Oracle® Hyperion Web Analysis

Workspace User's Guide

Release 11.1.2.2.00

ORACLE®

**ENTERPRISE PERFORMANCE
MANAGEMENT SYSTEM**

Web Analysis Workspace User's Guide, 11.1.2.2.00

Contents

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Setting Web Analysis Preferences

Preferences are stored in the repository as preference files. A preferences file is located in every users Profiles folder. Share preference files with other users. Although multiple preference files can be defined, only one preference file can be active at a time.

Note: Only subsets of Oracle Hyperion Web Analysis preferences are set through Oracle Hyperion Enterprise Performance Management Workspace. The Oracle Hyperion Web Analysis Studio offers a comprehensive interface for specifying Web Analysis preferences. EPM Workspace and the Web Analysis Studio modify the same files.

Note: In order for data to display correctly for a language, you need to set regional settings though the Control Panel as well the language setting through your browser (for example, Internet Explorer).

Setting the Active Preferences File

The Preferences dialog box Active Preferences tab specifies the current preferences file.

Selecting **Use My Preferences** indicates you are using and editing the preferences file located in your Profiles folder. Selecting **Use Shared Preferences** indicates you are using a shared preferences file at the specified repository location.

Note: The default location for Shared Preferences files is in the User\\<*Profiles*> folder.

Changing the Active Preference does not impact opened documents in the content area. User and shared preferences are only applied to subsequently created documents.

Upon editing shared preferences files, change the default behavior for users referencing that file. To prevent users from changing your preferences, restrict yourself to using your own preferences file.

Default Document Open Mode

- Selecting **HTML** or **Web Analysis Studio**, as your default document open mode, opens Web Analysis documents in the default mode selected

- Selecting **HTML** opens the document in EPM Workspace.

- Selecting Web Analysis Studio launches a Web Analysis Studio session, automatically logging in and opening the selected document.

  Note: This option will open one Web Analysis document per session in the Web Analysis Studio.

Web Analysis Database Preferences

Web Analysis Databases user preferences provide an inventory of available database servers and database connections by listing the database connection name, description, alias table, and repository location.

To review database connection names, click **Edit**. The Database Preferences dialog box is displayed. It has three tabs:

- Details
- Point of View
- Personal Variable

Click **Connect** to connect to data sources and retrieve values. If you are unable to connect, you may browse to another database connection file.

About Alias Tables

Alias tables are database tables that store aliases, or alternate description labels, for dimensions or members. Oracle Essbase enables you to define multiple alias tables. Web Analysis user preferences enable you to specify which alias table to use. The alias table selection is saved as a Web Analysis Database user preference.

Label mode enables you to select whether dimension members are listed by ID number or description. Label mode options are data source-specific, and are set for database connections, specific documents, and specific dimensions.

Label mode indicates whether the description or ID number is used and the database alias table provides the displayed value. Set the alias table before opening documents using Web Analysis Database user preferences.

Specify which description label to use in specific dimensions, using Dimension Browser and set a default label mode after querying the data source using Data Display options on the data object right-click menu.

Setting Alias Tables

➤ Specify default alias tables for database connections:

1 Select **File**, then **Preferences**.

2 Click **Web Analysis**.

3 Click **Active Preferences**, and select either **Use My Preferences**, or **Use Shared Preferences**. If you select Use Shared Preferences, click Browse and select a shared preferences file from the repository.

4 Click to make the **Databases** tab the current tab.

The Databases tab lists all available database connections for the active user.

5 **Optional:** To edit database preferences for a database connection, select the database connection from the list then click **Edit**.

6 **Optional:** To add a database connection to the list, click **Add**.

The Database Preferences dialog has three tabs: Details, Point of Views, and Personal Variables. Point of Views and Personal Variable tabs are disabled until a database connection is identified.

7 **Optional:** To identify database connection files, perform one:

● Click **Browse** and navigate to a database connection file in the repository. Select the file, click **Open** then **OK**.

● Enter the repository location and filename for existing database connection files in the text area.

If you do not have access to database connection files, consult your Web Analysis administrator.

8 Click **Connect** to retrieve the latest values from the database connection.

To log on to the data source, enter log on credentials, click **OK**.

When you have connected to the data source, the Database File Location text area is disabled, and the Connect button is converted to a Disconnect button. Data sources supporting Point of View, Personal Variables and Alias Tables have these controls.

9 Select an alias table from the **Alias Table** drop down list.

10 Click **OK**.

Whenever the specified database connection is used, the selected label mode is also used. Subsequent label mode selections made in the Cube Navigator or the Dimension Browser overwrite these default settings.

Setting the Database Logon Method

Web Analysis enables you to select among several data source log on options, and to save that selection as a Web Analysis Database user preference.

➤ Set default log on methods for specific database connections:

1   Select, **File** then **Preferences**.

    The User Preferences dialog box is displayed.

2   Click **Web Analysis**.

3   Click **Active Preferences**, select **Use My Preferences** or **Use Shared Preferences**. If you select Use Shared Preferences, click Browse and select shared preferences file from the repository.

4   Click to make the **Databases** tab the current tab.

    The Databases tab lists all available database connections for the Active user.

5   **Optional**: To edit database preferences for a database connection, select the database connection from the list then click **Edit**.

6   **Optional**: To add database connections, click **Add**.

    The Database Preferences dialog box is displayed. It has three tabs: Details, Point of Views and Personal Variables. The Point of View and Personal Variable tabs are disabled until database connections are identified.

7   **Optional**: To identify database connection files, perform one:

    ● Click **Browse** and navigate to database connection files in the repository. Select the file and click the Open dialog box **OK** button.

    ● Enter the repository location and filename for existing database connection files in the text area.

      If you do not have access to any database connection files, consult your Web Analysis administrator.

8   Click **Connect** to retrieve the latest values from the database connection.

    Enter valid log on credentials, click OK.

    When you have connected to the data source, the Database File Location text area is disabled, and the Connect button is converted to a Disconnect button. Data sources supporting Point of View, Personal Variables and Alias Tables, have these controls.

9   Select one option from the Default Logon group:

Table 1

Default Logon Options	Description
Use User's name and Password	Connects to the database connection using the Web Analysis user name and password.
Prompt for User Name and Password	Connects to the database connection by prompting the user for a Web Analysis user name and password.

Default Logon Options	Description
Enter User Name and Password	Connects to the database connection using a user name and password for the database connection, if it varies from the Analyzer Login parameters. You must enter the valid values in the corresponding text areas.

10 Click **OK**.

About Point of View Definitions

Point-of-view database preferences enable you to automatically insert dimensions and members that are of interest to them into the documents of others. Point of View definitions must be defined and activated specifically for a database connection.

When a point of view (POV) is activated, the Use Point of View check box in Cube Navigator and the Document Creation wizard are enabled. All subsequently created and loaded documents use the specified POV until it is deactivated. You can also deactivate use of POV by deselecting the Cube Navigator Use Point of View option as needed.

Point of View definitions consist of both axes and dimension member selections. The entire definition is used when new documents are created with the activated POV.

When you apply a point of view definition to an existing document, only the dimension member selections are applied. This prevents points of view from automatically arranging non-functioning layouts (such as moving all dimensions to a single axis).

If all POV member selections are custom filters, you may not see obvious changes to your document. Check to see which POV is applied on the View pane Information Panel tab, Point of View segment.

Using a point of view definition is a three part process. First, create a point of view definition. Next, activate the point of view definition. Lastly, set an existing document to use the activated point of view definition or create a new document that uses it.

Consider the following benefits:

Generic and Specific Documents

Document designers in large enterprises can create sets of generic documents, knowing that individual users can superimpose diverse and user-specific member selections into documents.

Replacing Member Selection Statements

Apply the complex calculations and analysis tool definitions of others' documents to the dimensions and members they track, using Point of View. This eliminates the need for the user to investigate and recreate these analyses.

Default Dimension Layout and Member Selections for New Documents

When Point of View is activated, the document-creation process is simplified. Cube Navigator is loaded with the dimension member selections designated by the current Point of View.

Session-based Point of View

Point of View is session-based. Point of View definitions are saved and recalled as part of individual database connections. This enables them to be used on all the documents using the corresponding database connection.

Reloading Documents

You must reload the document for the applied Point of View definition to be displayed.

Point of View and Personal Variables

Point of View definitions replace all existing member selections for corresponding dimensions and database connections. Personal variables augment existing member selections for single dimensions. Leverage personal variables in the creation of Point of View definitions.

About Personal Variables

Define and name complex member selections. Leverage personal variables when they are presented with the corresponding dimension and database connection.

Generic and Specific Documents

Other users create personal variables using the same name, dimension, and database connection that contain the dimensions members that are of interest to them. This technique creates hybrid documents with generic and user-specific content.

Point of View and Personal Variables

Point of View definitions replace existing member selections for corresponding dimensions and database connections. Personal variables augment member selections for single dimensions. Leverage personal variables in the creation of Point of View definitions.

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Exporting Web Analysis Documents to Microsoft Office

Note: When you export multiple pages to PowerPoint, all pages are placed in one slide. To have them automatically placed in individual slides, use Oracle Hyperion Smart View for Office in PowerPoint to import the reports.

➤ To export a Web Analysis document to Excel, Word, or PowerPoint:

1   Open a report, select **File**, and then **Export**.

2   Select one of the following submenu commands:

● Select **Microsoft Excel** to export the current page of the current data object of the current Web Analysis document. Then select one of the following:

  ❍ Select **Fully Formatted** to export the document as formatted HTML. Then select **Selected Object** or **All Objects**.

  ❍ Select **Query-Ready** to export the document as query-ready HTML. Then select **Selected Object**.

  ❍ Select **Unformatted** to export the document without formatting. Then select **Selected Object** or **All Objects**.

● Select **Microsoft Word** to export the current page of the current document to Microsoft Word as a static image. Then select **Image**, and then **Selected Object** or **Screen**.

● Select **Microsoft PPT (PowerPoint)** to export the current page of the current document to Microsoft PowerPoint as a static image. Then select Image, and then **Selected Object** or **Screen**.

● Select **Export Excel Wizard** to export one or all document pages or multiple data objects with one or more pages to Microsoft Excel in .xls format.

  Selecting this option displays the Export Excel Wizard (see "Using the Export Excel Wizard" on page 20). If you use the Export Excel Wizard, skip Step 3.

3   Select an option:

● Select **Open with** to display exported content in the specified application.

● Select **Save File** to save the content.

Using the Export Excel Wizard

Using the Export Excel Wizard, you can export one or all document pages or multiple data objects with one or more pages from a Web Analysis document residing in the EPM Workspace repository. All Web Analysis data objects (spreadsheet, chart, pinboard) are exported as Microsoft Excel spreadsheets. Freeform Grid and SQL spreadsheets cannot be exported.

➤ To specify the report contents to export and the Microsoft Excel spreadsheet format:

1 Select the box in the top left corner of each report object to select individual data objects or select **All Objects** to select all data objects.

2 **Optional:** Check **Split objects across worksheet** to create a new worksheet for each exported report object.

   When this option is not selected, all exported report objects are placed in the same worksheet.

3 Check **All Pages** to export all pages for each selected view.

   When this option is not selected, only the current pages are exported.

4 **Optional:** Check **Split pages across worksheets** to create a new worksheet for each exported page.

   When this option is not selected, all exported pages for each data object are placed in the same worksheet.

5 For **Export Document As** Select **Fully Formatted** to export reports with formatting, or select **Unformatted** to export reports unformatted.

6 **Optional:** Click **Next** to select members for the export.

   For each selected view, a preview of the exported view is displayed.

   a. Open the drop-down list for a page dimension, and then select the box next to each page dimension member to include in the export.

   b. Repeat Step a for each dimension for which you want to select specific members.

   c. Repeat Steps a and b for each selected view as it is displayed.

   d. If necessary, click the **Back** or **Next** button to navigate between selecting objects, pages, and members.

7 Click **Finish** to export the selected data objects and pages, or click **Cancel** to stop the export.

   Note: At least one member for every page dimension must be selected to enable the Finish button.

8 Select an option:

   ● Select **Open with** to display exported content in the specified application.

   ● Select **Save File** to save the content.

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Importing Artifacts

Importing

Importing artifacts to the repository makes them available to others. You might give users the ability to modify one artifact, while limiting others. See "Setting Permissions" on page 28 for detailed information about permissions.

Note: If you try to import an artifact whose MIME type is not defined, you get an error message. Contact your administrator to create the MIME type.

The following table shows the Oracle Hyperion Reporting and Analysis products and artifacts you can import:

Table 2

Oracle Hyperion Reporting and Analysis Product	Description
Oracle Hyperion Financial Reporting	● Dynamic report (*.des) ● Snapshot reports (*.rpt) ● Books (*.kbk) ● Snapshot Books (*.kbt) ● Batch files (*.bch) ● Supporting files, **Note:** To import these files, you must use the **Import, then Financial Reports** menu item.

Oracle Hyperion Reporting and Analysis Product	Description
Oracle Hyperion SQR Production Reporting	• Documents to view (*.spf) • Program files to run as jobs (*.sqr) • Supporting files
Oracle Hyperion Interactive Reporting	• Documents to view and modify (*.bqy) • Documents to run as jobs (*.bqy) • Supporting files
Web Analysis	• Documents and presentations (*.apt) • Supporting files are automatically imported with the document or presentation **Note:** To import these files, you must use the Web Analysis Studio.
Microsoft Reports	A user can browse the Microsoft Report server repository. The user can then import a link to a Microsoft Report as a URL object into EPM Workspace repository.

HTML Files

HTML image links and other HTML files are dependent on their folder locations. Ensure the links remain functional after you import them:

● Use relative links in the HTML

● Create folders that mirror the folder structure

Importing Artifacts

Import from Explore using **File**, then **Import** and these instructions:

Importing Files

Import files into the repository with the following exceptions:

● For Financial Reporting files, see Importing a Financial Reporting File.

● For importing files as jobs, see "Importing Files as Jobs" on page 24.

● For Interactive Reporting .oce files, see "Setting Processing and Metadata Options" on page 24.

● For importing URLs, see "Importing a URL" on page 24.

➤ To import files:

1 From Explore, navigate to the folder where you want to import the artifact.

2 Select **File**, , then **Import**, then **File**.

3 Browse to the file you want to import.

4 Enter a description, click **Next** or select **Finish** without specifying any Advanced options. If you select **Finish**, skip the following steps.

5 Enter properties, see "Advanced Properties" on page 33.

6 Complete permissions, , see "Setting Permissions and Pushing Artifacts" on page 28.

7 Click **Finish**.

Note: To return to a previous pages, click **Back**.

Importing Multiple Files

- Files must be imported to the current folder

- Import different file types together, for example, import text files, HTML files and image files.

- You cannot import multiple Interactive Reporting files (*.bqy, *.oce) or Production Reporting files (*.sqr, *.spf)

➤ To import multiple files:

1 From **Explore**, navigate to the folder in which you want the files to reside.

2 Select **File**, then **Import**, then **File**.

3 Click **Multiple Files**.

4 Select the files you want to import.

Browse for the first file. Click >> (right-facing arrows) to add the file to the list. To delete files from the list, select the file and click << (left-facing arrows).

5 **Optional:** Enter a description, and click **Finish** to complete the import without specifying any Advanced options.

6 Click **Next**.

7 Enter properties.

8 Click **Finish** to import the artifact.

The artifacts are imported into the current folder.

Importing Files as Jobs

Import Production Reporting program files (*.sqr) to create Production Reporting jobs, Interactive Reporting documents (*.bqy) to create Interactive Reporting jobs or generic files to create generic jobs. Schedule, set options on and execute the job using the Schedule module.

➤ To import files as jobs:

1 From **Explore**, navigate to the folder where you want to place the artifact.

2 Select **File**, then **Import**, then **File as Job**.

3 Browse to the artifact you want to import, and click **Next**.

4 Do one of the following to complete the Import wizard:

   ● For Production Reporting files and generic jobs, see "Setting Permissions" on page 34 This chapter guides you through the steps to complete this wizard.

5 Enter properties, see "General Properties" on page 32 and "Advanced Properties" on page 33. Required properties are marked with a red asterisk.

6 Click **Next**.

7 Complete the final step in the Import wizard — Permissions, see "Setting Permissions" on page 28.

8 Click **Finish** or **Finish and Schedule**.

Importing a URL

Perform these steps to import URLs.

➤ To import URLs:

1 From **Explore**, navigate to the folder where you want to place the artifact.

2 Select **File**, then **Import**, then **URL,** enter the URL name.

3 **Optional:** Enter a description, and click **Finish** to complete the import without specifying any Advanced options or Permissions.

4 Click **Next**.

   Required properties are marked with a red asterisk.

5 Complete step 3, Permissions. To specify permissions for the artifact, see "Setting Permissions" on page 28.

6 Click **Finish**.

Setting Processing and Metadata Options

Three options types specific to Interactive Reporting, database-connection file are offered: processing and metadata.

Processing Open Catalog Extension (OCE) options store database connection information.

Table 3   Processing Database-Connection Options

Option	Description
Data source access	Select a method for the Interactive Reporting database-connection file to use a username and password when a job is run or a file is processed. ● Use the username/password specified below—You enter the database username and password. ● Prompt for user name/password—You are prompted for the database username and password when the job is run or scheduled or the file is processed. This is the default when pass-through is disabled.
User name	If Data source access is set to use this field, enter the database user name.
Password	If Data source access is set to use this field, enter in the database password.
Allow pass-through where end user's authentication system is enabled for it	Select to allow pass-through credentials for data source access.

