase Server, that the operation ended
- Note—A comment, which may or may not be provided

Related Information

- [“Setting Database Properties” on page 101](#)
- [“About Database Monitoring” on page 313](#)
- [“Database Properties Window” on page 527](#)

Related Commands

- display database (MaxL) in the *Oracle Essbase Technical Reference*
- getdbstats (ESSCMD) in the *Oracle Essbase Technical Reference*

Database Properties Window—Statistics Tab

The Statistics tab displays information about data blocks, hit ratios, and read/write operations.

Several nodes display basic information about the current run of the database:

- Database start time—According to the time zone of Essbase Server
- Database elapsed time—In hours:minutes:seconds
- Number of connections—Number of connected users
- Statistics—Date and time that Essbase last collected information for the Statistics tab, according to the time zone of Essbase Server

The Blocks node displays statistics about the data blocks of a block storage database:

- Number of existing blocks—Total number of blocks that exist (contain data)
- Block size—Size, in bytes, of each expanded (decompressed) data block (number of cells * 8; ideally, between 8 and 100 kilobytes). To alter block size, you must change the dense-sparse configuration of the database.
- Potential number of blocks—Maximum number of blocks (derived by multiplying the number of members of one sparse dimension by the number of members of another sparse dimension and so on). For example, the Sample Basic database contains 19 Product members and 25 Market members (not counting shared or label-only members). Because Product and Market are sparse dimensions that store data, there are $19 \times 25 = 475$ potential data blocks.
- Existing level 0 blocks—Total number of level 0 blocks (blocks whose sparse dimension members have no children) that exist (contain data). Because data can be loaded at upper levels, level 0 blocks and blocks that are created by data input are not necessarily the same.
- Existing upper-level blocks—Total number of non-level 0 blocks that exist (contain data). Upper-level blocks include all combinations of upper-level sparse members plus upper-level combinations that include level 0 sparse members.
- Block density (%)—Average percentage fill of data points within each data block, based on a sample of existing data blocks. Dense-sparse configuration should maximize block density. Maximizing block density, however, may result in proliferation of data blocks. Block size and block proliferation considerations may overshadow the attempt to maximize block density.
- Percentage of maximum blocks existing—Percentage that compares the number of blocks that exist and the number of potential blocks. The percentage is a measure of the sparsity of the database. It is not uncommon for the percentage to be very small; for example, less than 1 percent.
- Compression ratio—Measure of the compression efficiency of blocks stored on disk. The compression ratio usually indicates block density.
- Average clustering ratio—The average clustering ratio database statistic is an approximate indication of the ordering in which data blocks are laid out in data (.pag) files. The maximum value of 1 indicates that the blocks are laid out in block key order within data files. The reported value of the clustering ratio may be less than 1, even upon restructure, due to the scalability enhancements as well as support for parallel operations. This statistic does not apply to aggregate storage databases.

The “Aggregate storage statistics” node displays statistics about each dimension of an aggregate storage database:

- Name
- Number of stored levels (dimension level factor)—In aggregate storage databases, not all levels are stored.
- Number of bits used in the dimension key—Key length is a multiple of 8 bytes (for example, 8, 16, or 24). Therefore, for example, a key that uses 65 bits has a key length of 9 bytes, and

a key that uses 64 bits has a key length of 8 bytes. Therefore, if you reduce the number of bits used to 64, you reduce the size of the database.

The “Aggregate storage statistics” node displays statistics about an aggregate storage database:

- Max. key length (bits)—Sum of all bits used by all dimensions (For example, the key used for all dimensions contains 20 bits, and the first 4 are used by Year.)
- Max. key length (bytes)—Number of bytes that the key uses per cell
- Number of input-level cells—Assuming that all input-level cells are level 0 cells
- Number of aggregate views
- Number of aggregate cells
- Input-level data size (kilobytes)—Total disk space used by input-level data
- Aggregate data size (kilobytes)—Total disk space occupied by aggregate cells

When reviewing the runtime statistics that are displayed in the Run-time node, consider the following information about hit ratios:

- A hit ratio is a percentage that identifies how often information is retrieved from a cache, rather than from disk.
- As the hit ratio increases, performance improves, because less information is retrieved from disk.
- A hit ratio of 1.0 identifies maximum performance, because data is never retrieved from disk.
- It is recommended that you allocate memory to caches in small increments. Small and large allocations may produce the same benefit, and large allocations usually have limited effect on the hit ratio.

For block storage databases, the Run-time node displays various hit ratio statistics:

- Hit ratio on index cache
- Hit ratio on data file cache
- Hit ratio on data cache

For aggregate storage databases, the Run-time node displays statistics about the aggregate storage cache:

- Cache hit ratio
- Current cache size (KB)—The cache grows dynamically up to the specified limit.
- Current cache size limit (KB)—To change the limit, see [“Sizing the Aggregate Storage Cache” on page 77](#).

For block storage databases, the Run-time node identifies the number of times each of the following events occurred and provides path information about the affected data files.

- Index page reads

- Index page writes
- Data block reads
- Data block writes

For aggregate storage databases, the Run-time node displays statistics about pages:

- Page reads since last startup
- Page writes since last startup
- Page size (KB)

For aggregate storage databases, the Run-time node displays statistics about disk space (“Disk space” refers to the space used in the `Default` tablespace, and “Temporary disk space” refers to the space used in the `Temp` tablespace. In both cases, some space within some files may not be used.):

- Disk space allocated for data (KB)
- Disk space used by data (KB)
- Temporary disk space allocated (KB)
- Temporary disk space used (KB)

Related Information

- “Optimizing Essbase Caches” in the *Oracle Essbase Database Administrator's Guide*
- [“Sizing the Aggregate Storage Cache” on page 77](#)
- [“Setting Database Properties” on page 101](#)
- [“About Database Monitoring” on page 313](#)
- [“Database Properties Window” on page 527](#)

Related Commands

- `display database (MaxL)` in the *Oracle Essbase Technical Reference*
- `query database (MaxL)` in the *Oracle Essbase Technical Reference*
- `getdbstats (ESSCMD)` in the *Oracle Essbase Technical Reference*
- `getperfstats (ESSCMD)` in the *Oracle Essbase Technical Reference*

Database Properties Window—Storage Tab

You use the Storage tab to set data storage options for block storage databases.

If you want to change the I/O access mode (not use the mode specified in the “Current I/O access mode” box), in the “Pending I/O access mode” box, you select a mode:

- Buffered I/O—Uses the file system buffer cache. If direct I/O was not specified for the `DIRECTIO` setting in the `essbase.cfg` file when the database was created, buffered I/O is the default. (See the *Oracle Essbase Technical Reference*.)

- Direct I/O—Bypasses the file system buffer cache and performs asynchronous, overlapped I/Os, providing faster response time and greater potential to optimize cache sizes. If direct I/O is selected, Essbase attempts to use direct I/O each time that the database is started. If direct I/O is not available, Essbase uses buffered I/O. To enable use of the cache memory locking feature or the no-wait (asynchronous) I/O provided by the operating system, you must select direct I/O.

From the “Data compression” box, you select an option:

- Bitmap encoding—A bitmap is used to represent data cells and only the bitmap, the block header, and other control information are stored on disk. This setting is the default and, usually, the most efficient method of compressing data.

Essbase stores only non-missing values and does not compress repetitive or zero values. When Essbase brings a data block into the data cache, it uses the bitmap to re-create missing values and, thus, fully expands the block.

- RLE (Run-Length Encoding)—Consecutive, repetitive values, including zeros, are compressed, and a record is kept of each repeating value and the number of times that it is repeated consecutively.

RLE may be preferable if [average block density](#) is not greater than three percent or if the database includes many consecutive zero values or any consecutive, repeating value other than zero.

- ZLIB—A data dictionary that is based on the data being compressed is created.

Usually, when data is extremely dense, ZLIB compression provides the best compression ratio. However, under some circumstances, other compression methods may yield better results. With ZLIB compression, the storage space that is saved has little or no relationship to the number of missing cells or the number of contiguous cells of equal value.

- No compression

In the columns of the Disk Volumes table, you specify how storage is allocated on each disk volume:

- Disk Volume—Select, in the order that you want volumes to be used, a series of volume names.
- Partition Size—Specify the maximum amount of disk space to be allocated to each volume. If you use the default (Unlimited), Essbase uses whatever it needs of the available space.
- Unit—Select a unit (kilobytes, megabytes, or gigabytes) for each Partition Size value.
- File Type—Specify, for each volume, whether to store index (`essn.ind`) files or data (`essn.pag`) files or both index and data files. The default is Index+Data.
- File Size—For each volume, specify the maximum size that an index or data file can attain before Essbase creates a new file. The default is 2G; the minimum is 8192K (8M).
- Unit—Select a unit (kilobytes, megabytes, or gigabytes) for each File Size value.

- **Delete button:** Select the row containing the volume that you want to delete, and click **Delete** to stop Essbase from storing additional files on the volume. Essbase writes no new files to the volume but continues to access and use files previously created on the volume.

Note: If you do not specify disk volumes for storage, Essbase stores all index and data files on the volume specified by the `ARBORPATH` environment variable and uses whatever space it needs.

If you want no more files stored on a volume, in the Disk volumes table, select the row that contains the volume, and then click **Delete**. Although files can no longer be written to the volume, the files on the volume can be accessed and used.

The columns of the “Data/Index file” table provide information about each file stored on a disk volume:

- Data/Index File Type—Either index (.ind) or data (.pag)
- Size—In kilobytes
- Status—Open, Closed, or Not Found
- Name—Path and name

Related Information

- “Understanding Buffered I/O and Direct I/O” in the *Oracle Essbase Database Administrator's Guide*
- “Allocating Storage and Compressing Data” in the *Oracle Essbase Database Administrator's Guide*
- [“Setting Database Properties” on page 101](#)
- [“About Database Monitoring” on page 313](#)
- [“Database Properties Window” on page 527](#)

Related Commands

- `alter database (MaxL)` in the *Oracle Essbase Technical Reference*
- `setdbstate (ESSCMD)` in the *Oracle Essbase Technical Reference*
- `setdbstateitem (ESSCMD)` in the *Oracle Essbase Technical Reference*
- `getperfstats (ESSCMD)` in the *Oracle Essbase Technical Reference*

Database Properties Window—Transactions Tab

For block storage databases, you use the Transactions tab to specify when Essbase writes data to disk and to control the level of data access among multiple, concurrent users.

To enable transactions to hold read/write locks on all data blocks involved with a transaction until the transaction completes and commits, you select the “Committed access” option and then specify a concurrency option:

- Wait (seconds)—You specify the number of seconds that a transaction waits for access to locked data blocks. You accept the default (20 seconds); or you enter a value; or, from the list, you select “Indefinitely” or “0 (No waiting).”
- Pre-image access—You provide users read-only access to data blocks that are locked for the duration of another concurrent transaction.

To enable transactions to hold read/write locks on a block-by-block basis, you select the “Uncommitted access” option (the default setting) and then specify when Essbase performs a commit operation:

- Commit blocks—The number of data blocks updated before Essbase performs a commit (The default is 3000.)
- Commit rows—The number of rows of a data file processed during a data load before Essbase performs a commit (The default is 0.)

If the value of “Commit blocks” or “Commit rows” is not zero, Essbase commits data when it reaches the first threshold. For example, if “Commit blocks” is 10, “Commit rows” is 0, and data is loaded, Essbase commits after 10 blocks are updated. If “Commit blocks” is 5, “Commit rows” is 5, and data is loaded, Essbase commits after 5 rows are loaded or 5 blocks are updated, whichever happens first.

Note: To ensure seamless recovery, Essbase retains duplicate data until it commits. You should allow disk space for double the size of your database to accommodate duplicate data, particularly if you use committed access or if the “Commit blocks” and “Commit rows” values are 0.

Note: This tab does not apply to aggregate storage databases.

Related Information

- “Ensuring Data Integrity” in the *Oracle Essbase Database Administrator's Guide*
- [“Setting Database Properties” on page 101](#)
- [“About Database Monitoring” on page 313](#)
- [“Database Properties Window” on page 527](#)

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- query database (MaxL) in the *Oracle Essbase Technical Reference*
- setdbstate (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdbstateitem (ESSCMD) in the *Oracle Essbase Technical Reference*
- getperfstats (ESSCMD) in the *Oracle Essbase Technical Reference*

Database Trigger Spool Files Window

You use the Database Trigger Spool files window to view and delete spool files for triggers.

The window identifies the Essbase Server instance, the application, and the database for which the current triggers are defined.

Note: To view triggers defined for a different database, in Enterprise View, below the preferred database, double-click the Triggers node.

The Name column lists the names of the spool files.

The window provides the following buttons, each of which affects the spool file list:

- View
- Delete
- Delete All
- Refresh

Related Information

- [“Viewing Trigger Spool Files” on page 419](#)
- [“About Triggers” on page 415](#)
- [“Creating Triggers” on page 416](#)
- [“Editing Triggers” on page 417](#)
- [“Deleting Triggers” on page 418](#)
- [“Enabling and Disabling Triggers” on page 418](#)
- [“Database Triggers Window” on page 541](#)
- “Monitoring Data Changes Using Triggers” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- create trigger (MaxL) in the *Oracle Essbase Technical Reference*
- display trigger (MaxL) in the *Oracle Essbase Technical Reference*
- drop trigger (MaxL) in the *Oracle Essbase Technical Reference*

Database Triggers Window

You use the Database Triggers window to view, create, edit, enable, disable, and delete triggers.

The window identifies the Essbase Server instance and the database for which the listed triggers are defined.

Note: To view triggers defined for a different database, in Enterprise View, below the name of the preferred database, click the Triggers node.

The columns of the window provide information about each trigger that is listed:

- Name—For example, Sample.Basic.EastColas
- Definition—MaxL commands and MDX syntax
- Enabled—TRUE or FALSE

The window provides the following buttons:

- New—To create a trigger
- Edit—To open the [Edit Trigger Dialog box](#), which you use to edit the selected trigger

Note: You can also open the Edit Trigger dialog box by double-clicking a trigger.

- Enable—To enable the selected disabled trigger
- Suspend All—To disable all triggers for the duration of the database session. When the application is closed, triggers revert to the value (enabled or disabled) that they had before Suspend All was clicked.
- Delete—To delete the selected trigger
- Refresh—To update trigger information

Related Information

- [“About Triggers” on page 415](#)
- [“Creating Triggers” on page 416](#)
- [“Editing Triggers” on page 417](#)
- [“Deleting Triggers” on page 418](#)
- [“Enabling and Disabling Triggers” on page 418](#)
- “Monitoring Data Changes Using Triggers” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- create trigger (MaxL) in the *Oracle Essbase Technical Reference*
- display trigger (MaxL) in the *Oracle Essbase Technical Reference*
- drop trigger (MaxL) in the *Oracle Essbase Technical Reference*

Define Dynamic Time Series Members Dialog Box

You use the Define Dynamic Time Series Members dialog box to enable and disable Dynamic Time Series (DTS) members, to associate DTS members with generations, and to specify aliases for DTS members.

The Series column lists the eight system-defined DTS members, listed from longest to shortest; for example, S-T-D (season to date) precedes P-T-D (period to date).

- H-T-D
- Y-T-D
- S-T-D
- P-T-D
- Q-T-D
- M-T-D
- W-T-D
- D-T-D

By selecting or clearing an Enabled column option, you enable or disable the member associated with the option.

In the Gen column, you select a generation number (one number per enabled member). You cannot associate DTS members with level 0 members of the time dimension, and you should not assign a generation number to multiple members.

When you select a generation number for a system-defined member, Essbase applies a predefined generation name (History for H-T-D, Year for Y-T-D, Season for S-T-D, Period for P-T-D, Quarter for Q-T-D, Month for M-T-D, Week for W-T-D, and Day for D-T-D). DTS member and generation names are reserved for use by Essbase. For example, if you use a reserved DTS generation name to name a generation on the time dimension, Essbase creates and enables the DTS member associated with the generation name, such as H-T-D for History.

If you want to assign aliases to a DTS member, in the Default column, in the member row, enter one or more aliases (one each from one or more alias tables).

For more information, see [“Enabling Dynamic Time Series Members” on page 166](#).

Related Information

- [“Enabling Dynamic Time Series Members” on page 166](#)
- [“Disabling Dynamic Time Series Members” on page 166](#)
- [“Creating Aliases for Dynamic Time Series Members” on page 178](#)

Define Generations Dialog Box

You use the Define Generations dialog box to create, edit, and delete generation names.

You can use a generation name in calculation and report scripts to refer to all members to which the generation name applies. For example, the generation name “Month” refers to all month members (Jan, Feb, and so on).

You can specify only one name per generation. The specified name must be unique; that is, it cannot duplicate a generation, level, or member name or an alias or conventional alias. You must follow member naming rules. See the *Oracle Essbase Database Administrator's Guide*.

In the Dimensions box of the Define Generations dialog box, you select the dimension that contains the generation to which you want to assign a name.

In the following columns, you view information and perform actions:

- State—Displays New or Modified, respectively, for generation names that were created or updated after the dialog box was opened. If no names have been created or updated since the dialog box was opened, nothing is displayed.
- Number—Displays the generation numbers of existing generations. If you are creating a generation name, in the column, click the first empty cell, and assign the next generation number. If you are changing a generation number, click the cell to be changed, and select a number. You cannot change numbers that are associated with DTS members.
- Unique—For [duplicate member name outlines](#), for dimensions that can contain member names, select a Unique-column option to require unique member names within the associated generation.
- Generation Name—Displays the names of existing generations. To create a generation name, in the column, click the first empty cell, and enter a name. To rename a generation, click the cell to be changed, and enter a name. You must follow member naming rules. See the *Oracle Essbase Database Administrator's Guide*. You cannot rename generations that are associated with DTS members.
- Delete—Select a Delete-column option to delete the associated generation name.

Related Information

- [“Naming Generations and Levels” on page 167](#)
- [“Define Levels Dialog Box” on page 544](#)
- “Dimensions and Members: in the *Oracle Essbase Database Administrator's Guide*

Define Levels Dialog Box

You use the Define Levels dialog box to create, edit, and delete level names. For example, you can create the level name *Month* and apply it to the generation that contains months.

You can use a generation or level name in a calculation or report script to refer to all members to which the name applies.

You can specify only one name for each level. The specified name must be unique; that is, it cannot duplicate a generation, level, or member name or an alias or a combinational alias. For information about the naming rules that you must follow, see the *Oracle Essbase Database Administrator's Guide*.

In the Dimensions box, you select the dimension that contains the level to which you want to assign a name. By default, the current dimension is displayed.

In the following columns, you view or enter information:

- **State**—Displays New or Modified, respectively, for level names that were created or updated since the dialog box was updated. For names that have not been created or updated, nothing is displayed.
- **Number**—Displays the numbers of existing levels. To create a level name, click the first empty cell to assign the next level number. To change a number, click the cell to be changed, and select a number.
- **Unique**—If the current outline is enabled for [duplicate member names](#), for dimensions that allow duplicate member names, to require unique member names within the associated level, select the column option.
- **Delete**—To delete the associated level name, select the column option.

Related Information

- [“Define Generations Dialog Box” on page 543](#)
- [“Naming Generations and Levels” on page 167](#)
- “Dimensions and Members” in the *Oracle Essbase Database Administrator's Guide*

Dimension Build Settings Dialog Box

You use the Dimension Build Settings dialog box to define how outlines change during dimension builds.

Changes such as the following can occur:

- Updating alias tables
- Determining dense-sparse configurations
- Combining selection and rejection criteria across fields
- Modifying members
- Creating dimensions

The dialog box contains the following tabs:

- [Global Settings](#)—Set properties for all dimensions in the rules file
- [Dimension Build Settings](#)—Determine how Administration Services can modify members
- [Dimension Definition](#)—Create dimensions in the rules file

You click the **Outline** button to associate the rules file with an outline and to populate dimension nodes.

Related Information

- [“Setting and Modifying Member Properties” on page 209](#)
- [“Specifying Build Methods” on page 207](#)
- [“Using Rules Files to Name Dimensions” on page 206](#)
- [“Creating Dimension Build Rules Files” on page 198](#)

Dimension Build Settings Dialog Box—Dimension Build Settings Tab

You use the Dimension Build Settings tab to determine how members change during dimension builds.

In the Dimension node, you select a dimension. All options that you select in the Dimension Build Settings tab apply to the selected dimension. If the node is empty, click the **Outline** button to associate the rules file with an outline.

The tab includes several option groups:

- Existing members
- Attribute members
- Build method
- Member sorting
- Member update

Options of the Existing members group:

- Ignore conflicts—Ignores member names that exist in the outline; cannot be selected if the “Allow moves” option is selected; available only with the Add build method
- Allow moves—Within a dimension, moves members and their children to new parents; recognizes primary members and matches them with the data source; cannot be selected if the Ignore conflicts option is selected; not available for duplicate member outlines
- Allow property changes—Changes member properties to the properties specified in the data source; makes the **Allow UDA changes** option available.
- Allow formula changes—Changes member formulas to the formulas specified in the data source.
- Allow UDA changes—Changes UDA values to the values specified in the data source (If the option is not selected, data-source UDAs are added to existing UDAs)
- Allow auto fix shared member prototype errors—If, during a dimension build, a shared member is loaded into a higher position in an outline than its primary member, makes the topmost shared member the primary member and the former primary member a shared member. This prevents a validation error.

- Do not share—Rejects records that specify new parents for members; available only with the Parent/child build method; not applicable to members of stored hierarchies within aggregate storage databases (If the option is not selected, shared members can be created.)

Options of the Attribute members group:

- Allow association changes—Changes member attribute associations to the associations specified in the data source (For example, if the data source associates the 100-10 member with the 8 Ounce attribute and the outline associates the 100-10 member with the 12 Ounce attribute, Essbase associates the 100-10 member with the 8 Ounce attribute.)
- Do not create members—Prevents Essbase from creating members

Options of the Build method group:

- Use generation references—Builds dimensions from top-down data sources, numbering generations hierarchically from the top down (the dimension as generation 1, its immediate children as generation 2, and so on)
- Use level references—Builds dimensions from bottom-up data sources, numbering levels hierarchically from the bottom up (the lowest level as level 0)
- Use parent/child references
- Add as sibling of member with matching string
- Add as sibling of lowest level
- Add as child of—Adds members as children of the selected dimension
- Process null values—Promotes primary fields (such as member names) that occur after null fields and ignores secondary fields (such as member properties and aliases) that occur after null fields; available only with the generation and level build methods

Options of the Member sorting group:

- None
- Ascending
- Descending

Options of the Member update group

- Merge—Inserts members among existing members (the default)
- Remove unspecified—Deletes members that do not exist in the data source; available only with the generation, level, and parent/child build methods

Related Information

- “Understanding Advanced Dimension Building Concepts” in the *Oracle Essbase Database Administrator's Guide*
- “Understanding Shared Members” in the *Oracle Essbase Database Administrator's Guide*
- [“Creating Dimension Build Rules Files” on page 198](#)

- [“Dimension Build Settings Dialog Box” on page 545](#)

Dimension Build Settings Dialog Box—Dimension Definition Tab

You use the options of the Dimension Definition tab to set or change the properties of standard and attribute dimensions:

- **Outline**—Displays a list of the dimensions of the associated outline. To change properties for a standard dimension, you right-click the dimension, and select **Edit Properties**. To define an attribute dimension, you right-click its base dimension, and select **Edit Properties**.
- **Rules file**—Displays a list of the standard dimensions that are defined in the rules file. To create a dimension, you select the **Rules file** option, enter the dimension name in the **Dimensions** text box, and press **Enter**. (For naming restrictions, see the *Oracle Essbase Database Administrator's Guide*). Then, in the **Dimension** node, you can right-click the dimension and set its properties.

You click the **Outline** button to associate the rules file with an outline and to populate the dimension node.

Related Information

- [“Dimension Properties Dialog Box” on page 549](#)
- “Setting Dimension and Member Properties” in the *Oracle Essbase Database Administrator's Guide*
- “Using the Data Source to Set Member Properties” in the *Oracle Essbase Database Administrator's Guide*
- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Dimension Build Settings Dialog Box” on page 545](#)

Dimension Build Settings Dialog Box—Global Settings Tab

You use the items of the Global Settings tab to set properties that affect all dimensions in the rules file:

- **Update alias table**—From the list, select the alias table to update during the dimension build. By default, the Default alias table is selected.
- **Data configuration**—For block storage databases, to determine how to decide whether dimensions are dense or sparse, select one of the following options:
 - **Use dimension property settings**—Essbase uses the dense or sparse configuration that is specified in the rules file or in the outline.
 - **Autoconfigure dense/sparse**—Essbase assigns dimensions to be dense or sparse.
- **Arrange dimensions by size and type to an hourglass shape**—For block storage databases, select this option to arrange dimensions in the following order. This order may not be

optimal for data retrievals. See “Designing an Outline to Optimize Performance” in the *Oracle Essbase Database Administrator's Guide*.

- Accounts and time dimensions at the top of the outline
- Other dense dimensions next, largest to smallest
- Sparse dimensions next, smallest to largest
- Attribute dimensions, if any, in any order
- Global select/reject Boolean—Select the **And** option (to select or reject a record only if all fields match the selection or rejection criteria) or the **Or** option (to select or reject a record if any field matches the selection or rejection criteria).

You click the Outline button to associate the rules file with an outline and to populate dimension nodes.

Related Information

- [“Combining Selection and Rejection Criteria” on page 219](#)
- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Dimension Build Settings Dialog Box” on page 545](#)

Dimension Properties Dialog Box

During dimension builds, you can use the tabs of the Dimension Properties dialog box to set or modify the properties of new or previously existing standard and attribute dimensions:

- [Dimension Properties](#)—Set general properties, including dimension type, two-pass calculation, data storage, and data configuration
- [Accounts Dimension](#)—Set properties on accounts dimensions, including time balance, currency conversion, and variance reporting
- [Generation/Level Names](#)—Name generations and levels
- [Attribute Dimensions](#)—Define attribute dimension names and types

Related Information

- “Setting Dimension and Member Properties” in the *Oracle Essbase Database Administrator's Guide*
- [“Creating Dimension Build Rules Files” on page 198](#)

Dimension Properties Dialog Box—Accounts Dimension Properties Tab

You use the Accounts Dimension Properties tab to set properties on the accounts dimensions of block storage databases.

In the Time Balance node, you set a time balance property:

- Existing definition or none—Apply the setting specified in the outline (the default). If no setting is specified, Administration Services applies “none.”
- None—Apply no time balance property. Member values are calculated in the default manner.
- First—A parent value represents the value at the beginning of a time period.
- Last—A parent value represents the value at the end of a time period.
- Average—A parent value represents the average value of a time period.
- Skip node—Select an option (None, Missing, Zeros, or Missing and zeros) to determine what values are ignored during time balance calculations. For example, if you select None, no values are ignored, and, if you select Missing and zeros, both #MISSING and zero values are ignored. You can specify skip settings only if the time balance property is set as first, last, or average.

Note: If, during calculation, Essbase encounters #MISSING values, the #MISSING values are divided by the number of members with values, not by the total number of members.

In the Currency Conversion node, for currency databases, you define currency-exchange categories:

- Existing definition or none—Apply the setting specified in the outline (the default). If no setting is specified, Essbase assumes that the dimension is not currency related.
- None (use ancestor)—Specify that the dimension is not currency related.
- No conversion—For values, such as quantities or percentages, that do not require conversion
- Category—For values that require conversion to specific category types. In the Category box, you enter the type of conversion required, for example, US dollars.

In the Variance Reporting node, you determine how differences between actual and budget data are calculated:

- Existing definition or non-expense—Apply the setting specified in the outline (the default). If no setting is specified, Essbase stores the dimension as non-expense.
- Non-expense—Set the member as non-expense. You want the actual values of non-expense items, such as sales, to be greater than the budgeted values. When actual values are less than budgeted values, the variance is negative.
- Expense—Set the member as expense. You want actual values of expense items, such as Costs, to be lower than budgeted values. When actual values are greater than budgeted values, the variance is negative.

Related Information

- “Creating an Accounts Dimension” in the *Oracle Essbase Database Administrator's Guide*

- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Dimension Properties Dialog Box” on page 549](#)

Dimension Properties Dialog Box—Attribute Dimensions Tab

You use the Attribute Dimensions tab to create attribute dimensions:

- In the Name box, you enter a name for the dimension. You follow the naming rules for standard dimensions. See the *Oracle Essbase Database Administrator's Guide*.
- In the Type box, you select a type (text, numeric, Boolean, or date).
- You click the **New** button (to create the specified dimension) or **Delete** (to delete the selected dimension).

Related Information

- “Building Attribute Dimensions and Associating Attributes” in the *Oracle Essbase Database Administrator's Guide*
- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Dimension Properties Dialog Box” on page 549](#)

Dimension Properties Dialog Box—Dimension Properties Tab

You use the Dimension Properties tab to set general dimension properties.

For any dimension, in the Dimension Type node, you select a dimension type:

- Existing definition or none—Apply the dimension type that the outline specifies (the default). If the outline does not specify a type, Essbase applies “none.”
- None—Do not apply a dimension type.
- Accounts—Use the dimension for measured items, such as profit or inventory. Only one dimension per outline can be tagged as accounts. If you tag a dimension as accounts, set the [Accounts dimension properties](#).
- Time—Use the dimension to describe how often data is collected and updated. Only one dimension per outline can be tagged as time.
- Country—Use the dimension (block storage only) to track business activities in multiple countries. For a country dimension, in the “Currency name” box, you can enter a currency name.

For any block storage dimension, if you want to calculate the dimension on the second pass through the database, select the “Two-pass calculation” option.

For any dimension of a database enabled for duplicate member names, in the “Member names unique in dimension” node, you specify a [member name uniqueness](#) setting:

- Existing definition or unique—Apply the uniqueness setting that the outline specifies (the default). If the outline does not specify a setting, Essbase applies “unique.”

- Member names unique in dimension—Require unique member names.
- Member names duplicated in dimension—Allow duplicate (non-unique) member names.

For any dimension, in the “Data storage” node, you select a storage option:

- Existing definition or store—Apply the storage setting that the outline specifies (the default). If the outline does not specify a setting, Essbase applies “store.”
- Store data—Store the data with the dimension.
- Never share—Do not share the data associated with the dimension. Thus, even for implied share relationships, such as between parent and child, data is duplicated (stored with the parent and the child). This option does not apply to stored hierarchies within aggregate storage outlines.
- Label only—Do not associate data with the dimension. For aggregate storage outlines, this option has restrictions.
- Dynamic calc and store—Calculate the data associated with the dimension (block storage only) when the data is requested by a user and store the calculated data.
- Dynamic calc—Calculate the data associated with the dimension (block storage only) when the data is requested by a user and discard (do not store) the calculated data.

For any dimension of a block storage database, in the Configuration node, you select a configuration option:

- Existing definition or sparse—Apply the configuration setting that the outline specifies (the default). If the outline does not specify a setting, Essbase applies “sparse.”
- Dense—Dense dimensions should contain data values for many dimension intersections.

Note: Because you cannot associate attributes with members of dense dimensions, do not set the storage setting of a base dimension to dense.

- Sparse—Sparse dimensions should contain data values for few dimension intersections. For example, if all products are not sold in all markets, the Products dimension should be sparse.

For any dimension of an aggregate storage database, in the “Hierarchy type” node, you select a hierarchy type:

- Existing definition or stored—Apply the hierarchy setting that the outline specifies. If the outline does not specify a setting, Essbase applies “stored.”
- Multiple hierarchy enabled—Use both stored and dynamic hierarchies.
- Stored—The default. The accounts dimension cannot be stored.
- Dynamic—The accounts dimension is automatically set as dynamic.

Note: For information about restrictions related to dynamic and stored hierarchies, see “Hierarchies” in the *Oracle Essbase Database Administrator's Guide*.

You can assign solve order settings for dimensions and for members. For a dimension, you select an option in the “Dimension solve order” node. For a member, you select an option in the “Solve order” node:

- Existing value or 0—Apply the solve order setting that the outline specifies. If the outline does not specify a setting, Essbase applies “0.”
- New value—Assign a calculation priority (0–127). The formula on the dimension or member that is assigned the highest solve order is calculated first. Values less than 0 or greater than 127 are reset to 0 and 127, respectively. No warning message is displayed. The default value is 0.

Note: Members that are not assigned a solve order inherit the solve order of their dimension. For detailed information about solve order, see “Calculation Order” in the *Oracle Essbase Database Administrator's Guide*.

Related Information

- “Setting Dimension and Member Properties” in the *Oracle Essbase Database Administrator's Guide*
- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Dimension Properties Dialog Box” on page 549](#)

Dimension Properties Dialog Box—Generation/Level Names Tab

In the Generation/Level Names tab, you name generations and levels by performing the following actions:

- Select the **Generation** option or the **Level** option.
- In the Number box, enter the number of the generation or level that you are naming.
- In the Name box, enter a name. Follow dimension and member naming rules. See the *Oracle Essbase Database Administrator's Guide*.
- Click the **New** button.

For dimensions enabled for duplicate member names, you click in the Unique Member Names column and specify a [member name uniqueness](#) requirement.

- Unique—Require unique member names within the generation or level.
- Duplicates—Allow duplicate member names within the generation or level.
- Default or duplicates—Apply the setting that is specified in the outline. If no setting is specified, Essbase applies “duplicates.”

Related Information

- [“Creating Dimension Build Rules Files” on page 198](#)

- [“Dimension Properties Dialog Box” on page 549](#)

Disabled User Names Window

You use the Disabled User Names window to identify and enable user names that are disabled on Essbase Server:

- To enable a disabled username, in the “Disabled user names” list, select the username, and click the appropriate single arrow button.
- To disable a username that you previously enabled, in the “Enabled” list, select the username, and click the appropriate single arrow button.
- To move all usernames from one list to another, click the appropriate double arrow button.

Related Information

- [“Disabling User Names” on page 284](#)
- [“Viewing or Activating Disabled User Names” on page 286](#)

Related Commands

alter user (MaxL) in the *Oracle Essbase Technical Reference*

Display Transactions Dialog Box

You use the Display Transactions dialog box to retrieve a list of logged transactions from the database. You choose whether to view transactions logged since the last transaction replay, or since a date and time that you enter.

You can log and replay only block storage database transactions.

To view the list of logged transactions, you must have the Administrator role.

Related Information

- [“Replaying Logged Transactions” on page 110](#)
- [“Viewing Logged Transactions” on page 111](#)
- “Enabling Transaction Logging” and “Configuring Transaction Replay” in the *Oracle Hyperion Enterprise Performance Management System Backup and Recovery Guide*

Related Commands

query database (MaxL) in the *Oracle Essbase Technical Reference*

Duplicate Shared Member Dialog Box

You use the Duplicate Shared Member dialog box to select a duplicate member to use as the basis for a shared member.