Metadata options store a file that contains extra information about the Interactive Reporting database connection.

Table 4   Metadata Options

Option	Description
This Interactive Reporting database connection (. oce) uses metadata defined in another connection	Metadata is used and the metadata connection is not specified in the Interactive Reporting, database-connection file. All fields in this group are disabled if this field is not selected.
Select metadata connection	If metadata is used and the metadata connection is not specified in the Interactive Reporting, database connection file, select the Interactive Reporting database-connection file for the metadata.
Metadata access	Select one of the following: ● Use processing OCE's credential for metadata connection – Use that username and password associated with the Interactive Reporting database connection to access the metadata. ● Use specified user name/password – Use the specified user name and password to access the metadata.
User name	If Data source access is set to use this field, enter the database user name.
Password	If Data source access is set to use this field, enter in the database password.

Table 5   Interactive Reporting Database Connection

Option	Description
Connection Software	Connection software name used by this Interactive Reporting database connection file (.oce) to connect to the database server, for example, ODBC or Essbase.

Option	Description
Database	Type of the database or database connectivity to which this Interactive Reporting Connection file (.oce) is used to connect, for example ORA8, Essbase, ODBC, OLEDB and so on.
Host	Identifier or alias for the specific information needed to connect to the client, for example, host name or DSN.

To complete the Import dialog wizard for Interactive Reporting Database Connection (.oce) files, see .

Using EPM Workspace URLs

Use these steps to open EPM Workspace URLs which point to a repository artifact.

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Opening a URL

Perform the following steps to open a URL.

➤ To open a URL:

1 Select **File**, then **Open**, then **URL.**

   The URL dialog is displayed.

2 Enter the URL name.

3 Select **OK.**

Opening a URL in a New Window

➤ To open a URL in a new window:

1 Complete procedure from .

2 Select **New Window**.

3 Enter the URL.

4 Select **OK.**

Updating a URL

Perform the following steps to update the content of an existing URL displayed in the content area.

➤ To update a URL:

1 Complete procedure from .

2 Select **Update URL**.

The Update URL dialog is displayed.

3 Enter the URL.

4 Select **OK**.

Importing a Financial Reporting File

Use this procedure to import aFinancial Reporting file.

Note: Only one file at a time can be imported.

➤ To import aFinancial Reporting file:

1 From **Explore**, navigate to the folder where you want to place the artifact.

2 Select **File**, then **Import**, then **Financial Reports**.

3 Browse to the file you want to import.

4 Click **Import**.

5 **Optional:** If you import an artifact that uses a data source connection you are prompted to select it.

Importing Microsoft Reports

EPM Workspace users with a Content Publisher role can import Microsoft reports to the EPM Workspace repository. Browse the Microsoft report server repository and import as a link a Microsoft report to the EPM Workspace repository. The link is in the form of a URL object and any user can launch a Microsoft report URL object as a tab in EPM Workspace. For details on how to setup Microsoft Reports Integration with EPM Workspace, see the *Oracle Hyperion Enterprise Performance Management Workspace Administrator's Guide*.

➤ To import Microsoft reports:

1 Select a folder from the EPM Workspace repository.

2 Right-click and select **Import** then **Microsoft Reports**.

3 From the Import Microsoft Reports dialog, select a Microsoft Report.

4 Select **Import**. A URL object is created in the EPM Workspace repository.

Setting Permissions

Access permissions define your level of access - view, modify, full control. When you import artifacts, you:

- Specify who gets access and to what level
- Have full control over the artifacts you import, and can change the permission level for all roles, groups, and users
- Efficiently grant permissions through roles or groups rather than to individual users

To modify permissions, use:

- "Setting Permissions and Pushing Artifacts" on page 28
- "Creating Shortcuts" on page 31

Setting Permissions and Pushing Artifacts

Set artifact permissions when you import or select an artifact. Push artifacts to be accessible to Favorites.

Rules for setting permissions and pushing artifacts:

- To push artifacts, you need proper permissions and a role that enables you to push them. Push any artifact, except multiple-cycle jobs and folders.
- Make artifacts accessible in the repository by changing their permissions
- Make artifacts accessible on Favorites by pushing them to Favorites
- To apply permissions to artifacts within folders, you need proper permission and role.

➤ To edit permissions for files and folders:

1   From **Explore**, right-click the file or folder whose permissions you want to modify.

> **Note:** You can select multiple items in Explore and apply Edit Permissions. Permissions can only be applied to items that a user has Full Control permission.

2   Select **Edit Permissions**.

3   To complete the Permissions dialog, see step 1 on page 30.

➤ To apply permissions to artifacts in a folder:

1   Right-click on a folder in Explore.

2   Select **Apply Permissions to Children**.

3   To complete Apply Permissions to Children dialog, see step 1 on page 30. through step 3 on page 31.

4 Set permissions for the children of the folder. The columns displayed for selected users, groups, and roles in the Apply Permissions to Children dialog depend on the artifact type within the folder. Use the description for each of the permissions as a guideline:

Table 6   Setting Permissions for Children of Folder

Permission	Description
Inherit	Not set to anything. Inherit defaults to No Access. See **Example of Inherit Permission** topic below.
No Access	Users cannot see the object.
View	View document but cannot modify.
Job Output Only	View and produce output in the folder. No additional Modify capabilities.
Modify	Make changes but not delete.
Full Control	Access the Apply Permissions to Children dialog (add/edit/delete permissions to other users/groups/roles).
Run	Ability to run a job.
Modify and Run	This is applicable only to jobs. You can modify the properties of the job and run the job. If you have modify permission only, you can modify the properties of the job but not run the job.
View and Process	View documents and refresh data, cannot modify. **Note:** these are adaptive states and are applicable only to Interactive Reporting artifacts.
Analyze	Create and modify charts, pivots, and reports in the document, but cannot modify the queries or refresh the data. **Note:** these are adaptive sStates and are applicable only to Interactive Reporting artifacts.
Analyze and Process	Create and modify charts, pivots and reports in the document and refresh data. Cannot modify the query.
Query and Analyze	Create and modify charts, pivots and reports in the document and refresh data. Can build and limit queries before processing.
Data Model and Analyze	Create and modify charts, pivots and reports in the document and refresh data. Can build and limit queries before processing. Can create and modify data models. **Note:** these are adaptive states and are applicable only to Interactive Reporting artifacts.

5 Once you are done making your selections, select **OK**.

> **Note:** Permissions are only applied to artifacts within a folder in which a user has Full Control permission.

Example of Inherit Permission

The following is an example of a BQY file and permissions set in the Permissions dialog.

UserA:

- Inherit for File Permission
- View for Adaptive State

- Inherit for Favorite

GroupA:

- View for File
- Process for Adaptive
- Inherit for Favorite

RoleA:

- Modify for File
- Datamodel for Adaptive
- Pushed for Favorite

Result of above scenario:

- If UserA belongs to GroupA then UserA is able to View the File
- If UserA has RoleA then UserA can Modify the File
- If UserA does not belong to GroupA or RoleA then UserA has NoAccess to the file

Inherit basically means inherit from the role's or group's permissions and the same applies for Favorites.

Changing Permissions or Pushing Artifacts

In the dialog, Apply Permissions to Children of the Selected Folder, you can choose to overwrite or merge permissions, thus eliminating the need to redefine permissions from scratch.

Note: Permissions change for all files in folder when you click OK. However, permissions are not saved for future use. If a new artifact is subsequently added to that folder, it does not get this permission. However, you can go to individual artifacts in that folder and change the permissions.

➤ To change permissions or push artifacts:

1 To specify selected users, groups, and roles perform the following:

a.   To populate the list with all users, groups or roles leave the text box blank, select **Update List**.

b.   To populate the list with specified users, groups or roles:

i.   To filter the list by name, select **begin with**, **contain**, or **are in group** and enter letters.

ii.   To filter the list by user type, select tabs for Users, Groups, or Roles, then click **Update List**.

Available Users, Groups, and Roles display artifacts based upon the selections you made in the drop-down lists.

Note: If all of the artifacts are not listed, filter the list with criteria or contact your administrator. Your administrator determines the maximum number of artifacts to list. Wild cards are not supported and the filter is not case sensitive.

2   Select a user, group, or role from Users, Groups, or Roles tab, then click ⬚ .

3   From **Selected Users, Groups and Roles** select a name from the Name column. From **Access** or **Access to file** drop-down set permissions:

  • **Inherit** – Not set to anything. This permission defaults to No Access.

  • **No Access** - Cannot access the document.

  • **View** - Can only display the document.

  • **Modify** - Change, but not delete.

  • **Full control** - Display, change, and delete.

    See "Setting Permissions and Pushing Artifacts" on page 28.

4   From the Favorite drop down, select **Pushed** to push the artifact to the users Favorites or Inherit (not pushed) to view only if this is the only permission set.

5   Repeat previous steps to set additional permissions for other users, groups, or roles.

Note: If all of the users/groups/roles in which you have access to are not listed, filter the list with different criteria or contact your administrator. Your administrator determines the maximum number of users/groups/roles to list.

6   Select one of the following:

  a.   To remove existing permissions and set new permissions, select **Overwrite current permissions.**

  b.   To redefine some permissions, and add new permissions to the existing ones, select **Merge with the current permission.** The changes are applied to folder child elements recursively.

    Note: In a merge, if a user already exists in Apply Permissions to Children for some artifacts, and this user is granted new permissions, the new permissions are in force.

7   To apply these permissions for an artifact, click**OK.**

8   Click **OK.**

Note: To remove a role, group, or user from the selected list, click ⬚ after highlighting the name to be removed.

Creating Shortcuts

Create a shortcut to a file or document.

➤ To create shortcuts:

1 From **Explore**, navigate to an artifact.

2 Right-click the artifact, click **Create Shortcut.**

3 Enter the name and folder.

Working with Properties

This section describes how to modify properties of repository artifacts. You specify properties when importing and modifying artifacts..

Properties for artifacts:

➤ To access properties:

1 From **Explore**, select an artifact.

2 Select **File** , then **Properties**.

General Properties

Most artifacts have these general properties:.

Table 7

General Properties	Definitions
File	The file name and path.
Name	The name you assign to the file. For example, if the file is `c:\Jan03SR` set the name to `January 2003 Sales Report`. Use letters, numbers, a space, and an underscore (_). **Note:** For Production Reporting jobs, select **Replace** to replace this job with another. Replacing this file may impact existing schedules dependent on this file. Owners of these schedules must be notified of these changes so that they can modify the job parameters accordingly.
Description	The description used to generate search keywords. Limit the length to 250 characters.
Owner	The User Name of the person who imported the artifact. To change owner of an artifact, see "Changing Ownership of Artifacts" on page 33.
Original File Name	(Read-only) The name of the file when it is imported or created.
Size	(Read-only) file size
SmartCut	(Read-only) A SmartCut is a URL pointing to a file.
Shortcut To	Specify the folder and subfolders for shortcuts.
Also store file in compressed (.zip) format	Set this when you import to store the file in WinZip format. This saves disk space, but slows down viewing.

Changing Ownership of Artifacts

Users can change the owner of repository artifacts. Artifacts you can change ownership for include, repository objects, folders (including sub-folders), Events, Job Parameters, and Schedules. A user must have Full Control or Administrator role rights.

➤ To change the owner of an artifact:

1   From **Explore**, select an artifact.

2   Select **File**, then **Properties**.

3   From the Properties dialog, select **Change Owner**.

4   Perform the following to complete the Change Owner dialog:

   a.   Select how you want to sort the name list by, User ID, First name, or Last name from the first drop down menu.

   b.   To filter by name, select **begin with**, **contain**, or **are in group** and then enter letters.

   c.   Select **Update List**.

   d.   Select **OK**.

5   Select **OK**.

Advanced Properties

Some artifacts have these advanced options:.

Table 8

Advanced Properties	Definitions
MIME Type	(Read Only) Multipurpose Internet Mail Extensions. Update this for jobs and documents only, MIME types are MS Word file, HTML file, and Personal Page.
Security Tags Included	(Read only) Indicates whether the Production Reporting job is secure. Secure jobs are Production Reporting only and always have HTML output.
Character Encoding	The character-encoding method, such as UTF-8. This encoding must be specified for HTML files so that EPM Workspace can display the file correctly.
	If the character encoding is not specified in this property or in the HTML file, EPM Workspace uses the character encoding set by your administrator.
Hidden File	Hides files in Explore.
	Example: Enable this option for image files needed by an HTML file, so the users select HTML files only.

Advanced Properties	Definitions
Auto-delete file on this date or **Auto-delete shortcut on this date**	Enable to automatically delete this artifact . from the repository when these conditions are met: • The expiration date passed. • Auto-delete is selected. • The system performs regular garbage collection (up to an hour after the expiration date). • For folders, set auto-delete to occur after all contents have been deleted from the folder.
If Exceptions are generated, allow users to add to their Exceptions Dashboard	The Exceptions dashboard is displayed on a Personal Page. This field is not used for jobs. When a job exception occurs, subscribed users can be notified by email or with a Exceptions Dashboard indicator.
Automatically generate keywords	Generates search keywords based on words contained in the Name and Description. For Interactive Reporting content, the section names are also used as keywords. The search function uses these keywords to find an artifact.
Keywords	New keywords used to search for an artifact. Creating keywords for artifacts is highly recommended and used for searching repository artifacts.
Auto Delete job outputs after	Used to delete job output after a specified time interval. The job output is deleted when all of these conditions are met: • The expiration date passed. • Auto-delete is checked. • The system performs its regular garbage collection (up to an hour after the expiration date).

Output Properties

Output properties option is displayed for Interactive Reporting and Oracle Hyperion SQR
Production Reporting jobs. A summary of the job outputs with the respective dates and output
formats that the job outputs are available in are displayed when this property is selected for one
of these products. You can also delete a selected output from the Output Summary.

Setting Permissions

Set rights for users to access files. See .

HTML File Properties

HTML files contain these unique properties also:

Table 9

HTML File Properties	Descriptions
Character encoding	The method of character encoding. Note: Use UTF–8 for non-Latin-1 languages or when using iPlanet native servlet engines.
Make displayable as a file content window	Contents of this artifact can be displayed on Personal Pages. (Default is enabled.)

URL Properties

In addition to General Properties and Advanced Properties, URLs have these properties:

Table 10

URL Properties	Descriptions
URL (in the General Properties group)	The URL starts with `http://` or `https://`.
Make displayable as a file content window	Contents of this artifact can be displayed on Personal Pages. (Default is enabled.)
Character encoding	The method of character encoding for the Web page. Note: Use UTF–8 for non-Latin-1 languages or when using iPlanet native servlet engine.
Icon	The icon shown for the URL. To change the icon, click **Change Icon.**
Change Icon	Select to add a graphic file from your PC or from the repository. Set the width and height to smaller than 24 pixels.

Working with Versions

Repository artifacts have multiple versions, except for jobs, job output, Interactive Reporting database connection files, shortcuts, Web Analysis artifacts and Financial Reporting artifacts.

Typical files are collections of versions, even if you have not imported multiple versions. When a file is imported, the resulting artifact is a collection containing a single version. You can later import additional versions.

Versions can be revisions of the same file or completely different files. If the file is considerably different from the original file, you should import a new file with a unique name.

Note: To change imported versions for Interactive Reporting jobs or Interactive Reporting database connection files, use **Replace** in General Properties. It is important to replace the Interactive Reporting job or Interactive Reporting database connection file with a similar file. If the Interactive Reporting job is considerably different from the original Interactive Reporting job, import a new job. The system accepts files as replacements for Oracle Hyperion Interactive Reporting jobs or Interactive Reporting database connection files.

Click an artifact's name for the latest version. When you move or delete an artifact, versions are included in the operation.

Versions have their own properties that are distinct from the properties of their collection artifact.

This section describes how to manipulate versions:

Opening a Version

Open any artifact version..

Adding a Version

Add another file as a version to an artifact in the repository.

Note: All artifacts in the repository can have multiple versions, except for jobs, job output, Interactive Reporting database connection files, shortcuts, Web Analysis artifacts and Oracle Hyperion Financial Reporting artifacts.

➤ To add versions:

1   From **Explore** select an artifact.

2   Select **File** , then **Properties**.

    The Properties dialog is displayed.

3   Select **Versions**, click **Add New Version** .

4   Click **Browse** and select a file to add as a new version.

5   **Optional:**Do one or more of these steps:

    ●   Enter a Description.

    ●   Enable **Flag as an exception**, then enter a message. If an exception occurs, the message is displayed on the Exceptions dashboard.

    ●   Set the priority to **High** or **Normal**.

6   Click **OK**.

    The version is added to the repository as the latest version.

Viewing or Modifying Properties of Versions

Each version has its own properties.

➤ To view or modify properties of versions:

1   From **Explore**, click the artifact whose version you want to edit.

2 Select **File** , then **Properties**.

3 Select **Versions**.

4 Select **Modify**.

The only changeable properties are *Description*, *Flag as an Exception*, and *Message*, see "Version Properties" on page 37.