For example, assume that a dimension contains three instances of the member Diet Cola, each under a different parent member. If you tag one of the Diet Cola members as shared, you must identify one of the other Diet Cola members as the basis for the shared member.

The Shared Members column displays the name of the shared member that you are creating.

The Base Members column displays the qualified names of all members in the outline that match the shared member name. In the column, you double-click the duplicate member that you want to be the basis for the shared member. The member that you double-click is added to the Shared Members column.

Related Information

- [“About Duplicate Member Names” on page 124](#)
- [“Saving Outlines” on page 130](#)
- [“Defining Shared Members” on page 154](#)
- [“Member Properties Dialog Box—Information Tab” on page 595](#)

Edit Drill-Through Definitions Dialog Box

You use the Edit Drill-Through Definitions Dialog Box to add, modify, or delete drill-through definitions.

Select a drill-through definition from **Definitions** to edit or delete it, or select **Click here to add a new definition**.

Information that can be edited in the Edit Drill-Through Definitions dialog box for a drill-through definition:

- URL name—Name of the drill-through definition as it appears in client applications
- XML Contents—Script defining how the client application retrieves data from Essbase
- Regions—Database slices containing information available to the client application

You add members to **Regions** by double-clicking them in the member tree. You apply commands and functions to members in **Regions** by double-clicking them in **Commands and Functions**.

Optionally, you use aliases and have Administration Services insert function arguments automatically by selecting **Use aliases** or **Insert arguments**.

You load or export XML scripts for a definition by selecting **Load XML from file** or **Export XML**.

See the “Limits” appendix in the *Oracle Essbase Database Administrator's Guide* for information related to drill-through URLs and regions.

Related Topics

[“Managing Drill-Through Definitions” on page 116](#)

Edit Function Dialog Box

You use the Edit Function dialog box to edit the properties of custom-defined functions that are registered with Essbase at the global (server) level or the local (application) level.

Note: Custom-defined functions require Java Runtime Environment, which is installed as an option with Essbase.

- Essbase Server—The name of the current Essbase Server instance

Note: To edit a function on a different Essbase Server instance, in Enterprise View, under the preferred server, double-click the Functions node.

- Scope—For local functions, the application name with which the function is associated; for global functions, <all apps>
- Name—Name of the function, which does not reflect the double-naming convention used in MaxL; for example, @JSUM
- Statement—The MaxL specification for the function

Information that can be edited in the Edit Function dialog box:

- Class—Full Java class name used to develop the function

For example, the following compiled Java class might be archived in a .jar file: `com.hyperion.essbase.calculator.Statistics1`, where `Statistics.java` was compiled into `Statistics.class` and the class was archived as `com/hyperion/essbase/calculator/Statistics.class`.

- Method—Java class method associated with current function (For example, the `covariance` element of `com.hyperion.essbase.calculator.Statistics.covariance` identifies a method.)
- Spec—Essbase calculator-syntax specification string (optional); for example, `@COVARIANCE (expList1, expList2)`

To use the output string of the `EssListCalcFunctions` API function to return the current function, you must use a specification string. If you do not use a specification string, you cannot enter a comment.

- Comment—Optional, and possible only if a specification string is used

You can select the **Runtime** option and, thereby, designate the current function as a runtime function. However, you should select **Runtime** only in special circumstances, as the Runtime property can seriously affect performance, as indicated by the following examples:

- A runtime function whose return value depends on the current date or on the values of a rapidly changing relational table may negatively impact performance.
- Runtime functions that include no operands or use constant values as operands cannot be pre-executed; therefore, the optimization value of pre-execution is lost.
- When the built-in Essbase @CALCMODE(CELL) function is used, a runtime function may execute on every cell in the range.
- A runtime function, such as Mem1 = @RANDOM(), that returns a random number each time that it executes may return different values for different blocks.

Related Information

- [“Editing Custom-Defined Functions” on page 353](#)
- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Custom-Defined Function Manager” on page 512](#)

Related Commands

create function (MaxL) in the *Oracle Essbase Technical Reference*

Edit Logger Dialog Box

You use the Edit Logger dialog box to change the log message level.

Note: Log messages are displayed in the Provider Services command line window.

By selecting an option in the **Logger level** list, you determine what types of messages are displayed. The options are listed in order, from the least to the most inclusive:

1. Error—Error and fatal messages
2. Warning—Warning, error, and fatal messages
3. Information—Information, warning, error, and fatal messages
4. Debug—Debug, information, warning, error, and fatal messages

Edit Macro Dialog Box

You use the Edit Macro dialog box to edit the properties of custom-defined macros that are registered with Essbase at the global (server) level or the local (application) level.

Read-only boxes:

- Essbase Server—Name of the current Essbase Server instance
- Scope—Name of the application with which the macro is associated (for local macros) or <all apps> (for global macros)

- Name—Name of the macro
- Statement—MaxL statement that would specify the current macro definition

Text boxes in which you enter or modify information:

- Signature—Description of the style in which macro arguments are passed
For example, the following signature passes the macro as two comma-separated arguments followed by a list of arguments: (SINGLE, SINGLE, GROUP)
- Expansion—A string that determines how the signature is processed
For example, if you use the following macro, signature, and expansion, @SUM3 (x, y, z) is replaced with @SUM3 (x + y + z):
 - Name—@SUM3
 - Signature—(SINGLE, SINGLE, SINGLE)
 - Expansion—(@@1, @@2, @@3)
- Spec—Essbase calculator-syntax specification string; for example, @MYMACRO (mbrName, rangeList)
A specification string is not required. You use a specification string to return the macro and its syntax by the output string of the EssListCalcFunctions API function.
- Comment—Not required and possible only if a specification string is used

Related Information

- [“Editing Custom-Defined Macros” on page 357](#)
- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Custom-Defined Macro Manager Window” on page 514](#)

Related Commands

create macro (MaxL) in the *Oracle Essbase Technical Reference*

Edit Note Dialog Box

You use the Edit Note dialog box to edit the contents of a cell note. A cell note is a type of linked reporting object.

The **Member combination** box identifies the member combination to which the current note is linked.

Note: To attach the current note to a different member combination, delete the current link, and use Spreadsheet Add-in to link the note to the preferred member combination.

In the Note box, you edit the contents of the note. For note length limits, see the *Oracle Essbase Database Administrator's Guide*

Related Information

- [“About Linked Reporting Objects \(LROs\)” on page 369](#)
- [“Managing LROs” on page 370](#)

Edit URL Dialog Box

You use the Edit URL dialog box to edit a URL string for a linked reporting object.

The dialog box includes the following text boxes:

- Member combination—You view (not change or modify) the member combination associated with the current URL.
- URL—You edit the URL string. For length limits, see the *Oracle Essbase Database Administrator's Guide*.
- Description—You edit the URL description, if any.

Related Information

- [“About Linked Reporting Objects \(LROs\)” on page 369](#)
- [“Managing LROs” on page 370](#)

Edit User/Group Access Dialog Box

You use the lists of the Edit User/Group Access dialog box to edit the following permissions for users and groups, as described in [“User/Group Access Window—Users Tab” on page 665](#) for users and [“User/Group Access Window—Groups Tab” on page 663](#) for groups:

- Application access
- Database access
- Filters

Related Information

- [“Managing User/Group Permissions for Applications and Databases” on page 269](#)
- [“User/Group Access Window” on page 663](#)

Editor Options Dialog Box

The options of the Editor Options dialog box are applied to an object that is being opened:

- If you select “Lock object,” see [“Locking and Unlocking Objects” on page 105](#).
- If you select “Associate Outline,” the editor is populated with the dimension and member names of the associated outline. Thus, you can select, rather than type, dimension and

member names. See [“Associating Outlines with Essbase Objects That Are Being Edited” on page 365](#).

To avoid being prompted to lock objects and associate outlines, [change the default setting](#).

Related Information

- [“Setting Essbase Default Options” on page 97](#)
- [“Options Dialog Box—Essbase Tab” on page 610](#)

Essbase Cluster Information Dialog Box

You use this dialog box to view cluster information on Essbase servers. When you first select a server, you will be prompted for your user name and password for that server.

Related Information

[“Viewing Essbase Cluster Information” on page 309](#)

Examples of Migration Security Permissions

For this topic, assume the following:

- The user being migrated (User1) exists on the target server.
- The application being migrated (MyApp) contains four databases: MyDb1, MyDb2, MyDb3, and MyDb4.
- MyDb1, MyDb2, and MyDb4 exist on the target server.

Before migration, User1 has the following permissions on the source and target servers:

Permissions on Source Server	Permissions on Target Server
Read for MyDb1	Read for MyDb1
Write for MyDb2	Calculate for MyDb2
Read for MyDb3	NA
Write for MyDb4	Read for MyDb4

During migration, User1's permissions on the target server may change, depending upon which of the following migration options is selected:

- Do not change permissions of user/group—Permissions do not change. The MyDb3 database is copied to the target, but User1 cannot access it.

- Reduce permissions of user/group—Permissions for MyDb1 and MyDb4 do not change. Permissions for MyDb2 are reduced from Calculate to Write. For MyDb3, source-level permissions are granted.
- Grant extra permissions to user/group—Permissions for MyDb1 and MyDb2 do not change. For MyDb3, source-level permissions are granted. Permissions for MyDb4 are raised from Read to Write.

Execute Calculation Script Dialog Box

The look of the Execute Calculation Script dialog box varies, depending upon whether you are executing a script that (1) was opened from the file system, (2) is associated with an application but not with a database, or (3) is associated with a database.

If you are executing a script that is saved on the file system (not on Essbase Server), you can use the boxes of the Execute Calculation Script dialog box to select an Essbase Server instance, an application, and a database against which to run the script.

You can select only one database. Only databases to which you have access are listed.

If you want to work as a script processes, select the **Execute in the background** option. During a background process, you can exit the console, but you cannot shut down Essbase Administration Server. You can review the status of the process in the [Background Process Status](#) window.

Related Information

[“Executing Calculation Scripts” on page 345](#)

Related Commands

- `execute calculation` (MaxL) in the *Oracle Essbase Technical Reference*
- `calc` (ESSCMD) in the *Oracle Essbase Technical Reference*
- `calcdefault` (ESSCMD) in the *Oracle Essbase Technical Reference*
- `calcline` (ESSCMD) in the *Oracle Essbase Technical Reference*

Execute Database Calculation Dialog Box

You use the Execute Database Calculation dialog box to select a calculation script to run against a database.

The Calculation script box, from which you select a calculation script, lists only the calculation scripts to which you have access.

The State text box indicates the calculation state of the database:

- Calculation in progress
- Data values modified since the last calculation
- Data values not modified since the last calculation

- No data in the database

If you select the **Execute in the background** process option, you can exit the console but you cannot shut down Essbase Administration Server until the calculation is completed. You can view the status of the background process in the [Background Process Status](#) window.

Related Information

- [Calculating](#)
- [Block Storage Databases](#)
- “Calculating Essbase Databases” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- execute calculation (MaxL) in the *Oracle Essbase Technical Reference*
- calc (ESSCMD) in the *Oracle Essbase Technical Reference*
- calcdefault (ESSCMD) in the *Oracle Essbase Technical Reference*
- calcline (ESSCMD) in the *Oracle Essbase Technical Reference*

Execute Report Script Dialog Box

You use the Execute Report Script dialog box to select a database against which to execute a report script.

The look of the dialog box varies, depending on whether you are executing a script that (1) was opened from the file system, (2) is associated with an application but not with a database, or (3) is associated with a database.

If the script that you are executing is saved on the file system, not on Essbase Server, the following boxes are displayed. In this case, you select the items that specify your preferred database:

- Essbase Server
- Application
- Database

In the dialog box, you can select one or more of the following options. However, if you select the **Execute in the background** option, you cannot select the **Console** or **Output file** option.

- Execute in the background—As the process executes, you can continue working. Also, you can exit the console but you cannot shut down Essbase Administration Server. You can check process status in the [Background Process Status](#) window.
- Console—The report is displayed in the [Report Viewer window](#) in Administration Services Console.
- Printer—The report is sent to the selected printer. If **Execute in the background** is selected, the report is sent to the default printer for the Essbase Administration Server computer.

- Output file—The report is sent to an output file (`.rpt`). You can click the Find button to browse to the preferred file.

Related Information

[“Executing Report Scripts” on page 366](#)

Related Commands

- `export data` (MaxL) in the *Oracle Essbase Technical Reference*
- `runrpt` (ESSCMD) in the *Oracle Essbase Technical Reference*

Export Alias Table Dialog Box

You use the Export Alias Table dialog box to export alias tables from databases to ASCII source files. Thus, you create and store table copies, to be used for back up or to be imported, at a later time, into other databases.

In the **Alias table** box, you select an alias table. When you click **OK**, the [Save As](#) dialog box is displayed. In the **Save As** dialog box, you specify the export file name (with an `.alt` extension) and the location to which to save the table (within the Essbase structure or elsewhere within the file system).

Related Information

- [“Exporting Alias Tables” on page 173](#)
- [“Importing Alias Tables” on page 174](#)
- “Setting Aliases” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- `unloadalias` (ESSCMD) in the *Oracle Essbase Technical Reference*
- `loadalias` (ESSCMD) in the *Oracle Essbase Technical Reference*

Export Database Dialog Box

You use the Export Database dialog box to export data.

In the **Export to file** box, you identify the file or files and perhaps the location to which to export the data. As you enter your information, keep the following in mind:

- Do not enclose a file name in double quotation marks.
- To export data in parallel, specify a comma-separated list of files. The number of threads used depends on the number of file names.
- By default, export files use `.txt` extensions. If you append a non-default extension, enclose it in single quotation marks.

- By default, export files are stored in the application directory (`ARBORPATH\app`). To store a file in a non-default location, specify a full path to the location.

If you are exporting data, in the **Export options** group, you select one of the following options:

- All data—All data, including consolidation and calculation results, is exported for block storage databases.
- Level 0 data blocks—Only data from blocks that contain level 0 sparse member combinations is exported.
- Input level data blocks—Only data from blocks that contain data from a previous data load or spreadsheet Lock & Send is exported, for block storage databases. Thus, consolidation and calculation results are not exported.

If you are exporting data from a block storage database, you can select the **Export in column format** option. When deciding whether to select the option, consider the following:

- Because, in columnar format, each row includes a member name from each dimension and names can repeat from row to row, data loads into relational databases are facilitated.
- A columnar structure enables data to be used by applications other than Essbase.
- Because files in non-columnar format are smaller than files in columnar format, loading non-columnar files is faster.

You can select the **Execute in the background** option. During a background process, you can exit the console but you cannot shut down Essbase Administration Server. You can check the status of the export process in the [Background Process Status](#) window.

Note: By default, Administration Services exports the database to the file system of the selected Essbase Administration Server, not to your local file system.

Related Information

[“Exporting Databases” on page 107](#)

Related Commands

- `export data (MaxL)` in the *Oracle Essbase Technical Reference*
- `export (ESSCMD)` in the *Oracle Essbase Technical Reference*

Export LROs Dialog Box

You use the Export LROs dialog box to export linked reporting objects (LROs) from a database, in preparation for backing up or clearing the database.

In the **Export to option** group, you select the location to which LRO information is exported:

- Essbase Server—To the following directory on Essbase Server:

(*ARBORPATH/app/appname_dbname-exportdir*)

- Local file system—To a specified file-system directory

In the **LRO export directory** box, you perform one of the following actions:

- If you selected the Essbase Server option, you enter a suffix to append to the default export directory.

For example, if you are exporting LROs from the Sample Basic application and database and you enter `lro`, the following directory is created: *ARBORPATH/app/sample_basic-lro*.

- If you selected the **Local file system** option, you enter the path to or browse to a directory. The directory can be on a local computer or on a network.

Essbase creates an export directory; not a directory structure. For example, Essbase creates `c:\temp\exports`, not `c:\temp\exports\to\this\long\path`. Essbase does not overwrite directories. Therefore, if the directory to be created already exists, the export fails. For detailed information about what export directories contain, see [“Exporting LROs” on page 371](#).

Related Information

- [“About Linked Reporting Objects \(LROs\)” on page 369](#)
- [“Exporting LROs” on page 371](#)
- [“Importing LROs” on page 372](#)

Related Commands

- `export lro` (MaxL) in the *Oracle Essbase Technical Reference*
- `import lro` (MaxL) in the *Oracle Essbase Technical Reference*

Export Partition Dialog Box

You use the Export Partition dialog box to export partition definitions to the file system or the network:

- In the **First** list, you select the drive and folder to which you want to export the partition definition.
- In the **File name** box, you enter the name of the partition definition file to be exported.
- In the **Files of type** box, you select `.xml`. By default, exported partition definition files use `.xml` extensions. Only partition files with `.xml` extensions can be imported.

Related Information

- [“About Partitions” on page 395](#)
- [“Exporting Partition Definitions” on page 411](#)
- [“Importing Partition Definitions” on page 411](#)

Export Selection Rules Dialog Box

You use the tabs of the Export Selection Rules dialog box to export member selection rules from partition area mappings:

- File System—To navigate to a file-system location to which to save the export file.
- Administration Server—To save the export file to Essbase Administration Server. Essbase Administration Server objects are not displayed in Enterprise View. Export files that are not shared are saved to the following location: `EPM_ORACLE_HOME/products/Essbase/eas/storage/selection/EASusername`. Export files that are shared are saved to the following location: `EPM_ORACLE_HOME/products/Essbase/eas/storage/public/selection/EASusername`. (`EPM_ORACLE_HOME` is the name of the root directory to which EPM System products are installed, and `EASusername` is the username of the person who exported the selection rules.)

If you want to allow other Administration Services users to access the export file, select the Shared option.

Related Information

- [“Exporting Selection Rules from Area Mapping” on page 403](#)
- [“Importing Selection Rules for Area Mapping in Partitions” on page 402](#)
- [“Defining Areas in Partitions” on page 400](#)

Externalize Users Wizard

You use the Externalize Users wizard to externalize users to Shared Services.

Note: To run the wizard for Administration Services users, you must have native Administrator permissions and must be externalized to Shared Services. To run the wizard for Essbase users, you must have native Administrator (formerly Supervisor) permissions.

The wizard detects users who are currently authenticated through native Essbase security and users who were externally authenticated before the current release. Then, the wizard attempts to match the users that it detected with 1) external users in the providers that were configured for authentication through Shared Services and 2) users in the native Shared Services directory.

If a match is not found, you can create the user as a native Shared Services user or delete the user. If a match is found, security information for the user is migrated to Shared Services. The wizard attempts to externalize all native users who are not externalized; therefore, you can run the wizard iteratively.

Note: When you run a migration, all external authentication providers must be running.

For information and tips about migrating Essbase to Shared Services, see the *Oracle Essbase Database Administrator's Guide*.

The following sections describe how to launch and use the wizard:

- [“Launching the Externalize Users Wizard” on page 567](#)
- [“Externalize Users Wizard Pages” on page 567](#)

Related Information

- [“Migrating Users to Shared Services” on page 248](#)
- [“About Shared Services User Management” on page 245](#)

Launching the Externalize Users Wizard

➤ To launch the Externalize Users wizard:

- 1 **Select the node next to the Essbase Administration Server or Essbase Server instance for which you want to externalize native users.**
- 2 **Perform an action:**
 - For Essbase Administration Server, select the Essbase Administration Server node, right-click, and select **Externalize users**.
 - For Essbase Server, select the **Security** node, right-click, and select **Externalize users**.

Externalize Users Wizard Pages

To view information about the wizard pages, click the following links:

- [Select Objects to Externalize](#)
- [Specify Shared Services Properties](#)
- [Specify Password Information](#)
- [Map Users to External Directory](#)
- [Map Groups to External Directory](#)
- [Externalize Users/Groups](#)

Select Objects to Externalize Page

On this page, you select Users and/or Groups to externalize, respectively, users and/or groups who are not externalized to Shared Services.

Note: If you initiated the wizard from Essbase Administration Server, the Groups option is not available.

Specify Shared Services Properties Page

The text boxes of this page display the name and port number of the Shared Services server to which you are externalizing the selected objects. The server to which the objects are being externalized is specified in the Shared Services external authentication configuration file. The information is retrieved from the file and cannot be edited.

Specify Password Information Page

You use this page to specify how passwords are created for the users that you create as native Shared Services users. The passwords are created when the users are migrated.

Note: If you are migrating only groups, password settings are not displayed.

If you want passwords to be automatically generated, select the **Auto-generated** option. When deciding whether to select the option, consider the following:

- Automatically generated passwords are recorded in a text file.
- You must specify the password file and its extension, which is `.txt`.
- The names of the password and log files cannot be the same.
- If you specify a file name but not a file path, the file is created in the `EPM_ORACLE_HOME\products\Essbase\eas\console\bin` directory.
- You can recover a password file by running the following MaxL statement: `display user`
- You can append passwords to existing files.

If you want to assign native usernames as passwords, select the “Use native user name as password” option. During migration, the username is converted to a lowercase password; therefore, the password is lowercase in Shared Services. For example, the password of a native user named “Mark” is “mark.”

If you want all users to use the same password, select the Password option, and specify and confirm one password for all users.

In the Logging details area, specify or browse to the text file in which you want to log the details of the externalization process. You must specify the file extension `.log`. If you select an existing file, new entries are appended to previously existing entries. All information and error messages are written to the specified file. The names of the log and password files cannot be the same. Log information is also written to the [Essbase log file](#).

Map Users to External Provider Page

Before displaying the provider page, the wizard searches, within the authentication providers that were specified when Shared Services was configured for external authentication, for matching users. If multiple providers were specified, the search process proceeds in the order in which providers are listed in the external authentication configuration file.

The provider page displays the search results in a table. The table contains the following columns:

- One column identifies, by Native User ID, the native Essbase Administration Server or Essbase Server users, including users who were authenticated natively or externally in a previous release.
- Other columns display information (External User ID, Last Name, First Name, and External Provider) about matching users that were found within the specified authentication providers.

Note: The table lists only first matches. To search for other matches, you select a user, click the Search button, and specify search criteria.

- The **Action** column displays the migration action applied to each user (Create, Migrate, or Do not migrate)

The **Create** option, which creates a native Shared Services user, is available only for users for whom no match was found. The **Migrate** option is available only for users for whom a match was found. In both cases, the user (created or previously existing) is tagged, in the local security file, as migrated and is provisioned, within Shared Services, with the access and role that the native security user was granted.

Note: In the **Action** column, you can select migration options, one per user.

To apply a migration action to multiple users simultaneously, select the users, and, in the **Action** list, select a migration option (Create, Migrate, or Do not migrate).

The page provides the following buttons:

- Apply—To apply your migration selections and, thus, to update the Action column
- Search—To open the [Find External User dialog box](#), and, thus, to search for another match for the selected user

Map Groups to External Provider Page

Before displaying this page, the wizard searches, within the authentication providers that were specified when Shared Services was configured for external authentication, for matching groups. If multiple providers were specified, the search process proceeds in the order in which providers are listed in the external authentication configuration file.

Note: If you initiated the wizard from Essbase Administration Server, this page is not displayed and, thus, this topic is not applicable.

The provider page displays the search results in a table. The table contains the following columns:

- One column identifies, by Native Group ID, the native Essbase Server groups, including groups that were authenticated natively or externally in a previous release.

- Other columns display information (External Group ID, Last Name, First Name, and External Provider) about matching groups that were found within the specified authentication providers.

Note: The table lists only first matches. To search for other matches, you select a group, click the Search button, and specify search criteria.

- The **Action** column displays the migration action applied to each group (Create, Migrate, or Do not migrate)

The **Create** option, which creates a native Shared Services group, is available only for groups for which no match was found. The **Migrate** option is available only for groups for which a match was found. In both cases, the group (created or previously existing) is tagged, in the local security file, as migrated and is provisioned, within Shared Services, with the access and role that the native security group was granted.

Note: In the **Action** column, you can select migration options, one per group.

To apply a migration action to multiple group simultaneously, select the groups, and, in the Action list, select a migration option (Create, Migrate, or Do not migrate).

The page provides the following buttons:

- Apply—To apply your migration selections and, thus, to update the Action column
- Search—To open the [Find External User dialog box](#), and, thus, to search for another match for the selected group

Externalize Users/Groups Page

To begin the externalization process, on this page, you select the **Users** or **Groups** option or the **Users and Groups** options, and click the **Start** button.

Note: If you initiated the wizard from Essbase Administration Server, the **Groups** option is not available.

On this page, you can perform the following additional actions.

- In the **Status** box, review the progress of the process.
- Stop the process by clicking the **Stop** button. The log file identifies the users and groups that were externalized before the process stopped.
- Close the wizard by clicking the **Finish** button.

Field Properties Dialog Box

You use the tabs of the Field Properties dialog box to manipulate field values:

- [Global Properties](#)—Used, during data loads and dimension builds, to modify the contents of the selected field, including changing case, adding prefixes and suffixes, dropping spaces, converting spaces to underscores, and replacing values
- [Data Load Properties](#)—Used, during data loads, to map names in the selected field to names in the outline
- [Dimension Build Properties](#)—Used, during dimension builds, to set a type, number, and dimension for the selected field

In the Field Properties dialog box, you press Alt+N to move to the next column and Alt+P to move to the previous column.

- [“About Field Operations” on page 220](#)
- [“Setting Field Types \(Building Dimensions\)” on page 210](#)
- [“Mapping Field Names” on page 227](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)

Field Properties Dialog Box—Data Load Properties Tab

The information that you specify in the Data Load Properties tab is used, during data loads, to map data-source fields directly to members or member combinations of the Essbase database.

Note: When data load rules are applied to SQL data sources, field names default to table field names, and, thus, SQL and Essbase database names may not match. In this case, you can map using Essbase names.

For outlines that contain only unique member names, select the **Default** option. Then, in the **Field name** box, enter a member name or a member combination (separated by commas), or, in the Dimension node, double-click a dimension or member. The current field is mapped to the specified member, member combination, or dimension.

For outlines that contains duplicate member names, select the **Use reference method** option, and enter the following information:

- **Type**—Double-click Generation or Level.
- **Reference number**—Enter the generation or level number. The default is the generation or level number of the previous field.
- **Reference dimension**—Enter a dimension name, or, in the Dimension node, double-click a dimension or member.

Note: If the Dimension node is not populated, click the **Outline** button, and associate the rules file with an outline.

Select one or more of the following options, each of which applies to the current field:

- **Data field**—Select this option if the data source contains a field for each dimension and one data column.
- **Date field**—After you select this option, you can select a date format.
- **Ignore field**—Select this option if you do not want to load the field into the outline.
- **Scale**—Select this option to apply a multiplier (which you specify) to the field values. For example, assume that a Sales data source tracks values in hundreds and that the Essbase database to which data is being loaded tracks real values. In this case, you must multiply the data-source values (such as 54.6) by 100 (to load and display in the Essbase database such as \$5460).

Related Information

- [“Mapping Field Names” on page 227](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Field Properties Dialog Box” on page 570](#)

Field Properties Dialog Box—Dimension Build Properties Tab

You use the Dimension Build Properties tab to set field type, field number, and dimension for a selected field.

Fields in data sources are parts of columns that describe members. Fields can contain information about member names, member properties, and attribute associations. To enable Essbase to process field information, in the rules file, you specify field types.

The Dimension node of the Dimension Built Properties tab lists the names of the dimensions in the rules file (the dimensions being created) and the dimensions in the outline. You double-click a dimension to set it as the dimension to which members in the selected field are added.

Note: If the Dimension node is empty, click the **Outline** button to associate the rules file with an outline.

In the Type list, you double-click and, therefore, select, a field type. As you decide which type to select, consider the following:

- “Duplicate generation” and “duplicate level” can be selected only if the previous field is, respectively, a generation or level field.
- “Duplicate generation alias” and “Duplicate level alias” can be selected only if the previous field is, respectively, a duplicate generation or duplicate level field.
- At the bottom of the list, in the "Attribute dimensions" group, attribute dimension names are listed (assuming that the rules file is associated with an outline). For Boolean, string, date, and numeric attribute dimensions, dimension type is identified. If you select a numeric attribute dimension, you can enter range information.

Note: The [solve order](#) type is available only for aggregate storage databases.

If, in the Type list, you selected a numeric attribute dimension, you can set a range:

1. Select “Place attribute members within a numeric range.”
2. For range size and Start value, enter positive whole numbers or positive decimal values: For example, if the range size is 10 and the start value is 15, Essbase builds the members 15-, 5-, 5, 15, 25, and so on. For example, if the range size is 10 and the start value is 0, Essbase builds the members 10-, 0, 10, and so on (Thus, by setting 0 as the start value, you define a range that includes 0.)
3. Set the dimension build to delete, rebuild, and re-associate the members of the dimension.

Note: During the dimension build, all associations between base and attribute members are lost. To enable the build to recreate the associations, the source data must include all members of the base dimension that are to be associated with members of the attribute dimension.

By default, the Number box displays the generation or level number of the previous field. As you consider whether to enter a different number, keep in mind the following:

- If field type is Parent or Child, the number must be 0.
- If you are creating an alias, a property, a currency category, a currency name, a formula field, or an attribute association, the number must identify the generation or level of the associated member.

You can select neither, either, or both of the following options:

- Ignore field during dimension build
- Delete when the field is empty—If the option is selected, Essbase considers the field as NULL or empty and deletes the associated information from the outline or resets the information to its default value. The option applies to member properties, formulas, UDAs, and attribute associations (assuming that the required dimension option is selected in the Dimension Build Settings dialog box for the relevant dimension).

Related Information

- [“Setting Field Types \(Building Dimensions\)” on page 210](#)
- [“Building Attribute Dimensions and Associating Attributes” in the *Oracle Essbase Database Administrator's Guide*](#)
- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Field Properties Dialog Box” on page 570](#)

Field Properties Dialog Box—Global Properties Tab

You use the Global Properties tab to modify the values of a selected field during a data load or dimension build.

You modify the values of a selected field by performing one or more of the following actions:

- Select a Case option to determine whether field values retain their original case or are converted to upper or lower case.
- In the Prefix box, enter a text string—to precede each field value.
- In the Suffix box, enter a text string—to append to each field value.
- Select the “Drop leading/trailing spaces” option, Fields that contain leading or trailing spaces cannot map to member names. The option is selected by default.
- Select the “Convert spaces to underscores” option.
- In the Replace column, enter the text string that you want to replace, and, in the With column, enter the text string that replaces the string in the Replace column. If you want to replace the text string only when it occurs as an entire word, select the Match Whole Word option. If you want to replace all text strings that match the text string in the With column, select the Replace All Occurrences option. By default, Essbase replaces only the first occurrence.

You define a search operation by clicking the New button or by pressing the Enter key. You click Delete to remove the selected search operation.

Related Information

- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)
- [“Field Properties Dialog Box” on page 570](#)

File Encoding Dialog Box

Administration Services Console displays the File Encoding dialog box when a file that is being saved or read from a client location does not contain an encoding indicator.

If the file is to be used with a non-Unicode-mode application or with a version of Essbase Server prior to Release 7.0, when you click OK, an encoding indicator is added to the file. Therefore, in this case, all you need do is click OK.

If the file is a non-Unicode-encoded text file, the encoding indicator is within the locale header record.

If the file is to be used with a Unicode-mode application, you define the encoding by performing one of the following actions:

- Select the UTF-8 option. If the file is not UTF-8 encoded, the option is not displayed.

- From the list of text encodings, select a non-Unicode text encoding. Select carefully; selecting the wrong encoding can cause data corruption.

Related Information

- [“About File Encoding and Locales” on page 117](#)
- [“Creating Applications” on page 90](#)
- [“Creating Scripts” on page 337](#)
- [Creating MaxL Scripts](#)
- [Creating a Rules Files](#)
- [“Administering Unicode-Mode Applications” in the *Oracle Essbase Database Administrator's Guide*](#)

For non-Unicode-mode applications, the correct locale is already selected; make no changes and click OK.

Filter Editor Window

You use the Filter Editor window to create or edit security filters. After you create a filter, you [assign the filter](#) to users or groups.

The Filter Definition tab of the Filter Editor window contains the following fields:

- Filter name—For a new filter, enter a name (letters, numbers, and spaces; for length limits, see the *Oracle Essbase Database Administrator's Guide*). If the name of an existing filter is displayed, the field is read only.
- Access: Apply an access level to the current member specification:
 - None: No data can be retrieved or updated.
 - Read: Data can be retrieved but not updated.
 - Write: Data can be retrieved and updated.
 - MetaRead: Metadata (dimension and member names) can be retrieved and updated.

Note: The MetaRead access level overrides all other access levels. Additional data filters are enforced within existing MetaRead filters. Filtering on member combinations (using AND relationships) does not apply to MetaRead. MetaRead filters each member separately (using an OR relationship).

- Member Specification—Using the following guidelines, specify the dimensions or members to which to the level selected in the Access column is applied:
 - Specify dimension or member names; alias names; member combinations; member sets that are defined by Essbase functions; or substitution variable names, which are preceded by ampersands (&)
 - Separate multiple entries with commas.

- Enter names manually, or select members or functions from the outline tree or the function tree. Names selected from the outline tree are automatically enclosed in double quotation marks (“*name*”). It is best practice to enclosed manually entered names in quotation marks.

In the Filter Editor window, you can select from the following trees:

- The database outline with which the filter is associated. The outline can display member names or aliases. If you want to display the aliases of members that have aliases, select the “Use aliases” option, and, in the “Alias table” box, select an alias table.
- Essbase member set functions, which define dimensions and members. You can view functions by category or by alphabetical order. If you want to insert an argument template into a function, select the **Insert arguments** option.

The Filter Editor window provides the following buttons:

- Verify—To verify names and function syntax. Results are displayed in the Messages pane.
- Delete—To delete a row from the Filter area
- Save—Filter information is stored in the Essbase security file (*essbase.sec*).

Related Information

[“Managing Filters” on page 288](#)

Related Commands

alter filter (MaxL) in the *Oracle Essbase Technical Reference*

Filters Window

You use the Filters window to manage security filters for a database.

The rows within the window provide access to context-sensitive menus (Select one or more rows, and right-click).

The columns within the window display information:

- Filter Name
- Application—Name of the application that contains the database with which the filter is associated
- Database—Name of the database with which the filter is associated

If you want to [create a filter](#) or [edit](#), [copy](#), or [delete](#) the selected filter, you click the relevant button. If Essbase Server is in [EPM System security mode](#), the **Assign** button is available and, thus, you can also [assign the selected filter](#) to a user or group.

Related Information

- [“Managing Filters” on page 288](#)

- [“Filter Editor Window” on page 575](#)

Find Dialog Box

You use the Find dialog box to find text in Calculation Script Editor, Formula Editor, MaxL Script Editor, Report Script Editor, and Report Viewer:

- In the Find text box, you type, paste, or select the text that you want to find.
- If you want a case-sensitive search, select the “Match case” option.

Related Information

- [“Replace Dialog Box” on page 631](#)
- [“Finding Text in Editors” on page 143](#)

Find External Group Dialog Box

You use the Find External Group dialog box to search for a group in an external authentication provider.

In the “Group name,” box, you enter a search string. The string must begin with a letter and can contain one wildcard character. For example, you might enter “H*.”

When you click **Search**, the first instance of the search string is located. You click **Search** again to locate the second instance, and so on.

Related Information

- [“Externalize Users Wizard” on page 566](#)

Find External User Dialog Box

In the Find External User dialog box, you search for a user in an external authentication provider.

With any authentication provider, you can use the “By user name” option. The name that you enter must begin with a letter and may contain one wildcard character.

With LDAP and MSAD, you can use the By Name or the By E-mail option. Both options require an exact match and do not accept wildcard characters.

You click the **Search** button to find the first and then additional occurrences of the item for which you are searching.

Related Information

- [Create User on Administration Server](#)
- [“Externalize Users Wizard” on page 566](#)
- [“Managing External Authentication” on page 265](#)

Find Members Dialog Box

For Outline Editor, Outline Viewer, Calculation Script Editor, Formula Editor, Report Editor, and Filter Editor, you use the Find Members dialog box to find items that are associated with a specified character string. Your search results are displayed on the [Find Results tab](#).

In the “Search for” box, you enter (type or paste) the character string that you want to find. As you enter your text, keep the following in mind:

- For Outline Viewer, Calculation Script Editor, Formula Editor, Report Editor, and Filter Editor, only instances of the search string as a whole word (the search string enclosed in blanks) are returned. To find all instances that contain a search string, use the * and ? wildcards.
- For Outline Editor, all instances that contain the search string are returned. To search for a string as a whole word, select the “Match word only” option. Wildcards cannot be used for Outline Editor.
- When searching for members in [duplicate member name outlines](#), you need not enter the qualified member name. The search finds all members that match the search string.
- When searching for members in [duplicate member name outlines](#), be very careful. Searching by alias name is not supported for an alias name that matches a member name for which it is not an alias. Incorrect results are displayed, and a message that says that the name is ambiguous is returned.

After you enter your text, you select the “Match text in option” and specify the type of information to be searched:

- Member names
- Formulas—Available only in Outline Editor
- UDAs—Available only in Outline Editor

If you want to direct your search, select one or more of the following options:

- Match words only—Used only with Outline Editor. For example, if the option is selected, in Sample Basic, the search string “100” returns only the 100 member. If the option is cleared, the search string “100” returns all members that contain “100,” such as 100, 100–10, 100–20, 100–20 (shared member), and Large_210000000.
- Match case—Select the option to restrict the search to the case of the search string.
- Select dimensions—In the list, select a dimension to search only within the selected dimension.
- Select alias tables—In the list, select an alias table to include a specified alias table or all alias tables. By default, searches do not include alias tables.

Related Information

- [“Finding and Replacing Members and Text in Outlines” on page 143](#)
- [“Finding Members in Editors” on page 182](#)

- [Inserting Dimension and Members in Scripts](#)
- [“Find Results Tab” on page 579](#)

Find Results Tab

When you click a [Find Members](#) button, the Find Results tab, which lists the members that match the Find Members request, is displayed.

To identify the location of a member within the outline tree, you right-click or double-click the member.

To edit a member (within Outline Editor), you right-click the member and perform any of the following actions:

- Move the focus to the member in the outline tree
- Access the Member Properties dialog box to, thus, view or edit the member
- Cut or copy the member

You can select whether to paste the member as a child or a sibling.

- Delete the member

You can perform the following find operations:

- Clear the results list
- Execute another find operation

The = tab remains open until the window or dialog box from which it was accessed is closed.

Related Information

- [“Finding and Replacing Members and Text in Outlines” on page 143](#)
- [“Find Members Dialog Box” on page 578](#)

Formula Dialog Box

The Formula pane of the Formula dialog box displays the text of the selected member formula. Because the dialog box loads only a formula (not an outline), formulas are displayed relatively quickly. If the formula exceeds the size of the pane, a scroll bar is displayed.

The Formula dialog box is part of Outline Viewer. For information about Outline Viewer, see [“Viewing Formulas” on page 138](#).

Related Information

- [“Viewing Formulas” on page 138](#)
- [“Viewing Dimension and Member Properties” on page 137](#)

Generate Currency Outline Dialog Box

You use the Generate Currency Outline dialog box to select or create the currency database for which an outline is generated.

You select an Essbase Server instance and an application and select an existing currency database, or enter a name for a new currency database.

Related Information

- [“Generating a Currency Database Outline” on page 424](#)
- [“About Essbase Currency Conversion” on page 421](#)
- [“Converting Currency” on page 422](#)

Global Mapping Member Selection Dialog Box

You use the Global Mapping Member Selection dialog box to define global member mappings.

For information about advanced, area-specific member mappings, see [“Defining Area-Specific Member Mappings in Partitions \(Optional\)” on page 402](#)

The Dimensions tab of the Global Mapping Member Selection dialog box displays a tree view of the dimensions and members of the source or target database (depending on whether the dialog box was launched from the Source or Target column of the Areas tab). You select a member to insert it in the Source or Target column of the Mappings tab.

Note: if you are working in a duplicate-member-name outline and you insert a [duplicate member name](#), the qualified member name is inserted in the Source or Target column.

You can modify the dimension tree in the following ways:

- To view and select members by their names, in the **View method** group, select the **By member name** option.
- If you are working with a block storage database, to view and select DTS members, in the **View method** group, select the **By Dynamic Time Series** option.
- If you selected the “By member name” option and want to use aliases, select the “Use alias” option to display aliases from the current alias table. For members that do not have aliases, the member names are displayed.

Note: Because you are selecting members, By generation name and By level name do not apply.

To display the [Find Members](#) dialog box, which you use to search the dimension tree, you click the Find Members button. To display the [Member Information](#) dialog box, which displays information about the member selected in the tree, you click the Find Information button.

The Find Results tab lists the members that match a Find Members request. See [“Find Results Tab” on page 579](#).

Related Information

- [“About Partitions” on page 395](#)
- [“Defining Global Mappings in Partitions” on page 404](#)
- [“Create or Edit Partition Window—Areas Tab” on page 502](#)

Groups Window

Note: This window is read-only if Essbase Server is in [EPM System security mode](#).

You use the Groups window to manage Essbase Server user groups on the Essbase Server indicated in the title bar of the window. You can manage one group, or multiple groups at one time.

Select one or more rows and then right-click to view a context-sensitive shortcut menu.

Columns that list and provide information about groups:

- Group Name
- Group Type—Displays the following group types:
 - Administrator—Full access to all users, groups, and data on Essbase Server.
 - User—No access, unless granted through Create/Delete permissions, group membership, application or database permissions, or filters.
- Create/Delete Permissions—Displays one of the following permissions for users in this group:
 - Users/Groups—Create and delete other users and groups with equal or lower permissions.
 - Applications—Create and delete applications and can control access to databases within those applications.
 - Users/Groups/Applications—All permissions listed in the other two options.

The window provides various buttons, which you can use to [create](#), [edit](#), [copy](#), or [delete](#) a group.

Related Information

- [“Managing Users and Groups” on page 256](#)
- “User Management and Security in Essbase Native Security Mode” and “User Management and Security in EPM System Security Mode” in the *Oracle Essbase Database Administrator's Guide*

Import LROs Dialog Box

You use the Import LROs dialog box to import linked reporting objects (LROs) that were previously [exported](#).

You import LROs from a file-system directory or from an [export directory](#) on Essbase Server by performing one of the following actions:

- Select the “Local file system directory” option, and enter the path to or browse to the preferred directory.
- Select the “Essbase Server directory” option, select the preferred directory, and select the “Delete LRO directory on server after import” option. If Essbase Server does not detect an export directory, the “Essbase Server directory” option is not available.

Related Information

- [“About Linked Reporting Objects \(LROs\)” on page 369](#)
- [“Importing LROs” on page 372](#)
- [“Exporting LROs” on page 371](#)

Related Commands

- `export lro` (MaxL) in the *Oracle Essbase Technical Reference*
- `import lro` (MaxL) in the *Oracle Essbase Technical Reference*

Import Member Mappings Dialog Box

You use the Import Member Mappings dialog box to import member mappings from external text files.

In the “Mapping file” box, you enter the path and file name of a mappings file, or you browse to and select a mappings file.

In the “Format settings” group, to assign a label to missing members (for example, to data-source members that are not in the data target), you select the Non-member box, and specify a label. By default, non-members are labeled as void.

In the “Format settings” group, you select an option:

- Source column first—If the first column in the text file contains source member names
- Target column first—If the first column in the text file contains target member names

Related Information

- [“Importing Member Mappings for Partitions” on page 404](#)
- [“Defining Global Mappings in Partitions” on page 404](#)

Import Partition File Dialog Box

You use the Import Partition File dialog box to import partition definitions that were previously [exported](#).

In the following boxes, you enter information about the partition definition file that you want to import:

- Look in—Drive and folder
- File name—Path and file name (If you selected the file from the file system window, the box is automatically populated.)
- Files of type—By default, the `.xml` file type is selected. You can import only partition definition files that were exported with the `.xml` extension.

Related Information

- [“About Partitions” on page 395](#)
- [“Importing Partition Definitions” on page 411](#)
- [“Exporting Partition Definitions” on page 411](#)

Import Selection Rules Dialog Box

You use the tabs of Import Selection Rules dialog box to import member selection rules that were previously exported—from previous releases of Administration Services or from Application Manager.

- File System—Navigate to a selection rules file or, in the “Files of type” list, browse for a `.txt` or `.sel` file.
- Essbase Server—Navigate through the application-database directory structure on the Essbase Server computer:
 - Look in—Select an Essbase Server.
The list box displays applications that exist on the selected Essbase Server. Select the application and/or database that contains the file that you want to import. Then select the file itself.
 - File name—Displays the selected file.
 - Files of type: Displays the file type, `.sel`. The import file must have this extension.
- Administration Server—Import selection rules that were exported to Essbase Administration Server, including the following:
 - Object—Displays the selection rules files that have been exported to Essbase Administration Server.
 - User—Displays the user name of the Administration Services user who exported the selection rules.
 - Modify Date—Displays the date and time that the selection rules were exported.

- Shared—Indicates whether the selection rules can be shared by other Administration Services users.

Related Information

- [“Importing Selection Rules for Area Mapping in Partitions” on page 402](#)
- [“Defining Areas in Partitions” on page 400](#)

Join Field Dialog Box

You use the Join Field dialog box to join multiple fields (selected in the “Fields to join” box) into one field.

Related Information

- [“Joining Fields” on page 224](#)
- [“About Field Operations” on page 220](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)

Linked Reporting Objects Window

You use the Linked Reporting Objects window to view, edit, and delete linked reporting objects (LROs).

Note: From the Linked Reporting Objects window, you cannot create LROs or create or modify linked partitions. To create LROs, use Spreadsheet Add-in to link an object to a data cell. To create and modify linked partitions, use the [Create/Edit Partition window](#).

You can filter the list of LROs by selecting options from the Filter LROs group:

- Modified on or before—Enter or select a date to view only LROs modified on or before the date. Select the current date (the default) to view LROs without regard to their modification status.
- Created by—Select a user to view only the LROs created by the user. Select “All users” (the default) to view LROs regardless of who created them.

Information about LROs is displayed in the following columns, one row per LRO:

- Type—File, note, or URL
- Object Description—Blank for cell notes
- Linked Object—For files, the original file name; for cell notes, the content of the note; for URLs, the URL address

- Created By—Name of the user who created the object
- Last Modified—Date and time that the object was last modified
- Member Combination—Member combination to which the object is linked

You click the Edit button to edit a selected object. Object type determines what action can be performed:

- Linked file—In the Change File Attachment dialog box, you can link a different file to the member combination. You cannot edit the contents of the file.
- Cell note—In the Edit Note dialog box, you can edit the contents of the note.
- URL—In the Edit URL dialog box, you enter a different URL string.

You click the View button to view a selected object. Object type determines how and what you can view:

- Linked file—Essbase prompts you to save the file to a local computer or network. After you save the file, open it from the specified location. You cannot view a linked file directly from the Essbase Server computer.
- Cell note—In the View Note dialog box, you can view but not edit the contents of the note.
- URL—The URL is displayed in the default Web browser.

You click the Delete button to delete the selected LRO from Essbase Server. For linked files, the link from the data cell to the file is deleted from the index file, the file is deleted from Essbase Server, and copies of the file that are stored on client machines are retained. Cell notes and URLs are deleted from the database.

Related Information

- [“About Linked Reporting Objects \(LROs\)” on page 369](#)
- [“Managing LROs” on page 370](#)
- [“Limiting LRO File Sizes” on page 373](#)
- [“Exporting LROs” on page 371](#)
- [“Importing LROs” on page 372](#)

Location Aliases Window

You use the Location Aliases window to create, edit, and delete location aliases. A location alias maps an alias name to the physical location of the database that contains the alias name.

In the columns of the window, you enter an alias and then enter or select the following information, relative to the remote database:

- Essbase Server—Name or IP address
- Application
- Database

- User name—Username for the Essbase Server that contains the remote database
- Verified—An indication of whether the alias information has been validated against the specified server

You click the Test button to verify the following alias information:

- That you can connect to the specified server with the provided user name and password
- That the specified application exists
- That the specified database exists in the specified application

To set your alias settings, you click the Set button.

To delete an alias, you select it and click the Delete button.

Related Information

- [“Creating Location Aliases” on page 114](#)
- [“Editing or Deleting Location Aliases” on page 115](#)

Related Commands

- create location alias (MaxL) in the *Oracle Essbase Technical Reference*
- drop location alias (MaxL) in the *Oracle Essbase Technical Reference*
- display database (MaxL) in the *Oracle Essbase Technical Reference*
- createlocation (ESSCMD) in the *Oracle Essbase Technical Reference*
- deletelocation (ESSCMD) in the *Oracle Essbase Technical Reference*
- listlocations (ESSCMD) in the *Oracle Essbase Technical Reference*

Locked Objects Window

In the Locked Objects window, according to your permissions, you can view and unlock locked objects. (For information about permissions, see [“About Security and Permissions” on page 253](#))

The window displays the following columns, each of which provides information about the associated object:

- Application
- Database
- Object Name
- Object Type—For example, report script or outline
- Locked By—Name of the user who locked the object
- Locked At—Date and time that the object was locked

By selecting the appropriate button, you can unlock the selected object or all objects or update (refresh) the information provided in the window.

Related Information

- [“Locking and Unlocking Objects” on page 105](#)
- [“Setting Essbase Default Options” on page 97](#)

Related Commands

- alter object (MaxL) in the *Oracle Essbase Technical Reference*
- display object (MaxL) in the *Oracle Essbase Technical Reference*
- unlockobject (ESSCMD) in the *Oracle Essbase Technical Reference*

Locks Window

You can use the Locks window only if you are working with a block storage database.

In the window, you can unlock data locks, move columns (by dragging them to other locations), and resize columns (by dragging the boundaries of their column headings). However, you cannot unlock objects. To unlock objects, you use the [Locked Objects](#) window.

The Locks window displays the following columns, which display the following information:

- User—All users who hold a lock on at least one data block
- Application/Database—The applications and databases to which users are connected
- Number of Blocks Locked—The number of blocks locked by each user
- Lock Duration (Sec)—The amount of time, in hours:minutes:seconds, rounded to the nearest 10-second increment, that users have had their data blocks locked (The maximum amount of time that a user can lock a data block is set in the Application Properties window.)

When you click the Unlock button, you not only remove the selected user's lock but you also disconnect the user from the current session.

Related Information

- [“Viewing Data Locks” on page 301](#)
- [“Setting Timeout for Data Locks” on page 303](#)
- [“Unlocking Data” on page 302](#)
- [“E-mailing Essbase Information” on page 87](#)
- [“Locked Objects Window” on page 586](#)

Related Commands

- listlocks (ESSCMD) in the *Oracle Essbase Technical Reference*
- removelocks (ESSCMD) in the *Oracle Essbase Technical Reference*

Log Analyzer Charts Window

The Log Analyzer Charts window displays a log chart and a table of log-chart entries for an Essbase Server instance or for an application.

Note: To view a text-only version of a log, use [Log Viewer](#).

The following boxes provide information about the current log:

- Created by
- Created on
- Earliest date in log
- Latest date in log—Always the current date

From the Duration box, you can select a duration and, thereby, restrict the log chart to the specified period of time. The duration begins on the current day and moves backwards.

From the “View by filter” list, you can select a pre-defined or custom filter and, thereby, restrict the displayed chart to one type of message. The following pre-defined filter names indicate the type of messages that each filter, respectively, includes in the chart:

- Errors
- Warnings
- Calculations—Within application logs, for block storage databases, includes the elapsed calculation times for calculation strings (1012550) and calculation scripts (1012579) and, for aggregate storage databases, includes the elapsed times for aggregate view selection processes (1270046) and for materialization of aggregate views (1270045)
- Logged users—Within Essbase Server logs, includes user login messages (1051187)
- Spreadsheet queries—Within application logs, includes elapsed spreadsheet query times (1020055)
- Data loads—Within application logs, includes, for block storage databases, the number of cells updated by a data load (1003037) and the elapsed time for the data load process (1003052) and includes, for aggregate storage databases, the elapsed times for the data-load process and the data-load-buffer commit process (1003058)

To add a custom filter to the “View by filter” list, click the Add Filter button, and then, in the Add Custom Filter dialog box, create a filter. To edit or delete a custom filter, from the “View by filter” list, select the filter, and then, click the Edit Filter or Delete Filter button.

Note: You can add, edit, and delete only custom filters.

To display other than the default three-dimensional line graph, select one or more of the following options:

- Enable 3D—Displays a three-dimensional view
- Stack bar charts—For custom filters in which Series is defined, stacks the bars of a bar chart
- Draw filled—Fills a line graph with color

You can modify the display of the log-entry table in the following ways:

- Hide the table by clearing the “Show log entries” option
- Drag columns to different locations
- Sort columns by double-clicking column headers

At any time, you can click Refresh, to start a manual-refresh process. If you want to enable an auto-refresh process, in the “Refresh rate” box, specify the refresh rate (in seconds, minutes, or hours). Then, you can click **Start** to start an auto-refresh process or click **Stop** to cancel an auto-refresh process.

Related Information

- [“About Log Analyzer” on page 238](#)
- [“Generating Log Charts” on page 239](#)
- [“Viewing Log Charts” on page 239](#)
- “Using Essbase Logs” in the *Oracle Essbase Database Administrator's Guide*

Log Viewer Options Dialog Box

You use the Log Viewer Options dialog box to specify how many log entries are displayed in the Log Viewer window.

In the box, you select one or both of the following options:

- Display log—Include up to 5MB of log entries
- Starting date—Begin with the entry that you specify in the Date box

If you selected the “Starting date” option, you enter a date in the Date box by performing one of the following actions:

- Double-click the current date, and enter a date.
- Click the down arrow next to the Date box, and, in the Date Selector box, select a date.

Related Information

- [“About Log Viewer” on page 241](#)
- [“Viewing Logs” on page 242](#)

Log Viewer Window

You use the Log Viewer window to view logs for Essbase Server instances and for applications.

Note: To filter logs and view log charts, use [Log Analyzer](#).

You can copy rows displayed in the Log Viewer window and then paste the rows to an external file or to another program, such as Microsoft Excel. You can print and save the contents of the window.

To perform or initiate actions, you right-click and select a command:

- Copy—To copy selected text
- Select All—To select all text
- Find—To open the [Find](#) dialog box
- Find Next—To find the next occurrence of the text that you most recently entered in the Find dialog box
- Go to line—To open the Go To dialog box

Related Information

- [“About Essbase Logs” on page 237](#)
- [“About Log Viewer” on page 241](#)
- [“Viewing Logs” on page 242](#)
- [“About Log Analyzer” on page 238](#)
- [“Using Essbase Logs” in the *Oracle Essbase Database Administrator's Guide*](#)

Member Information Dialog Box

The boxes of the Member Information dialog box display information about a selected member:

- Dimension
- Member
- Generation
- Level
- [Storage setting](#)
- [Formula](#)
- [User-Defined Attribute \(UDA\)](#)
- [Comments](#)

Related Information

- [“About Partitions” on page 395](#)

- [“Create or Edit Partition Window—Areas Tab” on page 502](#)
- [“Defining Areas in Partitions” on page 400](#)

Member Name Dialog Box

You use the Member Name box of the Member Name dialog box to enter or edit member mappings for partitions.

You can enter or edit only one member name at a time.

You must enclose in quotation marks member names that begin with a numeral (for example, "100-Blue") and member names that include any of the following characters: ampersand, asterisk, at sign, backslash, brace, bracket, colon, comma, dash, equal sign, exclamation point, greater than sign, hyphen, less than sign, minus sign, parentheses, percent sign, period, plus sign, semicolon, slash, or tilde.

For [duplicate members](#), you must enter qualified member names. Qualified member names are identified in Outline Viewer, in the Member Properties dialog box. If you use the member selection tool to select a duplicate member from the outline tree, the qualified member name is inserted automatically.

For information about advanced, area-specific member mappings, see [“Defining Area-Specific Member Mappings in Partitions \(Optional\)” on page 402](#).

Related Information

- [“Defining Global Mappings in Partitions” on page 404](#)
- “Mapping Members” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

create partition (MaxL) in the *Oracle Essbase Technical Reference*

Member Preview Dialog Box

The “Selected members” box of the Member Preview dialog box lists the members that meet the selection criteria that is specified in the Rules box.

For example, if the Rules box contains the member function `@CHILDREN("Qtr1")`, the “Selected members” box lists Jan, Feb, and Mar.

This “Selected members” box lists a member only once, regardless of whether the member meets multiple selection criteria.

Related Information

- [“About Partitions” on page 395](#)
- [“Create or Edit Partition Window—Areas Tab” on page 502](#)
- [“Defining Areas in Partitions” on page 400](#)

Member Properties Dialog Box

You use the Member Properties dialog box to edit properties for one or more dimensions or members.

The names of the current members are displayed at the top of the dialog box. The contents of the dialog box differ, depending upon whether you are working with a block storage or an aggregate storage outline.

The dialog box includes the following tabs. The functionality of the tabs depends upon the characteristics of the current member or members. In all cases, when you move between tabs, the selections made in the previous tab are saved.

- **Information**—View and edit general and alias-related information
- **Attributes**—Assign an attribute dimension to a sparse non-attribute dimension
- **Associations**—Assign one or more attributes to a member of a sparse, non-attribute dimension to which an attribute dimension is assigned
- **UDAs**—Assign or unassign UDAs (user-defined attributes)
- **Formula**—Open Formula Editor

Note: In aggregate storage outlines, formulas are expressed in MDX syntax. Therefore, for aggregate storage outlines, the Formula tab displays **MDX Script Editor**, not Formula Editor.

If only one member is selected, you can move to the previous or following member (as defined in the outline) by clicking the Prev or Next button. Changes to the initially selected member are saved. If multiple members are selected, the buttons are unavailable.

Related Information

[“Setting Dimension and Member Properties” on page 155](#)

Member Properties Dialog Box—Associations Tab

You use the Associations tab to associate attributes with base-dimension members that are assigned one of the following data-storage properties: store data, Dynamic Calc, or Dynamic Calc and Store.

The tab provides the following boxes:

- **Associated attributes**—The attributes associated with the current base-dimension member
- **Available attributes**—The attribute dimensions associated with the current base dimension. You expand dimension nodes to view attributes available for assignment.
- **Full name of selected available attribute**—The member name of the attribute selected in the “Available attributes” list, including the prefix or suffix and the joining characters `_`, `^`, or `|`

To assign or unassign attributes to the current base-dimension member, you click the following buttons:

- **Assign**—To assign the attribute selected in the “Available attributes” box
- **Remove**—To unassign the member selected in the “Associated attributes” box
- **Remove All**—To unassign all attributes listed in the “Attributes associated” box (The button becomes available when you select an attribute that is listed in the “Attributes associated” box.)

Attribute associations must follow these rules:

- Associate only level 0 members of attribute dimensions with members of base dimensions.
- The base dimension members with which you associate members from a specific attribute dimension must be at the same level.
- A member of a base dimension can have only one attribute from each attribute dimension associated with it. For example, product 100-10 can have only one size.
- Members from more than one attribute dimension can be associated with one member of a base dimension. For example, product 100-10 can have both a size attribute and a packaging type attribute.

Note: For information about attribute associations with aggregate storage databases, see the *Oracle Essbase Database Administrator's Guide*.

Related Information

- [“About Attributes” on page 184](#)
- [“Associating Attributes with Members of the Base Dimension” on page 186](#)
- [Associating Attribute Dimensions with Standard Dimensions](#)

Member Properties Dialog Box—Attributes Tab

You use the Attributes tab to assign any number of attribute dimensions to the current standard dimension.

Note: Attribute dimensions can be assigned only to sparse dimensions. An attribute dimension can only be assigned to one standard dimension.

The tab displays the following lists, which are updated as attribute dimensions are assigned and unassigned:

- Associated attribute dimensions, all of which are assigned to the current standard dimension
- Other attribute dimensions, some of which are available for assignment and some of which are not (Attribute dimensions that are assigned to other standard dimensions are not

available. The names of unavailable dimensions are followed by the names of their associated standard dimensions, in parentheses.)

To assign or unassign attribute dimensions, you use the following buttons:

- **Assign**—To assign the attribute dimension selected in the “Other attribute dimensions” list
- **Assign All**—To assign all available attribute dimensions
- **Remove**—To unassign the attribute dimension selected in the “Associated attribute dimensions” list
- **Remove All**—To unassign all assigned attribute dimensions

Related Information

- [“About Attributes” on page 184](#)
- [Associating Attribute Dimensions with Standard Dimensions](#)
- [“Associating Attributes with Members of the Base Dimension” on page 186](#)

Member Properties Dialog Box—Formula Tab

You use the Formula tab to edit formulas that are applied to members and that are calculated through default database calculations and calculation-script calculations.

Note: To edit formulas that are calculated only within calculation scripts, use [Calculation Script Editor](#). In aggregate storage outlines, formulas are expressed in MDX syntax. See [“Creating Formulas for Aggregate Storage Databases” on page 70](#).

The tab features a text editing pane, point-and-click member selection, function templates, and a syntax checker.

Within the tab, you can perform the following actions:

- [Create and edit member formulas](#)
- [Search the outline tree for members](#)
- [Insert members in a script from the outline tree](#)
- [Insert functions and commands in a script](#)
- [Use syntax auto-completion](#)
- [View and customize color-coded elements](#)
- Use either member names or alias names in a formula
- Create formulas using pre-defined templates

Related Information

- [“About Formulas” on page 179](#)
- [“Creating and Editing Formulas in Outlines” on page 179](#)

- “Developing Formulas” in the *Oracle Essbase Database Administrator's Guide*
- “Reviewing Examples of Formulas” in the *Oracle Essbase Database Administrator's Guide*

Member Properties Dialog Box—Information Tab

You use the Information tab to view or modify basic dimension or member information (such as consolidation properties, storage properties, and comments) and to work with alias tables.

The items available on the tab vary, depending on dimension or member type and outline type (block storage, aggregate storage, or currency).

The tab displays multiple nodes. All nodes provide information about the selected dimension or member. Some nodes are read only; some nodes accept entries; some nodes apply to all situations; and some nodes apply to specific situations.

- Member information—Dimension and member properties
- Qualified member name—Only in Outline Viewer and only for [duplicate member name](#) outlines
- Qualified member shared name—Only in Outline Viewer, only for [duplicate member name](#) outlines, and only for shared members that are associated with base members that have non-unique names
- Hybrid Analysis—Only for outlines enabled for Hybrid Analysis

You can select Enabled or Disabled, to enable or disable Hybrid Analysis for the selected member.

To modify a value, select it and, depending upon which of the following boxes is displayed, enter or select a different value.

- Name—Enter a dimension or member name. (For details about naming rules, see the *Oracle Essbase Database Administrator's Guide*.)
- Comment—For a standard dimension or member, enter a comment. Comments can contain up to 255 characters.
- Dimension type—For a dimension within a block storage outline, select None, Accounts, Time, Country, Currency Partition, Currency Type, or Attribute. For a dimension within an aggregate storage outline, select None, Accounts, Time, Date-time, or Attribute.
- Attribute type—For an attribute dimension select Text, Numeric, Boolean, or Date.
- Associate Format String—If typed measures are enabled in the outline properties, optionally select to create an MDX format string.

Format strings enable you to display more meaningful values in place of raw numeric values. For example, using a text based format string, you might display data cells as “High,” “Medium,” and “Low.”

To associate a format string, use the following syntax:

```
MDXFormat(string_value_expression)
```

where *string_value_expression* is a valid MDX string value expression as documented in the *Oracle Essbase Technical Reference*. For more information about format strings, see “Working with Typed Measures” in the *Oracle Essbase Database Administrator's Guide*.

- Dimension solve order—For a dimension, specify a number (0–127) to represent the priority with which Essbase calculates formulas assigned to the dimension.
- Attachment to Base Dimension Level—For a linked attribute dimension, define the member level of the date-time dimension with which the attribute dimension is associated.
- Consolidation—For a member that is not a dimension or an attribute, select one of the following consolidation operators: +, –, *, /, %, ~ (ignore), or ^ (non-consolidating) . Addition (+) is the default.

For aggregate storage outlines, restrictions may apply. See “Comparison of Aggregate and Block Storage” in the *Oracle Essbase Database Administrator's Guide*.

- Two-Pass—For a standard member of a block storage outline, select “true” to calculate the member during a second pass through the outline and “false” not to calculate the member during a second pass through the outline.
- Compression—For a non-compression dimension, select True to set the dimension as the compression dimension and change the dimension hierarchy to Dynamic (if it was previously stored). All other dimensions are set to False. For the compression dimension, clear the setting to remove the compression attribute from the dimension.
- Data storage—Select one of the following options to determine how Essbase stores data values for the current dimension or member: Store Data, Dynamic Calc and Store, or Dynamic Calc. Never Share, Label Only, or Shared Member.

The Dynamic Calc and Store and Dynamic Calc options do not apply to aggregate storage outlines.

- Hierarchy—For a dimension or a generation 2 member within an aggregate storage outline, specify the Stored option (the default) or the Dynamic option or, for a dimension within an aggregate storage outline, select the “Hierarchies Enabled” option (which equates to selecting both Stored and Dynamic). The storage option that you select is applied to the hierarchy headed by the dimension or generation 2 member.

The accounts dimension must be dynamic. For information about restrictions associated with dynamic and stored hierarchies, see the *Oracle Essbase Database Administrator's Guide*.

- Variance reporting expense—For an accounts member that is assigned a formula that includes the @VAR or @VARPER function and that is within a block storage outline, you can specify how Essbase calculates the difference between actual and budget data. You select the “false” option to tag the member as non-expense (the default) or “true” to tag the member as expense.

Related Information

- [“Member Properties Dialog Box” on page 592](#)
- [“Working with Outlines” on page 126](#)
- [“Setting Dimension and Member Properties” on page 155](#)

Member Properties Dialog Box—UDAs Tab

You use the UDAs tab to create, assign, and unassign user-defined attributes (UDAs).

Like attributes, UDAs are used to retrieve data by categories. Unlike attributes, UDAs have no built-in functionality. However, UDAs can be assigned to dense and sparse dimensions, whereas attributes can be assigned to only sparse dimensions. For a detailed comparison of attributes and UDAs, see the *Oracle Essbase Database Administrator's Guide*.

The tab displays the following lists:

- UDAs Assigned to selected member names—If a UDA is assigned to only one member, the member name is displayed next to the UDA. If a UDA is assigned to multiple members, the number of members is displayed next to the UDA.
- UDAs Assigned in *dimension-name* Dimension—If double-click a UDA or select multiple UDAs and click the Assign button, the UDA or UDAs are assigned to the selected members and, thus, are added to the Assigned list.

In the text box, you can enter the name of a new UDA. Then, you can click the **Assign** button to assign the new UDA to the selected members.

Related Information

- [“Working With UDAs Using Outline Editor” on page 191](#)
- “Creating UDAs” in the *Oracle Essbase Database Administrator's Guide*

Migration Wizard

You use the Migration wizard to migrate (copy) applications and databases across Essbase Server instances. You can migrate to any platform supported by Essbase. For example, you can migrate an application from a Windows development server to a UNIX production server.

When you migrate an application, the source application is unaffected, and the source and target servers experience no downtime.

This topic contains the following sections:

- [“Launching the Aggregate Storage Outline Conversion Wizard” on page 457](#)
- [“Information That Is and Is Not Migrated” on page 598](#)
- [“Aggregate Storage Outline Conversion Wizard Pages” on page 457](#)

To use the wizard, you must have Create/Delete Applications permissions for the source and target Essbase Server instances. To migrate users and groups, you must also have Create/Delete Users and Groups permissions for the target Essbase Server instance. An Essbase Server instance cannot be both source and target, and the target Essbase Server release must be the same as or later than the source Essbase Server release.

Before using the wizard:

- Be sure that the target server is running.

- Back up the databases to be migrated.

The following topics describe how to launch and use the wizard:

- [“Launching the Migration Wizard” on page 598](#)
- [“Information That Is and Is Not Migrated” on page 598](#)
- [“Migration Wizard Pages” on page 599](#)

Related Information

- [“Copying Applications” on page 94](#)
- [“Copying Databases” on page 102](#)
- [“Copying Essbase Server Users” on page 275](#)
- [“Copying Essbase Server Groups” on page 277](#)

Launching the Migration Wizard

- To launch this wizard, select **Wizards**, and then **Migration**.