5 After modifying properties, click **OK**.

Version Properties

The following table shows versions properties:

Table 11

Version Properties	Descriptions
Description	A description that identifies this version. *Using preliminary figures as of 2/03* or *First draft with Marketing's comments*. The length is limited to 250 characters.
Creation date	(Read-only) Date the version was created.
Last modified	(Read-only) Date the version was changed. Changing versions includes replacing or modifying its properties.
Modified By	(Read-only) User, who made the last modification to the version.
Priority	Normal or High priority shows in Explore, [!] indicates high priority. Users can sort on priority, and search for high-priority artifacts. **Note:** [!] does not display for high-priority scheduled jobs. This property is available if your administrator activated the priority feature on your system.
Size	(Read-only) The file size which is set automatically.
Flag as an exception	An exceptions indicates a condition or result, such as a threshold being reached. *Flag as an exception* can be set manually by a user. If you set this option on the latest version of an artifact, put the artifact on your Exception Dashboard, its state is displayed on the Exceptions Dashboard.
Message	Text associated with an exception for this version. When an exception is flagged on the version, this message prints, or it may be visible from a users Exception Dashboard.

Listing Multiple Versions

From **Explore**, the latest artifact version is displayed in the content area.

➤ To see all versions:

1 Select **View** , then **Show Columns**.

2 Click **Versions**, then click **Save**.

Deleting Versions

Delete one or more versions together.

➤ To delete versions:

1   From **Explore**, navigate to the artifact whose version you want to delete.

2   Select **File** , then **Properties**.

    The properties of the artifact are displayed.

3   Click **Versions**, then select a version.

4   Click **Delete Selected**.

5   Click **OK**.

4

Using Web Analysis

Presentations

Presentations, playlists of Web Analysis documents, enable documents to be grouped, organized, ordered, distributed, and reviewed. Presentations are lists of pointers that reference repository documents, not documents copied into sets.

Presentation properties govern display and content; file properties control identification, access, and security.

Presentation Access and File Permissions

Because file permission and presentation access operate independently, presentations may be distributed to users who cannot access the documents within them.

Documents for which users do not have list file permission are not listed; documents for which users do not have read file permission cannot be opened.

File permissions that withhold document access prevent all access, directly or through presentations. Presentation permissions that withhold access do not prevent direct document access.

User and Group Permissions

Users can access presentations assigned to them or the groups to which they belong.

Both presentations and the documents within them must be assigned to groups. Otherwise, group members can access the presentations but not the documents within them (unless granted individual access).

To mitigate the risk of conflicting permissions, store presentations and their documents in the same folder. Whenever possible, distribute documents and presentations to groups. It is easier to set permissions for all files in a folder and all users in a group than to manage permissions for individual files and users.

Document and Folder References

You can add two kinds of references to presentations:

- Document–When you add documents directly to a presentation, a reference to a unique document identifier is created in the presentation. Wherever the document is moved, the presentation can locate and present the document.

- Folders–When you add folders to a presentation, the folder reference is directly added to **Presentation Content**, but documents in the folder are dynamically referenced. Documents added or removed from the folder are automatically added or removed from presentations referencing that folder.

  Note: You cannot dynamically include descendant folders, or presentations in target presentations. When adding a folder to a presentation, only documents immediately in the selected folder are dynamically added to the target presentation.

Benefits and Considerations

Folder references simplify presentation maintenance because Web Analysis synchronizes presentation playlists with referenced folder content. You can also change folder content without editing its presentation. You must limit write access to the folder to prevent other users from inadvertently adding content to a folder, and subsequently your presentation.

While document references are less flexible and require more maintenance, presentation content is fixed.

Reference Reconciliation

When presentations are opened, Web Analysis first attempts to reconcile document references, and then folder references.

If files are copied and the original file deleted, Web Analysis cannot locate the unique file identifier. In this case, Web Analysis searches for files of the correct name at the same location. When a reference cannot be found by means of identifier or location, the reference displays as red in the Presentation Wizard.

Opening Presentations

Options for opening presentations:

- Select **File**, then **Open**, then **Document** or the open toolbar button, and select a presentation file from the **Open** dialog box.

- Right click the document and Select **Open As**
  - Click **HTML** to open the document in an HTML editor.
  - Click **Web Analysis Studio** to open the document in Web Analysis Studio.

- Use the view pane **Tools** menu or Explore toolbar button to access the Explore module, and navigate to and select a presentation from a repository location.

➤ To open a presentation, using the Open dialog box:

1 **Perform an action:**

- Select **File** , then **Open** , then **Document**.

- Select the open button.

  The Open dialog box displays. It lists current folder content, as specified by **Look in**.

- Right click the document and Select **Open As**

  ❍ Click **HTML** to open the document in an HTML editor.

  ❍ Click **Web Analysis Studio** to open the document in Web Analysis Studio.

2 **Optional: From Type, select All Files or Hyperion , then Presentation.**

3 **Navigate to the presentation:**

- From **Look In**, select a location from the drop down list.

- Click the Go Up A Level button to display the contents of the parent folder in the selection frame.

  As you navigate, the selection frame lists the files and folders indicated by the Files of Type list.

4 **Select the presentation.**

5 **Click OK.**

If the first presentation document uses a database connection requiring log on, the Database Login dialog box is displayed.

6 **If prompted by the Database Login dialog, enter a valid user name and password, select Save User ID and Password, and click OK.**

The selected presentation (and any other selections) display as content tabs below the content area. The first presentation document is opened and displayed as the current document.

Notes on Opening Presentations

- In the Open dialog box, you can select documents, presentations, or both. Multiple files are opened in the order that the Selection frame lists them. The order of documents inside the presentation is observed in the context of the other files being opened.

- If multiple presentations contain multiple instances of a document, only the first instance is opened. It may seem that the document did not open or that documents opened in the wrong order. Only one instance of a document can be opened (and modified) at a time.

Closing Presentations

Unchanged files close. Changed repository files prompt for changes to be saved. Files not previously saved to the repository trigger the Save As dialog box.

➤ To close all opened documents, select **File** , then **Close All**.

Web Analysis Documents

Web Analysis documents display in data objects the data values returned from data sources. A document can have multiple data objects, and data objects have a display type:

- Spreadsheet
- Chart
- Pinboard
- SQL spreadsheet
- Freeform grid

You can review all display types, but you can create spreadsheets and charts only by using the new document wizard.

To create a document you are required to specify:

- Data source—provides data values
- Data object—displays these values
- Query—gets data values from the data source and returns them to the data object.

Properties customize each of these elements.

The database connection wizard specifies the type of data source, logon credentials, database applications, dimension formatting and drill-through properties.

Each data object can be set to a display types that features specific formatting options.

Queries can be explicit, requesting information on particular dimension members, or dynamic, requesting information about any dimension member that satisfies a set of criteria.

You have two document creation options:

- Use the new document wizard
- Modify Web Analysis documents and save them under new names or to new locations

Creating Web Analysis Documents

A wizard guides you through creating Web Analysis spreadsheets and charts. The wizard requires a database connection. You must know where this database connection is located, and have permission to use it.

➤ To create a document, using the new document wizard:

1 Select **File** , then **New** , then **Document**, or select the toolbar **New Document** button.

Depending on the modules installed, you may be prompted to indicate the kind of document you want to create.

2   **Optional**: To create a Web Analysis document, select **Create a Web Analysis document**, and click **Next**.

If you are not prompted, proceed to the next step.

The content area displays **Select a Data Source**. Because the repository stores document definitions and not document data, you must identify a data source and the parameters for connecting to it.

3   **Perform one:**

- In the text area, enter the path, including the file name, from the root directory (/) to a database connection.

- Click **Browse**, select a database-connection file from the **Open** dialog box, and click **OK**.

4   **Optional**: Select **Use my active POV**, to populate the query from a predefined point of view definition, and click **Next**.

Performing this step enables you to load members from predefined point of view definitions and to insert dimensions and members with one click. You can define many point of view definitions, but Use my active POV applies only the definition set in user preferences as the current point of view.

5   **Optional**: Select **Automatically select one dimension**, to populate and display a simple spreadsheet, and click **Finish**.

Performing this step skips the remaining steps, and uses the highest aggregate members of the time and measures dimensions to populate spreadsheet row and column axes (the quickest method to use the new document wizard to display a spreadsheet).

Selecting Automatically select one dimension and Use my active POV and clicking Finish, skips the remaining steps and displays a simple spreadsheet using the current point of view definition.

6   **Optional**: Select **Use Cube Navigator instead of Wizard** and click **Next** to view the Select Layout dialog box.

- Select a layout and click **OK**

  The Cube Navigator dialog box is displayed.

- Select the appropriate dimensions and members and click **OK** to render the report.

7   Click **Next**.

In **Select Row Dimension**, you must select the dimensions to be used on the Rows axis. You are required to have at least one row axis dimension and one column axis dimension.

8   To move a dimension name from **Filters** to **Rows**, select the name, and click the right arrow.

The dimension name is displayed in the Rows frame. If no point of view definition was previously applied, the highest aggregate member of the dimension is used. If a point of view definition was applied, its members are used.

9   **Optional: To select members, in Rows, double-click a dimension name.**

The Dimension Browser dialog box displays. The dimension is presented as a node tree in the Browse frame. You select members from the Browse frame and move them to the Selections frame, using the following methods:

- To expand or contract the hierarchy, click the plus sign (+) or minus sign (-) nodes, or double-click the dimension name.

- To select members, right-click the dimension name, and select **Select Member**.

  Member names are displayed in the Selections list.

- To select members dynamically, right-click a member name, and select an advanced member selection method.

- Set the label mode for each dimension to the default label, an ID label, or the alias table description set in database connection properties.

  For descriptions of Dimension Browser dialog box options, see "Selecting Members" on page 48.

10 **After indicating row-axis dimensions and selecting members, click Next.**

11 **Using the methods used to define the row axis, move a dimension name from Filters to Columns.**

12 **Optional: To select members, double-click a dimension name in Columns.**

13 **Using Dimension Browser methods, select members, set options, and click OK.**

14 **Click Next.**

In Step 5, you select page-axis dimensions. Although document intersections are relative to member selections, you can organize row and column intersections by page members.

15 **Optional: Using the methods used to define row and column axes, move a dimension name from Filters to Pages.**

16 **Optional: Using Dimension Browser methods, select page members.**

17 **Click Next.**

In Step 6, you select filter-axis members.

All dimensions participate in all spreadsheet intersections, regardless of the axes to which dimensions are assigned. Intersection arrangement is defined by row, column, and page axes. Data values displayed at intersections are determined by member selections.

All data-object intersections are relative to filter member selections, which focus intersections, data values, and, consequently, data-object analysis.

Filter-axis dimensions are by default represented by the highest aggregate member defined in the data source outline. If a point of view definition was applied, its member selections are used. If you select Filter members, all intersections are relative to the selections.

18 **Optional: To display the Dimension Browser for Filter axis dimensions, double-click a dimension name.**

19 **Optional: Using Dimension Browser methods, select Filter axis members, and click OK.**

20 **Click Next.**

21 **Optional: Select a layout option:**

Chart— displays the result set as a chart data object.

Spreadsheet— displays the result set as a spreadsheet data object.

Vertical Combination— displays the result set as both a chart data object and a spreadsheet data object stacked vertically.

Horizontal Combination— displays the result set as both a chart data object and a spreadsheet data object arranged side-by-side.

You can change the display type of Vertical and Horizontal Combination layouts; for example, you can convert the spreadsheet to another chart type. The objects, however, are linked and maintain a coordinated context.

22 Click **Finish** to submit the query to the data source.

The data source is queried. The result set returned displays as a data object (or objects) on a Web Analysis document.

Creating Documents from Documents

When you save documents with new names or to new locations, you use data sources, data objects, and queries defined in existing documents, leveraging documents to save time and effort. You can modify documents before you save them to new names or locations.

➤ To create a document from a document:

1 Perform one:

- Select **File** , then **Open** , then **Document**.

- Select the open button.

  The Open dialog box displays. A selection frame lists contents of the current folder, specified by **Look in**.

- Right click the document and Select **Open As**

  ○ Click **HTML** to open the document in an HTML editor.

  ○ Click **Web Analysis Studio** to open the document in Web Analysis Studio.

2 **Optional**: From **Type,** select **All Files** or **Hyperion** , then **Web Analysis Document.**

3 Navigate to the document to be copied.

4 Select the document, and click **Open**.

If the document uses a database connection requiring log on, the Database Login dialog box displays.

5 If prompted by the **Database Login** dialog, enter a valid user name and password, select **Save User ID and Password,** and click **OK.**

The selected document displays.

6 Modify the document.

7 Perform one:

- Select **File** , then **Save As.**

- Click the toolbar Save As button.

  The Save As dialog box displays. A selection frame lists the contents of the current folder, as specified by **Look in.**

8 Navigate to the folder into which to save your modified document.

9 **Optional**: After you navigate to the location to save the file, enter a new filename in **Name.**

10 Click **Save.**

The modified document is saved to the specified location with the specified name.

Modifying Queries

Data Layout is a query editing interface. Data Layout displays dimensions returned by the database connection, arranged on four axes:

- Rows

- Columns

- Pages

- Filters

Database connections return three types of dimensions.

Table 12   Dimension Type

Icon	Dimension Type
	Standard
	Attribute
	Attribute Calculations

All queries must have at least one dimension assigned to the row axis and one dimension assigned to the column axis; multiple dimensions can be nested on one axis. You can organize row and column dimensions by assigning dimensions to the page axis. Dimensions not assigned to rows, columns, and pages are in the filter axis.

All dimensions, regardless of the axes to which they are assigned, participate in all intersections displayed by a data object. You use Data Layout to arrange dimensions, to specify level of detail, and to set query options.

Note: All data objects start as spreadsheets. Charts and pinboards are organized by the four axes, despite using different metaphors to display data.

➤ To redefine the query and dimension layout of the current data object of the current document, click the toolbar Data Layout button.

➤ To move a dimension between axes, drag the dimension to the other axis.

➤ To select members, double-click the dimension name.

Dimension Browser is displayed. See "Selecting Members" on page 48.

Modifying Filter Dimensions

All data-object intersections are relative to filter member selections, which focus intersections and data values, and consequently, analysis.

Filter-axis dimensions are by default represented by the highest aggregate member defined in the data source outline. To focus analysis on members other than the highest aggregate, you can select filter members.

Filter member selections do not rearrange dimensions or reorganize pages, but focus analysis on specific intersections.

Selecting Members

Dimension Browser, an interface for selecting members and refining database queries, is used with the new document wizard, Cube Navigator dialog box, Information panel, or on its own.

The Dimension Browser presents dimensions as a node tree in the Browse frame. You must select dimension members from this Browse frame and move them to the Selections frame.

Members can be selected individually, by familial relationships, by data-source-specific option, or from predefined selection lists.

➤ To access Dimension Browser:

● Right-click a member label on a data object, and select **Browse**.

● In the view pane **Information** panel, select a dimension name.

● Click the Data Layout button, and double-click a dimension name.

● In the new document wizard, double-click a dimension name.

➤ To expand or collapse hierarchies in Dimension Browser, click the plus sign (+) or minus sign (-) nodes, or double-click a dimension name.

➤ To select a member, right-click the member, and select **Select Member**.

The member name is displayed in the Selections list. You cannot select the database connection name at the top of the node tree.

➤ To select a member dynamically in Dimension Browser, right-click the member, and select an advanced member selection method from the list.

See .

➤ To remove a member from the Selections list, perform an action:

● Right-click the member in the **Browse** or **Selections** list, and deselect the selected selection method.

● Select the member in the **Selections** list, and click **Remove**.

➤ To remove all members from the Selection list, click **Remove All.**

➤ To preview members returned by advanced member selection, before you quit Dimension Browser, click **Preview.**

➤ To set dimension label mode, select a **Dimension Labels** option.

● Use Default

● Descriptions—the current alias table

● IDs— the unique ID label

● Both— ID label and description (used in Financial Management)

The label displayed by description is drawn from the alias table specified by the active user's database preferences. You can set an alias table for each Active Preferences user ID or group ID.

Users can specify label mode in specific dimensions, using Dimension Browser.

Advanced Member Selection

In dimensions with large member sets, users can define selections by using the Dimension Browser right-click menu. Right-clicking member names enables selection by familial relationship and data-source-specific options.

Table 13   Dimension Browser Right-Click Menu

Icon	Command	Description
	Select Member	Selects the currently member
	Also Select Children	Selects the current member and its children
	Also Select Descendants	Selects the current member and its descendants
	Select Parent	Selects the parent of the current member
	Also Select Ancestors	Selects the current member and its ancestors

Icon	Command	Description
	Also Select Siblings	Selects the current member and members on its level and of its parent.
	Select Dim Bottom	Selects lowest-level members
	Select Dim Top	Selects the highest ancestor
	Also Select Level	Selects the current member and all members on its level
	Also Select Generation	Selects the current member and all members of its generation
	Also Select Previous	Displays the Previous Selection dialog box, typically used to select previous members at the current level
	Also Select Subset	Displays the Subset dialog box, used to select an Analytic Services member subset.
No Icon	Substitution Variables	Displays the Substitution Variables dialog box, used to set a substitution variable as the dimension selection
No Icon	User Defined Fields	When Financial Management is used as a data source, displays the User Defined Fields dialog box, in which you can specify one of three pre-defined attribute values, select members featuring the specified attribute values, and compose compound selection statements with AND and OR
No Icon	Dynamic Time Series	Displays the Analytic Services Dynamic Time Series menu (for example: History To Date, Quarter To Date)
No Icon	Search	Displays the Search dialog box, in which you use search criteria to locate members of large dimensions (adds found members to the Selection list)
No Icon	Find In Tree	Locates members in large dimensions; expands the dimension hierarchy but does not add found members to the Selection list

Advanced Member Selection by Data Source

Different data sources support different member selection methods.