Information That Is and Is Not Migrated

The following information is migrated with an application:

- Databases and their objects (such as calculation scripts, report scripts, rules files, member select files, and Essbase Query Designer files)
- All database outlines (including member properties, outline properties, and formulas)
- Application and database properties, such as cache settings, with the exception of disk volumes
- Users and groups
Passwords are migrated. After migration, you can edit target user and group properties without affecting source user and group permissions.
- Filters and their associations
After migration, you need not reassign filters to users or groups.
- Substitution variables
- Linked reporting objects (LROs)
- Custom-defined functions
- Custom-defined macros

The following information is *not* migrated with an application:

- Data (.pag and .ind files)

- Files that are not recognized as objects on Essbase Server, such as spreadsheet files, text files, MaxL script files, ESSCMD scripts, and so forth
- The Essbase configuration file (`essbase.cfg`)
- Disk volumes
- Partitions ([Copy partitions](#) separately.)
- Triggers

Migration Wizard Pages

Click a link below to view information about each page in the wizard:

- [Select Source and Target Essbase Server](#)
- [Select Source and Target Application](#)
- [Select Objects To Migrate](#)
- [Select Security Migration Options](#)
- [Select Individual Users to Migrate](#)
- [Select Individual Groups to Migrate](#)

Select Source and Target Essbase Server Page

On this page, you select the preferred type of migration and the source and target Essbase Server instances.

In the “User level” list, you select the migration type:

- Novice—You can migrate only types of Essbase objects. Therefore, you cannot migrate users and groups or individual objects. For example, you can migrate all calculation scripts associated with an application, but you cannot migrate an individual calculation script.
- Advanced—You can migrate individual objects, such as a particular calculation script or filter. Also, you can migrate selected users and groups or all users and groups (assuming that the users and groups have access to the application or to databases within the application) and can specify how security permissions associated with the users and groups are migrated.

Note: If the source or target Essbase Server instance is running in EPM System security mode, you cannot perform an Advanced migration.

In the Source Essbase Server and Target Essbase Server lists, you select, respectively, the Essbase Server instances from which and to which to migrate the application.

If you want to run the migration in the background, select the “Migrate in background” option. If you select the option, as the migration processes, you can exit the console, but you cannot shut down Essbase Administration Server. You can review the status of the migration in the [Background Process Status](#) window.

Select Source and Target Application Page

On this page, you select the source and target applications. On the target Essbase Server instance, a migrated application can be added as a new or replacement application. If the migrated application replaces (overwrites) a target application, the migrated objects replace the target objects that they duplicate.

Note: You cannot migrate between aggregate storage and block storage applications.

In the “Source application on Essbase Server” and “Target application on Essbase Server” boxes, select, respectively, the source application (the name on the source Essbase Server instance) and the target application (the post-migration name on the target Essbase Server instance).

If you want to replace existing objects on the target application (for example, if you want the outline and database properties from the source application and database to replace the outline and database properties from the target application and database), select the “Replace existing objects on target” option. Target objects that are not replaced are unchanged.

Select Objects To Migrate Page

This page displays a tree view of the source application and its related objects. How you select the objects to migrate with the application depends on the type of migration that you are performing:

- Novice migration—You can select databases and types of objects. You cannot select individual files, such as a particular calculation script or filter.
- Advanced migration—You can select databases and individual objects.

Select Security Migration Options Page

On this page, you specify how security permissions for migrated users and groups are migrated. Permissions on the source Essbase Server instance are unaffected.

Note: This page and its options apply only if you are performing an advanced migration.

The following options apply to migrated users and groups that, before migration, exist on the target Essbase Server instance. You can select only one option:

- Do not change permissions of user/group—Pre-migration and post-migration target permissions are the same. [Example](#)
- Reduce permissions of user/group—If source permissions are lower than pre-migration target permissions, target permissions are reduced to the level of the source permissions. [Example](#)
- Grant extra permissions to user/group—If source permissions are higher than pre-migration target permissions, target permissions are raised to the level of the source permissions. [Example](#)

If you want to migrate Administrator users and groups, you select the Copy Administrators option.

Select Individual Users to Migrate Page

On this page, you determine which users are migrated.

Note: This page and its options apply only if you are performing an advanced migration.

The Selected Users and Available Users boxes list, respectively, the users that are selected for migration and the users that are not selected for migration.

To change the status of a user (selected or not selected for migration), you select the user and click the appropriate single-arrow button. To change the status of all users listed one or the other box, you click the appropriate double-arrow button.

Select Individual Groups to Migrate Page

On this page, you determine which groups are migrated.

Note: This page and its options apply only if you are performing an advanced migration.

The Selected Groups and Available Groups boxes list, respectively, the groups that are selected for migration and the groups that are not selected for migration.

To change the status of a group (selected or not selected for migration), you select the group and click the appropriate single-arrow button. To change the status of all groups listed one or the other box, you click the appropriate double-arrow button.

If you want to specify whether all users associated with a group are migrated, you select the group and then select the “Migrate all associated users” option.

Move Field Dialog Box

You use the Move Field dialog box to relocate data-source fields within a rules file.

The “Select position” box lists the data-source fields in their current order. To move a field, select it, and click the Up or Down button. The Up or Down button is disabled if the selected field is, respectively, at the top or bottom of the list.

Related Information

- [“Moving Fields” on page 224](#)
- [“About Field Operations” on page 220](#)
- [“Creating a Data Load Rules File” on page 198](#)

- [“Creating Dimension Build Rules Files” on page 198](#)

New Dialog Box

You use the New dialog box to initiate the process of creating Essbase objects, users, and groups.

The options of the Essbase tab, when selected, open dialog boxes that you use to create various types of Essbase objects:

Essbase Tab Option	Dialog Box That Opens
Block Storage Application	Create Application
Aggregate Storage Application	Create Application
Database	Create Database
User	Create User
Group	Create Group

The options of the Scripts tab, when selected, open editors that you use to create various types of Essbase scripts and objects:

Scripts Tab Option	Editor That Opens
Report script	Report Script Editor
Calculation script	Calculation Script Editor
MaxL script	MaxL Script Editor
MDX script	MDX Script Editor
Data rules file	Data Prep Editor

From the Wizards tab, you can open various Essbase wizards:

- [Migration wizard](#)
- [Aggregate storage outline conversion wizard](#)
- [Aggregate storage partition wizard](#)
- [User setup wizard](#)

Related Information

- [“Creating Applications” on page 90](#)
- [“Creating Databases” on page 98](#)
- [“Creating Users on Essbase Servers” on page 262](#)
- [“Creating Groups on Essbase Servers” on page 263](#)

- [“Creating Scripts” on page 337](#)
- [Creating MaxL Scripts](#)
- [“Creating Rules Files” on page 203](#)

New Function Dialog Box

You use the New Function dialog box to create a custom-defined function on the Essbase Server instance that is identified in the Essbase Server box.

Note: To edit a function on a different Essbase Server instance, in Enterprise View, under the preferred server, double-click the Functions node.

Only functions developed in Java can be created in Essbase. Custom-defined functions require Java Runtime Environment, which is installed as an option with Essbase.

To create a function, you enter information in the following text boxes:

- **Scope**—An application name (for local functions) or `<all apps>` (for global functions)
- **Name**—For example, `@JSUM`

For information about length limitations and naming conventions, see the *Oracle Essbase Database Administrator's Guide*.

- **Class**—Name of the full Java class used to develop the function

For example, the following compiled Java class might be archived in a `.jar` file:
`com.hyperion.essbase.calculator.Statistics1`, where `Statistics.java` was compiled into `Statistics.class` and the class was archived as `com/hyperion/essbase/calculator/Statistics.class`.)

- **Method**—Java class method associated with the function

For example, the `covariance` element of `com.hyperion.essbase.calculator.Statistics.covariance` identifies a method.

- **Spec**—The Essbase calculator-syntax specification string (optional); for example, `@COVARIANCE (expList1, expList2)`

To use the output string of the `EssListCalcFunctions` API function to return the current function, you must use a specification string. If you do not use a specification string, you cannot enter a comment.

- **Comment**—A description (optional and possible only if a specification string is used)

You can select the Runtime option and, thereby, designate the current function as a runtime function. However, you should select Runtime only in special circumstances, as the Runtime property can seriously affect performance.

Related Information

- [“About Custom-Defined Functions and Macros” on page 351](#)

- [“Creating Custom-Defined Functions” on page 352](#)
- [“Custom-Defined Function Manager” on page 512](#)

Related Commands

- `create function` (MaxL) in the *Oracle Essbase Technical Reference*
- `display function` (MaxL) in the *Oracle Essbase Technical Reference*

New Macro Dialog Box

You use the New Macro dialog box to create custom-defined macros.

Read-only boxes:

- **Essbase Server**—Name of the current Essbase Server instance
- **Statement**—How the macro definition would be specified using a MaxL statement

Text boxes in which you enter information:

- **Scope**—The application name (for local macros) or `<all app>` (for global applications)
- **Name**—Name of the macro; for example, `@MYMACRO` (For naming restrictions, see the *Oracle Essbase Database Administrator's Guide*)
- **Signature**—Description of the style in which macro arguments are passed

For example, the following signature passes the macro as two comma-separated arguments followed by a list of arguments: `(SINGLE, SINGLE, GROUP)`

- **Expansion**—A string that determines how the signature is processed

For example, if you use the following macro, signature, and expansion, `@SUM3 (x, y, z)` is replaced with `@SUM3 (x + y + z)`:

- **Name**—`@SUM3`
- **Signature**—`(SINGLE, SINGLE, SINGLE)`
- **Expansion**—`(@1, @2, @3)`

- **Spec**—Essbase calculator-syntax specification string; for example, `@MYMACRO (mbrName, rangeList)`

A specification string is not required. You use a specification string to return the macro and its syntax by the output string of the `EssListCalcFunctions` API function.

- **Comment**—Not required and possible only if a specification string is used

Related Information

- [“About Custom-Defined Functions and Macros” on page 351](#)
- [“Creating Custom-Defined Macros” on page 356](#)
- [“Custom-Defined Macro Manager Window” on page 514](#)

Related Commands

- create macro (MaxL) in the *Oracle Essbase Technical Reference*
- display macro (MaxL) in the *Oracle Essbase Technical Reference*

New Variable Dialog Box

You use the New Variable dialog box to create substitution variables.

The Essbase Server box identifies the Essbase Server instance for which you are creating a variable. The box is read only.

In the following boxes, you select or enter various specifications for the variable:

- Application—Select the application to which to apply the variable or select `all apps` to apply the variable to all applications on the current server.
- Database—Select the database to which to apply the variable or select `all dbs` to apply the variable to all databases within the selected application.
- Name
- Value

Note: For rules for setting substitution variable names and values, see the *Oracle Essbase Database Administrator's Guide*.

Related Information

[“Managing Substitution Variables” on page 88](#)

Related Commands

- alter system (MaxL) in the *Oracle Essbase Technical Reference*
- alter application (MaxL) in the *Oracle Essbase Technical Reference*
- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- createvariable (ESSCMD) in the *Oracle Essbase Technical Reference*
- deletevariable (ESSCMD) in the *Oracle Essbase Technical Reference*
- listvariables (ESSCMD) in the *Oracle Essbase Technical Reference*
- updatevariable (ESSCMD) in the *Oracle Essbase Technical Reference*

New/Edit Trigger Dialog Box

You use the New/Edit Trigger dialog box to create or edit a trigger. The information that is entered in the dialog box is used to generate MaxL commands. Execution of the commands creates the specified trigger.

For information about using triggers to monitor data changes, see the *Oracle Essbase Database Administrator's Guide*.

You create or change a trigger as follows:

► To create or change a trigger:

1 In the New/Edit dialog box, the Database box displays the current database name, in the form `essbase_server.database`. To create a trigger for a different database, double-click the Triggers node under that database in Enterprise View. You enter a name in the Name field, and then select the Where tab.

2 In **Where Condition**, enter a Where condition using a valid, symmetric MDX slicer specification, as shown in the following example:

```
(Jan, Sales, Actual, [100], East)
```

The Where condition is displayed in the Definition box.

Optionally, select one of the following check boxes:

- **After Update**—When selected, creates a trigger that executes after the entire data update operation is complete. When cleared, creates a trigger that executes during a data update process by any cell update that meets conditions specified for the database area.
- **Log Values**—When selected, if **After Update** is cleared, logs new and old values in the spool file specified in the When clause; otherwise this does nothing.

3 Click **When Conditions**, and in the When box, enter a valid MDX conditional expression to define the condition to be tested, as shown in the following example:

```
Jan > 20
```

4 Specify an action to take when the trigger is activated by selecting one of the following check boxes:

- **Spool**—Creates a spool file when the trigger is activated. Enter a name for the file in the **Spool** text box.
- **Mail**—Sends an email when the trigger is activated. Enter the following information:
 - **SMTP Server**: The name of the SMTP server at your company.
 - **To**: The e-mail address to send the message when the trigger is activated.
 - **From**: The e-mail address from which the message is sent. This address defaults to the address of the person who is logged into Administration Services.
 - **Subject**: The subject line of the message.

Note: To enable Essbase to send email alerts, you must have Java Virtual Machine (JVM) installed on your system and configured for Essbase. You configure Essbase in the `essbase.cfg` file. See [“Viewing Configuration File Settings \(essbase.cfg\)” on page 310](#) for information on how to verify configuration settings, including JVM.

5 Click **Apply** to apply the When condition.

6 **Optional:** Click **New** to create another When condition and repeat Steps 2 and 3.

7 **Optional:** To specify an Else condition:

- a. Click **Else Clause**.
- b. Specify an action to take when the trigger is activated by selecting one of the following check boxes:
 - **Spool**—Creates a spool file when the trigger is activated. Enter a name for the file in the **Spool** text box.
 - **Mail**—Sends an email when the trigger is activated. Enter the following information:
 - **SMTP Server:** The name of the SMTP server at your company.
 - **To:** The e-mail address to send the message when the trigger is activated.
 - **From:** The e-mail address from which the message is sent. This address defaults to the address of the person who is logged into Administration Services.
 - **Subject:** The subject line of the message.

Note: To enable Essbase to send email alerts, you must have Java Virtual Machine (JVM) installed on your system and configured for Essbase. You configure Essbase in the `essbase.cfg` file. See [“Viewing Configuration File Settings \(essbase.cfg\)” on page 310](#) for information on how to verify configuration settings, including JVM.

8 Click **OK** to save the trigger.

Related Information

- [“About Triggers” on page 415](#)
- [“Creating Triggers” on page 416](#)
- [“Database Triggers Window” on page 541](#)
- “Monitoring Data Changes Using Triggers” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- `create trigger` (MaxL) in the *Oracle Essbase Technical Reference*
- `display trigger` (MaxL) in the *Oracle Essbase Technical Reference*

Open Dialog Box

You use the Open dialog box to open Essbase files and other files. Different files are opened in different ways, depending upon how the files were saved.

You use the File System tab to open files that are located on the file system. In the “Files of type” list, you can specify the type of file that you want to open.

You use the Essbase Server tab to open files from an Essbase Server application or database directory structure.

- Look in—Select the Essbase Server computer and the application or the application and database that contain the preferred file, and then select the file.
- File name—The name of the file that you select is displayed in this text box.
- Files of type—To limit the number of files available for selection, select a file type. If you invoked the Open dialog box from Data Prep Editor, the file-type list displays only data file types (for example, .xls and .txt files).

The Administration Server tab is not available when the Open dialog box is launched from certain components of Administration Services Console; for example, the dialog box is not available from Data Prep Editor.

You use the Administration Server tab to open files that are saved on Essbase Administration Server. The tab includes the following columns:

- Object—Lists the files saved on Essbase Administration Server
- Created By—Identifies the names of the Essbase Administration Server users who created or saved each file
- Modify Date column—Identifies the date and time that each file was last saved
- Shared column—Indicates whether the file can be shared by other Essbase Administration Server users

Related Information

- [“Opening Scripts” on page 338](#)
- [“Opening MaxL and MDX Scripts” on page 378](#)
- [“Opening Rules Files” on page 204](#)
- [“Opening and Editing Outlines” on page 149](#)
- [“Saving Scripts” on page 343](#)
- [“Saving MaxL and MDX Scripts” on page 385](#)
- [“Saving a Rules File” on page 211](#)
- [“Saving Outlines” on page 130](#)

Open SQL Data Sources Dialog Box

Before using data from an SQL database to create a rules file or perform a data load or dimension build, you must connect to the database.

In the Open SQL Data Sources dialog box, you specify the information needed to connect to the database. After you connect, you can view the contents of specified tables in Data Prep Editor.

In the Data Source Name group, you select an option:

- SQL data sources—Select a type.

- **Substitution Variables**—Select a substitution variable that is of the type that you selected in “SQL data sources.”
- **Oracle Call Interface (OCI) Service Name**—Select an Oracle database, using the format \$OCI\$<service_name>.
- **No SQL Data Source**—Either there is no data source for this rules file, or remove previously-set SQL data source information from this rules file.

In the Connect group, you enter connection information, such as database name, server name, application name, username, or password. Different databases require different information.

In the following boxes, you enter the following items, either directly or by clicking the Open button and entering information in a larger window:

- **Select**—The SQL select statement
The select statement specifies the data to retrieve from the SQL database. The default value is * (which selects all columns in a row).
- **From**—The directory path that specifies the location of the preferred SQL database or table
- **Where**—The SQL where clause
The where clause determines the conditions that must be met to retrieve the data. By default, the where clause is * (which selects all rows in the table).

Note: In the Select, From, and Where boxes, you can enter substitution variables, rather than "field=value" strings. When entering a substitution variable, place an ampersand (&) before the variable name.

You conclude the connection setup by clicking one of the following buttons:

- **OK/Retrieve**—To connect to the SQL database immediately
- **OK/Save**—To save your settings without connecting to the SQL database

Related Information

- [Opening an SQL Data Source](#)
- [“Loading Data and Building Dimensions” on page 199](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)

Options Dialog Box

You use the Options dialog box to set options for Administration Services Console.

The dialog box includes the following tabs:

- **Display**—To control the general appearance of the console

- [Script Editor Options](#)—To customize color-coding and formatting for script-editor text
- [Essbase](#)—To set options for locking Essbase objects, executing calculations and reports in the background, and associating outlines with objects being opened in editors
- [Outline Tools](#)—To specify what outline information is displayed in Outline Editor and Outline Viewer
- [MaxL Editor](#)—To specify the display and behavior of MaxL Script Editor
- [Outline Tools](#)—To specify what outline information is displayed in Outline Editor and Outline Viewer
- [MDX Editor](#)—To specify how MDX Script editor behaves and is displayed

You perform various dialog-box actions by clicking the following buttons:

- Defaults—To restore default settings for the dialog box. You are prompted to select the tabs on which to restore defaults.
- Reset—To remove changes made since the dialog box was opened. Changes that were saved by clicking **Apply** are not reset.
- Apply—To save settings
- Close—To close the window. Changes made without clicking **Apply** are not saved.

Related Information

- [Setting Display Options for Administration Services Console](#)
- [“Setting Essbase Default Options” on page 97](#)
- [“Locking and Unlocking Objects” on page 105](#)
- [“Executing Calculation Scripts” on page 345](#)
- [“Executing Report Scripts” on page 366](#)
- [“Customizing Outline Editor and Outline Viewer” on page 141](#)

Options Dialog Box—Essbase Tab

You use the Essbase tab to set preferences for locking Essbase objects, executing operations in the background, and associating outlines with editors.

In the “When opening the Essbase objects” box, you specify the lock-unlock setting that is applied when objects (such as calculation and report scripts are opened):

- Always lock object—Other users cannot modify, rename, or delete locked objects.
- Never lock object—Users can modify, rename, and delete objects that are not locked.
- Prompt me to lock object—This option is selected by default.

Note: All outlines opened in Outline Editor are locked.

In the “When executing calculation scripts” list, you select a background-process option that applies to full database and calculation-script calculations:

- Always calculate in background—As a calculation processes, you can continue working or exit the console. When you launch a calculation, an ID for the process is displayed. You can use the ID to track the status of the process in the [Background Process Status](#) window.
- Always wait for calculation to finish—You cannot continue working or exit the console until the calculation finishes.
- Prompt me to calculate in background—This option is selected by default.

In the “When executing report scripts” list, you select a background-process option that applies to report execution:

- Always execute report in background—As a report is executed, you can continue working or exit the console. When you initiate execution of a report, an ID for the process is displayed. You can use the ID to track the status of the execution in the [Background Process Status](#) window.
- Always wait for execution of report to finish—You cannot continue working or exit the console until the report execution is completed.
- Prompt me to execute report in background—This option is selected by default.

In the “When executing data loads/dimension builds” box, you select a background-process option that applies to data loads and dimension builds:

- Always execute data load/dimension build in background—As the data load or dimension build processes, you can continue working or exit the console. When you initiate the process, an ID is displayed. You can use the ID to track the status of the process in the [Background Process Status](#) window.
- Always wait for execution of data load/dimension build to finish—You cannot continue working or exit the console until the data load or dimension build is completed.
- Prompt me to execute data load/dimension build in background—This option is selected by default.

In the “When associating an outline in editor” group, you select an option that determines whether objects that you open in editors are associated with outlines:

- Always associate with an outline
- Never associate with an outline
- Prompt me to associate with an outline

If you select the “Show MaxL statements in the message panel” option, in the Messages pane, all MaxL statements sent from Administration Services to Essbase Server for execution are displayed. When statements are executed, a tab that contains the statements is added to the Messages pane.

Related Information

- [“Setting Essbase Default Options” on page 97](#)
- [“Locking and Unlocking Objects” on page 105](#)
- [“Executing Calculation Scripts” on page 345](#)
- [“Executing Report Scripts” on page 366](#)
- [“Options Dialog Box” on page 609](#)

Options Dialog Box—Display Tab

You use the Display tab to modify the display of the console interface. Display tab settings affect all elements of the console display, including script editors, Enterprise View, dialog boxes, and so forth.

In the “Font settings” group, you can specify the following font settings:

- Font
- Size
- Style—Bold or Italic

In the Toolbar layout group, you can specify a layout for the console toolbars:

- Advanced—The general toolbar is displayed next to the menu bar, and the active window toolbar is displayed below the general and menu toolbars.
- Inline—The general toolbar is displayed next to the menu bar, and the active window toolbar is displayed inside the active window.
- Standard—The general and the active window toolbars are displayed next to the menu bar.

You can [hide](#) any displayed toolbar.

Note: The buttons of the general toolbar apply throughout the console (for example, Save and Print buttons). The buttons of the active window toolbar apply only to the active window. For example, if Calculation Script Editor is the active window, a toolbar that contains buttons that apply to Calculation Script Editor (for example, Check Syntax and Execute Script buttons) is displayed.

Related Information

- [Setting Display Options for Administration Services Console](#)
- [Console Toolbar](#)
- [“Options Dialog Box” on page 609](#)
- [Features of the Administration Services Console](#)

Options Dialog Box—MaxL Editor Tab

You use the MaxL Editor tab to set options and default behavior for MaxL Script Editor.

To specify how MaxL Script Editor behaves, from the Editor group, select one or more options:

- Enable auto-completion—As you type, MaxL Script Editor provides lists of relevant keywords and values. The option is selected by default.
- Enable GUI help with auto-completion—MaxL Script Editor launches a GUI component that helps you complete certain MaxL statements. For example, if you are typing the `create filter` statement, MaxL Script Editor launches Filter Editor. The option is available only if the “Enable auto-completion” option is selected.
- Synchronize Enterprise View after execution—Enterprise View is automatically updated with changes that result from execution of MaxL scripts. For example, immediately after a database-creation script is executed, Enterprise View is updated to include the new database. The option is selected by default.

To specify how results are displayed in the Results pane, from the “Results panel” group, select or clear the following options. By default, all options are selected.

- Echo statements—Select to display all MaxL statements and results. Clear to display only results.
- Keep results in one tab—Select to display all results on one tab. Clear to display results on multiple tabs, one tab per statement.
- Show information messages—Select to display information messages with results. Clear not to display of information messages with results.
- Show warning messages—Select to display warning messages with results. Clear not to display warning messages with results.

To specify what happens when an error occurs during execution of a script, from the “Errors during execution” group, select an option. With all options, the error is written to the Results pane.

- Stop execution
- Prompt to continue—You are asked whether to continue or stop execution. By default, the option is selected.
- Ignore and continue

To specify what happens when an undefined variable is encountered during script execution, from the “Undefined variables” group, select an option. With all options, the undefined variable error is written to the Results pane.

- Stop execution
- Prompt to continue—You are asked to continue or stop execution. By default, the option is selected.
- Ignore and continue

Related Information

- [Setting MaxL Execution Options](#)
- [“Resolving Undefined Variables” on page 383](#)
- [Viewing MaxL Results](#)
- [“Using Auto-Completion in MaxL and MDX Script Editors” on page 381](#)
- [“About MaxL Script Editor” on page 376](#)
- [“Using MaxL Data Definition Language” in the *Oracle Essbase Database Administrator's Guide*](#)
- [MaxL Reference in the *Oracle Essbase Technical Reference*](#)
- [“Options Dialog Box” on page 609](#)

Options Dialog Box—MDX Editor Tab

You use the MDX Editor tab to set options and default behavior for MDX Script Editor.

The “Enable auto-completion” option (within the Editor area) is selected by default. When the option is selected, MDX Script Editor prompts you with relevant keywords as you type MDX statements.

To specify what information (in addition to results) is displayed in the Results pane, from the “Results panel” group, you select one or more options. All options are selected by default.

- Echo statements—MDX statements are displayed.
- Show information messages
- Show warning messages

Also, in the “Results panel” group, by default, the “Keep results in one tab” option is selected. In this case, all results for all statements are displayed on one tab. If the option is cleared, results are displayed on multiple tabs, one per statement.

To determine what happens when an error occurs during script execution, from the “Errors during execution” group, you select an option. In all cases, the error is written to the Results pane:

- Stop execution
- Prompt to continue—You decide whether to continue or stop the execution. By default, this option is selected.
- Ignore and continue

To determine what happens when an undefined variable is encountered during script execution, from the “Undefined variables” group, you select an option. In all cases, the variable error is written to the Results pane.

- Stop execution

- Prompt to continue—You decide whether to continue or stop the execution. By default, this option is selected.
- Ignore and continue

Related Information

- [“Setting MaxL and MDX Execution Options” on page 386](#)
- [“Resolving Undefined Variables” on page 383](#)
- [“Viewing MaxL and MDX Results” on page 388](#)
- [Using Auto-Completion in MaxL and MDX Script Editor](#)
- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Script Editor” on page 392](#)
- [“Options Dialog Box” on page 609](#)

Options Dialog Box—Outline Tools Tab

You use the Outline Tools tab to set display properties for the outline trees of Administration Services Console. The properties become effective the next time you open the outline.

In the “View in tree” group, you can select any combination of items:

- Consolidation—Both dialog boxes display consolidation operators (such as +, -, and %).
- Formulas—Outline Editor displays the first 250 characters of each member formula.
- Dimension tags—Both dialog boxes display dimension tags (accounts, time, attribute, attribute calculation, country, or CurPartition). Even when the option is selected, no dimension tag is displayed for any dimension that is tagged as No Dimension Type.
- Aliases—Outline Editor displays member alias names (following the word **Alias**).
- Member properties—Both dialog boxes display member properties (such as Label Only and Never Share).
- Comments—Outline Editor displays comments, which are enclosed as follows: /* ... */.
- Associations—Outline Editor displays attribute names next to the base dimension members with which the attributes are associated.
- Attribute types—Both dialog boxes display the type of attribute dimension. The type information follows the word **Type**.
- Child count—Both dialog boxes display the number of children that each member contains.

You can also select a confirmation option:

- Delete member—To be prompted each time you delete a member from an outline.
- Move member—To be prompted each time you move a member within an outline

Related Information

- [Customizing Outline Viewer and Outline Editor](#)
- [“Options Dialog Box” on page 609](#)
- [“Outline Editor Window” on page 617](#)
- [“Outline Viewer Window” on page 621](#)

Options Dialog Box—Script Editor Options Tab

You use the Script Editor Options tab to customize script editors (such as Calculation Script Editor, Report Script Editor, MaxL Script Editor, and Formula Editor). You can select colors for script elements and can control text formatting.

The Section column lists the script elements for which you can select colors:

- Comments—Annotations that are ignored when scripts are executed
- Keywords—Calculation and report commands and keywords in MaxL statements
- Functions—Calculation functions and MDX statements
- Options—Terminals for MaxL statements and options for calculation and report commands
- Strings—Text that is enclosed within single or double quotation marks.
- Numbers—Any numeral
- Operators—Mathematical, conditional, logical, and cross-dimensional operators

The color column displays the color selected for each element. To change the color, from the drop-down list, select a standard color or Custom. If you select Custom, you can use the Set Editor Color dialog box to select a custom color.

In the “Tab size” box, you enter a tab-stop size, in number of characters. For example, a tab size of 2 indents lines by the length of two characters.

To specify wrap behavior, you select the first option or both options:

- Enable line wrap—Without regard to the integrity of words, splits text at the right margin of the editing pane.
- Enable word wrap—Splits text between words.

Related Information

- [“Customizing Script Color-Coding” on page 335](#)
- [“Customizing Script Formatting” on page 335](#)
- [“Options Dialog Box” on page 609](#)

Setting Display Options for Administration Services Console

You can set display options for Administration Services Console. Your preferences are stored on the Essbase Administration Server so that your view of the console is always the same no matter which computer you connect from.

➤ To set display options for the console:

- 1 From the menu bar, select **Tools**, and then **Console options**.
- 2 Select the **Display** tab.
- 3 Select the desired font name, size, and style for the select UI component.
- 4 Select the desired toolbar layout.
- 5 Click **Apply** to save the settings.

The console display changes according to your new settings.

- 6 Click **Close** to close the dialog box.

Related Information

[Options Dialog - Display Tab](#)

Outline Editor Window

Outline Editor is a graphical environment for manually defining and maintaining Essbase database outlines and their properties.

When you open an outline, the Outline menu is added to the menu bar of the console. A separate window is opened for each outline that you edit.

Note: For a quick, read-only view of outlines, use [Outline Viewer](#).

Outline Editor provides the following tabs:

- **Outline**—Used to manipulate dimensions and members within the outline
- **Properties**—Used to define outline properties, such as attribute settings and dimension data-storage properties
- **“Query Hints” on page 147**—Used to define query hints for a dimension
- **Modifications**—Used to view modifications made to the outline during the current editing session
- **Verification**—Used to view messages and errors that result from outline verification
- **Find Results**—Used to work with members that are displayed as the result of a Find operation

Related Information

- **“About Outlines” on page 124**

- [Opening Outlines](#)
- “Creating and Changing Database Outlines” in the *Oracle Essbase Database Administrator's Guide*

Outline Editor Window—Modifications Tab

The Modifications tab displays a least-recent to most-recent list of the outline modifications that occurred during the current editing session (description and time of each action). On the tab, you can view all changes and [undo](#) some changes.

Related Information

- [“Outline Editor Window” on page 617](#)
- [“Undoing Outline Changes” on page 169](#)

Outline Editor Window—Outline Tab

The Outline tab of Outline Editor displays an outline in a collapsible tree view. The branches on the level immediately below the database name identify dimensions. The branches on the levels below the dimension names identify members.

Next to each dimension and member name is displayed information about the dimension or member. You can [customize Outline Editor](#) so that selected information is displayed.

You can perform the following operations on the Outline tab:

- [Access dimension or member properties](#)
- [Create or update member formulas](#)
- [Name generations and levels](#)
- [Enable Dynamic Time Series members](#)
- [Cut, copy, delete, or rename members](#)
- [Add or paste child or sibling members](#)
- [Sort child members in ascending or descending order](#)
- [Split one view into multiple views \(the same outline\)](#)

Related Information

- [“About Outline Editor” on page 140](#)
- [“Manipulating Dimensions and Members in an Outline” on page 145](#)
- [Customizing Outline Viewer and Outline Editor](#)
- [“Outline Editor Window—Properties Tab” on page 619](#)
- [“Outline Editor Window—Modifications Tab” on page 618](#)
- [“Outline Editor Window—Verification Tab” on page 621](#)

Outline Editor Window—Properties Tab

You use the Properties tab of Outline Editor to view and edit the following types of outline properties:

- Case-sensitivity
- Alias table settings
- Uniqueness requirement for member names
- Attribute settings
- Dimension storage types

Note: The contents of the tab differ, depending upon whether you are working with a block storage or an aggregate storage outline.

The following nodes apply to database properties:

- Case sensitive members—Specifies whether member names and UDAs are case sensitive. For example, if you select true, Product and product represent two members, and, if you select false, Product and product represent one member.
- Outline type—Specifies [aggregate storage](#) or [block storage](#) or currency. The setting was defined when the database was created and cannot be changed.
- Duplicate member names allowed—Identifies true (if the outline is enabled for [duplicate member names](#)) or false (if unique member names are required). You can change false to true but cannot change true to false.
- Alias tables—Lists the alias tables that are associated with the outline. The alias table named *Default* is listed first. You right-click the node to display a menu that enables you to [create](#), [delete](#) or [clear alias tables](#). You right-click a table name to perform actions on the selected table or to import or export a table.

The “Attribute settings” node applies only to attribute dimensions. To define how Essbase handles names in attribute dimensions, specify the following properties:

- Prefix/Suffix format—You select None (to present member names without prefixes or suffixes), or you perform the following actions:
 1. Select Value.
 2. Select a prefix or suffix value: Dimension, Parent, Grandparent, or Ancestors.
 3. Select a separator (to place between the prefix or suffix and the original name): underscore (_), pipe (|), or caret. (^).
 4. Select Prefix or Suffix.

Note: You use prefixes or suffixes to ensure that member names are unique. By default, attribute member names do not include prefixes or suffixes.

- Calculation dimension names—You specify a name for the Attribute Calculations dimension or for any member of the Attribute Calculations dimension. The specified names are used in reports and spreadsheets. Member functions are not affected by member names. For example, no matter what its name, the second member of the Attribute Calculations dimension counts. For block storage databases, the default names are Sum, Count, Min, Max, and Avg. For aggregate storage databases, only the Sum member is used.
- Boolean, date, and numeric attribute settings—You specify member-name formats:
 - For Boolean dimensions, for example, specify Yes for true and No for false.
 - For date attribute dimensions, select Month First (*mm-dd-yyyy*) or Day First (*dd-mm-yyyy*).
 - For numeric dimensions, select “Bottoms of ranges” or “Tops of ranges,” and specify one or more values. For example, if you select “Tops of ranges” and specify the attributes 1000, 100000, and 1000000, the ranges are 0-1000, 1001-100000, and 100001-1000000.

For the dimensions of block storage databases, in the “Data storage” node, you can set a storage property—Auto configure or Dimension storage types. If the “Auto configure” option is selected, Essbase designates dimensions as dense (containing values for most intersections) or sparse (containing values for relatively few intersections). If “Auto configure” is not selected, you can, for user-created dimensions, in the “Dimension storage types” node, select Dense or Sparse. By default, attribute dimensions are permanently set as sparse. You can change underlined settings (by clicking their values).

Related Information

- [“Opening and Editing Outlines” on page 149](#)
- “Creating and Changing Database Outlines” in the *Oracle Essbase Database Administrator's Guide*
- [“Setting Outline Properties” on page 129](#)

Outline Editor Window—Text List Manager Tab

You use the Text List Manager tab of the Outline Editor to create and edit Text List objects.

In addition to numeric measures, databases can also have typed measures with text or date based values. Typed measures enable cell values to contain one of an enumerated list of text labels. These labels are defined, at the outline level, using a mapping artifact called a Text List object.

The Text Lists pane lists Text List objects, enables you to add, delete, import, and export Text List objects, and to sort them alphabetically.

Note: You can only import to a new Text List. If you open an existing Text List, the Import option is disabled.

The Edit Mappings pane displays details for the selected Text List object. From this pane you can define typed measures and map them to internally stored integers. In this pane, you can add or delete mappings and automatically generate a mapping of Text List objects to IDs.

Outline Editor Window—Verification Tab

The Verification tab lists the outline and member errors that are identified during outline verification.

Related Information

- [“About Outline Editor” on page 140](#)
- [“Outline Editor Window” on page 617](#)
- [“Verifying Outlines” on page 131](#)

Outline Print Options Dialog Box

You use the options of the Outline Print Options dialog box to print or preview an outline:

- All expanded items—Print all members (thus, all nodes are expanded)
- Only visible items—Print the members that are displayed on the Outline tab of Outline Viewer or Outline Editor

Related Information

[“Printing Outlines” on page 133](#)

Outline Viewer Window

You use the tabs of Outline Viewer to view (but not modify) outlines:

- [Outline](#)—Displays a tree view of the outline
- [Properties](#)—Displays outline properties, such as generation and level names and attribute settings

Because Outline Viewer loads members into memory only as you need to see them, it provides information relatively quickly. You can [customize Outline Viewer](#) to display only selected information.

Note: To modify outlines, you use [Outline Editor](#).

Related Information

- [“About Outlines” on page 124](#)

- [“Viewing Outlines” on page 135](#)
- [“About Outline Viewer” on page 135](#)
- [“About Outline Editor” on page 140](#)

Outline Viewer—Outline Tab

Outline Viewer displays members immediately. In contrast, Outline Editor displays members only after the outline is loaded into memory on the Essbase Administration Server computer.

Description of the Outline tab of Outline Viewer:

- Dimensions are located on the branches immediately below the database name.
- Members are located on the branches below the dimension names.
- Next to each dimension and member name is displayed information about the dimension or member.
- You can expand and collapse dimension and member hierarchies.
- You can divide the view into multiple views.
- You can display a secondary pane that describes the properties of a dimension or member by right-clicking it.
- You can view the attributes of a member by right-clicking it and selecting “Attribute Viewer.”

You can [customize Outline Viewer](#) so that the Outline tab displays only selected information. In any case, Outline Viewer displays less information than is displayed in Outline Editor.

Related Information

- [“About Outline Viewer” on page 135](#)
- [“Outline Viewer Window” on page 621](#)
- [“Outline Viewer—Properties Tab” on page 622](#)
- [“About Outline Editor” on page 140](#)
- [“Outline Editor Window—Outline Tab” on page 618](#)
- [“Attribute Viewer Window” on page 484](#)

Outline Viewer—Properties Tab

The Properties tab displays a tree view of outline properties. Typically, values are displayed next to the lowest level items.

Note: To modify outline properties, use [Outline Editor](#).

The Information nodes display the following information:

- Case-sensitive member names—True (Members whose names differ only by case are treated as multiple members.) or false (Members whose names differ only by case are treated as one member.)
- [Duplicate member names allowed](#)—True (Duplicate member names are accepted.) or false (Unique member names are required.)

The duplicate member name setting is set when the database is created or in the Properties tab of Outline Editor.

- Outline type—[Aggregate storage](#), currency, or [block storage](#)
Outline type is set when a database is created. The setting cannot be changed.
- Auto configure dimension storage type—For block storage databases, true (Essbase designates dimensions as dense or sparse.) or false (The default setting, which is sparse, must be maintained manually.)
- Alias tables—A list of the alias tables associated with the outline

The Generation Names and Level Names nodes list, respectively, the names of the generations and levels. For example, in the Sample Basic database, Quarter is the name for generation 2 of the Year dimension, and SKU is the name for level 0 of the Product dimension. For outlines that permit [duplicate member names](#), the nodes indicate, respectively, whether unique member names are required in particular generations and levels.

The Attribute Settings node displays settings for attribute dimensions and members.

- Prefix/Suffix format—Settings that define the format for attribute members
- Calculation dimension names—Names of the Attribute Calculations dimension and its members
- Boolean, date, and numeric attribute settings—Name settings for members of Boolean and date attribute dimensions
- Numeric ranges represent—Whether a value represents the top or bottom of an attribute range

Note: Unless stated otherwise, you can use the Outline Editor Properties tab to define these properties.

Print Options Dialog Box

You use the Print Options dialog box to print or preview a rules file.

To print the contents of one or more dialog boxes, you select one or more of the following options:

- Field properties—Field Properties dialog box
- Data source settings—Data Source Properties dialog box
- Data load settings—Data Load Settings dialog box
- Dimension build settings—Dimension Build Settings dialog box

- Dimension properties—Dimension Properties dialog box.

Related Information

[“Printing Rules Files” on page 214](#)

Propagate Password to Essbase Servers Dialog Box

You use the Propagate Password to Essbase Servers dialog box to change a user's password and then propagate the new password to all Essbase Server instances on which the user exists.

In the Password and “Confirm password” boxes, you enter and reenter the user's password. Passwords are not case-sensitive. For length limitations, see the *Oracle Essbase Database Administrator's Guide*.

The Selected and Available boxes list, respectively, the Essbase Server instances to which the password will be propagated or can be propagated. You can move instances from one to the other box in the following ways:

- To move one instance, select it and click the appropriate single-arrow button.
- To move multiple instances, select multiple instances (using the Shift or Ctrl keys) and click the appropriate single-arrow button.
- To move all instances listed in one box, click the appropriate double-arrow button.

Related Information

- [“Propagating Passwords Across Servers” on page 283](#)
- [“Copying Essbase Server Users” on page 275](#)

Query Hints Selection Dialog Box

When, in Outline Editor, under the Query Hints tab, you double-click a dimension, the Query Hints Selection dialog box is displayed.

In the outline that is displayed in the Dimensions pane, you select the member that you want to use for query aggregation.

You can perform the following actions:

- To search for a member, click the **Find Members** button and then use the Find Members dialog box.
- To display information about a member (generation, level, and associated formulas, UDAs, and comments), you select the member and click the Information button.

Record View Count Dialog Box

In the boxes of the Record View Count dialog box, you enter values that determine which records are displayed in Data Prep Editor:

- View count—The number of records to be displayed (up to 500). By default, Data prep Editor displays 50 records.
- Start record—The number of the first record to be displayed. For example, if you enter 5, Data Prep Editor does not display records 1 through 4. By default, Data Prep Editor begins the display with record 1.

Related Information

[“About Data Prep Editor” on page 203](#)

Register Essbase Server with Performance Management Architect Dialog Box

You use the Register Essbase Server with Performance Management Architect dialog box to register or deregister Essbase servers with Performance Management Architect.

Note: You can register only Essbase Server instances that are externalized to Oracle Hyperion Shared Services.

The Selected box and the Available box list, respectively, servers that have been registered with Oracle Hyperion EPM Architect and servers available to register.

You move servers from one to the other list (and, thus, grant or rescind permissions) in one of the following ways:

- To move one server, select it, and click the appropriate single-arrow button.
- To move all servers of one box, click the appropriate double-arrow button.

The selected server is displayed under Server Name. You can assign a user-friendly name for this server by typing it under Instance Name.

Reject Record Dialog Box

You use the Reject Record dialog box to determine which data-source records are not loaded during a data load or dimension build.

In the Boolean group, you select Or (to reject records that contain a field that meets any rejection criterion) or And (to reject records that contain a field that meets all rejection criteria). The default selection is And.

In the following columns, you define the criteria by which data records are rejected:

- **Type**—Select String or Number, to base a rejection criterion on, respectively, a string or numeric value.
- **String/Number**—Enter the string or number on which to base the rejection criterion.
- **Condition**—Select Equal, Not equal, Greater than, Greater than or equal to, Less than, Less than or equal to, Contains, or Does not contain. The condition that you select is combined with your Type and String/Number selections to create a criterion. For example, if you select Or and String, enter XYZ, and select Equal, all records that contain a field with a value of XYZ are rejected. For example, if you select Or and Number, enter 5, and select Less than or equal to, all records that contain a field value that is less than or equal to 5 are rejected.

Note: The Contains and Does not contain conditions can be used only with strings.

- **Case-sensitive**—If you selected String and you want the rejection criterion to be case-sensitive, select the option.

To create a criterion, you click the **New** button. To delete a criterion, you select it, and click the **Delete** button.

Related Information

- [“Rejecting Records” on page 219](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)

Rename Alias Table Dialog Box

You use the Rename Alias Table dialog box to rename alias tables.

The “Current name” box displays the name of the selected alias table.

In the “New name” box, you enter a new name for the selected alias table. Alias-table names must adhere to the naming rules for dimensions and members. For rule details, see the *Oracle Essbase Database Administrator's Guide*

Related Information

- “Setting Aliases” in the *Oracle Essbase Database Administrator's Guide*
- [“Renaming Alias Tables” on page 175](#)

Related Commands

- `alter object` (MaxL) in the *Oracle Essbase Technical Reference*
- `renameobject` (ESSCMD) in the *Oracle Essbase Technical Reference*

Rename Application Dialog Box

To rename an application, in the “Rename to” box of the Rename Application dialog box, enter a new name. Follow the naming conventions that are detailed in the *Oracle Essbase Database Administrator's Guide*

Related Information

[“Renaming Applications” on page 95](#)

Related Commands

- `alter application` (MaxL) in the *Oracle Essbase Technical Reference*
- `renameapp` (ESSCMD) in the *Oracle Essbase Technical Reference*

Rename Calculation Script Dialog Box

In the Rename box of the Rename Calculation Script dialog box, you can enter a new name for a current calculation script. For length limitations, see the *Oracle Essbase Database Administrator's Guide*.

Related Information

[“Renaming Scripts” on page 348](#)

Related Commands

- `alter object` (MaxL) in the *Oracle Essbase Technical Reference*
- `renameobject` (ESSCMD) in the *Oracle Essbase Technical Reference*

Rename Custom View Dialog Box

You use the Rename Custom View dialog box to rename custom views. By default, custom views are named `MyView<number>`.

The “Current name” box displays the name of the selected custom view.

In the “Rename to” box, you enter a new name for the selected custom view.

Related Information

- [“Renaming a Custom View Tab” on page 52](#)
- [“About Custom Views” on page 49](#)
- [“Creating Custom Views” on page 50](#)
- [“Arranging Objects in Custom Views” on page 51](#)

Rename Database Dialog Box

To rename a database, in the “Rename to” box of the Rename Database dialog box, enter a new name. Follow the naming conventions detailed in the *Oracle Essbase Database Administrator's Guide*.

Related Information

[“Renaming Databases” on page 103](#)

Related Commands

- alter database rename (MaxL) in the *Oracle Essbase Technical Reference*
- renamedb (ESSCMD) in the *Oracle Essbase Technical Reference*

Rename Filter Dialog Box

To rename a security filter, in the “Rename to” box of the Rename Filter dialog box, enter a new name.

Filter names can consist of letters, numbers, and spaces. For length limitations, see the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.

Related Information

- [“Renaming Filters” on page 291](#)
- [“Managing Filters” on page 288](#)

Related Commands

alter object (MaxL) in the *Oracle Essbase Technical Reference*

Rename Function Dialog Box

You use the Rename Function dialog box to rename custom-defined functions:

- Function name—Box that displays the current name (read only)
- Rename to—Box in which you enter the new name (For naming restrictions, see the *Oracle Essbase Database Administrator's Guide*.)
- Overwrite existing function—Option that determines whether functions already using the new name are overwritten

Related Information

[“Renaming Custom-Defined Functions” on page 355](#)

Related Commands

create function (MaxL) in the *Oracle Essbase Technical Reference*

Rename Group Dialog Box

To rename a group of Essbase Server users, in the “Rename to” box of the Rename Group dialog box, enter a new name.

Group names must begin with a letter or number and are not case-sensitive. For length limitations, see the *Oracle Essbase Database Administrator's Guide*.

Renaming a group does not affect users in the group.

Related Information

[“Renaming Groups” on page 279](#)

Related Commands

alter group (MaxL) in the *Oracle Essbase Technical Reference*

Rename Macro Dialog Box

You use the Rename Macro dialog box to rename custom-defined macros:

- Macro name—Box that displays the current name (read only)
- Rename to—Box in which you enter the new name (For naming restrictions, see the *Oracle Essbase Database Administrator's Guide*.)
- Overwrite existing function—Option that determines whether macros that use the new name are overwritten

Related Information

[“Renaming Custom-Defined Macros” on page 358](#)

Related Commands

create macro (MaxL) in the *Oracle Essbase Technical Reference*

Rename Report Script Dialog Box

To rename a report script, in the “Rename to” box of the Rename Report Script” dialog box, enter a new name. For length limitations, see the *Oracle Essbase Database Administrator's Guide*.

Related Information

[“Renaming Scripts” on page 348](#)

Related Commands

- `alter object` (MaxL) in the *Oracle Essbase Technical Reference*
- `renameobject` (ESSCMD) in the *Oracle Essbase Technical Reference*

Rename Rules File Dialog Box

To rename a rules file, in the “Rename to” box of the Rename Rules File dialog box, you enter any name that is valid within your operating system. For length limitations, see the *Oracle Essbase Database Administrator's Guide*.

To all rules file names, Essbase adds an extension of `.rul`.

Related Information

[“Renaming Rules Files” on page 213](#)

Related Commands

- `alter object` (MaxL) in the *Oracle Essbase Technical Reference*
- `renameobject` (ESSCMD) in the *Oracle Essbase Technical Reference*

Rename User Dialog Box

To rename an Essbase Server user, in the “Rename to” box of the Rename User dialog box, you enter a new username.

Rules for renaming users:

- You cannot rename yourself or any user who is currently connected to Essbase Server.
- Names must begin with letters or numbers and must adhere to the length limitations detailed in the *Oracle Essbase Database Administrator's Guide*.
- Names can include any special character other than a backslash (`\`).
- Names are not case-sensitive.

Related Information

[Renaming Users](#)

Related Commands

- `alter user` (MaxL) in the *Oracle Essbase Technical Reference*
- `renameuser` (ESSCMD) in the *Oracle Essbase Technical Reference*

Repair Partition Dialog Box

You use the Repair Partition dialog box to repair partitions that include invalid application, database, or user information.

In the fields of the Data Source and Data Target groups, you specify information, respectively, for the source and target. Only fields that need repair are available:

- Essbase Server—Name of the Essbase Server instance on which the source or target database resides
- Application—Name of the application that contains the source or target database
- Database—Name of the source or target database
- User—Username that the partition uses to connect to the source or target Essbase Server instance
- Password—Password that the partition uses to connect to the source or target Essbase Server instance

Related Information

- [“Repairing Partitions” on page 409](#)
- [“Viewing Partitions in Enterprise View” on page 396](#)
- [“Creating Partitions” on page 397](#)
- “Designing Partitioned Applications” in the *Oracle Essbase Database Administrator's Guide*
- Creating and Maintaining Partitions in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- alter partition (MaxL) in the *Oracle Essbase Technical Reference*
- drop partition with force (MaxL) in the *Oracle Essbase Technical Reference*

Replace Dialog Box

Within text editors (such as MaxL Script Editor and Calculation Script Editor), you can use the Replace dialog box to find and replace text.

In the Find box and the “Replace with” box, you enter, paste, or select, respectively, the text to be found and the replacement text.

If you want your search to be case-sensitive, select the **Match case** option.

Related Information

- [“Find Dialog Box” on page 577](#)
- [“Finding Text in Editors” on page 143](#)

Replace in Outline Dialog Box

Within Outline Editor, you can use the Replace in Outline dialog box to find and replace text.

In the “Search for” and “Replace with” boxes, you enter or paste, respectively, the text to be found and the replacement text.

To specify search parameters, you select one or more of the following options:

- **Match words only**—For example, if the option is selected and 100 is entered, the search returns only the 100 member. If the option is cleared and 100 is entered, the search returns all members that contain 100, such as 100, 100–10, 100–10 (shared member), and Large-21000000.
- **Match case**—For example, if the option is selected and the word “product” is entered in the “Search for” box, the product member, but not the Product member, is returned.
- **Select dimensions**—Restrict the search to the selected dimension. By default, all dimensions are searched.
- **Select alias tables**—Include the selected alias table in the search. By default, no alias table is searched.
- **Match text in**—Include one or more of the following types of information in the search: member names, formulas, and UDAs.

Related Information

- [Finding Members and Text in Outlines](#)
- [“Finding Text in Editors” on page 143](#)

Replay Transactions Dialog Box

Use this dialog box to specify transactions to replay while recovering a database.

In order to replay transactions, you must have the Administrator role.

Dialog Box Items

- **Based on last replay time or last restored backup's time**—Uses the date and time of the last replay request as the beginning of the period for transactions to replay
- **Since time**—Allows the user to enter date and time for the beginning of the period for transactions to replay
- **Replay in the background**—Executes transaction replay as a background process

Related Information

- [“Replaying Logged Transactions” on page 110](#)
- [“Viewing Logged Transactions” on page 111](#)
- [“Enabling Transaction Logging” and “Configuring Transaction Replay” in the *Oracle Hyperion Enterprise Performance Management System Backup and Recovery Guide*](#)

Related Commands

alter database (MaxL) in the *Oracle Essbase Technical Reference*

Report Viewer Window

The Report Viewer window displays reports that are generated from report scripts. You can print, save, or copy the contents of the window, and you can find specified report text or a specified report line.

On the console toolbar, in the Font box, you can select the font that Report Viewer uses. If you want properly aligned columns, select a monospaced font, such as Courier.

You can right-click anywhere in the window and perform or initiate one of the following actions:

- Undo
- Redo
- Cut
- Copy
- Paste
- Clear—Deletes all content from the window
- Select all.
- Find—Opens the [Find](#) dialog box
- Replace—Opens the [Replace](#) dialog box

Related Information

- [“About Report Scripts” on page 363](#)
- [“Executing Report Scripts” on page 366](#)
- [“Saving Reports” on page 367](#)
- [“Printing Administration Services Console Windows” on page 41](#)

Restore Database Dialog Box

You use the Restore Database dialog box to restore databases from archive files. You select from the following options:

- Restore from file—Enter the archive file name.
- Force restore—Select if the application or database name in the backup file differs from the application or database name.
- Restore in the background—Executes the restore command as a background process.
- Advanced—Click to specify volume mapping options.
- Add (advanced option)—Adds a disk volume to the mapping table.

- Delete (advanced option)—Removes a disk volume from the mapping table.

Related Information

- [“Backing Up Block Storage Databases” on page 108](#)
- [“Restoring Block Storage Databases” on page 109](#)

Related Commands

alter database (MaxL) in the *Oracle Essbase Technical Reference*

Restructure Database Dialog Box

In the Restructure Database dialog box, you can select or clear the “Restructure in the background” option.

If you select the option:

- You can continue working as the restructure processes.
- You can exit the console.
- You cannot shut down Essbase Administration Server until the restructure is completed.
- A process ID is displayed.
- You can use the process ID to [track the status](#) in the [Background Process Status](#) window.

Related Information

- [“Restructuring Databases Manually” on page 108](#)
- “Optimizing Database Restructuring” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

alter database (MaxL) in the *Oracle Essbase Technical Reference*

Restructure Database Options Dialog Box

When an outline is saved, the database may be restructured. For information about managing database restructuring, see the *Oracle Essbase Database Administrator's Guide*.

In the Restructure Database dialog box, you specify how data values are handled during restructures by selecting one of the following options:

- All data—All data values are preserved.
- Level 0 data—Only level 0 (leaf node) values are preserved. If all data required for calculation resides in level 0 members, you should select this option. If the option is selected, all upper-level blocks are deleted before the database is restructured. Therefore, the disk space required for restructuring is reduced, and calculation time is improved. When the database is recalculated, the upper-level blocks are re-created.

- Input data—Only the blocks that contain the data that is being loaded are preserved. However, all blocks (both upper-and lower-level) that contain loaded data are preserved.
- Discard all data—All data values are cleared.

If Hybrid Analysis is enabled, the “Warn if restructuring affects Hybrid Analysis” option is displayed. If you want to see warnings on how modifications to the Essbase outline may affect queries that run within the context of the Hybrid Analysis data source, select the option.

Related Information

“Optimizing Database Restructuring” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- `increstruc (essbase.cfg)` in the *Oracle Essbase Technical Reference*
- `setdbstateitem (ESSCMD)` in the *Oracle Essbase Technical Reference*

Save As Dialog Box

You use the Save As dialog box to save objects, such as calculation scripts, report scripts, rules files, MaxL scripts, and outlines.

Not all objects can be saved to all locations. Therefore, depending upon which type of object is being saved, the dialog box displays at least one but not necessarily all of the following tabs:

- File System—Save the object on a client computer or network.
- Essbase Server—Save the object to an application, a database, or an application and database.
- Administration Server—Save the object to Essbase Administration Server.

To specify encoding, select the Specify Encoding option, and perform one of the following actions:

- Select UTF-8.
- From the list, select a non-Unicode encoding. If you are working with a non-Unicode-mode application, the correct encoding is selected. In this case, do not change the selection.

Note: For outlines, the encoding of Essbase Server is used. Therefore, the encoding options do not apply to outlines.

Related Information

- [“Saving Scripts” on page 343](#)
- [“Saving a Rules File” on page 211](#)
- [“Saving Outlines” on page 130](#)
- [“Saving MaxL and MDX Scripts” on page 385](#)

- [“Saving Reports” on page 367](#)
- [“Saving Partitions” on page 406](#)

Script Variables Dialog Box

You use the Script Variables dialog box to create, set, update, and delete script variables.

The following columns display existing variables and the values of existing variables or enable you to, respectively, create a variable or enter a value.

- Variable
- Value

You click the **New** button to create a variable and the **Delete** button to delete the selected variable.

Related Information

- [“Defining Variables in MaxL and MDX Scripts” on page 382](#)
- [“Resolving Undefined Variables” on page 383](#)
- [“About MaxL Script Editor” on page 376](#)
- [“About MDX Script Editor” on page 392](#)

Select Accounts Dimension Dialog Box

You use the Select Accounts Dimension dialog box to review compression statistics and to select an accounts dimension for an aggregate storage database.

Note: You can also view compression statistics in the [Compression tab of the Database Properties window](#).

The Accounts Dimension column:

- Lists all dimensions in the current database
- Includes a “No compression dimension” row, which assumes that no accounts dimension exists
- Displays red icons to discourage you from tagging some dimensions as accounts. Typically, such dimensions contain more than 10,000 level 0 children.
- Displays green icons to suggest suitable dimensions to tag as accounts. Typically, such dimensions contain fewer than 10,000 level 0 children.

The Expected Level 0 Size column displays, in each row, the expected size, in megabytes, of the compressed database if the dimension identified in the row is tagged as the accounts dimension.

After reviewing the compression statistics, from the Accounts Dimension column, you select the dimension that you want to tag as accounts. When you click OK, the outline is updated to reflect your change and is restructured.

Related Information

- [Selecting An Accounts Dimension for Aggregate Storage](#)
- “Choosing an Accounts Dimension to Manage Database Compression” in the *Oracle Essbase Database Administrator's Guide*

Select Cluster Component Database Dialog Box

In the following boxes of the Select Cluster Component Database dialog box, you specify a database to add to the current cluster:

- Essbase Server—Essbase Server instance that contains the preferred database
- Application—Application that contains the preferred database
- Sample—Preferred database

Select Record Dialog Box

You use the Select Record dialog box to determine which data-source records are loaded during a data load or a dimension build.

In the Boolean group, you select Or (to load records that contain a field that meets any selection criterion) or And (to load records that contain a field that meets all selection criteria). The default selection is And.

In the following columns, you define the criteria by which data records are selected for loading:

- Type—Select String or Number, to base a selection criterion on, respectively, a string or numeric value. The default selection is String.
- String/Number—Enter the string or number on which to base the selection criterion.
- Condition—Select Equal, Not equal, Greater than, Greater than or equal to, Less than, Less than or equal to, Contains, or Does not contain. The condition that you select is combined with your Type and String/Number selections to create a criterion. For example, if you select Or and String, enter XYZ, and select Equal, all records that contain a field with a value of XYZ are loaded. For example, if you select Or and Number, enter 5, and select Less than or equal to, all records that contain a field value that is less than or equal to 5 are loaded.

Note: The Contains and “Does not contain” conditions can be used only with strings.

- Case-sensitive—If you selected String and you want the selection criterion to be case-sensitive, select the option.

To create a criterion, you click the **New** button. To delete a criterion, you select it, and click the **Delete** button.

Related Information

- [“Selecting Records” on page 218](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)

Send E-mail Dialog Box

You use the Send E-mail dialog box to send email messages that contain Essbase information from Administration Services Console to other administrators or to Oracle Technical Support. The title of the dialog box changes, depending on the type of information being sent.

In the text boxes of the Send E-Mail dialog box, you enter information as you typically enter it in any email program:

- To—By default, the box displays the most recently used address.
- cc—All recipients can see to whom you copy the message.
- bcc—No direct or copied recipients can see to whom you blind-copy the message.
- Subject—Informs recipients of the e-mail topic.
- Comment—Inclusion of a comment is optional.

As you enter addresses, keep the following in mind:

- Recipient addresses are not validated.
- Messages not successfully received are not returned.
- Multiple addresses must be separated by commas.

Related Information

- [“E-mailing Essbase Information” on page 87](#)
- [“Specifying an E-mail Server” on page 65](#)

Session and Request Termination Options

This topic lists the options that you can use to terminate sessions and kill requests.

The following table assumes that you selected the “Log off” option. In all cases, the “Use Force” option, which you use to terminate a request and log off a session, is available.

The Log off option can be selected with the following scopes:

- selected user
- all users on selected server, application, or database

- all instances of user on selected server, application, or database
- selected request
- all requests on selected server

The Kill option can be selected with the following scopes. In all cases, the Use Force option is not available.

- on selected application
- on selected database
- from selected user on selected server
- from selected user on selected application
- from selected user on selected database

Sessions Window

You use the Sessions window to view and manage user sessions and user requests for an Essbase Server instance, an application, or a database.

If you have Administrator permissions, the window displays information for all users. If you have Application Manager permissions, the window displays information for all users who are connected to the applications for which you have Application Manager permissions.

You can modify the window:

- To move a column, drag it to another location.
- To resize a column, drag the boundary of the column heading.

For users with permissions equal to or lower than your own, you can disconnect active sessions from Essbase Server and terminate requests.

In the First box, you select “Log off” or Kill:

- If you select “Log off,” the user is disconnected from the specified object, and the session is terminated. Other sessions running for the user and sessions running for other users are unaffected.
- If you select Kill, the user remains connected to Essbase Server, but, when a safe termination point is reached, the user's request is terminated. The user can continue the session and issue a new request.

The options available in the Second and Third boxes vary, depending on whether you selected “Log off” or Kill. For a list of all possible ways to use the “Log off” and Kill options, see [“Session and Request Termination Options” on page 638](#).

The following columns display various kinds of information:

- User—All users currently connected to Essbase Server. If you are not an administrator, only users connected to applications for which you have Application Manager permissions are listed.

- Session—Session ID
- Login Time—How long (in hours:minutes:seconds) each user has been connected to Essbase Server
- Application—Name of each application that each user is accessing. For users who are connected to the server but who have not started an application, no application name is displayed. Once an application name is displayed, it remains displayed until the application is explicitly shut down.
- Database—Name of the database that each user is accessing. For users who are connected to the server but who have not started a database, no database name is displayed. Once a database name is displayed, it remains displayed until the database is explicitly shut down.
- Db Connect Time—How long (in hours:minutes:seconds) each user has been connected to the database that is specified in the Application/Database column
- Request—Type of request made by the user; for example, a calculation, database restructure, dimension build, or query.
- Request Time—How long (in hours:minutes:seconds) the request has been processing.
- Request State—Whether the request is in progress, terminating, or terminated
- Connection Source—Name of the user's computer.
- Connection Ip—IP address of the user's computer

To terminate a session that is processing a request, as indicated in the Request column, select the Use Force option.

To disconnect the selected session or request, click **Apply**.

Related Information

- [“Viewing Active User Sessions” on page 299](#)
- [“Disconnecting User Sessions and Requests” on page 300](#)

Related Commands

- display session (MaxL) in the *Oracle Essbase Technical Reference*
- alter system (MaxL) in the *Oracle Essbase Technical Reference*

Set Active Alias Table Dialog Box

In the “Alias tables available” box of the Set Active Alias Table dialog box, you select an alias table to serve as the default alias table for a database for the console session. When aliases are displayed or updated, the default-alias-table aliases are used.

The setting from this dialog box does not affect what alias table is viewed during an Outline Editor session. See [Setting the Active Alias Table for Outline Editor](#).

Related Information

- [“Setting Active Alias Tables for Administration Services Console Sessions” on page 42](#)

- [“Setting the Active Alias Table for Outline Editor” on page 177](#)
- “Calculating Essbase Databases” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- setdefaultcalc (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdefaultcalcfile (ESSCMD) in the *Oracle Essbase Technical Reference*

Set Database Note Dialog Box

You use the Set Database Note dialog box to attach notes to databases. You use database notes for various purpose, such as to inform users of database status or of update deadlines.

You enter notes in the “Database note” box. Notes are broadcast to users through the Spreadsheet Add-in login dialog box.

Related Information

[“Annotating Databases” on page 102](#)

Related Commands

alter database (MaxL) in the *Oracle Essbase Technical Reference*

Set Default Calculation Dialog Box

You use the Set Default Calculation dialog box to set the default calculation for a database.

You select one of the following options and then, respectively, select a calculation script or enter a calculation string:

- Use calculation script
- Use calculation string—The default string is `CALC ALL;`

Related Information

- [“Setting Default Calculations” on page 329](#)
- “Calculating Essbase Databases” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- alter database (MaxL) in the *Oracle Essbase Technical Reference*
- setdefaultcalc (ESSCMD) in the *Oracle Essbase Technical Reference*
- setdefaultcalcfile (ESSCMD) in the *Oracle Essbase Technical Reference*

Provider Services Properties Window

In the Provider Services window, you can view and edit properties for Provider Services. You need Administrator permissions to view and edit server-level properties.

The window includes the following tabs:

- [Logging](#)—Specify log-level settings
- [Settings](#)—Specify session timeout limits and the maximum number of rows and columns to be retrieved during a session
- [Client Deployment](#)—Enable automatic deployment of Smart View client upgrades

Provider Services Properties—Client Deployment Tab

You use the Client Deployment tab to enable automatic deployment of Smart View client upgrades.

You select one of the following options:

- Force Smart View client to upgrade—Require users to upgrade; therefore, do not permit users to continue using their current version of Smart View
- Warn Smart View client to upgrade—Inform users that a new version of Smart View is available, and permit users to continue using their current version of Smart View
- Apply Smart View client to upgrade—Enable the administrator to upgrade Oracle Hyperion Smart View for Office; also, inform users of the upgrade, but do not require users to restart Provider Services

Related Information

- [“Provider Services Properties—Logging Tab” on page 642](#)
- [“Provider Services Properties—Settings Tab” on page 643](#)

Provider Services Properties—Logging Tab

You use the Logging tab to set log levels and to enable XML tracing.

To determine where log messages are recorded and displayed, you select one or both of the following options:

- Enable Provider logging—Send log messages to a log file, the location of which is specified by the administrator
- Display messages on Provider console—Send log messages to the Provider Services console window that displays the startup message

If you selected a record-display option, you can select the Enable Provider logging option and, thus, enable tracing of XML request-response communications between the Smart View client and provider.

In the Minimum Log Level list, you select the minimum log message level:

- Warning—Warning, error, and fatal messages
- Information—Information, warning, error, and fatal messages
- Debug—Debug, information, warning, error, and fatal messages

Related Information

- [“Provider Services Properties—Client Deployment Tab” on page 642](#)
- [“Provider Services Properties—Settings Tab” on page 643](#)

Provider Services Properties—Settings Tab

On the Settings tab, in the following boxes, you specify the preferred settings:

- Session timeout in minutes—The number of minutes that a session can run without activity (default, 60)
- Maximum number of rows—The maximum number of rows that can be retrieved in one session (default, 5000)
- Maximum number of columns—The maximum number of columns that can be retrieved in one session (default, 255)

Related Information

- [“Provider Services Properties—Client Deployment Tab” on page 642](#)
- [“Provider Services Properties—Logging Tab” on page 642](#)

Provider Services Sessions Window

You use the Provider Services window to monitor Oracle Hyperion Provider Services sessions (all user sessions, sessions of specific users, or specific session types).

To determine what sessions are displayed, perform one or both of the following actions:

- Select the “Show sessions for user” option, and, from a list of users, select the users whose sessions you want to monitor.
- In the “Show sessions for type” group, select an option (JAPI, XMLA, or SMARTVIEW).

The following columns display session information, one row per session:

- Session—Active session ID
- Mode—Server (for standalone server mode) or cluster (for Analytic cluster mode)
- Session Type—Request type from a standalone server or an Analytic cluster session
- User—User ID
- Essbase Server—Name of the Essbase Server instance that originated the request

- Application
- Database
- Request Time—Time of the most recent request
- Request—Name of the currently running request, if any

Split Field Dialog Box

You use the Split Field dialog box to divide the contents of a field into two fields.

The Field box displays the name of the selected field.

In the “Number of characters in a column” box, you enter the number of characters to place in the first field. For example, if the selected field contains UPC100–10–1, enter 3 to place UPC in the left field and 100–10–1 in the right field.

Related Information

- [“Splitting Fields” on page 226](#)
- [“About Field Operations” on page 220](#)
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)

SQL Connect Dialog Box

You use the SQL Connect dialog box to connect to an SQL database. You must connect to an SQL database before creating a rules file or performing a data load or dimension build that uses SQL database data.