Table 14 Advanced Member Selection by Data Source

Data Source	Advanced Member Selection Methods
Analytic Services	• Also Select Children • Also Select Descendants • Select Parent • Also Select Ancestors • Also Select Siblings • Select Dim Bottom • Select Dim Top • Also Select Level • Also Select Generation • Also Select Previous • Select Subset • Substitution Variables • Dynamic Time Series • Search • Find in Tree
SAP BW	• All Members • Select Dim Top • Select Dim Bottom • Also Select Descendants • Select Parent • Also Select Ancestors • Also Select Children • Also Select Siblings • Also Select Level • Select At Level • Also Select Previous • Also Select Next • Dynamic Time Series • Select Top/Bottom • Filter on Member Properties • Find in Tree

Data Source	Advanced Member Selection Methods
Financial Management	● All Members ● Select Dim Top ● Select Dim Bottom ● Also Select Descendants ● Member List ● Also Select Children ● User Defined Field ● Search ● Find in Tree
JDBC Relational Data Sources	● Also Select Children ● Also Select Descendants ● Select Parent ● Also Select Ancestors ● Also Select Siblings ● Select Dim Bottom ● Select Dim Top ● Also Select Generation ● Find in Tree

Consider relational-hierarchy implications in advanced member selections on relational data sources. When highest ancestors are selected, default members, rather than aggregations, may be used. For example, the relational hierarchy may equate Also Select Children and Also Select Descendants.

Searching for Members

Analytic Services and Financial Management users can locate members in large dimensions by using search criteria. Searches can be conducted inside Dimension Browser (during query creation) or from the data-object right-click menu (during document analysis).

➤ To search for Analytic Services or Financial Management members in Dimension Browser:

1 Right-click a member.

2 Select **Search**.

3 Enter search criteria in the text boxes.

Table 15 Member Search Criteria

Search Criteria	Control	Description
Member		Searches by text string
Mode	ID	Searches by member name

Search Criteria	Control	Description
	Description	Searches by member alias
	Both	Searches by ID and description (Financial Management data sources only)
	Find In Tree	If Expand Tree is selected, adds found members to the Selections list and expands the Browse node tree to display the members in the hierarchy (only the first search-criteria instance is selected) If Expand Tree is not selected, adds found members to the Selections list
Range		Searches the entire dimension or down the hierarchy from the right-clicked member
Option	Whole	Searches for the whole member name or alias
	Substring	Searches for the first, last, or middle part of the member name, in the order entered in the member text box
	Beginning	Searches for the start of the member string
	Ending	Searches for the end of the member string.

4 Click **OK**.

➤ To search for Analytic Services members in a Web Analysis data object:

1 Right-click a member, and select **Search** from the right-click menu.

2 Enter search criteria in the text boxes, and click **OK**.

Note: Search performance is directly related to size and complexity of the dimension hierarchy.

Searching for SAP BW Characteristics

SAP BW users can locate characteristics in large dimension hierarchies by using search criteria. The searches can be conducted only inside Dimension Browser during composition of a query.

➤ To locate SAP BW members in Dimension Browser:

1 Right-click a member.

2 Select **Search**.

3 Enter search criteria in the text boxes.

Table 16   SAP BW Search Criteria

Search Criteria	Control	Description
Mode	ID	Searches by member technical name
	Description	Searches by member alias

Search Criteria	Control	Description
Search Criteria		Searches using an operand: ● Equal To ● >= ● <= ● > ● < ● Between ● Contains Pattern
		Searches by text string.
Execute		Runs the search function
Filtered Members		Displays the search result set
	Add	Moves the selected member from the Filtered Members list to the Selected Members list.
	Remove	Moves the selected member from the Selected Members list to the Filtered Members list
Selected Members		Displays members of the search result set
	Add All	Moves all filtered members to the Selected Members list
	Remove All	Moves all selected members to the Filtered Members list
OK		Adds the Search Selected Members list to the Dimension Browser Selections list

4 Click **Execute** to run the search function using the criteria specified in the Mode and Search Criteria group boxes.

The search result set is displayed in the Filtered Members box.

5 Select members from the **Filtered Members** list, and click Add to add them to the **Selected Members** list.

Only Selected Members list members are added are added to the Dimension Browser Selections list when you click OK.

6 Click **OK**.

Locating Members

In large or complex dimension hierarchies, you can locate known members to select other members, rather than composing search strings for unknown members.

➤ To find a known member in the dimension hierarchy:

1 In Dimension Browser, from **Selections**, right-click a member.

2 Select **Find In Tree**.

In the Browse frame, the dimension hierarchy is expanded, and the first instance of the selected member is highlighted. You can now select members based on their relationship to the selected member.

Selecting Members Using Analytic Services Subsets

Analytic Services users can define rules that select dimension member subsets by criterion. These rules are composed of the following items:

- UDA — user-defined attributes
- Generation — generation within the dimension hierarchy
- Level — level within the dimensional hierarchy
- Expression — pattern of wildcard characters
- Attribute dimensions — database-defined attributes
- Conditional logic — advanced subset member selection criteria

You can search all selected member descendants using a maximum of 50 subset conditions. Subset criteria are saved by document in the repository. Because the filter panel cannot accommodate lengthy selection lists, subset member selections made in Filters are summarized with a description.

➤ To define a member subset selection:

1 In Dimension Browser, right-click a member.

2 Select **Select Subset**.

   The Subset dialog box displays. At the top, it indicates dimension members against which the rule is applied. Use the Individual Selection Rule control to compose a rule by selecting components from drop down lists.

3 Select a type: **UDA**, **Generation**, **Level**, **Expression**, or **Attribute**.

4 Select an operand: **is** (=) or **is not** (not equal).

5 From the last list, select a value.

6 Click **Add**.

   You must add the rule to Total Subset Definition for it to be used. You can define compound and conditional rules by adding multiple rules to the definition and using the Advanced button to connect them.

Table 17   Advanced Subset Options

Option	Submenu	Description
Add		Rule added to Total Subset Definition
Update		Rule replaced by another rule
Validate		Parenthetical syntax of Total Subset Definition verified

Option	Submenu	Description
Remove		Rule deleted from Total Subset Definition
Remove All		All rules deleted from Total Subset Definition
Connect	And	AND inserted at end (AND is used by default when multiple rules are added to the definition.)
	Or	OR inserted at end
Move	Move Up	Rule moved up in Total Subset Definition
	Move Down	Rule moved down in Total Subset Definition
Parenthesis	Add (	Open parenthesis inserted at beginning
	Add)	Close parenthesis inserted at end
	Remove (	Open parenthesis deleted
	Remove)	Close parenthesis deleted
	Remove All ()	All parentheses deleted from Total Subset Definition
Substitution Variable		Substitution Variable dialog box presented, enabling you to select a predefined substitution variable for the rule value

7 **Optional:** To compose a compound subset definition, repeat steps 3 through 6.

8 Click **OK**.

Wildcard Characters

Supported wildcard characters include the question mark (?) and the asterisk (*), which can be used only once in an expression and only at the end of a text string.

Expressions

Subset queries defined by expressions are not dependent upon label mode, returning all strings satisfying the expressions regardless of the alias table. Users must determine whether value sources are ID, description, or from alias tables and refine queries as needed.

UDAs

Web Analysis enables Analytic Services users to create user-defined attributes (UDAs), words or phrases associated with and defining characteristics of members, for member subsets.

Selecting Financial Management User-Defined Fields

Financial Management users can select members with specified attribute criteria. User-defined fields define compound selection rules for attributes of a specified value.

➤ To define a user-defined field selection:

1   In Dimension Browser, right-click a member.

2   Select **User Defined Field**.

The User Defined Field Selection dialog box is displayed. The controls at the top prompt you to compose a rule.

3   Select a field: **UserDefined1, UserDefined2**, or **UserDefined3**.

The equal sign is the sole operand for the rule.

4   Enter a value.

5   Click Add.

To be used, the individual rule must be added to the Selection Criteria. Define compound and conditional rules by adding multiple rules to the frame, and using Advanced options to connect them.

Table 18 Advanced User-Defined Field Options

Option	Submenu	Description
Add		Rule added to Selection Criteria
Update		Rule replaced by another rule
Remove		Rule deleted from Selection Criteria
Remove All		All rules deleted from Selection Criteria
Connect	And	AND inserted at end (AND is used by default when multiple rules are added to the definition.)
	Or	OR inserted at end
Move	Move Up	Rule moved up in Selection Criteria
	Move Down	Rule moved down in Selection Criteria
Parenthesis	Add (	Open parenthesis inserted at beginning
	Add)	Close parenthesis inserted at end
	Remove (	Open parenthesis deleted
	Remove)	Close parenthesis deleted

6   **Optional:** To compose compound subset definitions, repeat steps 3 through 5.

7   Click **OK**.

Filtering by SAP BW Member Properties

SAP uses the term *member properties* to refer to member attributes. You can select SAP BW members and filter them by their member properties. You select the members and then define filtering definitions on the selections.

➤ To select SAP BW members by their member properties:

1 In **Dimension Browser**, select a member.

The member is displayed in the Selection frame.

2 Right-click the member, and select **Filter on Member Properties**.

The Member Properties dialog box is displayed. The controls at the top prompt you to compose a rule.

3 From the list, select a member property.

4 Select an operand.

5 In the text area, enter a value for the member property.

6 Click Add.

You must add the rule to the filter definition for it to be used. You can use multiple rules to create compound definitions.

Table 19   Advanced Filter on Member Properties Options

Option	Submenu	Description
Add		Rule added to the filter definition
Update		Rule replaced by another rule
Remove		Rule deleted from the filter definition
Remove All		All rules deleted from the filter definition
Parenthesis	Add (	Open parenthesis inserted at beginning
	Add)	Close parenthesis inserted at end
	Remove (	Open parenthesis deleted
	Remove)	Close parenthesis deleted
Connect	And	AND inserted at end (AND is used by default when multiple rules are added to the definition.)
	Or	OR inserted at end
Move	Move Up	Rule moved up in the filter definition
	Move Down	Rule moved down in the filter definition

7 **Optional:** To compose compound definitions, repeat steps 3 through 6.

8 Click **OK**.

Using SAP BW Select Top/Bottom

SAP BW enables you to limit the size of and rank query result sets. You select members and then define filtering definitions on the selections.

➤ To limit and rank SAP BW members as part of the query:

1   In **Dimension Browser**, select a member.

    The member is displayed in the Selection frame.

2   Right-click the member, and select **Select Top/Bottom**.

    The Top/Bottom dialog box is displayed.

3   Select **Top** or **Bottom**.

    You cannot select both, as you can with Analytic Services.

4   From **Using Function**, select **Percent**, **Sum**, or **Count**.

    You can determine rank by only one method.

5   In the text area, enter a value for the selected method.

    For Percent, use a value between one and one hundred. For Sum, enter a threshold. All member values summed up to and including the threshold are returned. For Count, provide an integer, to indicate how many top or bottom members to return.

6   In **Order By**, select a dimension.

    Because all dimensions participate in all intersections, you must identify the intersection by which the selected dimension is ranked.

7   **Optional**: Click Selection.

    Dimension Browser for the Order By dimension is displayed. You can select a member of the Order By dimension by which to rank the selected dimension.

8   Click **OK**.

Selecting Financial Management Member Lists

Member lists are predefined variables, used for frequently changing information, created using Financial Management, and identified by variable names.

➤ To use a Financial Management member list in a Dimension Browser member selection:

1   In Dimension Browser, right-click a member.

2   Select **Member List**.

3   From **Choose Member List**, select a member list.

4   Click **OK**.

Selecting Substitution Variables

Substitution variables are predefined variables, used for frequently changing information, created using Analytic Services, and identified by variable names.

Substitution variables simplify document maintenance, enabling fluctuating values to be adjusted centrally (in Analytic Services) and to be referenced dynamically (by Web Analysis documents).

➤ To use a substitution variable in a Dimension Browser member selection:

1   In Dimension Browser, right-click a member.

2   Select **Substitution Variable**.

3   Select a substitution variable.

4   Click **OK**.

Multiple Substitution Variables

Multiple substitution variables can be used using Subset Member Selections.

Syntax Tips

Substitution variables have specific rules and syntax requirements:

- For substituted values, use dimension or member names.

- Do not use ampersands (&) as the first character of member names.

Analysis Tools and Substitution Variables

When member selections defined by substitution variables are used in analysis tool definitions, the variables are resolved to their current values, ensuring accurate aggregations, comparisons, and calculations, regardless of the substitution-variable definition.

Selecting Personal Variables

Personal variables, containers for ad hoc collections of otherwise unrelated members, enable users to define and name complex member selections. To leverage personal variables, you must be presented with relevant dimensions and database connections.

Defining personal variables does not include them in queries. You select personal variables from Dimension Browser when you define queries.

➤ To use a personal variable in a query, select the personal variable definition from the Dimension Browser **Browse** panel.

Applying Point of View (POV)

POV database preferences enable users to insert dimensions and members into the documents of others. Definitions must be defined and activated for specific database connections.

When a POV is activated, the Use Point of View check box in the new document wizard is enabled. Documents created when Use Point of View is selected use the active POV.

EPM Workspace users cannot create or activate POV definitions. But, they can select database connections with activated POV definitions and apply the definitions to documents that they are creating. EPM Workspace users cannot apply POV definitions to documents.

POV definitions consist of axes and member selections. Entire definitions are used when documents are created with activated POVs.

If all POV member selections are custom filters, you may not see changes in your document. You can check Point of View, of the view pane Information tab, to see which POV, if any, is applied.

Note: You cannot edit the User POV in Workspace.

➤ Using POV definitions is a three-part process:

1 Use Web Analysis Studio to create a POV definition.

2 Use Web Analysis Studio to activate the definition.

3 Set a document (existing or newly created) to use the definition.

➤ To apply an activated POV definition to a new document:

1 Perform an action:

● Select **File** , then **New Document**.

● Click the new button.

The steps for creating documents are displayed.

2 Click **Browse**.

3 From the Open dialog box, select the file of the database connection that uses the activated POV definition that you want to use, and click OK.

Defining Dynamic Time Series Selections

You can select Dynamic Time Series (DTS) definitions, created in Analytic Services, for query selection statements. To define time periods, users select DTS definitions and time members.

Time Substitution Variables

You can select DTS substitution variables.

Substitution variables are predefined placeholders, used for frequently changing information, identified by variable names, and having temporary values that define data type. When substitution variables are used, temporary values are replaced by current values. Substitution variables are stored at the database level in Analytic Services.

➤ To define a DTS selection:

1 In Dimension Browser, right-click a time member.

2 Select **Dynamic Time Series**.

   The Dynamic Time Series dialog box is displayed, listing DTS definitions as option buttons and substitution variables in a list.

3 Select a DTS definition option.

4 Perform an action:

   ● Select the **Substitution Variables** tab, and then select a substitution variable.

   ● Select the **Members** tab, and then select a member to represent the date in the X-to-date definition.

5 Click **OK**.

Defining Previous Member Selections

Selecting Also Select Previous from the Dimension Browser right-click menu displays the Also Select Previous dialog box, used to select previous members at one dimension level.

➤ To define a previous member selection:

1 In Dimension Browser, in **Browse**, right-click a member.

2 Select **Also Select Previous**.

   The Also Select Previous dialog box is displayed.

3 Specify how many previous members to retrieve.

4 Click **OK**.

   Dimension Browser is displayed. The member that you right-clicked is displayed in the Selections list with the Also Select Previous icon.

Navigating Data Objects and Sources

Web Analysis documents can contain a variety of data objects:

● Spreadsheets

● Charts

● Pinboards

● SQL spreadsheets

● Freeform grids

Despite their diversity, data objects are not static. You can rearrange, expand, change, and concentrate dimension intersections. These methods, called *navigation methods*, enable travel through dimensional hierarchies.

Navigation methods are specific to data object and data source.

Table 20 Supported Data Sources

Type	Data Source
OLAP	Analytic Services
	IBM DB2 OLAP Server
	SAP BW
Hyperion	Financial Management
	Planning
Relational	IBM DB2 Enterprise Server Edition
	Microsoft SQL Server
	Oracle
	Teradata
	Other JDBC RDBMS

OLAP data sources support the navigation methods described in this chapter. Other Hyperion data sources and relational data sources support fewer navigation methods.

Navigation Methods

EPM Workspace uses various navigation methods:

Table 21 Navigation Methods

Navigation	Description	Method
Move	Relocates dimensions on data-layout axes	Position dimensions on or between axes, using the Data Layout dialog box, Information panel, or new document wizard
Paging	Maintains dimensions on their row and column axes, while changing their intersections on the page axis	Click or scroll the Page Control panel. See "Paging" on page 64.
"Keep Only" on page 65	Retains one member of the selected dimension, while deselecting all other members	Right-click a member and select Keep Only. See "Keep Only" on page 65
"Remove Only" on page 65	Deselects the selected member, removing it from the query result set	Right-click a member, and select Remove Only. See "Remove Only" on page 65.
Drilling	Increases or decreases dimension detail by displaying or not displaying members in the hierarchy	Double-click members. You can customize drilling behavior. See "Drilling" on page 65.
"Drill-Linking" on page 68	Navigates to other documents or executables	Click a linked cell and pass the cell and the dimension context to another data object or document

Navigation	Description	Method
Custom Controls	Define Web Analysis navigation	Use a custom document component to change the query. While Web Analysis users can use custom document components, you can only create these components in the Web Analysis Studio.

Navigation method specifics:

- Drilling—Navigates to related members

- Linking (called *drill-linking*) — Passes selected members to other documents

- Linked reporting objects (LROs) — Open executables to display cell-notes, Windows executables, or Web page URLs.