In the following boxes, you enter or select your connection information:

- User name—Username for the database
- Password—Password for the username
- Essbase Server—Instance that serves as the client for the SQL database
- Application—Application that serves as the client for the SQL database
- Database—Database that contains the rules file that is used to connect to the SQL database

After you connect, you can view the contents of the specified tables in Data Prep Editor.

Related Information

- [“Opening SQL Databases” on page 205](#)
- [“Loading Data and Building Dimensions” on page 199](#)

- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)

Subset Dialog Box

When defining areas within partitions, you use the Subset dialog box to apply rules to a subset of members. You select members that meet specified criteria and then define conditional logic and group conditional expressions together. The subset options give you more flexibility in defining selection rules.

Note: The maximum number of conditions you can set is 50 items.

You create a condition by selecting from the following lists:

- The first list displays the subsetting methods that are available for the member that you selected in the [Area Mapping Member Selection](#) dialog box. Options available depend on the selected view method.
- The second list displays filtering criteria. If you select IS, members that meet the criteria are included. If you select IS NOT, members that meet the criteria are excluded.
- The third list displays the values that are associated with the subsetting methods and filtering criteria that were selected in the first and second list.

If you are adding multiple conditions to the Conditions tree, you select an “Add as condition” option:

- AND—The current condition and the condition that precedes the current condition must be met.
- OR—The current condition *or* the condition that precedes the current condition must be met

The Conditions tree displays the subsetting conditions that will be used to include or exclude members in the area definition.

If you are adding multiple conditions to the Conditions tree, you select an “Add as condition” option:

- AND—The current condition and the condition that precedes the current condition must be met.
- OR—The current condition *or* the condition that precedes the current condition must be met

Related Information

- [“Defining Areas in Partitions” on page 400](#)
- [“Finding Members While Defining Partition Areas” on page 401](#)

Substitution Variables Window

You use the Substitution Variables window to create, edit, and delete substitution variables.

The window displays the following columns:

- **Application**—To apply a variable to one or all applications on the selected Essbase server instance, select, respectively, an application or (all apps).
- **Database**—To apply a variable to one or all databases within the selected application, select, respectively, a database or (all dbs).
- **Variable**—Enter or replace a variable name. If a name includes single quotation marks, precede each mark with a forward slash. Quotation marks not preceded by slashes are discarded.
- **Value**—Enter or replace a variable value.

The window provides the following buttons:

- **Set**—Create or edit the selected variable.
- **Copy**—[Copy a variable](#) to another Essbase Server instance.
- **Delete**—Remove the selected variable from the selected Essbase Server instance.
- **Refresh**—Update the window information.

Related Information

- [“Managing Substitution Variables” on page 88](#)
- [“E-mailing Essbase Information” on page 87](#)

Related Commands

- `alter system (MaxL)` in the *Oracle Essbase Technical Reference*
- `alter application (MaxL)` in the *Oracle Essbase Technical Reference*
- `alter database (MaxL)` in the *Oracle Essbase Technical Reference*
- `createvariable (ESSCMD)` in the *Oracle Essbase Technical Reference*
- `deletevariable (ESSCMD)` in the *Oracle Essbase Technical Reference*
- `listvariables (ESSCMD)` in the *Oracle Essbase Technical Reference*
- `updatevariable (ESSCMD)` in the *Oracle Essbase Technical Reference*

Synchronize Outline Dialog Box

You use the Synchronize Outline dialog box to select the types of outline changes that are included in outline synchronizations.

The following nodes display information about the outlines being synchronized:

- “Target outline” and “Source outline”—The associated Essbase Server names, application names, and database names. The synchronization process and the partition may define *target* and *source* differently, depending on the direction in which changes are being tracked.
- “Target time” and “Source time”—The time stamps of the most recent changes to the outlines
- In sync—Whether the outlines are synchronized

In the Dimension, Member, and Member Property nodes, you select the preferred types of changes.

Dimension and Member options—For example, if, in the Dimension node, you select only Add and Rename, only changes that insert and rename dimensions are included.

- Add
- Delete
- Rename
- Move
- Update dimension type—This option applies only to dimensions. The available types are none, accounts, time, country, currency partition, and attribute.

Member property options—For example, if you select only Alias and Consolidation, only changes that affect aliases and consolidation tags are included.

- Account type
- Alias
- Calculation formula
- Consolidation
- Currency conversion tag
- Currency category
- Data storage
- UDA

To select all options, no options, or only the selected options, click, respectively, the Select All, Select None, or Apply button.

To delete from the outline change log (.chg) entries that have been applied or rejected, click the Purge button. If all entries have been changed or rejected, Essbase deletes the .chg log.

Related Information

- [“Synchronizing Outlines” on page 412](#)
- “Understanding and Using the Outline Change Log” in the *Oracle Essbase Database Administrator's Guide*

Related Commands

- applyotlchange (ESSCMD) in the *Oracle Essbase Technical Reference*
- getpartitionotlchanges (ESSCMD) in the *Oracle Essbase Technical Reference*
- purgeotlchange (ESSCMD) in the *Oracle Essbase Technical Reference*
- resetotlchangetime (ESSCMD) in the *Oracle Essbase Technical Reference*

Transaction List Dialog Box

Use this dialog box to view logged database transactions and to replay transactions to restore the database. Select the replay option from the following list:

- Select all the transactions—Queues all displayed transactions for replay.
- Replay in the background—Transaction replay occurs as a background process.
- Replay—Begins replaying selected transactions and writing them to the database.

Related Information

- [“Replaying Logged Transactions” on page 110](#)
- [“Viewing Logged Transactions” on page 111](#)
- “Enabling Transaction Logging” and “Configuring Transaction Replay” in the *Oracle Hyperion Enterprise Performance Management System Backup and Recovery Guide*

Related Commands

alter database (MaxL) in the *Oracle Essbase Technical Reference*

Create Date-Time Dimension Wizard

The Create Date-Time Dimension Wizard automates the creation of time dimension hierarchies and attributes within aggregate storage outlines.

► To use the Create Date-Time Dimension Wizard:

- 1 **Open Outline Editor.**
- 2 **In the Outline Editor window, right-click an aggregate storage outline.**
- 3 **Select **Create Date-Time Dimension**.**
- 4 **On the **Select Common Attributes** page, complete the following actions:**
 - Enter a dimension name.
 - Select the first day of the calendar week.
 - Select the beginning and end of the preferred time period.

See [“Create Date-Time Dimension Wizard—Select Common Attributes Page”](#) on page 653 for detailed information about this page.

5 Click **Next**.

6 On the **Add Calendar Hierarchies** page, select **Add**.

7 In the [“Create Date-Time Dimension Wizard—Select Calendar Hierarchy Page”](#) on page 650, select a calendar hierarchy type.

For information about calendar hierarchies, see Calendar Template Definitions.

8 As needed, modify the hierarchy, including enabling linked variable attributes (LVAs).

9 Select **OK** to close the Select Calendar Hierarchy dialog box.

10 Select **Next** to open the [“Create Date-Time Dimension Wizard—Select Day Attributes Page”](#) on page 654.

On the next page, you enter reserved days (weekends) and holidays. See Select Day Attributes for information about this window.

Related Information

- [“Create Date-Time Dimension Wizard—Add Calendar Hierarchies Page”](#) on page 649
- [“Create Date-Time Dimension Wizard—Define Labeling Rules Page”](#) on page 650
- [“Create Date-Time Dimension Wizard—Select Calendar Hierarchy Page”](#) on page 650
- [“Create Date-Time Dimension Wizard—Select Common Attributes Page”](#) on page 653
- [“Create Date-Time Dimension Wizard—Select Day Attributes Page”](#) on page 654
- [“Create Date-Time Dimension Wizard—Select Linked Attributes Page”](#) on page 654
- “Aggregate Storage Time-Based Analysis” in the *Oracle Essbase Database Administrator's Guide*

Create Date-Time Dimension Wizard—Add Calendar Hierarchies Page

Use the Create Date-Time Dimension Wizard—Add Calendar Hierarchies page to create, edit, or delete a calendar hierarchy. A date-time dimension can have only one calendar hierarchy.

- **Add**—Opens the [“Create Date-Time Dimension Wizard—Select Calendar Hierarchy Page”](#) on page 650.
- **Edit**—Opens the [“Create Date-Time Dimension Wizard—Select Calendar Hierarchy Page”](#) on page 650.
- **Next**—Opens the [“Create Date-Time Dimension Wizard—Select Common Attributes Page”](#) on page 653, for defining common attributes for day-level members.
- **Finish**—Creates the date-time dimension.

Create Date-Time Dimension Wizard—Define Labeling Rules Page

On the Define Labeling Rules page, you define the pattern used for naming date-time dimension members. For example, if you open the page from the Week level, you use the page to define the name format for Week-level members.

The page displays the following sections:

- **Time Depths**—On the far left of the page. From a list of time depths, you can select one or more time depths to be included within the name format.

The listed time depths are higher-level than the time depth for which the page was opened. Available time depths are displayed in bold.
- **Member Name Examples**—To the right of the Time Depths section. From a list of possible formats, you can select the preferred format.
- **Selected Format**—Above the Member Name Examples section. The member-name format that results from your selections is displayed. If the number for a member can vary, the range is displayed; for example Week 1/12 indicates that the Week number for a member can range between 1 and 12.

To display the year portion of the member name as two, rather than four, digits, you select the “Use a 2–digit year” option.

Create Date-Time Dimension Wizard—Select Calendar Hierarchy Page

On the Select Calendar Hierarchy page, you select one of the following calendar types:

- [Gregorian](#)
- [Fiscal](#)
- [Retail](#)
- [Manufacturing](#)
- [ISO 8601](#)

Then, on the page, the wizard creates a hierarchy for the selected type and, thus, enables you to define the hierarchy structure and the member naming rules.

Depending on the calendar type that is selected, the page displays various sections.

Time Depth Rules (All Calendar Types)

To include a level within the hierarchy, select the check box next to the level. Not all levels can be used with all calendar types, and not all levels can be used in combination with other levels. For example, Semester and Trimester are mutually exclusive.

Time-depth selections define the members that are created in the date-time dimension and determine which semantic-rule sections are available to define year, month, or period characteristics.

When you select a check box, its associated level is expanded. Then, you can select an underlined labeling rule to open the Define Labeling Rules dialog box, wherein you can select the naming patterns to be applied to the date-time members of the selected level. Be sure that naming patterns are meaningful, and, for non-duplicate member outlines, do not use duplicate names.

Year Rules (Fiscal and Manufacturing Types)

You define a year by when the year starts or ends. Most start and end options require you to specify details, such as month, week, or day.

First, you select one of the following options. Then, you specify the required information. For example, if you select “Year starts on a specific date,” you specify a month and day.

- Starting week number in month
- Ending week number in month
- Year starts on a week that includes a specific date
- Year starts on the week on or immediately following a specific date
- Year starts on a specific date

If you select the “Year starts on a specific date” option, you can select the “Enforce 53 weeks” option and then the “Enforce 52 weeks” option or only the “Enforce 53 weeks” option. For both options, you can specify whether extra days are attached to the first week, extra days are attached to the last week, or the extra week is determined by the location of the fewest unattached days (Auto-merge).

Depending upon which option is selected, the following lists are available:

- Month
- Week
- Day

Month semantic rules (Fiscal and Retail Types)

For fiscal and retail types, you select one of the following options, each of which is based on the selected year option:

- Starting week number specified—Use the week that is specified in the “Starting week number in month” option.
- Month always starts on a week that includes a specific date (dd)—Use the day number that is specified in the “Year starts on a week that includes a specific date” option.
- Month starts on the week on or immediately following a specific date (dd)—Use the day number that is specified in the “Year starts on the week on or immediately following a specific date” option.

- Month always starts on a specific day number (dd)—Use the day number that is specified in the “Year starts on a specific date” option.
- Month always starts on a specific day number (dd)—Use the day number that is specified in the following Year option: “Year starts on a specific date.”

For retail types, you select the “By Qtr-Month pattern,” and define which months within a quarter contain 4 weeks, which months within a quarter contain 5 weeks, and which month within a year contains 6 weeks.

Period Rules (Manufacturing Type)

Manufacturing calendars use 13 periods, instead of 12 months. For each of the following options, you select a value:

- Quarter having 4 periods—All other periods have 3 periods.
- Period having 5 weeks—All other periods have 4 weeks.

Add Linked Attributes Button

When you click the Add Linked Attributes button, the [“Create Date-Time Dimension Wizard—Select Linked Attributes Page” on page 654](#) opens. Herein, you create attribute dimensions that you link to the date-time dimension.

Gregorian Calendar Hierarchy

The Gregorian calendar is the standard twelve-month calendar starting on Jan 01 and ending on Dec 31. Gregorian calendars can include members on year, semester, trimester, quarter, month, week, and day time periods.

Fiscal Calendar Hierarchy

Fiscal calendars, which are based on financial reporting requirements, can start on any date. Fiscal calendars can include members on the following time periods: year, semester, trimester, quarter, month, week, and day.

When a calendar is created, the year is divided first into weeks and then into months.

For example, consider a calendar that is based on a quarter-month pattern that defines a 7-day week. A 52-week year represents a twelve-month reporting period that includes four repetitions of two months of four weeks and one month of 5 weeks. For each quarter, you select a three-month pattern (4-4-5, 4-5-4, or 5-4-4 weeks). A 53-week year contains an extra week.

Note: When a month starts on a specified date that occurs in the middle of a week, the week is split into two weeks, possibly resulting in years that contain more than 53 weeks.

Retail Calendar Hierarchy

The retail calendar, which is derived from the National Retail Federation, analyzes week-over-week data across years. The calendar uses a 4-5-4 quarter pattern and includes leap weeks every 5 to 6 years. Starting dates, which differ from year to year, occur in early February. When one year is compared to another, standard practice omits the first week of a fifty-three week year—to normalize and to enable each year to include the same number of holidays.

Fiscal calendars can include members on the following time periods: year, semester, quarter, month, week, and day.

Manufacturing Calendar Hierarchy

The manufacturing calendar defines a thirteen-period year and a 7-day week. The periods are grouped into three quarters of three periods each and one quarter of four periods. With a 53-week year, one period includes an extra week.

When you define the thirteen periods, you specify which quarter includes the extra period. If the year includes 53 weeks, you specify which period includes the extra week. If you specify the date on which the year starts, you must indicate whether the year has 53 or 52 weeks. A calendar of 52 weeks is first grouped into 53 weeks and then adjusted to 52 weeks.

ISO Calendar Hierarchy

The ISO 8601 calendar uses seven-day weeks. The year can start before or after the start of the Gregorian new year (Jan 1), but the week that includes the start day must include the first Thursday of the Gregorian year. Monday is the first day of the week. The ISO 8601 calendar hierarchy can include members on the following periods: year, week, and day.

Create Date-Time Dimension Wizard—Select Common Attributes Page

You use this page to name the date-time dimension of an aggregate storage outline, select the first day of the calendar week, and select the modeling period for which members are to be created.

In the following boxes, you enter the preferred information:

- Date-time dimension name
- First day of week—Day of the calendar week on which the calendar starts
- Modeling period—Start and end dates of the time range for which members are to be created. Next to each field a down arrow is displayed. You click an arrow to enable a calendar-date selection interface.

Create Date-Time Dimension Wizard—Select Day Attributes Page

You use this page to associate attributes with the day-level members of the date-time dimension that you are creating (assuming that the outline includes day-level members).

➤ To specify the text attribute dimension that contains the attributes to be associated with the day-level members:

- 1 Select the **Perform day modeling** option.
- 2 In the **Day label** box, enter the name of a text attribute dimension.

➤ To specify Reserve Days:

- 1 Select the days (Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday) with which you want to associate the Boolean attribute dimension.
- 2 Next to each selected day, specify a day label (name of the text attribute that you want to associate with the day).

You can use a label more than once. For example, you can combine Saturday and Sunday by using the label `Weekend`. In this case, Saturday and Sunday values display `Weekend_True`, and all other days display `Weekend_False`.

The Holiday list identifies the special days that are associated with the Boolean attribute dimension. You can perform the following holiday-list actions:

- Add a date—Using the calendar tool, select a date. Then click the Add button.
- Apply a holiday label—Select a holiday, and enter the name of the text attribute that you want to associate with the holiday.
- Remove a date—Select a date, and click the Remove button.

Whether you click the Back button (to return to the [“Create Date-Time Dimension Wizard—Add Calendar Hierarchies Page”](#) on page 649) or the Finish button (to close the wizard and create the date-time dimension), your selections are retained.

Create Date-Time Dimension Wizard—Select Linked Attributes Page

Using the wizard, you can link attribute dimensions to the date-time dimension and, thus, enable analysis that is based on the periodicity of date-time members.

Periodicity, which is defined as “a pattern that is shared by date-time members,” enables time-based analysis. For example, because, in the Gregorian calendar, January and April are the opening months of a quarter, January and April share a pattern. Therefore, January and April can be associated with the attribute “Month By Quarter: 1.” You can use linked attributes to determine, for example, whether sales are greater at the beginning or end of a quarter or year.

The On the Select Linked Attributes page, all cross-tab combinations that are possible (based on the time depths that are selected in the Select Calendar Hierarchy dialog box) are displayed; for example, quarter-by-year, month-by-year, and month-by-quarter.

To link all of the displayed attributes, you select the “Select all attribute” option. Otherwise, select the attributes you wish to link.

In the following boxes, you may modify the name or alias of the selected linked attribute dimension:

- Dimension name
- Alias name prefix—Hereafter, attribute names are prefixed with the alias.

Unlock Objects Dialog Box

The columns of the Unlock Objects dialog box display information about the locked objects of an application or database:

- Object Name
- Object Type—For example, report script or outline
- Locked By—Name of the user who holds a lock on an object
- Locked At—Date and time that an object was locked

You can view and unlock objects according to your security permissions. For information about permissions, see [“About Security and Permissions” on page 253](#).

Related Information

- [“Locking and Unlocking Objects” on page 105](#)
- [“Setting Essbase Default Options” on page 97](#)

Related Commands

unlockobject (ESSCMD) in the *Oracle Essbase Technical Reference*

Update Outline Dialog Box

You use the Update Outline dialog box to load members into a block storage outline and, thus, to build dimensions.

In the Type group, you select SQL (to use a SQL database as the data source) or “Data files” (to use a file as the data source). Then, you perform one of the following actions:

- If you selected SQL, in the “SQL user” and “SQL password” boxes, you enter your username and password on the SQL database.
- If you selected the “Data files” option, you locate and select one or more data files.

Any file that you select is listed in the “Data files” box. When selecting data files, keep the following in mind:

- To locate a file that is stored on Essbase Server, click the Find Data File button.
- A data source that is saved on Essbase Server and the database into which you are loading data must be located in the same directory.
- To locate a file that is not saved on Essbase Server, use the File System tab.
- You delete a file by selecting it and clicking the Delete button.

Because the outline is being updated dynamically using a rules file, the “Use rules” option is selected and cannot be cleared. If an outline were not being updated dynamically, you could select the option and, thereby, enable dynamic updating.

The path and name of the selected rules file is displayed in the Rules file box. As you select a rules file, keep the following in mind:

- To locate a rules file that is saved on Essbase Server, click the Find Rules File button.
- A rules file that is saved on Essbase Server and the database into which you are loading data must be located in the same directory.
- To locate a file that is not saved on Essbase Server, use the File System tab.

To specify how errors are handled, you can perform the following actions:

- Specify, in the “Error file” box, the location to which errors are written. This action is available to you because the “Use rules file” option is selected. If the option were not selected, errors would be written to the `aaspath\client` directory on the machine where Administration Services Console is installed.
- Select the Overwrite option. Your selection to overwrite the contents of error files enables you to correct an outline and use the error file as a data source to load previously rejected records.

Related Information

[“Updating an Outline Dynamically Using a Rules File” on page 201](#)

User Properties (Administration Server) Window

You use the tabs of the User Properties window to view and edit properties for an Essbase Administration Server user.

- [User Info](#)—View and edit information such as username, password, and privileges.
- [Essbase Servers](#)—Add or delete Essbase Server instances from a user's Enterprise view.

Related Information

- [“Creating Users on Essbase Administration Server” on page 59](#)
- [“Adding Essbase Servers to Enterprise View” on page 45](#)

- [Removing Essbase Servers from Enterprise View User Setup Wizard](#)
- [“Setting Up Administration Services” on page 34](#)

User Properties Window—Essbase Servers Tab

Using the items of the Essbase Servers tab of the User Properties dialog box, you can add Essbase Server instances to or delete Essbase Server instances from a user's Enterprise View:

- Essbase node—Add an instance by entering or selecting the name of a computer on which Essbase Server is installed:
 - The Essbase Server and Essbase Administration Server computer names may differ.
 - You should avoid using “localhost” because its use may create problems when partitions are displayed or when Administration Services Console and Essbase Administration Server run on different computers.
 - You can select either a server name or a cluster name.
 - If the Agent port is not assigned the default port value, you can specify a port value in the format *ServerMachineName:Port#* (example *jdcoe2:4378*).
- User name—Enter the name exactly as it is defined on Essbase.
- Password and Confirm password—Enter a password for users that are [externally authenticated](#).
- Use SSL—Connect using SSL encryption.
- Set—Click to validate the username and password against Essbase Server or the external authentication source.
- Delete—Click to delete the selected instance from the user's Enterprise View.
- Apply and Refresh—Click, respectively, to apply your settings or to revert to the settings that were in effect the last time Apply was clicked.

Related Information

- [“Adding Essbase Servers to Enterprise View” on page 45](#)
- [“User Properties \(Administration Server\) Window” on page 656](#)
- [“User Setup Wizard” on page 658](#)

User Properties Window—User Info Tab

Note: This tab is read-only in EPM System security mode.

You use the items of the User Info tab of the User Properties dialog box to view and modify information about Administration Services users:

- Native—Enables native Administration Services authentication (selected by default).

If you select Native, you must enter and confirm the user's Administration Services password.

- External—Enables [external authentication](#) and, thereby, enables you to search for external users by username, first and last name, or email address.

Text boxes available only if Native is selected:

- User name—Cannot exceed the length prescribed in the *Oracle Essbase Database Administrator's Guide*, is not case-sensitive, and can contain any special character except a backslash.
- Password and Confirm password—Are not case-sensitive and cannot exceed the length prescribed in the *Oracle Essbase Database Administrator's Guide*.

Button available only if External is selected: Search

Items available whether Native or External are selected:

- E-mail full name and E-mail address—Used when the user emails information from Administration Services Console to other administrators or to Technical Support.
- Administrator privileges—True or False, to grant or not grant the user Administrator privileges. (The user's Essbase Server permissions are unaffected.)

Related Information

- [“User Properties \(Administration Server\) Window” on page 656](#)
- [“Changing Passwords for Essbase Administration Server Users” on page 60](#)
- [“Renaming Essbase Administration Server Users” on page 61](#)
- [“User Setup Wizard” on page 658](#)

User Setup Wizard

This wizard is not available if Essbase Server is in [EPM System security mode](#).

You use the User Setup wizard to create or edit Administration Services users and to set up or modify their Essbase Server access. With each run of the wizard, you can work with only one Administration Services user.

If you are creating a user, on the first page, you enter the username or search for an external user and, on subsequent pages, you define user information and setup properties. If you are editing a user, on the first page, you specify an existing username and, on subsequent pages, you modify the user's information and setup properties.

How you use the wizard depends on your permissions:

- To create new Administration Services users, you need Administrator permissions for Essbase Administration Server.
- To create new Essbase Server users, you need Administrator or Create/Delete Users and Groups permissions for Essbase Server.

- To edit properties for an existing Administration Services user, you need Administrator permissions for Essbase Administration Server. Non-Administrator users can edit their own passwords, e-mail information, and Essbase Server list.

For information about using the User Setup Wizard, see the following topics:

- [“Launching the User Setup Wizard” on page 659](#)
- [“User Setup Wizard Pages” on page 659](#)

Related Information

- [“About Administration Services” on page 31](#)
- [“Connecting to Essbase Servers” on page 83](#)
- [“Disconnecting from Essbase Servers” on page 84](#)

Launching the User Setup Wizard

➤ To launch the User Setup Wizard, select **Wizards**, and then **User Setup**.

User Setup Wizard Pages

Click a link below to view information about each page in the wizard:

- [Administration Server User Name](#)
- [Administration Server User Info](#)
- [Essbase Server Connections](#)
- [Confirm Creation of User on Essbase Server](#)
- [Essbase Server User Info](#)
- [Setup Complete](#)

User Setup Wizard—Administration Server Username Page

On this page, you specify the user's Essbase Administration Server username.

If you are editing an Administration Services user, in the “Username” box, you enter the Essbase Administration Server username.

If you are creating an Administration Services user, you perform one of the following actions:

- In the “Username” box, enter the Essbase Administration Server username, which does not have to match the Essbase Server username.

You must adhere to naming guidelines: Begin with a letter or number, include no more than one wildcard character, do not consider case, and do not exceed length limitations (see the *Oracle Essbase Database Administrator's Guide*).

- Select the “Search for external user” option and search by username (by selecting the “Search by user” option), by name (by selecting the “Search by name” option) or by e-mail address (by selecting the “Search by e-mail” option).

Username must begin with a letter (for example, H*) and can contain no more than one wildcard character (for example, H*_J*). Names and e-mail addresses cannot include wildcard characters.

If you are creating an Administration Services user, select one of the following options:

- Create native—Create the user as a native Administration Services user.
- Create external—Create the user as an external Administration Services user.

Note: External user options are available only if the system is configured for external authentication.

User Setup Wizard—Administration Server External Search Results

If you searched for an external user, this page, which lists the external users that were found, is displayed.

On the page, you select a user.

User Setup Wizard—Administration Server User Info Page

On this page, in the “User name” box, the user's Essbase Administration Server username is displayed.

For the user, in the following boxes, you enter or select information:

- “E-mail full name” and “E-mail address”—The name and address that are used when the user e-mails information from Administration Services Console to other administrators or to Technical Support (see [“E-mailing Essbase Information” on page 87](#))
- “Password” and “Confirm password”—Not required for externally authenticated users
 Passwords are not case-sensitive and need not match the user's Essbase Server password. For length limitations, see the *Oracle Essbase Database Administrator's Guide*.
- Administrator privileges—True or False
 A user with Administrator privileges can create, modify, and delete Essbase Administration Server users and can modify the list of Essbase Server instances that is displayed in any Enterprise View. Users without Administrator privileges cannot change their own Essbase Administration Server privileges. This setting does not affect a user's Essbase Server permissions.
- User Type—“Use native authentication” or “Use external authentication”
 - Select the “Use native authentication” option if external authentication is not configured and the user is authenticated internally by Administration Services.

- Select the “Use external authentication” option if [external authentication](#) is configured and the user's Administration Services login information is stored outside the application.

User Setup Wizard—Essbase Server Connections Page

On this page, you specify which Essbase Server instances are displayed in the user's Enterprise View. To accomplish this task, you map the Administration Services user to Essbase Server users. Each Administration Services user can have a unique Enterprise View.

In following columns, you perform the following actions:

- Essbase Server—Enter the names of the computers on which the preferred Essbase Server instances are installed, which may or may not be the name of the computer on which Essbase Administration Server is installed.

Because the name “localhost” may create problems (when partitions are displayed or when Essbase Administration Server and Administration Services Console run on different computers), avoid using it. If a current Agent port value is not the default, you must use the following format to specify the current value: *ServerMachineName:port* (for example, *jdoe2:4378*).

- User name—Enter the user's Essbase Server usernames exactly as they are on the preferred Essbase Server instances.

Note: If the user does not exist on an Essbase Server instance, the wizard helps you create the user.

- Password—For Essbase Server instances for which the user is externally authenticated, enter the user's Essbase Server passwords exactly as they are on the Essbase Server instances.
- Confirm password—Re-enter any password that you entered.

User Setup Wizard—Confirm Creation of User on Essbase Server Page

This page lists the users who do not currently exist on the Essbase Server instances that are listed on the Essbase Server Connections page.

On the confirm-creation page, you confirm the creation of the listed users and confirm that you want to save the users' information on Essbase Administration Server. The usernames and passwords that were entered on the Essbase Server Connections page are used to create the Essbase Server users, one user per instance.

The following read-only columns display user information:

- Essbase Server—Names of the Essbase Server instances on which the user will be created
- User name—Essbase Server usernames

Note: To change a username, return to the Connections page.

In the following columns, you select or clear the following options:

- **Save Info**—Select this option to save the user's Administration Services and Essbase Server connection information to Essbase Administration Server.
- **Create User**—Select this option to confirm creation of the user on the Essbase Server instance. The option is available only for Essbase Server instances on which the user does not exist.

A "Cannot Create" message indicates that you do not have access to the Essbase Server instance on which you are trying to create the user or the Essbase Server instance on which you are trying to create the user is not running.

User Setup Wizard—Essbase Server User Info Page

On this page, you select the models to be used to authenticate the Essbase Server users, and you select a user type for each user.

For each Essbase Server user, you select one of the following “Authentication model” options:

- **Essbase Server Authentication**—Select this option to enable native Essbase Server authentication, and, thus, to create and store the user as part of Essbase Server security.
- **External Authentication**—Select this option to enable external authentication for the user. The option is available only if external authentication is enabled on the Essbase Server instance.

Depending upon which model option you selected, you provide some, all, or none of the following information:

- For users for whom you selected the Essbase Server Authentication option, enter and confirm the Essbase Server passwords that were entered on the Connections page. If you want to change a password, return to the Connections page.
- For any Essbase Server instance for which you have Administrator or Create/Delete Users and Groups permissions, you can select the “Prompt user to change password” option. If the option is selected, the user is prompted to change the password at the next login. If the option is cleared, the user retains the assigned password. By default, the option is not selected.

For each Essbase Server user, in the “User type” group, you select one of the following options:

- **Administrator**—Grants the user full access to all users, groups, and data on the Essbase Server instance
- **User**—Grants no inherent permissions. Therefore, the user has no access, unless access is granted through Create/Delete permissions, group membership, application or database permissions, or filters.

You can grant the user “Create/delete users and groups” and/or “Create/delete applications” permissions. You can also grant the user permissions to specific applications and databases and manage the user's membership in groups ([by editing the user's properties](#) on the Essbase Server instance).

User Setup Wizard—Setup Complete Page

On this page, you confirm that setup is completed.

If you want to restart the wizard and create another Administration Services user, select the “Create another user” option.

User/Group Access Window

Use this window to edit application and database permissions for users and groups in the following areas:

- Access
- Security filter assignment
- Calculation script permissions

You can also edit these permissions through Users and Groups under the Essbase Server Security node in Enterprise View. See [“Managing Users and Groups” on page 256](#) for more information.

To access this window, right-click an application or database name in Enterprise View.

Related Information

- [“Managing User/Group Permissions for Applications and Databases” on page 269](#)
- [“Managing Calculation Permissions for Users and Groups” on page 271](#)
- [“Managing Filters” on page 288](#)

User/Group Access Window—Groups Tab

Use this tab to grant application and database security permissions for users within security groups.

- Hierarchical tree view of applications and databases—Select an application or database to work with user or group permissions.
- Show assigned groups—Only view groups with current access to the selected application or database.
- Application Access—The current application access permission. Select an option to change:
 - None—Grants users in the group no access to the selected application or database. The user can still inherit access if the application or any database in the application has a higher minimum permission than None, or if the user is granted a filter that upgrades permission to particular cells.
 - Access Databases—Enables users in the group to grant specific permissions to users for each database in the application.

- Application Manager—Grants users in the group most permissions available to an Administrator, but only for the selected application. The user has full access to the application and can perform the following tasks for this application:
 - Create and delete databases.
 - Disconnect users.
 - Define and assign filters.
 - Remove locks on data.

If the permission is Application Manager, you cannot change it.

- Database Access—Displays the current database access permission. Disabled if an application is selected. To change access permission, select an option:
 - None—Removes access to any object or data value in the selected database.
 - Filter—Grants users in the group access as defined by a filter assigned to the user for the selected database. Enables you to select a filter to assign to the user.
 - Read—Grants users in the group read-only access to the database, including permission to execute (but not modify) report scripts.
 - Write—Grants users in the group permissions to read and update (but not calculate) data values in the database, including permission to execute (but not modify) Essbase objects.
 - Calculation—Grants users in the group permissions to read, update, and calculate data values in the database. Enables you to select specific calculation scripts that the user can execute against the database. See [“Assign Calculations Dialog Box” on page 483](#).
 - Database Manager—Grants users in the group permissions to read, update, and calculate data values in the database and permissions to modify all database-related files. Database Managers have permission to execute any calculation script against the database.
- Filter—Displays the filter associated with the group for the selected database. If you select any Database Access permission other than None, you can select a filter from the Filter node.
- Assign Calculations—Selects calculation scripts that users in the group can execute. Opens the Assign Calculations dialog box. Enabled when Database Access permission is Calculation.

Related Information

- [“User/Group Access Window” on page 663](#)
- [“About Security and Permissions” on page 253](#)
- [“Creating Groups on Essbase Servers” on page 263](#)
- [“Editing Group Properties” on page 274](#)
- [Create/Edit Group on Essbase Server Dialog Box](#)

User/Group Access Window—Users Tab

Use items in this tab to grant application and database security permissions for users:

- Hierarchical tree view of applications and databases—Select an application or database to work with user or group permissions.
- Show assigned users—Only view users with current access to the selected application or database.
- Application Access—The current application access permission. Select an option to change:
 - None—Grants the user no access to the selected application or database. The user can still inherit access if the application or any database in the application has a higher minimum permission than None, or if the user is granted a filter that upgrades permission to particular cells.
 - Access Databases—Enables the user to grant specific permissions to users for each database in the application.
 - Application Manager—Grants the user most permissions available to an Administrator, but only for the selected application. The user has full access to the application and can perform the following tasks for this application:
 - Create and delete databases.
 - Disconnect users.
 - Define and assign filters.
 - Remove locks on data.

If the permission is Application Manager, you cannot change it.

- Database Access—Displays the current database access permission. Disabled if an application is selected. To change access permission, select an option:
 - None—Removes access to any object or data value in the selected database.
 - Filter—Grants the user access as defined by a filter assigned to the user for the selected database. Enables you to select a filter to assign to the user.
 - Read—Grants the user read-only access to the database, including permission to execute (but not modify) report scripts.
 - Write—Grants the user permissions to read and update (but not calculate) data values in the database, including permission to execute (but not modify) Essbase objects.
 - Calculation—Grants the user permissions to read, update, and calculate data values in the database. Enables you to select specific calculation scripts that the user can execute against the database. See [“Assign Calculations Dialog Box” on page 483](#).
 - Database Manager—Grants the user permissions to read, update, and calculate data values in the database and permissions to modify all database-related files. Database Managers have permission to execute any calculation script against the database.
- Filter—Displays the filter associated with the user for the selected database. If you select any Database Access permission other than None, you can select a filter from the Filter node.