Repositioning Dimensions

You can rearrange intersections by repositioning dimensions on or between axes.

➤ To reposition a dimension, using the Data Layout dialog box, click the data layout button, and drag the dimension from its current positions to another position on the current axis or to another axis.

Note: Document creators use Properties to lock the ability to swap and move dimensions.

➤ To reposition a dimension, using the view pane Information panel:

1   Select **View** , then **View Pane**.

2   Click the information panel button to make Information the current tab.

3   Scroll to the **Filter**, **Page**, **Row**, and **Column** trees to review placement of the current data object.

4   Drag the dimension from one axis tree to another axis tree.

Note: You must have at least one row and one column dimension. If repositioning leaves a row or column axis empty, use Data Layout to rearrange the dimension layout.

Paging

Paging maintains dimensions on row and column axes, while changing their intersections on the Page axis.

You can jump or scroll through pages of intersections by using the Page Control panel.

➤ To display the Page Control panel, select **View** , then **Pages**.

The Page Control panel displays in the content area above the relevant data object, organizing Page axis intersections so that each page is relevant to one Page member.

➤ To navigate the Page dimension, perform an action:

- Click < and > to move up and down in the page series.

- From the list box, select a page member by name.

Pages

Think of the Page axis as the Z-axis of a three-dimensional graph. Visualize a stack of spreadsheets. You navigate the stack to compare values among pages. The spreadsheets represent Page axis dimensions, and the pages represent Page axis members or member combinations.

Multiple-Page and Single-Page List Boxes

When you work with page dimension combinations, the Page Control panel can display multiple-page list boxes, which display all possible page combinations, whether or not data exists. Single-page list boxes omit page combinations that do not contain data. Oracle recommends using single-page list boxes when working with sparse dimensions.

➤ To separate or combine Page dimensions into multiple-page list boxes, click **Toggle Multipage**.

Keep Only

Keep Only deselects all but one member of the selected dimension.

➤ To deselect all but one member of a dimension, right-click the member, and select **Keep Only**.

Remove Only

Remove Only deselects a member, removing it from the query result set.

➤ To remove one member from the query result set, right-click a member, and select **Remove Only**.

Drilling

Drilling increases or decreases data-object detail by changing the member display. Because drilling is customizable, the term *drilling* refers to almost any hierarchical navigation prompted by clicking a dimension label.

Three types of drilling options:

- Drilling options specify the result set.

- Expand on Drill specifies whether the result set replaces or augments the currently displayed members.
- The Selected Member data-display option specifies whether the drilled member is included in the result set.

Web Analysis users must use the data-object, right-click menu to set drill options. Expand on Drill and Selected Member options are set by user preferences in Web Analysis Studio.

Drilling Options

Web Analysis Studio features these default drilling behaviors:

- Drill Down includes a member's children in the display.
- Drill Up includes a member's parent in the display.
- Drill to Top includes the highest ancestor in the display.

You can customize drilling by setting drilling options. Drilling options are set for the current document through the data object shortcut menu (select Drill, then Drill Options). Drilling options can also be set for all subsequently created documents through Drilling preferences.

This table describes Web Analysis Studio drilling options:

Table 22   Drilling options

Drilling Option	Description
Drill to Next Level	Includes the children of the drilled member in the display.
Drill to Descendants	Includes all descendants of the drilled member in the display.
Drill to Dim Bottom	Includes the lowest level descendants of the drilled member in the display.
Drill to Siblings	Includes members at one level who share a parent with the drilled member.
Drill to Same Level	Includes all members on the drilled member's level. **Note:** Hyperion defines levels as hierarchical layers counted up from the lowest descendant (Level 0). Other data sources define levels differently. Asymmetric hierarchies may also yield unexpected results.
Drill to Same Generation	Includes all members on the drilled member's generation. **Note:** Hyperion defines generations as hierarchical layers counted down from the highest ancestor (Generation 0). Other data sources define generations differently.

Drilling options are data-source specific. Drilling options that are not supported by the data source default to Drill to Next Level.

Expand on Drill

The Expand on Drill drilling option sets the drilling return set to augment or replace currently displayed dimension members. You can set Expand on Drill for the current document through

the data object shortcut menu (Drill , then Drill Options). Expand on Drill can also be set for all subsequently created documents through Drilling preferences.

When Expand on Drill is selected the drilling return set is added to currently displayed dimension members. When Expand on drill is disabled the drilling return set replaces currently displayed dimension members.

Selected Member Data Display Option

The Selected Member data display option specifies that the query result set should include the member from which advanced member selections are defined.

For example: If you specify Also Select Children on the Year dimension member and Selected Member is enabled, Year and all of its children are returned by the query. When Selected Member is disabled, only the children of year are returned.

This Selected Member functionality also impacts the drilling result set, by including or excluding the drilled member in the drilling result set.

Additionally, you can enable the Selected Member First data display option, to ensure that the drilled member is listed above the drilling result set.

Drilling Variations

These data display and drilling option combinations result in drilling return sets that differ. If you are aware of this dynamic you are better prepared to receive the intended drilling return set.

Table 23   Drilling Variations

Drilling Variation	Description
Drilling down with Expand Drilling enabled and Data Display , then Selected Members disabled	Augments current member selections with the drilled return set and removes the drilled member
Drilling down with Expand Drilling enabled and Data Display , then Selected Members enabled	Augments current member selections with the drilled return set and includes the drilled member.
Drilling down with Expand Drilling disabled and Data Display , then Selected Members disabled	Replaces the current member selections with the drilled return set and removes the drilled member.
Drilling down with Expand Drilling disabled and Data Display , then Selected Members enabled	Replaces the current member selections with the drilled return set and includes the drilled member.

Default Drilling Behavior

Default drilling behavior for Web Analysis documents:

● Drill Down displays children.

● Drill Up displays parents.

● Drill to Top displays the highest ancestor.

Drilling options are data-source specific. If, in user preferences, you set drilling options that are not supported by the current data source, drilling defaults to Drill to Next Level.

Drill-Linking

Drill-linking enables you to navigate to other documents by clicking cells with preplaced links.

Drill-linking differs from both drilling and linked reporting objects. Drilling navigates the dimensional hierarchy. Drill-linking passes the current member selection to other documents and executables. Linked reporting objects are linked to cell notes, file attachments, and URLs.

Changing Display Types

Documents display data values returned from data sources in data objects. Web Analysis documents can have multiple data objects, and each data object can have a different display type:

- Spreadsheet
- Chart
- Pinboard
- SQL spreadsheet
- Freeform grid

Each display type has numerous prerequisites. Because SQL spreadsheets and freeform grids can be created only in Web Analysis Studio, you cannot change them.

Pinboards require traffic lighting definitions, so you can change spreadsheets or charts to pinboards, only if the pinboard definition is defined.

➤ To change the display type of the current document, select **Format** , then **Display Type** then, select a display type or chart type.

Note: Web Analysis Studio users can lock the display type to prevent subsequent users from altering a document.

Data Display Options

Each display type has data display options specifying document behavior. For suppression— suppresses rows with missing data, rows with zeroes, and in the case of Analytic Services, rows with shared members. Suppression can be set from the Cube Navigator dialog box, Data Display shortcut menu or OLAP Server preferences.

Table 24   Data Display Options of Data Object Shortcut Menu

Data Display Option Submenu	Description
Selected Member	Displays the explicit member selection made in the query. This member selection can be previewed in the Information panel, or Dimension Browser. Selected Member provides a method for displaying this information in data objects.
Selected Member First	When Selected Member is active, enables you to position the explicit member selection made in the query definition first (from left to right, or top to bottom).
Suppress	Omits data, as specified, from the query result set: ● Missing Rows ● Missing Columns ● Shared Members ● Zero Rows
Default Label Mode	Toggles between label modes: ● Descriptions ● IDs ● Both (Financial Management option)
Dimension-Specific Label Mode	Toggles between label mode options: ● Use Default ● Descriptions ● IDs ● Both (Financial Management option)
Dimension Header Sorting	Orders the selected dimension per the order option: ● Default ● Ascending ● Descending ● Level (OLAP specific) ● Generation (OLAP specific) ● Selection Order (Relational specific) The Default option is the order in which dimension members are naturally ordered by data source outlines. Using this option may offer improved performance.
Show Linked Reporting Object Indicators	Shows or hides small cell triangles indicating the presence of Linked Reporting Objects. Triangles persist for related content.

Saving Selections to the User POV

User POV enables users to select members in Filters, Pages, Rows, and Columns (Data layout and/or member selection controls) and applies them to multiple reports.

Note the report needs the following to utilize the User POV:

- "Use User POV" is enabled in the Data Layout dialog in the Web Analysis Studio.
- A dimension member selection needs to include "User POV" as a selection.

This is exposed through the current POV functionality, where UserPOV is the name of another POV that is created and utilized in reports. The UserPOV exist for all database connections and can be set at user level only.

To set a UserPOV, right click a spreadsheet and select Save Selection to save the dimension member selections to the UserPOV.

Pinboards

Pinboards are custom, graphic representations of multiple dimensions. Pinboard dimensions are represented by graphics, pin icons on graphics, and color (or state).

Pinboards Prerequisites

Because pins change image or color dynamically, based on traffic-lighting cues, you must create the spreadsheet and apply traffic lighting before creating the pinboard in Web Analysis Studio.

Pinboard Series

A pinboard series enables drilling from one pinboard to another. You create the first pinboard and then use the Web Analysis Studio Pinboard Designer right-click menu to generate subsequent pinboards, each of which uses the children of the preceding pinboard. The pinboard that represents the dimension bottom is the last in the series.

Pins

You can use the default pins provided by Web Analysis Studio or use Pin Designer to create pins. Pins change their image or color, based on traffic lighting.

Figure 1   *Default Pin, Image Pin, and Color Pin*

Traffic-Lighting Control Panel

If multiple traffic-lighting definitions are defined on a document, the pinboard display type displays a traffic-lighting control panel, which enables you to scroll through the traffic-lighting definitions.

SQL Spreadsheets

SQL spreadsheet data objects enable users to query relational data sources and display the returned data values on custom documents:

- SQL spreadsheets can be created only on custom documents.

- You must understand how to compose SQL queries to create SQL spreadsheets.

- You must be able to connect to a relational data source using supported JDBC drivers.

Alternatives for accessing relational data:

- In Web Analysis Studio, you can create a relational database connection to be used by spreadsheets, charts, and pinboards.

- You can use freeform grids, which leverage custom document database connections, to combine data values from multiple data sources in one data object.

- In Web Analysis Studio, you can create a relational drill-through connection from an OLAP database connection to a relational data source.

- You use the Related Content dialog box to leverage pre-defined Analytic Integration Services drill-through reports.

Freeform Grids

Freeform grids present OLAP, relational, and manually entered data on a data object, enabling you to leverage multiple data sources in integrated, dynamic calculations.

Freeform grids are comprised of rows and columns; page dimensions are not visually represented. You can use OLAP database connections with members assigned to the page axis, but you cannot navigate through page dimensions unless you create additional subscription controls. In short, only the first page of a multidimensional cube is displayed.

Resizing the Display

You can resize large Web Analysis documents in the content area:

- **Auto-Resize**— attempts to fit the current data object into the current content area
- **Custom Resize** — fits the current data object to a manually specified pixel area

➤ To auto-resize the current data object, select **Format** , then **Auto-Resize**.

➤ To size the current data object to a specified size, select **Format** , then **Custom Resize**, and, when the Custom Resize dialog box is displayed, enter the preferred number of horizontal and vertical pixels.

Managing Analysis Tools

You can leverage tools, advanced-analytical-formatting and data-source-specific, from the EPM Workspace. Analysis tools expedite comparisons, visually organize data, and promote structures and conclusions.

Analysis tools are data-source-specific; not all tools are available in all data objects.

Analysis tools are centrally organized and applied by Analysis Tools Manager, accessed using the data-object, right-click menu. Analysis Tools Manager features an Ordered By panel, which shows the number and order of tool definitions activated on the current data object.

You can create analysis tools, using the data-object, right-click menu.

Table 25   Analysis Tools

Tool	Description
Traffic Lighting	Displays the Traffic Lighting dialog box, used to color-code member values based on fixed limits or value comparison Traffic Lighting visually associates member values, whether or not they are sorted or ranked.
Sorting	Displays the Sorting dialog box, used to order the query result set
Retrieve Only Top/Bottom	Displays the Retrieve Only Top/Bottom dialog box, used to limit and rank the query result set
Restrict Data	Displays the Restrict Data dialog box, used to restrict the query result set based on criteria
Calculations	Displays the Calculations dialog box, used to create calculated rows and columns
Show/Hide Only	Displays the Show/Hide dialog box, used to filter data by color, value, and member
Data Formatting	Displays the Data Formatting dialog box, used to format data values based on member or value criteria

Related Content Definitions

Related Content definitions can be managed from the Related Content dialog box and Analysis Tools Manager. Edits, including remove and remove all, made in the Related Content dialog box change definition content but do not impact definition existence. In Analysis Tools Manager, you can activate, deactivate, reorder, and remove, but not edit, definitions.

Order of Definitions

The order in which Analysis Tools definitions are applied affects data object behavior. Users can edit application order by moving Analysis Tools definitions up and down in the Ordered By panel.

Default Analysis Tools Definitions

Analysis Tools Manager displays default formatting, measures formatting, and spreadsheet option definitions at the top of the Ordered by list panel. Definitions originating from user preferences, database connection properties, and data object properties are applied before Analysis Tools definitions and can be edited, but not removed or disabled.

Activating and Deactivating Analysis Tools Definitions

You can activate and deactivate Analysis Tools definitions without removing them from Analysis Tools Manager; thus, you can use many different Analysis Tools combinations.

➤ To deactivate an Analysis Tools definition, in the **Ordered By** panel, select the appropriate **Active** check box.

Show/Hide Only

You use the Show/Hide Only analysis tool to include or exclude members in or from data objects. Using member name, traffic lighting color, or data value criteria, you enabled focused, value-based analysis.

The Information panel displays the Show/Hide Only definitions that restrict or display current-document information.

Asymmetrical Analysis

Asymmetric documents feature nested dimensions that differ (by at least one member) across an axis. You can hide rows, columns, and chart objects and thus enable asymmetrical analysis.

Multiple Show/Hide Only Definitions

Multiple Show/Hide Only definitions are applied in order, enabling simultaneous control by member, color, and values.

Differences in Show/Hide Only Definitions

Different types of Show/Hide Only definitions operate differently:

- Calculations displays or hides all calculated members.

- Members displays or hides specified members of the dimension right-clicked in the document.
- Values displays or hides members on the axis opposite the dimension right-clicked in the document.
- Colors displays or hides members on the axis opposite the dimension right-clicked in the document.

Show/Hide Only definitions are created in the Show/Hide Only dialog box.

Table 26   Show/Hide Only Dialog Box

Control	Description
Select Method	Show—Displays items that satisfy definition criteria Hide—Hides items that satisfy definition criteria
Where	
Calculations	Shows or hides all calculated members
Member	Bases definitions on specified, current-axis members
Any Values	Tests whether any opposite-axis member contains values that satisfy current-axis criteria
All Values	Tests whether all opposite-axis members contain values that satisfy current-axis criteria
Any Colors	Tests whether any opposite-axis member contains colors that satisfy current-axis criteria
All Colors	Tests whether all opposite-axis members contain colors that satisfy current-axis criteria
Set Condition	
Operator menu	Enables selection of a criteria operator: Greater than (>), Greater Than or Equal To (>=), Equal to (=), Less Than or Equal To (<=), or Less Than (<), Not Equal To (<>)
Value Text box	Enables users to enter values for conditions
Color	Opens the Select Color dialog box, used to set condition color
Members	Lists members and attributes to which the current definition applies
Advanced	Aggregates or separates member combinations
Apply	Applies new definitions to documents

Creating Show/Hide Only Definitions

➤ To create a Show/Hide Only definition:

1 Right-click a member, and select **Analysis Tools** , then **Show/Hide Only.**

The Show/Hide Only dialog box is displayed.

2   From **Select Method**, select **Show** or **Hide**.

3   Define a Show/Hide Only definition option:

- To show or hide calculated members, in **Where**, select **Calculations**.

- To show or hide specific members, in **Where**, select **Members,** and, from **Members**, select members.

- To show or hide members, if any member satisfies the specified condition.

a.   In **Where,** select **Any Values**.

b.   From Members, select members.

c.   Use the operator list and the value text area to define the condition. To show or hide members, if all members satisfy the specified condition:

d.   In **Where,** select **All Values**.

e.   From **Members**, select members.

f.   Use the operator list and the value text area to define the condition.

g.   To show or hide members, if any member satisfies the specified traffic-lighting color condition:

    i.   In **Where,** select **Any Colors**.

    ii.   From **Members**, select members.

    iii. From the operator list, select Equal To (=) or Not Equal To (<>).

    iv.   From **Color**, select an option. To show or hide members, if all members satisfy the specified traffic-lighting color condition:

h.   In **Where,** select **All Colors.**

i.   From **Members,** select members.

j.   From the operator list, select Equal To (=) or Not Equal To (<>).

k.   From **Color**, select an option.

> **Note:** Show/Hide Only Members is applied to the named member, and Show/Hide Only Values and Show/Hide Only Colors are applied to the opposite axis, using the values in the selected axis.