- Assign Calculations—Selects calculation scripts that the selected user can execute. Opens the Assign Calculations dialog box. Enabled when Database Access permission is Calculation.

Related Information

- [“User/Group Access Window” on page 663](#)
- [“About Security and Permissions” on page 253](#)
- [“Managing User/Group Permissions for Applications and Databases” on page 269](#)
- [“Editing Essbase Server User Properties” on page 273](#)
- [“Managing Calculation Permissions for Users and Groups” on page 271](#)
- [“Managing Filters” on page 288](#)

Users Window

You use the Users window to manage users on the Essbase Server instance that is indicated in the title bar of the window.

Note: This window is read-only if Essbase Server is in [EPM System security mode](#).

The following columns display information about the listed users. If Essbase Server is not in EPM System security mode, you can select one or more users and modify various fields. You can perform most operations on multiple users simultaneously.

- User Name
- User Type—Administrator (full access to all users, groups and data on Essbase Server) or User (no access, unless access is granted through Create/Delete permissions, group membership, application or database permissions, or filters)
- Application Access Type—The applications that the user can access (see [“Setting Application Access Type for Users” on page 268](#))
- Create/Delete Permissions—Users/Groups, Applications, or User/Groups/Applications
Users who are granted Users/Groups permission can create and delete users and groups whose permissions are equal to or lower than their own. Users who are granted Applications permission can create and delete applications and can control access to databases within the applications. Users who are granted Users/Groups/Applications permissions can perform all tasks granted by the Users/Groups and Applications permissions.
- Last Login Time—Relative to the time zone of Essbase Server
- Authentication—Native or External
Native users are authenticated using native Essbase authentication. External users are [externally authenticated](#) in a supported corporate authentication repository.

- Change Password?—Yes or No, whether users are [prompted to change their passwords](#) upon their next login
- Active?—Yes or No, whether users can log on to Essbase Server

Actions that you can perform:

- Select one or more rows, right-click, and select a command from the context-sensitive menu that is displayed.
- Click the **New** button, and create a user.
- Select one or more users and click the **Edit**, **Copy**, or **Delete** buttons.
- Click the **Refresh** or **Close** button.

Related Information

- [“Managing Users and Groups” on page 256](#)
- “User Management and Security in Oracle Essbase Native Security Mode” and “User Management and Security in Oracle Enterprise Performance Management System Security Mode” in the *Oracle Essbase Database Administrator's Guide*

Validate Rules Dialog Box

You use the Validate Rules dialog box to determine why a rules file validation failed.

The following columns display information about errors, one row per error:

- Field with errors—Number of the field that caused the error
- Error/warning message—Message that describes the error

Related Information

- [“Validating Rules Files” on page 211](#)
- “Requirements for Valid Data Load Rules Files” in the *Oracle Essbase Database Administrator's Guide*
- “Invalid Dimension Build Rules Files” in the *Oracle Essbase Database Administrator's Guide*
- [“Creating a Data Load Rules File” on page 198](#)
- [“Creating Dimension Build Rules Files” on page 198](#)

View Note Dialog Box

You use the View Note dialog box to view, not edit, the contents of a cell note. A cell note is a type of linked reporting object.

The dialog box includes the following text boxes:

- Member combination—Identifies the member combination associated with the note

- Note—Displays the contents of the note

Related Information

- [“About Linked Reporting Objects \(LROs\)” on page 369](#)
- [“Managing LROs” on page 370](#)

Windows Dialog Box

The Windows dialog box displays a list of open windows (a maximum of 10). To designate one of the open windows as the active window, from the windows list, select it.

Related Information

[“Managing Windows within Administration Services Console” on page 41](#)

In This Chapter

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Extending Administration Services with Java Plug-ins

Administration Services supports the development and use of Java plug-ins to extend the functionality of the product. Administration Services Java plug-ins are installable components. The following documentation is provided to assist developers in authoring plug-in components:

- Administration Services Developer's Guide
- Administration Services Java API Reference

Configuring Plug-in Components

You can add, remove, or reorder plug-in components on the client. Plug-ins are displayed as nodes in the Enterprise View tree in Administration Services Console and appear in the order they are displayed in the **Installed Plug-ins** text box.

➤ To configure plug-in components:

- 1 From Administration Services Console, select **Tools**, and then **Configure components**.
- 2 If you are adding a plug-in component, click **Add** to select a Java Archives (*.jar) file to add to the list of installed plug-ins.
- 3 If you are removing a plug-in component, select a component in the **Installed Plug-ins** text box and click **Remove**.
- 4 If you are reordering the components in the **Installed Plug-ins** text box, select a component and click **Move Up** or **Move Down** until it appears in the desired position in the list.
- 5 Click **Close**.

Related Information

- [“Configure Plug-in Components Dialog Box” on page 486](#)
- Administration Services Developer's Guide

- Oracle Essbase Administration Services Java API Reference

Glossary

! See bang character.

#MISSING See missing data.

access permissions A set of operations that a user can perform on a resource.

account blocking The process by which accounts accept input data in the consolidated file. Blocked accounts do not receive their value through the additive consolidation process.

account eliminations Accounts which have their values set to zero in the consolidated file during consolidation.

account type A property that determines how an account's value flows over time and its sign behavior. Account type options can include expense, income, asset, liability, and equity.

accountability map A visual, hierarchical representation of the responsibility, reporting, and dependency structure of the accountability teams (also known as critical business areas) in an organization.

active service A service whose Run Type is set to Start rather than to Hold.

active-active high availability system A system in which all the available members can service requests, and no member is idle. An active-active system generally provides more scalability options than an active-passive system. Contrast with active-passive high availability system.

active-passive high availability system A system with active members, which are always servicing requests, and passive members that are activated only when an active member fails. Contrast with active-active high availability system.

activity-level authorization Defines user access to applications and the types of activities they can perform on applications, independent of the data that will be operated on.

ad hoc report An online analytical query that an end user creates dynamically.

adapter Software that enables a program to integrate with data and metadata from target and source systems.

adaptive states Interactive Reporting Web Client level of permission.

adjustment See journal entry.

Advanced Relational Access The integration of a relational database with an Essbase multidimensional database so that all data remains in the relational database and is mapped to summary-level data in the Essbase database.

agent An Essbase server process that starts and stops applications and databases, manages connections from users, and handles user-access security. The agent is referred to as ESSBASE.EXE.

aggregate cell A cell comprising several cells. For example, a data cell that uses Children(Year) expands to four cells containing Quarter 1, Quarter 2, Quarter 3, and Quarter 4 data.

aggregate function A type of function, such as sum or calculation of an average, that summarizes or performs analysis on data.

aggregate limit A limit placed on an aggregated request line item or aggregated metatopic item.

aggregate storage database The database storage model designed to support large-scale, sparsely distributed data which is categorized into many, potentially large dimensions. Upper level members and formulas are dynamically calculated, and selected data values are aggregated and stored, typically with improvements in overall aggregation time.

aggregate view A collection of aggregate cells based on the levels of the members within each dimension. To reduce calculation time, values are pre-aggregated and stored as aggregate views. Retrievals start from aggregate view totals and add up from there.

aggregation The process of rolling up and storing values in an aggregate storage database; the stored result of the aggregation process.

aggregation script In aggregate storage databases only, a file that defines a selection of aggregate views to be built into an aggregation.

alias table A table that contains alternate names for members.

alternate hierarchy A hierarchy of shared members. An alternate hierarchy is based upon an existing hierarchy in a database outline, but has alternate levels in the dimension. An alternate hierarchy allows the same data to be seen from different points of view.

ancestor A branch member that has members below it. For example, the members Qtr2 and 2006 are ancestors of the member April.

appender A Log4j term for destination.

application 1) A software program designed to run a specific task or group of tasks such as a spreadsheet program or database management system; 2) A related set of dimensions and dimension members that are used to meet a specific set of analytical requirements, reporting requirements, or both.

application administrator A person responsible for setting up, configuring, maintaining, and controlling an application. Has all application privileges and data access permissions.

application currency The default reporting currency for the application.

Application Migration Utility A command-line utility for migrating applications and artifacts.

application server cluster A loosely joined group of application servers running simultaneously, working together for reliability and scalability, and appearing to users as one application server instance. See also vertical application cluster and horizontal application cluster.

area A predefined set of members and values that makes up a partition.

arithmetic data load A data load that performs operations on values in the database, such as adding 10 to each value.

artifact An individual application or repository item; for example, scripts, forms, rules files, Interactive Reporting documents, and financial reports. Also known as an object.

assemblies Installation files for EPM System products or components.

asset account An account type that stores values that represent a company's assets.

assignment The association of a source and destination in the allocation model that controls the direction of allocated costs or revenue flow.

asymmetric topology An Oracle Fusion Middleware Disaster Recovery configuration that is different across tiers on the production site and standby site. For example, an asymmetric topology can include a standby site with fewer hosts and instances than the production site.

attribute A characteristic of a dimension member. For example, Employee dimension members may have attributes of Name, Age, or Address. Product dimension members can have several attributes, such as a size and flavor.

attribute association A relationship in a database outline whereby a member in an attribute dimension describes a characteristic of a member of its base dimension. For example, if product 100-10 has a grape flavor, the product 100-10 has the Flavor attribute association of grape. Thus, the 100-10 member of the Product dimension is associated with the Grape member of the Flavor attribute dimension.

Attribute Calculations dimension A system-defined dimension that performs these calculation operations on groups of members: Sum, Count, Avg, Min, and Max. This dimension is calculated dynamically and is not visible in the database outline. For example, using the Avg member, you can calculate the average sales value for Red products in New York in January.

attribute dimension A type of dimension that enables analysis based on the attributes or qualities of dimension members.

attribute reporting A reporting process based on the attributes of the base dimension members. See also base dimension.

attribute type A text, numeric, Boolean, date, or linked-attribute type that enables different functions for grouping, selecting, or calculating data. For example, because the Ounces attribute dimension has the type numeric, the number of ounces specified as the attribute of each product can be used to calculate the profit per ounce for that product.

authentication Verification of identity as a security measure. Authentication is typically based on a user name and password. Passwords and digital signatures are forms of authentication.

authentication service A core service that manages one authentication system.

auto-reversing journal A journal for entering adjustments that you want to reverse in the next period.

automated stage A stage that does not require human intervention; for example, a data load.

axis 1) A straight line that passes through a graphic used for measurement and categorization; 2) A report aspect used to arrange and relate multidimensional data, such as filters, pages, rows, and columns. For example, for a data query in Simple Basic, an axis can define columns for values for Qtr1, Qtr2, Qtr3, and Qtr4. Row data would be retrieved with totals in the following hierarchy: Market, Product.

backup A duplicate copy of an application instance.

balance account An account type that stores unsigned values that relate to a particular time.

balanced journal A journal in which the total debits equal the total credits.

bang character (!) A character that terminates a series of report commands and requests information from the database. A report script must be terminated with a bang character; several bang characters can be used within a report script.

base currency The currency in which daily business transactions are performed.

base dimension A standard dimension that is associated with one or more attribute dimensions. For example, assuming products have flavors, the Product dimension is the base dimension for the Flavors attribute dimension.

base entity An entity at the bottom of the organization structure that does not own other entities.

batch calculation Any calculation on a database that is done in batch; for example, a calculation script or a full database calculation. Dynamic calculations are not considered to be batch calculations.

batch file An operating system file that can call multiple ESSCMD scripts and run multiple sessions of ESSCMD. On Windows-based systems, batch files have BAT file extensions. On UNIX, batch files are written as a shell script.

Batch Loader An FDM component that enables the processing of multiple files.

batch POV A collection of all dimensions on the user POV of every report and book in the batch. While scheduling the batch, you can set the members selected on the batch POV.

batch processing mode A method of using ESSCMD to write a batch or script file that can be used to automate routine server maintenance and diagnostic tasks. ESSCMD script files can execute multiple commands and can be run from the operating system command line or from within operating system batch files. Batch files can be used to call multiple ESSCMD scripts or run multiple instances of ESSCMD.

block The primary storage unit which is a multidimensional array representing the cells of all dense dimensions.

block storage database The Essbase database storage model categorizing and storing data based on the sparsity of data values defined in sparse dimensions. Data values are stored in blocks, which exist only for sparse dimension members for which there are values.

Blocked Account An account that you do not want calculated in the consolidated file because you want to enter it manually.

book 1) In Financial Reporting, a container that holds a group of similar documents. Books may specify dimension sections or dimension changes; 2) In Data Relationship Management, a collection of exports that can be run together as a group. Export results can be combined together or output separately.

book POV The dimension members for which a book is run.

bookmark A link to a reporting document or a Web site, displayed on a personal page of a user. The types of bookmarks are My Bookmarks and image bookmarks.

bounding rectangle The required perimeter that encapsulates the Interactive Reporting document content when embedding Interactive Reporting document sections in a personal page, specified in pixels for height and width or row per page.

broadcast message A simple text message sent by an administrator to a user who is logged on to a Planning application. The message details information such as system availability, notification of application refresh, or application backups.

build method A method used to modify database outlines. Choice of a build method is based on the format of data in data source files.

business process A set of activities that collectively accomplish a business objective.

business rules Logical expressions or formulas that are created within an application to produce a desired set of resulting values.

cache A buffer in memory that holds data temporarily.

calc script A set of commands that define how a database is consolidated or aggregated. A calculation script may also contain commands that specify allocation and other calculation rules separate from the consolidation process.

Calculated Accounts Accounts with formulas that you cannot alter. These formulas are fixed to maintain the accounting integrity of the model that you are building. For example, the formula for Net Income, a Calculated Account, is modeled into Strategic Finance and cannot be changed in historical or forecast periods.

calculated member in MaxL DML A member designed for analytical purposes and defined in the optional WITH section of a MaxL DML query.

Calculation Manager A module of Enterprise Performance Management Architecture (EPMA) that Planning and Financial Management users can use to design, validate, and administrate business rules in a graphical environment. c

calculation status A consolidation status that indicates that some values or formula calculations have changed. You must reconsolidate to get the correct values for the affected entity.

calendar User-defined time periods and their relationship to each other. Q1, Q2, Q3, and Q4 comprise a calendar or fiscal year.

cascade The process of creating multiple reports for a subset of member values.

Catalog pane An area that displays a list of elements available to the active section. If Query is the active section, a list of database tables is displayed. If Pivot is the active section, a list of results columns is displayed. If Dashboard is the active section, a list of embeddable sections, graphic tools, and control tools are displayed.

categories Groupings by which data is organized. For example, Month.

cause and effect map A map that depicts how the elements that form your corporate strategy relate and how they work together to meet your organization's strategic goals. A Cause and Effect map tab is automatically created for each Strategy map.

CDF See custom-defined function.

CDM See custom-defined macro.

cell 1) The data value at the intersection of dimensions in a multidimensional database; the intersection of a row and a column in a worksheet; 2) A logical group of nodes belonging to one administrative domain.

cell note A text annotation for a cell in an Essbase database. Cell notes are a type of LRO.

CHANGED status Consolidation status that indicates data for an entity has changed.

chart template A template that defines the metrics to display in Workspace charts.

child A member with a parent above it in the database outline.

choice list A list of members that a report designer can specify for each dimension when defining the report's point of view. A user who wants to change the point of view for a dimension that uses a choice list can select only the members specified in that defined member list or those members that meet the criteria defined in the function for the dynamic list.

clean block A data block in which the database is fully calculated, if a calculation script calculates all dimensions at once, or if the SET CLEARUPDATESTATUS command is used in a calculation script.

cluster An array of servers or databases that behave as a single resource which share task loads and provide failover support; eliminates one server or database as a single point of failure in a system.

cluster interconnect A private link used by a hardware cluster for heartbeat information, to detect node failure.

cluster services Software that manages cluster member operations as a system. With cluster services, you can define a set of resources and services to monitor through a heartbeat mechanism between cluster members and to move these resources and services to a different cluster member as efficiently and transparently as possible.

clustered bar charts Charts in which categories are viewed side-by-side; used only with vertical bar charts.

code page A mapping of bit combinations to a set of text characters. Different code pages support different sets of characters. Each computer contains a code page setting for the character set requirements of the language of the computer user. In the context of this document, code pages map characters to bit combinations for non-Unicode encodings. See also encoding.

column In Data Relationship Management, a field of data associated with an import source or the results of a query, compare, validation, or export.

committed access An Essbase Kernel Isolation Level setting that affects how Essbase handles transactions. Under committed access, concurrent transactions hold long-term write locks and yield predictable results.

computed item A virtual column (as opposed to a column that is physically stored in the database or cube) that can be calculated by the database during a query, or by Interactive Reporting Studio in the Results section. Computed items are calculations of data based on functions, data items, and operators provided in the dialog box and can be included in reports or reused to calculate other data.

connection file See Interactive Reporting connection file (.oce)

consolidated file (Parent) A file into which all of the business unit files are consolidated; contains the definition of the consolidation.

consolidation The process of aggregating data from dependent entities to parent entities. For example, if the dimension Year consists of the members Qtr1, Qtr2, Qtr3, and Qtr4, its consolidation is Year.

consolidation file (*.cns) A graphical interface that enables you to add, delete, or move Strategic Finance files in the consolidation process using either a Chart or Tree view. It also enables you to define and modify the consolidation.

consolidation rule The rule that is executed during the consolidation of the node of the hierarchy. This rule can contain customer-specific formulas appropriate for the correct consolidation of parent balances. Elimination processing can be controlled within these rules.

content Information stored in the repository for any type of file.

content browser A component that enables users to browse and select content to be placed on a Workspace Page.

context variable A variable that is defined for a particular task flow to identify the context of the taskflow instance.

contribution The value added to a parent from a child entity. Each child has a contribution to its parent.

controls groups Groupings used in FDM to maintain and organize certification and assessment information, especially helpful for meeting Sarbanes-Oxley requirements.

conversion rate See exchange rate.

cookie A segment of data placed on your computer by a Web site.

correlated subqueries Subqueries that are evaluated once for every row in the parent query; created by joining a topic item in the subquery with a topic in the parent query.

critical business area (CBA) An individual or a group organized into a division, region, plant, cost center, profit center, project team, or process; also called accountability team or business area.

critical success factor (CSF) A capability that must be established and sustained to achieve a strategic objective; owned by a strategic objective or a critical process and is a parent to one or more actions.

crosstab reporting Reporting that categorizes and summarizes data in table format. The table cells contain summaries of the data that fit within the intersecting categories. For example, a crosstab report of product sales information could show size attributes, such as Small and Large, as column headings and color attributes, such as Blue and Yellow, as row headings. The cell in the table where Large and Blue intersect could contain the total sales of all Blue products that are sized Large.

cube A block of data that contains three or more dimensions. An Essbase database is a cube.

cube deployment In Essbase Studio, the process of setting load options for a model to build an outline and load data into an Essbase application and database.

cube schema In Essbase Studio, the metadata elements, such as measures and hierarchies, representing the logical model of a cube.

currency conversion A process that converts currency values in a database from one currency into another. For example, to convert one U. S. dollar into the European euro, the exchange rate (for example, 0.923702) is multiplied by the dollar (1×0.923702). After conversion, the European euro amount is .92.

Currency Overrides A feature allowing the selected input method for any input period to be overridden to enable input of that period's value as Default Currency/Items. To override the input method, enter a pound sign (#) before or after the number.

currency partition A dimension type that separates local currency members from a base currency, as defined in an application. Identifies currency types, such as Actual, Budget, and Forecast.

custom calendar Any calendar created by an administrator.

custom dimension A dimension created and defined by users. Channel, product, department, project, or region could be custom dimensions.

custom property A property of a dimension or dimension member that is created by a user.

custom report A complex report from the Design Report module, composed of any combination of components.

custom-defined function (CDF) Essbase calculation functions developed in Java and added to the standard Essbase calculation scripting language using MaxL. See also custom-defined macro.

custom-defined macro (CDM) Essbase macros written with Essbase calculator functions and special macro functions. Custom-defined macros use an internal Essbase macro language that enables the combination of calculation functions and they operate on multiple input parameters. See also custom-defined function.

cycle through Perform multiple passes through a database while calculating it.

dashboard A collection of metrics and indicators that provide an interactive summary of your business. Dashboards enable you to build and deploy analytic applications.

data cache A buffer in memory that holds uncompressed data blocks.

data cell See cell.

data file cache A buffer in memory that holds compressed data (PAG) files.

data form A grid display that enables users to enter data into the database from an interface such as a Web browser, and to view and analyze data or related text. Certain dimension member values are fixed, giving users a specific view into the data.

data function Function that computes aggregate values, including averages, maximums, counts, and other statistics that summarize groupings of data.

data load location In FDM, a reporting unit responsible for submitting source data into the target system. Typically, one FDM data load location exists for each source file loaded to the target system.

data load rules A set of criteria that determines how to load data from a text-based file, a spreadsheet, or a relational data set into a database.

data lock A feature that prevents changes to data according to specified criteria, such as a period or scenario.

data model A representation of a subset of database tables.

data value See cell.

database connection A file that stores definitions and properties used to connect to data sources and enables database references to be portable and widely used.

date measure In Essbase, a member tagged as Date in the dimension where measures are represented. The cell values are displayed as formatted dates. Dates as measures can be useful for analysis types that are difficult to represent using the Time dimension. For example, an application may need to track acquisition dates for a series of capital assets, but the acquisition dates span too large a period to allow for feasible Time dimension modeling. See also typed measure.

Default Currency Units The unit scale of data. For example, If you select to define your analysis in thousands and enter 10, this unit is interpreted as 10,000.

dense dimension In block storage databases, a dimension likely to contain data for every combination of dimension members. For example, time dimensions are often dense because they can contain all combinations of all members. Contrast with sparse dimension.

dependent entity An entity that is owned by another entity in the organization.

derived text measure In Essbase Studio, a text measure whose values are governed by a predefined rule expressed as a range. For example, a derived text measure, called Sales Performance Index, based on a measure Sales, could consist of the values High, Medium, and Low. This derived text measure is defined to display High, Medium, and Low, depending on the range in which the corresponding sales values fall. See also text measure.

descendant Any member below a parent in the database outline. In a dimension that includes years, quarters, and months, the members Qtr2 and April are descendants of the member Year.

Design Report An interface in Web Analysis Studio for designing custom reports, from a library of components.

destination 1) In Business Rules, a block of the database where calculated values are stored; 2) In Profitability and Cost Management, the association of a source and destination in the allocation model that controls the direction of allocated costs or revenue flow.

destination currency The currency to which balances are converted. You enter exchange rates and convert from the source currency to the destination currency. For example, when you convert from EUR to USD, the destination currency is USD.

detail chart A chart that provides the detailed information that you see in a Summary chart. Detail charts appear in the Investigate Section in columns below the Summary charts. If the Summary chart shows a Pie chart, then the Detail charts below represent each piece of the pie.

dimension A data category used to organize business data for the retrieval and preservation of values. Dimensions usually contain hierarchies of related members grouped within them. For example, a Year dimension often includes members for each time period, such as quarters and months.

dimension build The process of adding dimensions and members to an Essbase outline.

dimension build rules Specifications, similar to data load rules, that Essbase uses to modify an outline. The modification is based on data in an external data source file.

dimension tab In the Pivot section, the tab that enables you to pivot data between rows and columns.

dimension table 1) A table that includes numerous attributes about a specific business process; 2) In Essbase Integration Services, a container in the OLAP model for one or more relational tables that define a potential dimension in Essbase.

dimension type A dimension property that enables the use of predefined functionality. Dimensions tagged as time have a predefined calendar functionality.

dimensionality In MaxL DML, the represented dimensions (and the order in which they are represented) in a set. For example, the following set consists of two tuples of the same dimensionality, because they both reflect the dimensions (Region, Year): { (West, Feb), (East, Mar) }

direct rate A currency rate that you enter in the exchange-rate table. The direct rate is used for currency conversion. For example, to convert balances from JPY to USD, in the exchange-rate table, enter a rate for the period/scenario where the source currency is JPY and the destination currency is USD.

dirty block A data block containing cells that have been changed since the last calculation. Upper-level blocks are marked as dirty if their child blocks are dirty (that is, if they have been updated).

Disaster Recovery The ability to safeguard against natural or unplanned outages at a production site by having a recovery strategy for applications and data to a geographically separate standby site.

display type One of three Web Analysis formats saved to the repository: spreadsheet, chart, and pinboard.

dog-ear The flipped page corner in the upper-right corner of the chart header area.

drill-down Navigation through the query result set using the dimensional hierarchy. Drilling down moves the user perspective from aggregated data to detail. For example, drilling down can reveal hierarchical relationships between years and quarters or quarters and months.

drill-through The navigation from a value in one data source to corresponding data in another source.

driver In Profitability and Cost Management, an allocation method that describes the mathematical relationship between the sources that use the driver and the destinations to which those sources allocate cost or revenue. For Business Modeling, see also cost driver and activity driver.

duplicate alias name A name that occurs more than once in an alias table and can be associated with more than one member in a database outline. Duplicate alias names can be used with duplicate member outlines only.

duplicate member name Multiple occurrences of a member name in a database, with each occurrence representing a different member. For example, a database has two members named New York. One member represents New York state and the other member represents New York city.

duplicate member outline A database outline containing duplicate member names.

Dynamic Calc and Store members Members in a block storage outline that Essbase calculates only upon the first retrieval of the value. Essbase then stores the calculated value in the database. Subsequent retrievals do not require calculating.

Dynamic Calc members Members in a block storage outline that Essbase calculates only at retrieval time. Essbase discards calculated values after completing the retrieval request.

dynamic calculation In Essbase, a calculation that occurs only when you retrieve data on a member that is tagged as Dynamic Calc or Dynamic Calc and Store. The member's values are calculated at retrieval time instead of being precalculated during batch calculation.

dynamic hierarchy In aggregate storage database outlines only, a hierarchy in which members are calculated at retrieval time.

dynamic member list A system-created named member set that is based on user-defined criteria. The list is refreshed automatically whenever it is referenced in the application. As dimension members are added and deleted, the list automatically reapplies the criteria to reflect the changes.

dynamic reference A pointer in the rules file to header records in a data source.

dynamic report A report containing data that is updated when you run the report.

Dynamic Time Series A process that performs period-to-date reporting in block storage databases.

dynamic view account An account type indicating that account values are calculated dynamically from the data that is displayed.

Eliminated Account An account that does not appear in the consolidated file.

elimination The process of zeroing out (eliminating) transactions between entities within an organization.

employee A user responsible for, or associated with, specific business objects. Employees need not work for an organization; for example, they can be consultants. Employees must be associated with user accounts, for authorization purposes.

encoding A method for mapping bit combinations to characters for creating, storing, and displaying text. Each encoding has a name; for example, UTF-8. Within an encoding, each character maps to a specific bit combination; for example, in UTF-8, uppercase A maps to HEX41. See also code page, locale.

ending period A period enabling you to adjust the date range in a chart. For example, an ending period of "month" produces a chart showing information through the end of the current month.

Enterprise View An Administration Services feature that enables management of the Essbase environment from a graphical tree view. From Enterprise View, you can operate directly on Essbase artifacts.

entity A dimension representing organizational units. Examples: divisions, subsidiaries, plants, regions, products, or other financial reporting units.

EPM Oracle home A subdirectory of Middleware home containing the files required by EPM System products. The EPM Oracle home location is specified during installation with EPM System Installer.

EPM Oracle instance A directory containing active, dynamic components of EPM System products (components that can change during run-time). You define the EPM Oracle instance directory location during configuration with EPM System Configurator.

Equity Beta The riskiness of a stock, measured by the variance between its return and the market return, indicated by an index called "beta." For example, if a stock's return normally moves up or down 1.2% when the market moves up or down 1%, the stock has a beta of 1.2.

essbase.cfg An optional configuration file for Essbase. Administrators may edit this file to customize Essbase Server functionality. Some configuration settings may also be used with Essbase clients to override Essbase Server settings.

EssCell A function entered into a cell in Essbase Spreadsheet Add-in to retrieve a value representing an intersection of specific Essbase database members.

ESSCMD A command-line interface for performing Essbase operations interactively or through batch script files.

ESSLANG The Essbase environment variable that defines the encoding used to interpret text characters. See also encoding.

ESSMSH See MaxL Shell.

exceptions Values that satisfy predefined conditions. You can define formatting indicators or notify subscribing users when exceptions are generated.

exchange rate type An identifier for an exchange rate. Different rate types are used because there may be multiple rates for a period and year. Users traditionally define rates at period end for the average rate of the period and for the end of the period. Additional rate types are historical rates, budget rates, forecast rates, and so on. A rate type applies to a specific time.

expense account An account that stores periodic and year-to-date values that decrease net worth if they are positive.

Explorer A client/server-based tool that delivers query, analysis, and reporting capabilities for power users who need to directly access data sources or to explore the information organized in prebuilt data models stored in the repository.

Extensible Markup Language (XML) A language comprising a set of tags used to assign attributes to data that can be interpreted between applications according to a schema.

external authentication Logging on to Oracle EPM System products with user information stored outside the application. The user account is maintained by the EPM System, but password administration and user authentication are performed by an external service, using a corporate directory such as Oracle Internet Directory (OID) or Microsoft Active Directory (MSAD).

externally triggered events Non-time-based events for scheduling job runs.

Extract, Transform, and Load (ETL) Data-source-specific programs for extracting data and migrating it to applications.

extraction command An Essbase reporting command that handles the selection, orientation, grouping, and ordering of raw data extracted from a database; begins with the less-than (<) character.

fact table The central table in a star join schema, characterized by a foreign key and elements drawn from a dimension table. This table typically contains numeric data that can be related to all other tables in the schema.

failover The ability to switch automatically to a redundant standby database, server, or network if the primary database, server, or network fails or is shut down. A system that is clustered for failover provides high availability and fault tolerance through server redundancy and fault-tolerant hardware, such as shared disks.

Favorites gadget A gadget that contains links to Reporting and Analysis documents and URLs. See also gadget.

file delimiter A character, such as a comma or tab, that separates fields in a data source.

filter A constraint on data sets that restricts values to specific criteria; for example, to exclude certain tables, metadata, or values, or to control access.

flow account An unsigned account that stores periodic and year-to-date values.

footer Text or images at the bottom of report pages, containing dynamic functions or static text such as page numbers, dates, logos, titles or file names, and author names.

format string 1) In Essbase, a method for transforming the way cell values are displayed; 2) In Data Relationship Management, a parameter of a Format or Formatted Date derived property that indicates the format in which a property value should be returned.

formula In Data Relationship Management, business logic used by a derived property to dynamically calculate a property value.

frame An area on the desktop. Two main areas: the navigation and workspace frames.

free-form grid An object for presenting, entering, and integrating data from different sources for dynamic calculations.

free-form reporting Creating reports by entering dimension members or report script commands in worksheets.

function In Data Relationship Management, a syntactic element of a derived property formula that accepts parameters and returns dynamic values.

gadget A simple, specialized, lightweight application that provides easy viewing of EPM content and enables access to core Reporting and Analysis functionality.

geneology data Additional data that is optionally generated after allocation calculations. This data enables reporting on all cost or revenue flows from start to finish through all allocation steps.

generation A layer in a hierarchical tree structure that defines member relationships in a database. Generations are ordered incrementally from the top member of the dimension (generation 1) down to the child members. Use the unique generation name to identify a layer in the hierarchical tree structure.

generic jobs Non-SQR Production Reporting or non-Interactive Reporting jobs.

global report command A command in a running report script that is effective until it is replaced by another global command or the file ends.

grid POV A means for specifying dimension members on a grid without placing dimensions in rows, columns, or page intersections. A report designer can set POV values at the grid level, preventing user POVs from affecting the grid. If a dimension has one grid value, you put the dimension into the grid POV instead of the row, column, or page.

group A container for assigning similar access permissions to multiple users.

GUI Graphical user interface

hardware cluster a collection of computers that provides a single view of network services (for example, an IP address) or application services (such as databases and Web servers) to clients of these services. Each node in a hardware cluster is a standalone server that runs its own processes. These processes can communicate with one another to form what looks like a single system that cooperatively provides applications, system resources, and data to users.

high availability A system attribute that enables an application to continue to provide services in the presence of failures. This is achieved through removal of single points of failure, with fault-tolerant hardware, as well as server clusters; if one server fails, processing requests are routed to another server.

Historical Average An average for an account over a number of historical periods.

holding company An entity that is part of a legal entity group, with direct or indirect investments in all entities in the group.

horizontal application server cluster A cluster with application server instances on different machines.

host A server on which applications and services are installed.

host properties Properties pertaining to a host, or if the host has multiple Oracle EPM homes, to an Oracle EPM home.

Hybrid Analysis An analysis mapping low-level data stored in a relational database to summary-level data stored in Essbase, combining the mass scalability of relational systems with multidimensional data.

hyperlink A link to a file, a Web page, or an intranet HTML page.

Hypertext Markup Language (HTML) A programming language specifying how Web browsers display data.

identity A unique identification for a user or group in external authentication.

image bookmarks Graphic links to Web pages or repository items.

IMPACTED status A status that indicates changes in child entities consolidating into parent entities.

implied share A member with one or more children but only one that is consolidated, so the parent and child share a value.

import format In FDM, the definition of the structure of the source file that enables the loading of a source data file to an FDM data-load location.

inactive group A group for which an administrator has deactivated system access.

INACTIVE status A status that indicates entities deactivated from consolidation for the current period.

inactive user A user whose account was deactivated by an administrator.

income account An account storing periodic and year-to-date values that, if positive, increase net worth.

index 1) A method where Essbase uses sparse-data combinations to retrieve data in block storage databases. 2) The index file.

index cache A buffer containing index pages.

index entry A pointer to an intersection of sparse dimensions. Index entries point to data blocks on disk and use offsets to locate cells.

index file An Essbase file storing block storage data retrieval information, residing on disk, and containing index pages.

index page A subdivision in an index file. An index page contains pointers to data blocks.

input data Data loaded from a source rather than calculated.

installation assemblies Product installation files that plug in to EPM System Installer.

integration A process that is run to move data between Oracle's Hyperion applications using Shared Services. Data integration definitions specify the data moving between a source application and a destination application, and they enable the data movements to be grouped, ordered, and scheduled.

intelligent calculation A calculation method tracking updated data blocks since the last calculation.