Color options are enabled only for data objects that feature active traffic-lighting definitions. An Advanced check box enables you to specify conditions for member combinations. The Apply button enables you to apply the current definition to the current data object, without exiting the dialog box. You may have to drag the dialog box title bar to see the data object.

4   Click **OK**.

The definition is added to Analysis Tools Manager.

5   Click **Close**.

Editing Show/Hide Only Definitions

➤ To edit a Show/Hide Only definition:

1 Right-click a member, and select **Analysis Tools** , then **Analysis Tools Manager.**

   Analysis Tools Manager is displayed.

2 Right-click a Show/Hide Only definition, and select **Edit.**

   The Show/Hide Only dialog box is displayed.

3 Make selections and define parameters.

4 Click **OK.**

Traffic Lighting

The Traffic Lighting analysis tool color-codes data cells. You can base color-coding on two-member comparisons or single-member fixed limits. Colors graphically associate member values, whether or not they are sorted or ranked. Traffic Lighting definitions are created in the Traffic Lighting dialog box and maintained as the document is pivoted and changed.

The Information panel displays the Traffic Lighting definitions that color-code the current data object.

Table 27   Traffic Lighting Dialog Box

Control	Description
Create Criteria	
Apply Traffic Lighting To	Specifies the dimension to which traffic lighting is applied
Comparing It To	Specifies the dimension to which the preceding dimension is compared
Assign Limits	Specifies the interval, set point, and color parameters that compose the traffic lighting definition
% Differences	Indicates that color-coding is based on the percent difference between compared members. If not enabled, color-coding is based on value difference.
Enable Financial Intelligence	Enables Hyperion data sources to treat expenses and liabilities as negative values. Works with % Differences to reflect variance and variance percent calculations for the Traffic Lighting dialog box.
Advanced	Aggregates or separates member combinations
Apply	Applies the definition to the document

Financial Intelligence Variations

% Differences and Enable Financial Intelligence cooperate to provide four calculations for the Traffic Lighting dialog box:

● Neither selected—Traffic Lighting compares members, using a subtraction calculation.

- Only % Differences selected—Traffic Lighting compares members, using a percent difference calculation.

- Enable Financial Intelligence selected—Traffic Lighting compares members, using an advanced variance calculation that recognizes specific expense and liability members as negative values.

- Both selected—Traffic Lighting compares members, using an advanced variance percent calculation that recognizes specific expense and liability members as negative values.

Assign Limits Box

In the Assign Limits box, you indicate the number, color, and criteria for color-coding traffic lighting ranges.

Table 28   Assign Limits Box

Control	Description
Add to End	Inserts set points within ranges
Remove Last	Removes the last traffic lighting range and set point
Set Color button	Opens the Select Color dialog box, used to set range colors

Note: Setting traffic lighting colors to the colors used by Spreadsheet Options may obscure member color-coding.

Creating Traffic Lighting Definitions

➤ To create a traffic lighting definition:

1 Right-click a member, and select **Analysis Tools** , then **Traffic Light**.

The Traffic Lighting dialog box is displayed.

2 From **Apply To**, select the member to which traffic lighting is to be applied.

3 From Comparing It To, select the member to which the previously selected member is to be compared.

- Compare to a fixed limit by, in **Assign Limits**, deselecting **% Differences** or, from **Comparing It To**, selecting **Fixed Value.**

- Select Advanced twice, first to separate members into combinations and second to select from aggregated members.

  Assign Limits contains three default set points and colors. Set points divide values into ranges identified by color.

4 For each set point, indicate a set point operand.

The first list prompts you to specify whether the setpoint value is in the range; you choose greater than (>) or greater than and equal to (>=).

5   In the text box, enter a setpoint value, to specify the threshold that separates ranges.

The second list prompts you to specify the setpoint value; you enter positive or negative decimal values.

6   **Optional: To change the range color, click Color, and select a color square.**

The Color button displays a color-square palette. Selecting a square assigns it to the current traffic lighting range and displays the hexadecimal value of the color in the neighboring text-entry field.

7   **Optional: To change color opacity, enter a value in the last text-entry box for each range.**

You can specify a percentage from zero (transparent) to one hundred. Transparency is sometimes used to reveal background graphics.

8   **Optional: To add a set point, click Add to End, and repeat steps 4 through 7.**

9   Click **OK**.

Editing Traffic Lighting Definitions

➤   To edit a Traffic Lighting definition:

1   Right-click a member, and select **Analysis Tools** , then **Analysis Tools Manager**.

Analysis Tools Manager is displayed.

2   Right-click a Traffic Lighting definition, and select **Edit**.

The Traffic Lighting dialog box is displayed.

3   Make selections, and define parameters.

4   Click **OK**.

Sorting

The Sorting analysis tool orders dimensions of the query result set in ascending or descending alphanumeric order. Sorting definitions, which are created in the Sorting dialog box and displayed in the Information panel, are dynamic—applied as documents are drilled, pivoted, and changed.

You can use client-side and server-based sorting definitions:

●   Client-side sorting—provided by Sorting and executed on local computers

●   Server-based sorting—provided by Retrieve Only Top/Bottom and executed on Analytic Server; performed prior to returning the OLAP query result set to the client, thus minimizing the result set and network traffic

Multiple sorting definitions are applied in the order presented by Analysis Tools Manager. Sorting definitions applied to axes with equal values may be rearranged by sorting definitions applied to axes with diverse values. The document display is the result of the cumulative

application of all active sorting, client-side and server-side, but it may seem that only the last sorting definition was applied.

Table 29   Sorting Dialog Box

Control	Description
Sort On	Specifies the member to which the sorting definition is applied
Order	
Ascending	Selects ascending alphanumeric order
Descending	Selects descending alphanumeric order
Apply	Apply the definition to the document

Creating Sorting Definitions

➤   To create a sorting definition:

1   Right-click a member, and select **Analysis Tools** , then **Sort.**

The Sorting dialog box is displayed.

2   From **Members,** select the member to which sorting is to be applied.

3   Select **Ascending** or **Descending**.

4   Click **OK**.

Editing Sorting Definitions

➤   To edit a sorting definition:

1   Right-click a member, and select **Analysis Tools** , then **Analysis Tools Manager.**

The Analysis Tools Manager is displayed.

2   Right-click a sorting definition, and select **Edit**.

The Sorting dialog box is displayed.

3   Make selections and define parameters.

4   Click **OK**.

Restrict Data

The Restrict Data analysis tool narrows the return set by requiring data values to be relevant to rules and operands. Data can be restricted by two-column comparison or single-column fixed limits.

The Information panel displays Analytic Services Restrict Data definitions for the current document.

Because Restrict Data is executed by Analytic Services, the network server is protected from transmitting and the client is protected from processing large result sets.

Users can apply Restrict Data to result sets of processed queries (using the Analysis Tools right-click menu) and of unsubmitted queries. The last step of the new document wizard enables users to create Restrict Data definitions.

Table 30   Restrict Data Dialog Box

Control	Description
Select Column	Displays the Select Column dialog box, used to select a column from the current document
Operator menu	Specifies an operator: Greater than (>), Greater Than or Equal To (>=), Equal to (=), Less Than or Equal To (<=), Less Than (<), Not Equal To (<>)
Operand menu	Specifies one of three operands: ● A value Of—restricts data to a value or range of values ● The Data Value of Column—displays a secondary Select Column button, used to compare two columns ● A Missing Value—restricts missing values
Value Text box	Specifies values for Restrict Data conditions

Note: It is advised to use one member per dimension in filters when restrict data or retrieve top/bottom is applied. If multiple members are selected per dimension, the application aggregates results. Because restrict data and retrieve top/bottom are parts of Analytic Services queries, aggregation occurs after queries are returned and may result in unexpected result sets.

Creating Restrict Data Definitions

➤ To create a Restrict Data definition:

1   Right-click a member, and select **Analysis Tools** , then **Restrict Data**.

The Restrict Data dialog box is displayed.

2   From **Select Column**, select a column on which to restrict data.

3   From **Operator,** select an operator.

4   From **Operand**, select an operand: **A Value Of**, **The Data Value of Column**, or **A Missing Value**.

5   Depending on the selected operand, perform an action:

- **A Value Of** — For **Value**, enter a data value.

- **The Data Value of Column** — From the relevant list, select a column.

- **A Missing Value** — Do nothing.

6   Click Add.

Four buttons are available: Add, Update, Remove, and Remove All.

Restriction criteria is listed in the Restriction Definition frame. You can use the Advanced button to create compound definitions.

Table 31 Advanced Options

Option	Submenu	Description
Add		Add the rule to Total Subset Definition
Update		Replace the selected rule with the current rule
Validate		Verify the parenthetical syntax of Total Subset Definition
Remove		Remove the rule from Total Subset Definition
Remove All		Remove all rules from Total Subset Definition
Connect	And	Insert AND at the end of the rule. AND is used by default when multiple rules are added.
	Or	Insert OR at the end of the rule
Move	Move Up	Move the rule up in Total Subset Definition
	Move Down	Move the rule down in Total Subset Definition

7 **Optional**: To compose a compound rule, select an advanced connect option, and repeat steps 2 through 7.

8 Click **OK**.

Editing Restrict Data Definitions

➤ To edit a Restrict Data definition:

1 Right-click a member, and select **Analysis Tools** , then **Analysis Tools Manager**.

Analysis Tools Manager is displayed.

2 Right-click a Restrict Data definition, and select **Edit**.

The Restrict Data dialog box is displayed.

3 Make selections and define parameters.

4 Click **OK**.

Retrieve Only Top/Bottom

The Retrieve Only Top/Bottom analysis tool, central to top/bottom analysis, leverages Analytic Services server-based sorting and ranking to control the size and order of OLAP query result sets. Thus, the network server is protected from transmitting and the client is protected from processing large result sets.

You can apply Retrieve Only Top/Bottom to result sets of processed queries (using the Analysis Tools right-click menu) and to result sets of unsubmitted queries. Prior to sending queries, click the Data Layout Options button and select Retrieve Only Top/Bottom. During query creation, use the last step of the new document wizard.

The Information panel displays all Analytic Services Retrieve Only Top/Bottom definitions for the current document.

Server-Based Sorting

Server-based sorting is provided by Retrieve Only Top/Bottom and executed on Analytic Server. Server-based sorting is performed by the server prior to returning the OLAP query result set to the client, thus minimizing the result set and network traffic.

Multiple, Filter-Axis Members

Multiple, filter-member selections impact Retrieve Only Top/Bottom.

Multiple filter-axis members are aggregated before they are to sent queries. Because client-based aggregation does not exist in data source servers, queries are processed using server data values. The discrepancy between client aggregations and server-based sorting and ranking results in irregular result sets.

Note: Users are strongly advised to use one member per dimension in filters when using Retrieve Only Top/Bottom and Restrict Data.

Table 32   Retrieve Only Top/Bottom Dialog Box

Control	Description
Select Column	Specifies the columns to which the Retrieve Only Top/Bottom definition is to be applied
Show	Limits the result set to the specified criteria
Top	Selects the highest data value, as indicated by the number in the relevant box
Bottom	Selects lowest data value, as indicated by the number in the relevant box
Sorting	
Ascending	Displays the result set in ascending alphanumeric order
Descending	Displays the result set in descending alphanumeric order
Clear	Deletes all Retrieve Only Top/Bottom definitions

Creating Retrieve Only Top/Bottom Definitions

➤ To create a Retrieve Only Top/Bottom definition:

1 Right-click a member, and select **Analysis Tools** , then **Retrieve Only Top/Bottom**.

   The Retrieve Only Top/Bottom dialog box is displayed.

2 From Column, select the column to which the Retrieve Only Top/Bottom definition.

3 Limit the result set by selecting **Top** or **Bottom** and, in the relevant box, indicating the number of members.

4 Sort the result set by selecting **Ascending** or **Descending**.

5 **Optional:** To remove all selections from the current definition and start over, click Clear.

6 Click **OK**.

Editing Retrieve Only Top/Bottom Definitions

➤ To edit a Retrieve Only Top/Bottom definition:

1 Right-click a member, and select **Analysis Tools** , then **Analysis Tools Manager**.

   Analysis Tools Manager is displayed.

2 Right-click a Retrieve Only Top/Bottom definition, and select **Edit**.

   The Retrieve Only Top/Bottom dialog box is displayed.

3 Make selections and define parameters.

4 Click **OK**.

5 Click **Close**.

Editing Data Formatting Definitions

➤ To edit a data formatting definition:

1 Right-click a member, and select **Analysis Tools**, then **Analysis Tools Manager**. Analysis Tools Manager is displayed.

2 Right-click a formatting definition, and select the**Edit**button.

   The Formatting dialog box is displayed.

3 Make selections and define parameters.

4 Click **OK**.

Spreadsheet Options

All spreadsheet formatting options are set using the Spreadsheet Options dialog box, accessed from the spreadsheet data object shortcut menu. You can set these options for all spreadsheets subsequently created using Spreadsheet preferences.

Spreadsheet Option	Description
Display	
Gridlines	Sets the spreadsheet to display table gridlines.
Transparent	Makes the cell background transparent to display a spreadsheet background image.
Row Banding	Sets spreadsheet rows to display alternating banding.
Column Banding	Sets spreadsheet columns to display alternating banding.
Background Color	Opens the Select Color dialog box, to set the background color.
Background Image	Opens the Select Background Image dialog box.
Row Band Color	Opens the Select Color dialog box, to set the color of row banding.
Column Band Color	Opens the Select Color dialog box, to set the color of column banding.
Headers	
Custom Row Height	Sets a fixed height for spreadsheet rows in point size (from 20-200).
Row Titles	Displays column headers for nested rows.
Row Header Alignment	Aligns row headers left, center, or right or indents them based on generation.
Indent Amount	Indicates the number of pixels to indent row headers for each level from the top of the dimension hierarchy.
Row Group Alignment drop-down list	Aligns rows as a group center, top, or bottom in a cell.
Header Font	Displays the Font Properties dialog box, enabling the selection of header fonts and font formatting.
Header Background Color	Opens the Select Color dialog box, where you can set the header background color.
Sample Header	Displays the current header formatting.
Column Header Alignment	Justifies column headers; Center (default), Left or Right.
Data	
Align Text	Sets the alignment of textual data values: left, center, and right.
Align Values	Sets the alignment of numeric data values: left, center, and right.
Cell Font	Displays the Font Properties dialog box enabling the selection of data value fonts and font formatting. **Note:** Font sizes are limited to a maximum of 100 points.

Spreadsheet Option	Description
Cell Background Color	Opens the Select Color dialog box where you can set the cell background color; does not override banding.
Sample Cell	Displays the current data values formatting.

Sizing Columns

Columns can be individually sized, uniformly sized, or reset to their default column width.

The Freeze Headers formatting option must be enabled in the preferences or the Spreadsheet Options dialog box before you can size columns.

Sizing Individual Columns

➤ To size a column:

● Right-click a column header and select **Column Sizing** > **Custom Width** from the shortcut menu. When the Column Width dialog box is displayed, enter the desired column width in pixels. The default is 75 pixels.

Sizing All Columns to a Common Width

➤ To size all columns uniformly:

1 **To size one column:**

   ● Position your mouse over the border between two column headers. When the cursor changes to the double-arrow cursor, drag the column border to adjust the column width.

   ● Right-click a column header and select **Column Sizing, then Set Column Width** from the shortcut menu. When the Column Width dialog box is displayed, enter the desired column width in pixels.

2 **When you are satisfied the selected column size, right-click that column and select Column Sizing, then Set All Columns To This Width.**

   The remaining columns are automatically resized to the selected column's width.

Autosizing Column Width

➤ To size all column widths so that headers display without truncation, select **Column Sizing** > **Autosize** from the header shortcut menu.

Note: You must save the document before closing it to preserve the column widths.

Formatting Documents

Formatting Options

Documents display data values returned from the data source in a data object. Multiple data objects can occupy a document, and each data object's display type can differ:

- Spreadsheet
- Chart
- Pinboard
- SQL Spreadsheet
- Freeform grid

Each display type has formatting options. This chapter describes the formatting options for spreadsheets and charts, as only these two objects can be modified through EPM Workspace.

Other Kinds of Formatting

- **Display Type** — Converts spreadsheet data objects to charts or pinboards.
- **Data Display options** — Sets document behavior through the data object shortcut menu (or preferences, for subsequently created documents).
- **Formatting options** — Formats dimension headers and cell ranges. You can restrict formatting by member selection or cell value. Formatting options include currency formatting and positive and negative numeric formatting. See "Formatting Options" on page 86. Formatting options include:
  - Measures formatting (Available in Oracle Hyperion Web Analysis Studio only)
  - Default formatting preferences
  - Ad hoc formatting
  - Data formatting analysis tool
  - Cell Formatting

    See "Formatting Data" on page 93.

The scope of formatting depends on its source. To review all formatting definitions applied to a document, you must consult preferences, the Analysis Tools Manager, the Information Panel, and various document, data object, dimension and cell property settings.

Formatting Order of Precedence

Formatting is applied an order of precedence:

1. **Measures formatting** — Applied globally to dimensions on database connections. Settings are saved with the database connection.

2. **Default formatting preferences** — Applied globally to column and row headers, and data values. Settings are saved in preference files.

3. **Formatting** — Applied ad hoc from the data object shortcut menu on dimension members. It is stored with the document definition and applied as a preliminary Analysis Tool definition. See "Formatting Options" on page 86.

4. **Data formatting analysis tool** — Applied after Data Formatting Analysis Tool definitions are created and applied. It is stored with the document and applied from the Analysis Tools Manager.