Interactive Reporting connection file (.oce) Files encapsulating database connection information, including the database API (ODBC, SQL*Net, and so on), database software, the database server network address, and database user name. Administrators create and publish Interactive Reporting connection (.oce) files.

intercompany elimination See elimination.

intercompany matching The process of comparing balances for pairs of intercompany accounts within an application. Intercompany receivables are compared to intercompany payables for matches. Matching accounts are used to eliminate intercompany transactions from an organization's consolidated totals.

intercompany matching report A report that compares intercompany account balances and indicates whether the accounts are in balance.

interdimensional irrelevance A situation in which a dimension does not intersect with other dimensions. Because the data in the dimension cannot be accessed from the nonintersecting dimensions, the nonintersecting dimensions are not relevant to that dimension.

intersection A unit of data representing the intersection of dimensions in a multidimensional database; also, a worksheet cell.

intrastage assignment An assignment in the financial flow to an object within the same stage.

introspection A deep inspection of a data source to discover hierarchies based on the inherent relationships in the database. Contrast with scraping.

Investigation See drill-through.

isolation level An Essbase Kernel setting that determines the lock and commit behavior of database operations. Choices are: committed access and uncommitted access.

iteration A pass of the budget or planning cycle in which the same version of data is revised and promoted.

Java application server cluster An active-active application server cluster of Java Virtual Machines (JVMs).

Java Database Connectivity (JDBC) A client-server communication protocol used by Java-based clients and relational databases. The JDBC interface provides a call-level API for SQL-based database access.

job output Files or reports produced from running a job.

jobs Documents with special properties that can be launched to generate output. A job can contain Interactive Reporting, SQR Production Reporting, or generic documents.

join A link between two relational database tables or topics based on common content in a column or row. A join typically occurs between identical or similar items within different tables or topics. For example, a record in the Customer table is joined to a record in the Orders table because the Customer ID value is the same in each table.

journal entry (JE) A set of debit-credit adjustments to account balances for a scenario and period.

JSP Java Server Page.

KeyContacts gadget A gadget that contains a group of Smart Space users and provides access to Smart Space Collaborator. For example, you can have a KeyContacts gadget for your marketing team and another for your development team. See also gadget.

latest A spreadsheet keyword used to extract data values from the member defined as the latest time period.

layer 1) The horizontal location of members in a hierarchical structure, specified by generation (top down) or level (bottom up); 2) Position of objects relative to other objects. For example, in the Sample Basic database, Qtr1 and Qtr4 are in the same layer, so they are also in the same generation, but in a database with a ragged hierarchy, Qtr1 and Qtr4 might not be in same layer, though they are in the same generation.

layout area An area on a Workspace Page where content can be placed.

legend box A box containing labels that identify the data categories of a dimension.

level A layer in a hierarchical tree structure that defines database member relationships. Levels are ordered from the bottom dimension member (level 0) up to the parent members.

level 0 block A data block for combinations of sparse, level 0 members.

level 0 member A member that has no children.

liability account An account type that stores "point in time" balances of a company's liabilities. Examples: accrued expenses, accounts payable, and long-term debt.

lifecycle management The process of migrating an application, a repository, or individual artifacts across product environments.

line item detail The lowest level of detail in an account.

lineage The relationship between different metadata elements showing how one metadata element is derived from one or more other metadata elements, ultimately tracing the metadata element to its physical source. In Essbase Studio, a lineage viewer displays the relationships graphically. See also traceability.

link 1) A reference to a repository object. Links can reference folders, files, shortcuts, and other links; 2) In a taskflow, the point where the activity in one stage ends and another begins.

link condition A logical expression evaluated by the taskflow engine to determine the sequence of launching taskflow stages.

linked data model Documents that are linked to a master copy in a repository

linked partition A shared partition that enables you to use a data cell to link two databases. When a user clicks a linked cell in a worksheet, Essbase opens a new sheet displaying the dimensions in the linked database. The user can then drill down those dimensions.

linked reporting object (LRO) A cell-based link to an external file such as cell notes, URLs, or files with text, audio, video, or pictures. (Only cell notes are supported for Essbase LROs in Financial Reporting.) Contrast with local report object.

load balancer Hardware or software that directs the requests to individual application servers in a cluster and is the only point of entry into the system.

load balancing Distribution of requests across a group of servers, which helps to ensure optimal end user performance.

local currency An input currency type. When an input currency type is not specified, the local currency matches the entity's base currency.

local report object A report object that is not linked to a Financial Reporting report object in Explorer. Contrast with linked reporting object.

local results A data model's query results. Results can be used in local joins by dragging them into the data model. Local results are displayed in the catalog when requested.

locale A computer setting that specifies a location's language, currency and date formatting, data sort order, and the character set encoding used on the computer. Essbase uses only the encoding portion. See also encoding, ESSLANG.

locale header record A text record at the beginning of some non-Unicode-encoded text files, such as scripts, that identifies the encoding locale.

location alias A descriptor that identifies a data source. The location alias specifies a server, application, database, user name, and password. Location aliases are set by DBAs at the database level using Administration Services Console, ESSCMD, or the API.

locked A user-invoked process that prevents users and processes from modifying data.

locked data model A data model that cannot be modified by a user.

LOCKED status A consolidation status indicating that an entity contains data that cannot be modified.

Log Analyzer An Administration Services feature that enables filtering, searching, and analysis of Essbase logs.

logic group In FDM, one or more logic accounts generated after a source file is loaded into FDM. Logic accounts are calculated accounts derived from the source data.

logical Web application An aliased reference used to identify the internal host name, port, and context of a Web application. In a clustered or high-availability environment, this is the alias name that establishes a single internal reference for the distributed components. In EPM System, a nonclustered logical Web application defaults to the physical host running the Web application.

LRO See linked reporting object.

managed server An application server process running in its own Java Virtual Machine (JVM).

manual stage A stage that requires human intervention.

Map File A file that stores the definition for sending data to or retrieving data from an external database. Map files have different extensions (.mps to send data; .mpr to retrieve data).

Map Navigator A feature that displays your current position on a Strategy, Accountability, or Cause and Effect map, indicated by a red outline.

Marginal Tax Rate The rate used to calculate the after-tax cost of debt; represents the tax rate applied to the last earned income dollar (the rate from the highest tax bracket into which income falls) and includes federal, state, and local taxes. Based on current level of taxable income and tax bracket, you can predict marginal tax rate.

Market Risk Premium The additional rate of return paid over the risk-free rate to persuade investors to hold "riskier" investments than government securities. Calculated by subtracting the risk-free rate from the expected market return. These figures should closely model future market conditions.

master data model An independent data model that is referenced as a source by multiple queries. When used, "Locked Data Model" is displayed in the Query section's Content pane; the data model is linked to the master data model displayed in the Data Model section, which an administrator may hide.

mathematical operator A symbol that defines how data is calculated in formulas and outlines. Can be any of the standard mathematical or Boolean operators; for example, +, -, *, /, and %.

MaxL The multidimensional database access language for Essbase, consisting of a data definition language (MaxL DDL) and a data manipulation language (MaxL DML). See also MaxL DDL, MaxL DML, and MaxL Shell

MaxL DDL The data definition language used by Essbase for batch or interactive system-administration tasks.

MaxL DML The data manipulation language used in Essbase for data query and extraction.

MaxL Perl Module A Perl module (essbase.pm) that is part of Essbase MaxL DDL. This module can be added to the Perl package to provide access to Essbase databases from Perl programs.

MaxL Script Editor A script-development environment in Administration Services Console. MaxL Script Editor is an alternative to using a text editor and the MaxL Shell for administering Essbase with MaxL scripts.

MaxL Shell An interface for passing MaxL statements to Essbase Server. The MaxL Shell executable file is located in the Essbase bin directory (UNIX: essmsh; Windows: essmsh.exe).

MDX (multidimensional expression) A language used for querying and calculation in multidimensional-compliant databases.

measures Numeric values in an OLAP database cube that are available for analysis. Measures are margin, cost of goods sold, unit sales, budget amount, and so on. See also fact table.

member A discrete component within a dimension. A member identifies and differentiates the organization of similar units. For example, a time dimension might include members Jan, Feb, and Qtr1.

member list A named system- or user-defined group that references members, functions, or member lists within a dimension.

member load In Essbase Integration Services, the process of adding dimensions and members (without data) to Essbase outlines.

member selection report command A type of Report Writer command that selects member ranges based on outline relationships, such as sibling, generation, and level.

member-specific report command A type of Report Writer formatting command that is executed as it is encountered in a report script. The command affects only its associated member and executes the format command before processing the member.

merge A data load option that clears values only from the accounts specified in the data load file and replaces them with values in the data load file.

metadata A set of data that defines and describes the properties and attributes of the data stored in a database or used by an application. Examples of metadata are dimension names, member names, properties, time periods, and security.

metadata elements Metadata derived from data sources and other metadata that is stored and cataloged for Essbase Studio use.

metadata sampling The process of retrieving a sample of members in a dimension in a drill-down operation.

metadata security Security set at the member level to restrict users from accessing certain outline members.

metaoutline In Essbase Integration Services, a template containing the structure and rules for creating an Essbase outline from an OLAP model.

Middleware home A directory that includes the Oracle WebLogic Server home and can also include the EPM Oracle home and other Oracle homes. A Middleware home can reside on a local file system or on a remote shared disk that is accessible through NFS.

migration audit report A report generated from the migration log that provides tracking information for an application migration.

migration definition file (.mdf) A file that contains migration parameters for an application migration, enabling batch script processing.

migration log A log file that captures all application migration actions and messages.

migration snapshot A snapshot of an application migration that is captured in the migration log.

MIME Type An attribute that describes the data format of an item, so that the system knows which application should open the object. A file's MIME (Multipurpose Internet Mail Extension) type is determined by the file extension or HTTP header. Plug-ins tell browsers which MIME types they support and which file extensions correspond to each MIME type.

minireport A report component that includes layout, content, hyperlinks, and the query or queries to load the report. Each report can include one or more minireports.

minischema A graphical representation of a subset of tables from a data source that represents a data modeling context.

missing data (#MISSING) A marker indicating that data in the labeled location does not exist, contains no value, or was never entered or loaded. For example, missing data exists when an account contains data for a previous or future period but not for the current period.

model 1) A file or content string containing an application-specific representation of data. Models are the basic data managed by Shared Services, of two major types: dimensional and nondimensional application objects; 2) In Business Modeling, a network of boxes connected to represent and calculate the operational and financial flow through the area being examined.

multidimensional database A method of organizing, storing, and referencing data through three or more dimensions. An individual value is the intersection point for a set of dimensions. Contrast with relational database.

Multiload An FDM feature that allows the simultaneous loading of multiple periods, categories, and locations.

My Workspace Page Customizable Workspace Pages created by users. They are marked specially so that they can be easily accessed from one single place without having to navigate the repository.

named set In MaxL DML, a set with its logic defined in the optional WITH section of a MaxL DML query. The named set can be referenced multiple times in the query.

native authentication The process of authenticating a user name and password from within the server or application.

nested column headings A report column heading format that displays data from multiple dimensions. For example, a column heading that contains Year and Scenario members is a nested column. The nested column heading shows Q1 (from the Year dimension) in the top line of the heading, qualified by Actual and Budget (from the Scenario dimension) in the bottom line of the heading.

NO DATA status A consolidation status indicating that this entity contains no data for the specified period and account.

non-dimensional model A Shared Services model type that includes application objects such as security files, member lists, calculation scripts, and Web forms.

non-unique member name See duplicate member name.

null value A value that is absent of data. Null values are not equal to zero.

numeric attribute range A feature used to associate a base dimension member that has a discrete numeric value with an attribute that represents a value range. For example, to classify customers by age, an Age Group attribute dimension can contain members for the following age ranges: 0-20, 21-40, 41-60, and 61-80. Each Customer dimension member can be associated with an Age Group range. Data can be retrieved based on the age ranges rather than on individual age values.

ODBC Open Database Connectivity. A database access method used from any application regardless of how the database management system (DBMS) processes the information.

OK status A consolidation status indicating that an entity has already been consolidated, and that data has not changed below it in the organization structure.

OLAP Metadata Catalog In Essbase Integration Services, a relational database containing metadata describing the nature, source, location, and type of data that is pulled from the relational data source.

OLAP model In Essbase Integration Services, a logical model (star schema) that is created from tables and columns in a relational database. The OLAP model is then used to generate the structure of a multidimensional database. See also online analytical processing (OLAP).

online analytical processing (OLAP) A multidimensional, multiuser, client-server computing environment for users who analyze consolidated enterprise data in real time. OLAP systems feature drill-down, data pivoting, complex calculations, trend analysis, and modeling.

Open Database Connectivity (ODBC) Standardized application programming interface (API) technology that allows applications to access multiple third-party databases.

Oracle home A directory containing the installed files required by a specific product, and residing within the directory structure of Middleware home. See also Middleware home.

organization An entity hierarchy that defines each entity and their relationship to others in the hierarchy.

origin The intersection of two axes.

outline The database structure of a multidimensional database, including all dimensions, members, tags, types, consolidations, and mathematical relationships. Data is stored in the database according to the structure defined in the outline.

outline synchronization For partitioned databases, the process of propagating outline changes from one database to another database.

P&L accounts (P&L) Profit and loss accounts. P&L refers to a typical grouping of expense and income accounts that comprise a company's income statement.

page A display of information in a grid or table often represented by the Z-axis. A page can contain data from one field, derived data from a calculation, or text.

page file An Essbase data file.

page heading A report heading type that lists members represented on the current page of the report. All data values on the page have the members in the page heading as a common attribute.

page member A member that determines the page axis.

palette A JASC-compliant file with a .PAL extension. Each palette contains 16 colors that complement each other and can be used to set the dashboard color elements.

parallel calculation A calculation option. Essbase divides a calculation into tasks and calculates some tasks simultaneously.

parallel data load In Essbase, the concurrent execution of data load stages by multiple process threads.

parallel export The ability to export Essbase data to multiple files. This may be faster than exporting to a single file, and it may resolve problems caused by a single data file becoming too large for the operating system to handle.

parent adjustments The journal entries that are posted to a child in relation to its parent.

parents The entities that contain one or more dependent entities that report directly to them. Because parents are entities associated with at least one node, they have entity, node, and parent information associated with them.

partition area A subcube within a database. A partition is composed of one or more areas of cells from a portion of the database. For replicated and transparent partitions, the number of cells within an area must be the same for the data source and target to ensure that the two partitions have the same shape. If the data source area contains 18 cells, the data target area must also contain 18 cells to accommodate the number of values.

partitioning The process of defining areas of data that are shared or linked between data models. Partitioning can affect the performance and scalability of Essbase applications.

pattern matching The ability to match a value with any or all characters of an item entered as a criterion. Missing characters may be represented by wild-card values such as a question mark (?) or an asterisk (*). For example, "Find all instances of apple" returns apple, but "Find all instances of apple*" returns apple, applesauce, applecranberry, and so on.

percent consolidation The portion of a child's values that is consolidated to its parent.

percent control The extent to which an entity is controlled within the context of its group.

percent ownership The extent to which an entity is owned by its parent.

performance indicator An image file used to represent measure and scorecard performance based on a range you specify; also called a status symbol. You can use the default performance indicators or create an unlimited number of your own.

periodic value method (PVA) A process of currency conversion that applies the periodic exchange rate values over time to derive converted results.

permission A level of access granted to users and groups for managing data or other users and groups.

persistence The continuance or longevity of effect for any Essbase operation or setting. For example, an Essbase administrator may limit the persistence of user name and password validity.

personal pages A personal window to repository information. You select what information to display and its layout and colors.

personal recurring time events Reusable time events that are accessible only to the user who created them.

personal variable A named selection statement of complex member selections.

perspective A category used to group measures on a scorecard or strategic objectives within an application. A perspective can represent a key stakeholder (such as a customer, employee, or shareholder/financial) or a key competency area (such as time, cost, or quality).

pinboard One of the three data object display types. Pinboards are graphics composed of backgrounds and interactive icons called pins. Pinboards require traffic lighting definitions.

pins Interactive icons placed on graphic reports called pinboards. Pins are dynamic. They can change images and traffic lighting color based on the underlying data values and analysis tools criteria.

pivot Alter the perspective of retrieved data. When Essbase first retrieves a dimension, it expands data into rows. You can then pivot or rearrange the data to obtain a different viewpoint.

planner A user who can input and submit data, use reports that others create, execute business rules, use task lists, enable e-mail notification for themselves, and use Smart View. Planners comprise the majority of users.

planning unit A data slice at the intersection of a scenario, version, and entity; the basic unit for preparing, reviewing, annotating, and approving plan data.

plot area The area bounded by X, Y, and Z axes; for pie charts, the rectangular area surrounding the pie.

plug account An account in which the system stores any out-of-balance differences between intercompany account pairs during the elimination process.

post stage assignment Assignments in the allocation model that are assigned to locations in a subsequent model stage.

POV (point of view) A feature for setting data focus by selecting members that are not already assigned to row, column, or page axes. For example, selectable POVs in FDM could include location, period, category, and target category. In another example, using POV as a filter in Smart View, you could assign the Currency dimension to the POV and select the Euro member. Selecting this POV in data forms displays data in Euro values.

precalculation Calculating the database before user retrieval.

precision Number of decimal places displayed in numbers.

predefined drill paths Paths used to drill to the next level of detail, as defined in the data model.

presentation A playlist of Web Analysis documents, enabling reports to be grouped, organized, ordered, distributed, and reviewed. Includes pointers referencing reports in the repository.

preserve formulas User-created formulas kept within a worksheet while retrieving data.

primary measure A high-priority measure important to your company and business needs. Displayed in the Contents frame.

Process Monitor Report A list of locations and their positions within the FDM data conversion process. You can use the process monitor report to monitor the status of the closing process. The report is time-stamped. Therefore, it can be used to determine to which locations at which time data was loaded.

product In Shared Services, an application type, such as Planning or Performance Scorecard.

Production Reporting See SQR Production Reporting.

project An instance of Oracle's Hyperion products grouped together in an implementation. For example, a Planning project may consist of a Planning application, an Essbase cube, and a Financial Reporting Server instance.

provisioning The process of granting users and groups specific access permissions to resources.

proxy server A server acting as an intermediary between workstation users and the Internet to ensure security.

public job parameters Reusable named job parameters created by administrators and accessible to users with requisite access privileges.

public recurring time events Reusable time events created by administrators and accessible through the access control system.

PVA See periodic value method.

qualified name A member name in a qualified format that differentiates duplicate member names in a duplicate member outline. For example, [Market].[East].[State].[New York] or [Market].[East].[City].[New York].

query governor An Essbase Integration Server parameter or Essbase Server configuration setting that controls the duration and size of queries made to data sources.

reciprocal assignment An assignment in the financial flow that also has the source as one of its destinations.

reconfigure URL A URL that is used to reload servlet configuration settings dynamically when users are already logged on to the Workspace.

record In a database, a group of fields making up one complete entry. For example, a customer record may contain fields for name, address, telephone number, and sales data.

recurring template A journal template for making identical adjustments in every period.

recurring time event An event specifying a starting point and the frequency for running a job.

redundant data Duplicate data blocks that Essbase retains during transactions until Essbase commits updated blocks.

regular journal A feature for entering one-time adjustments for a period. A regular journal can be balanced, balanced by entity, or unbalanced.

Related Accounts Accounts related to the main account and grouped under the same main account number. The account structure groups all main and related accounts under the same main account number. The main account is distinguished from related accounts by the first suffix of the account number.

relational database A type of database that stores data in related two-dimensional tables. Contrast with multidimensional database.

replace A data load option that clears existing values from all accounts for periods specified in the data load file and loads values from the data load file. If an account is not specified in the load file, its values for the specified periods are cleared.

replicated partition A portion of a database, defined through Partition Manager, used to propagate an update to data mastered at one site to a copy of data stored at another site. Users can access the data as though it were part of their local database.

Report Extractor An Essbase component that retrieves report data from the Essbase database when report scripts are run.

report object In report designs, a basic element with properties defining behavior or appearance, such as text boxes, grids, images, and charts.

report script A text file containing Essbase Report Writer commands that generate one or more production reports.

Report Viewer An Essbase component that displays complete reports after report scripts are run.

reporting currency The currency used to prepare financial statements, and converted from local currencies to reporting currencies.

repository Storage location for metadata, formatting, and annotation information for views and queries.

resources Objects or services managed by the system, such as roles, users, groups, files, and jobs.

restore An operation to reload data and structural information after a database has been damaged or destroyed, typically performed after shutting down and restarting the database.

restructure An operation to regenerate or rebuild the database index and, in some cases, data files.

result frequency The algorithm used to create a set of dates to collect and display results.

review level A Process Management review status indicator representing the process unit level, such as Not Started, First Pass, Submitted, Approved, and Published.

Risk Free Rate The rate of return expected from "safer" investments such as long-term U.S. government securities.

role The means by which access permissions are granted to users and groups for resources.

roll-up See consolidation.

root member The highest member in a dimension branch.

runtime prompt A variable that users enter or select before a business rule is run.

sampling The process of selecting a representative portion of an entity to determine the entity's characteristics. See also metadata sampling.

saved assumptions User-defined Planning assumptions that drive key business calculations (for example, the cost per square foot of office floor space).

scaling Scaling determines the display of values in whole numbers, tens, hundreds, thousands, millions, and so on.

scenario A dimension for classifying data; for example, Actuals, Budget, Forecast1, or Forecast2.

schema In relational databases, a logical model that represents the data and the relationships between the data.

scope The area of data encompassed by any Essbase operation or setting; for example, the area of data affected by a security setting. Most commonly, scope refers to three levels of granularity, where higher levels encompass lower levels. The levels, from highest to lowest: the entire system (Essbase Server), applications on Essbase Server, or databases within Essbase Server applications. See also persistence.

score The level at which targets are achieved, usually expressed as a percentage of the target.

scorecard A business object that represents the progress of an employee, strategy element, or accountability element toward goals. Scorecards ascertain this progress based on data collected for each measure and child scorecard added to the scorecard.

scrapping An inspection of a data source to derive the most basic metadata elements from it. Contrast with introspection.

secondary measure A low-priority measure, less important than primary measures. Secondary measures do not have Performance reports but can be used on scorecards and to create dimension measure templates.

security agent A Web access management provider (for example, Oracle Access Manager, Oracle Single Sign-On, or CA SiteMinder) that protects corporate Web resources.

security platform A framework enabling Oracle EPM System products to use external authentication and single sign-on.

serial calculation The default calculation setting. Divides a calculation pass into tasks and calculates one task at a time.

services Resources that enable business items to be retrieved, changed, added, or deleted. Examples: Authorization and Authentication.

servlet A piece of compiled code executable by a Web server.

shared disks See shared storage.

shared member A member that shares storage space with another member of the same name, preventing duplicate calculation of members that occur multiple times in an Essbase outline.

Shared Services Registry The part of the Shared Services repository that manages EPM System deployment information for most EPM System products, including installation directories, database settings, computer names, ports, servers, URLs, and dependent service data.

shared storage A set of disks containing data that must be available to all nodes of a failover cluster; also called shared disks.

Shared Workspace Pages Workspace Pages shared across an organization that are stored in a special System folder and can be accessed by authorized users from the Shared Workspace Pages Navigate menu.

sibling A child member at the same generation as another child member and having the same immediate parent. For example, the members Florida and New York are children of East and each other's siblings.

silent response files Files providing data that an installation administrator would otherwise be required to provide. Response files enable EPM System Installer or EPM System Configurator to run without user intervention or input.

single point of failure Any component in a system that, if it fails, prevents users from accessing the normal functionality.

single sign-on (SSO) The ability to log on once and then access multiple applications without being prompted again for authentication.

smart tags Keywords in Microsoft Office applications that are associated with predefined actions available from the Smart Tag menu. In Oracle EPM System products, smart tags can also be used to import Reporting and Analysis content and to access Financial Management and Essbase functions.

SmartCut A link to a repository item, in URL form.

snapshot Read-only data from a specific time.

source currency The currency from which values originate and are converted through exchange rates to the destination currency.

sparse dimension In block storage databases, a dimension unlikely to contain data for all member combinations when compared to other dimensions. Contrast with dense dimension. For example, not all customers have data for all products.

SPF files Printer-independent files created by an SQR Production Reporting server, containing a representation of the actual formatted report output, including fonts, spacing, headers, footers, and so on.

Spotlighter A tool that enables color coding based on selected conditions.

SQL spreadsheet A data object that displays the result set of a SQL query.

SQR Production Reporting A specialized programming language for data access, data manipulation, and creating SQR Production Reporting documents.

stage 1) A task description that forms one logical step within a taskflow, usually performed by an individual. A stage can be manual or automated; 2) For Profitability, logical divisions within the model that represent the steps in the allocation process within your organization.

stage action For automated stages, the invoked action that executes the stage.

staging area A database that you create to meet the needs of a specific application. A staging area is a snapshot or restructured version of one or more RDBMS.

staging table A database that you create to meet the needs of a specific application. A staging area is a snapshot or restructured version of one or more RDBMSs.

standard dimension A dimension that is not an attribute dimension.

standard journal template A journal function used to post adjustments that have common adjustment information for each period. For example, you can create a standard template that contains the common account IDs, entity IDs, or amounts, and then use the template as the basis for many regular journals.

Status bar The bar at the bottom of the screen that displays helpful information about commands, accounts, and the current status of your data file.

stored hierarchy In aggregate storage databases outlines only, a hierarchy in which the members are aggregated according to the outline structure. Stored hierarchy members have certain restrictions; for example, they cannot contain formulas.

strategic objective (SO) A long-term goal defined by measurable results. Each strategic objective is associated with one perspective in the application, has one parent, the entity, and is a parent to critical success factors or other strategic objectives.

Strategy map Represents how the organization implements high-level mission and vision statements into lower-level, constituent strategic goals and objectives.

structure view Displays a topic as a simple list of component data items.

Structured Query Language A language used to process instructions to relational databases.

Subaccount Numbering A system for numbering subaccounts using nonsequential whole numbers.

subscribe Flags an item or folder to receive automatic notification whenever the item or folder is updated.

Summary chart In the Investigates Section, a chart that rolls up detail charts shown below in the same column, plotting metrics at the summary level at the top of each chart column.

supervisor A user with full access to all applications, databases, related files, and security mechanisms for a server.

supporting detail Calculations and assumptions from which the values of cells are derived.

suppress rows A setting that excludes rows containing missing values and underscores characters from spreadsheet reports.

symmetric multiprocessing (SMP) A server architecture that enables multiprocessing and multithreading. Performance is not significantly degraded when a large number of users simultaneously connect to an single instance.

symmetric topology An Oracle Fusion Middleware Disaster Recovery configuration that is identical across tiers on the production site and standby site. In a symmetric topology, the production site and standby site have the identical number of hosts, load balancers, instances, and applications. The same ports are used for both sites. The systems are configured identically and the applications access the same data.

sync Synchronization of Shared Services and application models.

synchronized The condition that exists when the latest version of a model resides in both the application and in Shared Services. See also model.

system extract A feature that transfers data from application metadata into an ASCII file.

tabs Navigable views of accounts and reports in Strategic Finance.

target Expected results of a measure for a specified period of time (day, quarter, and so on).

task list A detailed status list of tasks for a particular user.

taskflow The automation of a business process in which tasks are passed from one taskflow participant to another according to procedural rules.

taskflow definition Business processes in the taskflow management system that consist of a network of stages and their relationships; criteria indicating the start and end of the taskflow; and information about individual stages, such as participants, associated applications, associated activities, and so on.

taskflow instance A single instance of a taskflow including its state and associated data.

taskflow management system A system that defines, creates, and manages the execution of a taskflow, including definitions, user or application interactions, and application executables.

taskflow participant The resource that performs the task associated with the taskflow stage instance for both manual and automated stages.

Taxes - Initial Balances Strategic Finance assumes that the Initial Loss Balance, Initial Gain Balance, and Initial Balance of Taxes Paid entries have taken place in the period before the first Strategic Finance time period.

TCP/IP See Transmission Control Protocol/Internet Protocol.

text list In Essbase, an object that stores text values mapped to numeric identifiers. Text Lists enable the use of text measures.

text measure In Essbase, a member tagged as Text in the dimension where measures are represented. The cell values are displayed as predefined text. For example, the text measure Satisfaction Index may have the values Low, Medium, and High. See also typed measure, text list, derived text measure.

time dimension The time period that the data represents, such as fiscal or calendar periods.

time events Triggers for job execution.

time scale A scale that displays metrics by a specific time span, such as monthly or quarterly.

time series reporting A process for reporting data based on a calendar date (for example, year, quarter, month, or week).

Timeline Viewer An FDM feature that enables users to view dates and times of completed process flow steps for specific locations.

Title bar A bar that displays the Strategic Finance name, the file name, and the scenario name Version box.

toast message A message that fades in the lower-right corner of the screen.

token An encrypted identification of one valid user or group on an external authentication system.

top and side labels Column and row headings on the top and sides of a Pivot report.

top-level member A dimension member at the top of the tree in a dimension outline hierarchy, or the first member of the dimension in sort order if there is no hierarchical relationship among dimension members. If a hierarchical relationship exists, the top-level member name is generally the same as the dimension name.

trace allocations A Profitability feature that enables you to visually follow the flow of financial data, either forwards or backwards, from a single intersection throughout the model.

trace level The level of detail captured in a log file.

traceability The ability to track a metadata element to its physical source. For example, in Essbase Studio, a cube schema can be traced from its hierarchies and measure hierarchies to its dimension elements, date/time elements, measures, and, ultimately, to its physical source elements. See also lineage.

traffic lighting Color-coding of report cells, or pins based on a comparison of two dimension members, or on fixed limits.

transformation A process that transforms artifacts so that they function properly in the destination environment after application migration.

translation See currency conversion.

Transmission Control Protocol/Internet Protocol (TCP/IP) A standard set of communication protocols linking computers with different operating systems and internal architectures. TCP/IP utilities are used to exchange files, send mail, and store data to various computers that are connected to local and wide area networks.

transparent login A process that logs in authenticated users without launching the login screen.

transparent partition A shared partition that enables users to access and change data in a remote database as though it is part of a local database.

triangulation A means of converting balances from one currency to another through a third common currency. For example, to convert balances from the Danish krone to the British pound, balances could be converted from the krone to the euro and from the euro to the pound.

triggers An Essbase feature whereby data is monitored according to user-specified criteria that, when met, cause Essbase to alert the user or system administrator.

trusted user Authenticated user.

tuple MDX syntax element that references a cell as an intersection of a member from each dimension. If a dimension is omitted, its top member is implied. Examples: (Jan); (Jan, Sales); ([Jan], [Sales], [Cola], [Texas], [Actual]).

two-pass An Essbase property that is used to recalculate members that are dependent on the calculated values of other members. Two-pass members are calculated during a second pass through the outline.

typed measure In Essbase, a member tagged as Text or Date in the dimension where measures are represented. The cell values are displayed as predefined text or dates.

unary operator A mathematical indicator (+, -, *, /, %) associated with an outline member. The unary operator defines how the member is calculated during a database roll-up.

Unicode-mode application An Essbase application wherein character text is encoded in UTF-8, enabling users with computers set up for different languages to share application data.

unique member name A nonshared member name that exists only once in a database outline.

unique member outline A database outline that is not enabled for duplicate member names.

upgrade The process of deploying a new software release and moving applications, data, and provisioning information from an earlier deployment to the new deployment.

upper-level block A type of data block wherein at least one of the sparse members is a parent-level member.

user directory A centralized location for user and group information, also known as a repository or provider. Popular user directories include Oracle Internet Directory (OID), Microsoft Active Directory (MSAD), and Sun Java System Directory Server.

user variable A variable that dynamically renders data forms based on a user's member selection, displaying only the specified entity. For example, a user variable named Department displays specific departments and employees.

user-defined attribute (UDA) An attribute, associated with members of an outline to describe a characteristic of the members, that can be used to return lists of members that have the specified associated UDA.

user-defined member list A named, static set of members within a dimension defined by the user.

validation The process of checking a business rule, report script, or partition definition against the outline to ensure that the object being checked is valid.

validation rules Rules used in FDM to enforce data integrity. For example, in FDM, validation rules ensure that certain conditions are met after data is loaded from FDM to the target application.

value dimension A dimension that is used to define input value, translated value, and consolidation detail.

variance The difference between two values (for example, between planned and actual values).

version A possible outcome used within the context of a scenario of data. For example, Budget - Best Case and Budget - Worst Case where Budget is scenario and Best Case and Worst Case are versions.

vertical application server cluster A cluster with multiple application server instances on the same machine.

view A year-to-date or periodic display of data.

visual cue A formatted style, such as a font or a color, that highlights specific data value types. Data values may be dimension members; parent, child, or shared members; dynamic calculations; members containing a formula; read-only data cells; read-and-write data cells; or linked objects.

WebLogic Server home A subdirectory of Middleware home containing installed files required by a WebLogic Server instance. WebLogic Server home is a peer of Oracle homes.

weight A value assigned to an item on a scorecard that indicates the relative importance of that item in the calculation of the overall scorecard score. The weighting of all items on a scorecard accumulates to 100%. For example, to recognize the importance of developing new features for a product, the measure for New Features Coded on a developer's scorecard would be assigned a higher weighting than a measure for Number of Minor Defect Fixes.

wild card Character that represents any single character (?) or group of characters (*) in a search string.

WITH section In MaxL DML, an optional section of the query used for creating reusable logic to define sets or members. Sets or custom members can be defined once in the WITH section and then referenced multiple times during a query.

workbook An entire spreadsheet file with many worksheets.

workflow The steps required to process data from start to finish in FDM. The workflow consists of Import (loading data from the GL file), Validate (ensures that all members are mapped to a valid account), Export (loads the mapped members to the target application), and Check (verifies accuracy of data by processing data with user-defined validation rules).

Workspace Page A page created with content from multiple sources including documents, URL, and other content types. Enables a user to aggregate content from Oracle and non-Oracle sources.

write-back The ability for a retrieval client, such as a spreadsheet, to update a database value.

ws.conf A configuration file for Windows platforms.

wsconf_platform A configuration file for UNIX platforms.

XML See Extensible Markup Language.

XOLAP An Essbase multidimensional database that stores only the outline metadata and retrieves all data from a relational database at query time. XOLAP supports aggregate storage databases and applications that contain duplicate member names.

Y axis scale A range of values on Y axis of charts displayed in Investigate Section. For example, use a unique Y axis scale for each chart, the same Y axis scale for all Detail charts, or the same Y axis scale for all charts in the column. Often, using a common Y axis improves your ability to compare charts at a glance.

Zero Administration A software tool that identifies version number of the most up-to-date plug-in on the server.

ZoomChart A tool for viewing detailed information by enlarging a chart. A ZoomChart enables you to see detailed numeric information on the metric that is displayed in the chart.