5. **Cell formatting** — Applied ad hoc to cell ranges, and is stored with the document. See "Formatting Data" on page 93.

Preferences and formatting options:

There are some identical formatting options and preferences. Preferences are global settings applied to documents. Preferences, however, can be overridden by database connection formatting and document-based formatting.

The formatting order of precedence can be changed for Database Connection Measures formatting, User Preferences, and Analysis Tools formatting. For example, Analysis Tools formatting can be set to override all Database Connection and User Preferences formatting for a specific report.

Order of formatting precedence:

1. Formatting options saved with documents

2. Formatting options saved with the database connection

3. Formatting options specified by the User Preferences dialog box

Data Display Options

Each display type has data display options specifying document behavior:

- **Label mode**—Essbase and Oracle Hyperion Financial Management enable administrators to define multiple alias tables. Web Analysis Studio enables you to specify which alias table to use. Alias table selection is saved as a database connection property. See "Setting the Label Mode" on page 89.

- **Dimension header sort** — Order column and row headers in a query result set using Dimension Header Sort definitions. Dimension Header Sort options are determined by the data source. See "Sorting Dimension Headers" on page 90.

- **Suppression** — Suppresses rows with missing data, rows with zeroes, and in the case of Essbase, rows with shared members. Suppression can be set from the Data Layout dialog box, Data Display shortcut menu or OLAP Server preferences.

Data Display Option	Description
Selected Member	Displays the explicit member selection made in the query. This member selection can be previewed in the Information panel, or Dimension Browser. Selected Member provides a method for displaying this information in data objects.
Selected Member First	When Selected Member is active, enables you to position the explicit member selection made in the query definition first (from left to right, or top to bottom).
Default Label Mode	Toggles between label modes: ❍ Descriptions ❍ IDs ❍ Both (Financial Management option)
Dimension-Specific Label Mode	Toggles between label mode options: ❍ Use Default ❍ Descriptions ❍ IDs ❍ Both (Financial Management option)
Display Entity Currency	When using Financial Management data sources with defined Entity dimension currency information, you can enable the Display Entity Currency option to append Entity dimension members with currency value. This can be set before querying using Data Layout options, after querying using the Data Display shortcut menu, and for all subsequently created documents using OLAP Server preferences.
Dimension Header Sort	Orders the selected dimension per the order option: ❍ Default ❍ Ascending ❍ Descending ❍ Level (OLAP specific) ❍ Generation (OLAP specific) ❍ Selection Order (Relational specific) The Default option is the order in which dimension members are naturally ordered by data source outlines. Using this option may offer improved performance. For a complete description, See "Sorting Dimension Headers" on page 90.
Show Linked Reporting Object Indicators	Shows or hides small cell triangles indicating the presence of Linked Reporting Objects. Triangles persist for related content.
Suppress	Omits data, as specified, from the query result set: ❍ Missing Rows ❍ Missing Columns ❍ Shared Members ❍ Zero Rows

Setting the Label Mode

Alias tables are database tables storing alternate description labels for dimension members.

Essbase and Financial Management enable administrators to define multiple alias tables. Web Analysis Studio enables you to specify which alias table to use. The alias table selection is saved as a database connection property.

You can specify to display the member ID or its description label from the alias table.

- The ID number is a column of unique values distinguishing members from all other members.

- Description displays the alias table description. Web Analysis Studio uses the Description label when no label mode is specified.

Financial Management users have an additional label mode option. They can select the Both option to display the ID label and description.

You can set the default label mode before querying using Data Layout options or the last step in the document creation wizard, and after querying using the data object shortcut menu. You can specify which description label to use in dimensions, using Dimension Browser and the data object shortcut menu.

The Description label comes from the alias table setting, saved per database connection and per active user as a database user preference.

➤ To set the default label mode for the current database connection:

1   Right-click dimension header.

2   Right-click and select **Data Display**.

3   Select **Default Label Mode** from the drop-down list.

4   Select **IDs** or **Descriptions**.

➤ To set the label mode for a dimension:

1   Right-click a dimension header.

2   Right-click and select **Data Display**.

3   Select the dimension-specific Label Mode from the drop-down list.

4   Select **Use Default, IDs** or **Descriptions**.

Default label mode coordinates the label mode of the selected dimension with all other dimensions displaying the default label mode. Default label mode can be set for all dimensions in a query through Data Layout, and per dimension by Dimension Browser or the Data Display shortcut menu.

Sorting Dimension Headers

You can order column and row headers in a query result set using Dimension Header Sort definitions. Dimension Header Sort options are determined by the data source.

For Example, Oracle Essbase enables you to order columns and rows in default, ascending, descending, level or generation order. The default order is the natural order in which dimension members are returned, based on the data source outline.

➤ To indicate a Dimension Header Sort definition:

1 Right-click a dimension member header and select **Data Display, then Dimension Header Sort**.

The Dimension Header Sort submenu is displayed.

2 Select **Default, Ascending, Descending, Level** or **Generation**.

Relational Dimension Header Sort

You can order the result set returned by relational SQL queries in Ascending, Descending, Selection Order or Default order. Default returns members based on the data source outline. Selection Order is the member selection order in Dimension Browser.

Unlike OLAP servers, relational cubes are compiled by Web Analysis Studio, and the label mode, alias tables, and selection order are manually coordinated. Sort by alias may perform comparatively slow, as the default query result set is sorted by ID. Sorting by alias requires a complete client-side re-sort.

The source of the relational dimension header sort impacts performance. Defining a relational dimension header sort using Data Layout, prompts Web Analysis Studio to sort all dimensions as part of the current query result set.

Alternatively, sorting a relational dimension using the data object shortcut menu (Data Display > Dimension Header Sort) requires you to select dimension headers.

Lastly, you can apply dimension header sort definitions to relational generations defined in the Generation Editor. These definitions only impact the Dimension Browser sort order. Using the Order By Mode drop-down list, you can also specify orders by ID or Alias.

Formatting Dialog Box

The Formatting dialog box indicates the members to which these formats are applied:

● Header font properties by member.

● Data value format and font properties by member.

● Edit the dimension members selected for formatting.

● Restore default formatting preferences.

Control	Description
Selections	Lists dimensions and members in the query. The dimensions that appear are based on the context of where the Formatting dialog box was invoked. For example, if Formatting is invoked from the rows, all row dimension and members are displayed. If Formatting is invoked from a cell, all dimensions and members in the query are listed.
Advanced	Shows the Dimension panel that enables you to select or deselect dimensions and apply formatting to specific dimension combinations. This mainly applies when there are two or more dimensions in the columns or rows.
Dynamic References	Provides selection of row or column references instead of selecting members from a report. Formatting is applied regardless of the member selection.
Apply to entire grid	Applies formatting defined to the entire spreadsheet query. When selected, the Selections section is grayed and a Formatting "All Members" item is added to the Analysis Tools Manager.
Header Font tab	Allows formatting of member labels fonts in the row and column headers.
Data Font tab	Allows formatting of data cells fonts. Conditional font or number formatting can be applied to specific data values that meet the defined criteria.
Data Format tab	Provides formatting to specific data values such as currency/prefix/suffix, as well as other numeric formatting. Conditional font or number formatting can be applied to specific data values that meet the defined criteria.
Conditional Formatting	Enables conditional formatting of dimension member selections based on the criteria defined in the operand drop-down list and value text box.
Conditional Formatting — Operand drop-down list	Specifies the conditional formatting operand: >, >=, =, <=, <, or <>.
Conditional Formatting — Value Text box	Specifies the conditional formatting value.
Restore Defaults	Restores the settings specified by the Default Formatting preferences.

Formatting Behavior

The behavior for the members that are selected prior to opening the Formatting dialog:

- When you right-click a column or row header and select Formatting, the context is completed automatically for the row or column member selections. This context can be edited and different member selections can be made.

- When you right-click a cell and select Cell Formatting, the context is completed for the cell intersection of members. This context cannot be edited.

- When you right-click a column or row header and select Analysis Tools > Format, the Formatting dialog is opened without completed context.

- If the number of members in a dimension on a report exceeds 25, the dimension parent node is collapsed. You can click the node to expand it.

- If there is more than one dimension in the rows or columns, you can select from one dimension only or multiple dimensions.

Using Dynamic References

Instead of selecting members from a report, you can use Dynamic References to select a row or column reference. Formatting is applied regardless of the member selection. Also:

- If a member is drilled on, its formatting will "carry with it".
- If a swap or pivot is performed, the formatting will "carry" where possible.

Topics that discuss formatting:

- "Creating Formatting Definitions" on page 92
- "Formatting Data" on page 93

Creating Formatting Definitions

➤ To create formatting definitions:

1   Right-click a column or row dimension header.

2   Select **Formatting**.

    The **Formatting** dialog box is displayed.

3   **Optional**. To display the Dimensions panel, click **Advanced**.

4   To select a dimension, click its check box.

    If you select one dimension from the Dimensions panel, the corresponding dimension members are displayed in the Combinations panel.

    If you select multiple dimensions from the Dimensions panel, the Combinations panel displays dimension member aggregations.

5   To specify dimension members, click the check boxes in the **Combinations** panel.

6   To specify a formatting definition, perform an action:

    - To specify header cell font properties for the dimension member selection, click the **Header Font** tab.
    - To specify data cell font properties for the dimension member selection, click the **Data Font** tab.
    - To specify leading and trailing text and numeric formatting, click the **Data Format** tab. See "Formatting Data" on page 93.

      Note: The Data Font and Data Format tabs provide conditional formatting where you can refine formatting definitions. Select **Conditional Formatting**, then select an operand and specify a value.

7   Click **OK** to accept the formatting definition properties for the dimension member selection.

    The formatting definition is listed in Analysis Tools Manager for future reference, and the definition is applied to the document.

Formatting Data

You define format definitions in the Data Format tab:

Formatting Options	Description
Conditional Formatting	Enables conditional formatting of dimension member selections based on the criteria defined in the operand drop-down list and value text box.
Replace Missing With	Enables you to replace missing data with zeros or text that you specify.
Leading and Trailing Formatting	
Currency Symbol	Inserts currency formatting symbols into the Positive Prefix and Negative Prefix text boxes.
Positive Prefix	Specifies the character to precede positive numeric values.
Positive Suffix	Specifies the character to follow positive numeric values.
Negative Prefix	Specifies the character to precede negative numeric values. **Caution:** The minus sign (-) is the default prefix. Deleting the default prefix without replacing it displays negative values as positive.
Negative Suffix	Specifies the character to follow negative numeric values.
Numeric Formatting	
Grouped Thousands	Displays numeric digits as grouped by thousands.
Minimum Decimals	Indicates the minimum number of decimal places displayed.
Maximum Decimals	Indicates the maximum number of decimal places displayed.
Scale	Enables abbreviated values by tens, hundreds, thousands, ten-thousands, hundred-thousands, millions, and billions.
Use Negative Color	Indicates that negative numbers are signified by a selected color.
Select Negative Color	Enables you to select the color representing negative values.
Date Formatting	Select a date format.
Samples	
Update Samples	Updates the samples panel based on the most recent formatting selections.

Cell Formatting

The Cell Formatting dialog box enables you to format cell ranges ad hoc.

- Format data value font properties for cell ranges.
- Set text and numeric formatting for cell ranges.
- Restore default formatting preferences.

To define cell formatting, right-click a spreadsheet cell and select Cell Formatting:

Controls	Description
Selections	Displays the cell dimension member selection statement.
Data Font tab	Enables you to select font properties for the cell.
Data Format tab	Enables you to specify text and numeric formatting.
Restore Defaults	Restores the settings specified by the Default Formatting preferences.

Sizing Columns

Columns can be individually sized, uniformly sized, or reset to their default column width.

The Freeze Headers formatting option must be enabled in the preferences or the Spreadsheet Options dialog box before you can size columns.

Sizing Individual Columns

➤ To size a column:

● Right-click a column header and select **Column Sizing** > **Custom Width** from the shortcut menu. When the Column Width dialog box is displayed, enter the desired column width in pixels. The default is 75 pixels.

Sizing All Columns to a Common Width

➤ To size all columns uniformly:

1 **To size one column:**

   ● Position your mouse over the border between two column headers. When the cursor changes to the double-arrow cursor, drag the column border to adjust the column width.

   ● Right-click a column header and select **Column Sizing, then Set Column Width** from the shortcut menu. When the Column Width dialog box is displayed, enter the desired column width in pixels.

2 **When you are satisfied the selected column size, right-click that column and select Column Sizing, then Set All Columns To This Width.**

   The remaining columns are automatically resized to the selected column's width.

Autosizing Column Width

➤ To size all column widths so that headers display without truncation, select **Column Sizing** > **Autosize** from the header shortcut menu.

Note: You must save the document before closing it to preserve the column widths.

Changing and Locking Display Types

➤ To change the current display type, select the **Display** menu, and select a display type or chart type from the submenu.

➤ To prevent others from changing the current display type:

1 Right-click the current content tab and select **Properties**.

The File Properties dialog box is displayed.

2 Select the **Advanced** tab.

3 In **Document Usage**, select **Change Display Type**.

4 Click **OK**.

Charts and Chart Types

Charts are graphic representations of spreadsheet data. Their visual nature expedites quick analysis, color coding, and cues that aid comparisons.

Charts, depending on the chart type, can display one to four dimensions. Pie charts only display one dimension; quadrant charts offer more complex displays.

Charts can be rendered using a variety of chart types:

Chart Type	Compares
Bar	Similar elements, represented as vertical bars.
Line	Items over time.
Spline	Displays the document as a spline chart.
Pie	Contributions.
Area	Items over time.
Curve Area	Items over time, represented as a curved area.
Horizontal Bar	Similar elements.
Marks	Items over time.
Pareto	Trends in data.
Box	Displays the document as a box plot chart.
Quadrant	Two members from one dimension over time.
Bubble	Displays the document as a Bubble chart.

Only the first 50 dimension members can be accommodated on chart axes.

Quadrant Charts

In Quadrant charts, at least one dimension must be placed on the column axis and at least two dimensions must be placed on the rows axes. Other dimension-axes arrangements result in error messages.

Bubble Charts

Bubble charts require three dimensions. Only one dimension can be placed on the column axis. One or two dimensions can be placed on the row axis. There must be two columns in the dimension positioned on the columns axis. These columns may be the result of selecting two dimension members, or of including a calculated column with a dimension member. The values in the first two columns provide the X and Y values required to plot the chart.

A third column provides the Z value used to determine the bubble size. If no third column is available, a constant of 100 is used to determine the bubble size.

Chart Properties

Use the data object shortcut menu to access Chart Properties, described in the following topics:

- "General Chart Properties" on page 96— options for effects, object borders, chart backgrounds, and legends.
- "Titles Chart Properties" on page 97— options for chart titles.
- "Axes Chart Properties" on page 98— options for axes, number formatting, gridlines, scale, and labels.
- "Series Effects Chart Properties" on page 99— options for chart behavior and border formatting.
- "Series Chart Properties" on page 99— options for chart object properties.
- "Pie Chart Properties" on page 100— options for pie charts.
- "Bubble Chart Properties" on page 100— options for bubble charts.

General Chart Properties

Control	Description
Layout	
Chart Type	Enables you to set the Chart Type: Bar, Line, Spline, Pie, Area, Curve Area, Horizontal Bar, Marks, Pareto, Multi, Box, Quadrant, and Bubble.
Stacked	Enables you to arrange chart objects: Side-by-Side, Stacked, and Stacked 100%.
Left Plot Area Margin	Enables you to specify a left margin for the plot area.
Right Plot Area Margin	Enables you to specify a right margin for the plot area.

Control	Description
Effects	
3D	Represents chart objects in three-dimensional space.
Anti-alias Fonts	Enables and disables the use of anti-alias fonts. Although anti-alias fonts are clearer, they sometimes differ from the original font style.
Cluster (Z-axis)	Arranges chart objects along the Z axis in three-dimensional space.
Show Z-axis Labels	Displays labels along the Z axis (front to back). This feature is only available when the chart is clustered, and for Bar, Horizontal Bar, Pareto and Multichart chart types. Long Z-axis labels may be cut off by chart margins.
Background	
Background Color	Displays the Select Color dialog box where you can set the chart background color.
Plot Area Color	Displays the Select Color dialog box where you can set the plotter background color.
Legend	
Show Legend	Displays a chart legend.
Position	Locates the Legend to the Top, Left, Bottom, or Right of the chart.
Color	Displays the Select Color dialog box to set the legend background color.
Font	Displays the Font Properties dialog box to select font and their formatting.

Titles Chart Properties

Control	Description
Header Title	Sets the text string for the header title.
Footer Title	Sets the text string for the footer title.
Left Title	Sets the text string for the left title.
Right Title	Sets the text string for the right title.
Font	Displays the Font Properties dialog box to select font and their formatting.

Axes Chart Properties

Control	Description
Axis	Indicates the current axis: ● X-axis - Sets the Axes tab to display x-axis parameters. ● Y-axis - Sets the Axes tab to display y-axis parameters. ● Secondary Y-axis - Set the Axes tab to display secondary y-axis parameters. See also Series Tab, Assign to Secondary Y-axis.
Show Axis	Displays the current axis.
Scale	
Auto-calculate	Enables the current axis to be calculated automatically based on data values.
Start at Minimum Value	Indicates whether to start numeric labels with the minimum value.
Minimum	Sets the minimum value on the current axis.
Maximum	Sets the maximum value on the current axis.
Step	Sets the number of increments to scale on the current axis.
Scale	Enables you to indicate the multiple by which to scale the current axis: None, Tens, Hundreds, Thousands, Ten Thousands, Hundred Thousands, Millions, or Billions.
Gridlines	
Show Gridlines	Displays gridlines on the current axis.
Style	Represents gridlines using one style: Solid Line, Dash, Dot, and Dash Dot.
Weight	Sets the width of gridlines in pixels (from 1-8).
Color	Displays the Select Color dialog box where you can select a gridline color.
Number Format	
Decimal Places:	Enables you to sets the number of decimal places used to represent data values (0-10).
Format:	Enables you to sets the numeric format for data values: Numeric, Currency, Percent.
Currency Symbol:	Inserts currency formatting symbols.
Labels	
Stagger	Alternates labels on two lines to accommodate larger labels.
Angle	Enables you to indicates the angle at which labels extend from the current axis: 0-360 degrees.
Font	Displays the Font Properties dialog box to select fonts and their formatting.

Series Effects Chart Properties

Series Effects chart properties impact all chart object series in general. Series chart properties are applied only to specific series.

Control	Description
Charting	
Number of Groups Displayed	Specifies the number of chart object groups to display.
Chart All Dimensions	Delineates nested dimensions for chart type requirements and displays each combination set as a series.
	Chart type requirements differ for dimension member position and number. When dimension members exceed a requirement, surplus dimensions are relocated to the page axis so that the designated chart type can be displayed. Enabling Chart All Dimensions prompts Oracle Hyperion Web Analysis Studio to delineate nested dimensions and display each combination set as a series.
Borders	
Show Borders	Represents chart objects with a border or outline.
Style	Represents the chart object border using one style: Solid Line, Dash, Dot, and Dash Dot.
Width	Sets the width of chart object border in pixels (from 1-8).
Color	Displays the Select Color dialog box where you can set the border color.

Series Chart Properties

Control	Description
Series	Indicates the current dimension member chart object series.
Style	
Show Series	Displays the current series.
Type	Sets the chart type for the series when multiple chart types are enabled: Bar, Line, Area, Spline and Curve Area.
Shape	Sets the series chart object to one shape: Bar, Cylinder, Diamond Bar, or Triangle Bar.
Color	Displays the Fill Properties dialog box where you can set chart object color, pattern fill, or gradient.
Assign to Secondary Y-axis	Displays the current series on the secondary y-axis.
Markers	
Style	Sets the series to one marker: None, Square, Circle, Triangle-Up, Diamond, Cross, Triangle-Down, or Multiple Chart Type.
Size	Sets the size of the series marker in pixels (1-20).

Control	Description
Point Values	
Show Values	Displays data values with the series.
Font	Displays the Font Properties dialog box where you can select font and their formatting.
Angle:	Indicates the angle at which value labels extend from the current series: 0-360 degrees.
Lines	
Style	Represents the chart object border using one style: Solid Line, Dash, Dot, and Dash Dot.
Width	Sets the width of chart object border in pixels (from 0-8).
Apply selections to all.	Sets all series to the parameters of the current series.

Line Widths of Zero (0)

Line charts accommodate a line width of zero, enabling a line chart to appear as a marks chart. This applies only to **two-dimensional** line, quadrant, multichart, spline, area, and curve area chart types.

Pie Chart Properties

Control	Description
Values	
Values	Indicates the current pie slice.
Color	Displays the Select Color dialog box to set color, pattern fill or gradient scale for the current slice.
Labels	
Show Values	Displays data values with pie slices.
Position	Indicates where to display labels: Inside Slices or Outside Slices.
Font	Displays the Font Properties dialog box where you can select font and their formatting.
Show Multiple Pies	Sets Page Dimensions to be displayed as multiple pie charts in one document.

Bubble Chart Properties

Bubble charts require three dimensions. Only one dimension can be placed on the column axis. Up to two dimensions can be placed on the row axis. There must be two columns in the dimension positioned on the columns axis. These columns may be the result of selecting two dimension members, or the result of including a calculated column with a dimension member. The values in the first two columns provide the X and Y values required to plot the chart.

A third column provides the Z value used to determine the bubble size. If no third column is available, a constant of 100 is used to determine the bubble size.

Control	Description
Effects	
Marker Style:	Sets the bubble chart to be displayed using these options: none, square, circle, Triangle Up, Diamond, Cross, Triangle Down, or Multi.
Maximum Size:	Sets the maximum bubble object size in points.
Show Points	Displays plot points.
Point Color	Sets the color of the center point.
Values	
X-member Values:	Indicates the dimension member used to plot x-axis values.
Y-member Values:	Indicates the dimension member used to plot y-axis values.
Z values:	
Constant	Sets the constant used to plot the size of bubble chart objects when no third column is available, so that object sizes match.
Z-member Values:	Indicates the third column used to plot the size of bubble chart objects.
Scaling	
Minimum Scaling:	Sets the minimum bubble size when the bubble object size has reached the Maximum Size limit.
Maximum Scaling:	Sets the maximum bubble size when the bubble object size has reached the Maximum Size limit.
Scale On:	Sets the bubble chart to determine scale using area or diameter.
Borders	
Show Borders	Displays or hides the bubble borders.
Use Traffic Lights for Colors	Sets the bubble object border to use colors specified in the traffic lighting definition; only one dimension, with a traffic lighting definition, can be positioned on the rows axis
Color	Displays the Select Color dialog box.
Border Width:	Sets the border width in pixels.

Selecting Color

The Select Color dialog box enables you to set object, font, and component colors.

Control	Description
Swatches Tab	
Recent	Displays recently selected colors.
RGB Float Over Values	Displays the Red-Green-Blue color values when mouse is floated over a color.
HSB Tab	
Hue	Sets the percentage of hue in the current color.
Saturation	Sets the percentage of saturation in the current color.
Brilliance	Sets the percentage of brilliance in the current color.
Red	Displays the red value of the current color.
Green	Displays the green value of the current color.
Blue	Displays the blue value of the current color.
RGB Tab	
Red	Displays the red value of the current color.
Green	Displays the green value of the current color.
Blue	Displays the blue value of the current color.
Preview	Displays the application of the current color.

Font Properties

The Font Properties dialog box enables font selection and formatting.

Control	Description
Font	Sets the font family.
Size	Sets the font point size. Note: Fonts are limited to 100 points in size.
Font Style	
Bold	Displays the **bold** font.
Italic	Displays the *italic* font.
Color	Displays the Select Color dialog box, to enable font color selection.
Sample Text	Displays the current font selection.

Calculations

You can create client-side calculated members, and edit, delete, and analyze these calculations.

The order of calculation definitions in the Analysis Tools Manager establishes a precedent for subsequent compound calculations. You can change the order of calculation definitions, by selecting the definition and clicking the up and down arrow buttons.

The "Creating Calculations" on page 109 procedure describes Calculation analysis tool options in context.

Absolute Value

- **Function Performed** — Returns the absolute value of a numeric value. The absolute value of a number is that number without a negative sign. A negative number becomes positive, while a positive number remains positive.
- **Number of Arguments** — One member or calculation.
- **Options** — Whether missing values should be set to 0 in the calculation and included in the number of arguments.

Example — If Actual is -100, the Absolute Value of Actual is 100.

Average

- **Function Performed** — Sum of all arguments divided by the number of arguments.
- **Number of Arguments** — Two or more members or calculations.
- **Options** — Whether missing values should be set to 0 in the calculation and included in the number of arguments.

Example — If Actual is 100 and Budget is 200, the Average of Actual and Budget is 150.

Cumulative

- **Function Performed** — Provides a running total.
- **Number of Arguments** — One member or calculation.
- **Options** — Whether missing values should be set to 0 in the calculation.

Example — Consider a spreadsheet with Actual as a column and Colas, Root Beer, and Cream Soda as rows. If the Actual values for these products were 100, 200, and 300, the Cumulative column would be 100, 300, 600.

Difference from Average

- **Function Performed** — Subtracts each argument's average value from each occurrence of the argument.

- **Number of Arguments** — One member or calculation.

- **Options** — Whether missing values should be set to 0 for the purposes of the calculation.

Example — Consider a spreadsheet with Actual as a column and Colas, Root Beer, and Cream Soda as rows. If the Actual values for these products were 100, 200, and 300, the average would be 200. So the Difference from Average column would be -100, 0, 100.

Divide

- **Function Performed** — Arithmetic division.

- **Number of Arguments** — Two members or calculation.

- **Options** — Whether missing values should be set to zero in the calculation.

Linear Regression

- **Function Performed** — Straight-line linear regression. Looks at all occurrences of the specified argument, and uses a linear regression algorithm to calculate a 'straight line' through the occurrences.

- **Number of Arguments** — One member or calculation.

- **Options** — Whether missing values should be set to 0 in the calculation.

Example — Consider a spreadsheet with Actual as a column and Jan, Feb, Mar as rows. If the Actual values for these time periods were 100, 300, and 600, the Linear Regression column would be 83, 333, 583. Notice that there is now a constant difference between each value (250). All points in the sequence are adjusted. A chart of these numbers would produce a straight line that goes through the original data points.

Maximum

- **Function Performed** — Given two or more arguments, Maximum returns the name of the member or calculation that has the maximum value.

- **Number of Arguments** — Two or more members or calculations.

- **Options** — Whether missing values should be set to 0 in the calculation.

Example — Consider a spreadsheet with East and West as columns and Jan, Feb, Mar as rows. If the East values were 100, 300, and 600 and the West values were 200, 200, 300, the Maximum column would be West, East, East.

Maximum Value

- **Function Performed** — Given two or more arguments, Maximum Value returns the value of the member or calculation that has the maximum value.

- **Number of Arguments** — Two or more members or calculations.

- **Options** — Whether missing values should be set to 0 in the calculation.

Example — Consider a spreadsheet with East and West as columns and Jan, Feb, Mar as rows. If the East values were 100, 300, and 600 and the West values were 200, 200, 300, the Maximum Value column would be 200, 300, 600.

Minimum

- **Function Performed**: Given two or more arguments, the name of the member or existing calculation with the minimum value

- **Number of Arguments**: Two or more members or existing calculations

- **Options**: Whether missing values should be set to 0

Example: Consider a spreadsheet with East and West as columns and Jan, Feb, Mar as rows. If East values are 100, 300, 600 and West values are 200, 200, 300, Minimum values are East, West, West.

Minimum Value

- **Function Performed** — Given two or more arguments, Minimum Value returns the value of the member or calculation that has the minimum value.

- **Number of Arguments** — Two or more members or calculations

- **Options** — Whether missing values should be set to 0 in the calculation.

Example — Consider a spreadsheet with East and West as columns and Jan, Feb, Mar as rows. If the East values were 100, 300, and 600 and the West values were 200, 200, 300, the Minimum Value column would be 100, 200, 300.

Multiply

- **Function Performed** — Arithmetic multiplication.

- **Number of Arguments** — Two or more members or calculations, or one member or calculation and a constant.

- **Options** — You can specify a constant as an argument if you want to work with one rather than two members or calculations. You can also choose whether missing values should be set to 0 in the calculation.

Percent

- **Function Performed** — Percentage calculation.

- **Number of Arguments** — Two members or calculations, or one member or calculation and a constant.

- **Options** — You can specify a constant as an argument if you want to work with one rather than two members or calculations. You can also choose whether missing values should be set to 0 in the calculation.

Example — Consider a spreadsheet with Actual and Budget as columns and Jan, Feb, Mar as rows. If the Actual values were 100, 300, and 600 and the Budget values were 200, 200, 400, the Percentage column (Actual % Budget) would be 50, 150, 150.

Percent Difference from Average

- **Function Performed** — Performs the same actions as Difference from Average but displays each result as a percentage of average.

- **Number of Arguments** — One member or calculation.

- **Options** — Whether missing values should be set to 0 in the calculation.

Example — Consider a spreadsheet with Actual as a column and Colas, Root Beer, and Cream Soda as rows. If the Actual values for these products were 100, 200, and 300, the average would be 200. So the Difference from Average (%) column would be -50, 0, 50.

Percent of Difference

- **Function Performed** — Percentage difference calculation.

- **Number of Arguments** — Two members or calculations, or one member or calculation and a constant.

- **Options** — You can specify a Constant as an argument if you want to compare a member with a fixed value. You can also choose whether missing values should be set to 0 in the calculation.

Example — Consider a spreadsheet with Actual and Budget as columns and Jan, Feb, Mar as rows. If the Actual values were 100, 300, and 600 and the Budget values were 200, 200, 400, the Percentage difference column (Actual % diff Budget) would be calculated as ((Actual -Budget) / Budget)*100 and shown as -50, 50, 50.

Percent of Member

- **Function Performed** — Evaluates a dimension member argument as a percentage of another dimension member argument. The second argument is defined by the dimension member intersected on an opposite axis.

- **Number of Arguments** — Two or more members or calculations, or one member or calculation and a constant.

- **Options** — You can choose whether missing values should be set to 0 in the calculation.

- **Procedure** — Select a Percent of Member calculation from the Function list, select a dimension member argument, and select a dimension member from the opposite axis using the Opposite Member drop-down list.

Percent of Total

- **Function Performed** — Percentage of total.

- **Number of Arguments** — One member or calculation.

- **Options** — None.

Example — Consider a spreadsheet with Actual as a column and Jan, Feb, Mar as rows. If the Actual values were 100, 300, and 600, the Percentage of Total column would be shown as 10, 30, and 60.

Rank Ascending and Rank Descending

- Function Performed: Ranking

- **Number of Arguments**: One member or existing calculation

- **Options**: Ascending or descending (the default). If ascending, the smallest value is ranked as 1. If descending, the largest value is ranked as 1.

Example: Consider a spreadsheet with Actual as a column, Jan, Feb, Mar as rows, and Actual values of 100, 300, 600. If descending is selected, Rank values are 3, 2, 1. If ascending is selected, Rank values are 1, 2, 3.

Subtract

- **Function Performed** — Arithmetic subtraction.

- **Number of Arguments** — Two members or calculations, or one member or calculation and a constant.

- **Options** — You can choose whether missing values should be set to 0 in the calculation.

Sum

- **Function Performed** — Arithmetic addition.

- **Number of Arguments** — Two or more members or calculations, or one member or calculation and a constant.

- **Options** — Whether missing values should be set to 0 in the calculation.

Square Root

- **Function Performed** — Returns the square root of a numeric value.

- **Number of Arguments** — One member or calculation.

- **Options** — Whether missing values should be set to 0 in the calculation and included in the number of arguments.

Example — If Actual is 100, the Square Root of Actual is 10.

Trend

- **Function Performed** — Trend based on straight-line Linear Regression; that is, the slope of the 'straight line' that a Linear Regression calculation would plot between the points in the original data series.

- **Number of Arguments** — Two or more members or calculation.

- **Options** — Whether missing values should be set to 0 in the calculation

Variance

- **Function Performed** — Arithmetic subtraction that uses Financial Intelligence account metadata to interpret Financial Management expense and liability items as negative values.

- **Number of Arguments** — Two members or calculations, or one member or calculation and a constant.

- **Options** — You can choose whether missing values should be set to 0 in the calculation.

Variance Percent

- **Function Performed** — Percentage difference calculation that uses Financial Intelligence account metadata to interpret Oracle Hyperion Financial Management expense and liability items as negative values.

- **Number of Arguments** — Two members or calculations, or one member or calculation and a constant.

- **Options** — You can specify a Constant as an argument if you want to compare a member with a fixed value. You can also choose whether missing values should be set to 0 in the calculation.

Complex Calculations

Oracle recommends dividing complex calculations into components and combining the components into a compound calculation.

Example: To set up a calculation for (A + B) / (C x 2), where A, B, and C are members, you divide the formula into steps:

- Set up Sum for A + B, and name it Step 1.

- Set up Multiply for C x 2, and name it Step 2.

- Set up Divide for Step 1 result divided by Step 2 result, and name it Step 3.

- Use Show Only Members to hide Step 1 and Step 2. If you want to switch between seeing only members, seeing only calculations, and seeing both, you can use the Hide option in your document right-click menu.

Creating Calculations

You can use a combination of members, functions and/or operators to create a formula using the Functions and Members tabs, as well as the operators buttons. You can create a formula by using members and operators, without functions, or you can combine members, functions and operators in a formula. You also can create and edit advanced expressions by manually entering and editing the formulas.

An editor field, Formula Body, allows you to manually enter and edit the formula using a syntax that resembles multidimensional expressions (MDX) for defining members. However, while the syntax definition for defining members resemble the MDX format, MDX statements are not supported in the Web Analysis calculations. A formula is created by selecting a combination of Function and Member(s). For more information, see Using the Manual Formula Syntax.

Toolbar buttons for Cut, Copy, Paste and Validate are activated when a formula is entered in the Formula Body. The Validate button checks the validity of the formula for any errors and returns an error box to confirm whether validation succeeded or an error exists. The result of the formula is shown in the Formula field and can be inserted into the report by clicking the Insert button. Existing functions can be grouped together in one expression. If you want to switch between seeing only members or only calculations, or both, you can use the Hide option in the shortcut menu on your document.

Note: You can select Dynamic row or column references instead of selecting members from the report. The formatting is applied regardless of the member selection. If a calculation refers to a specific column, and that column is deleted through member selection, the calculation is handled correctly. If a swap or pivot is performed, the calculation will "carry" where possible.

➤ To create a calculation:

1 Right-click a dimension member header and select **Analysis Tools**, then **Calculation**.

The Calculation Definition dialog box is displayed, containing three tabs: Functions, Members and Options.

- The **Members** tab is for selecting members and adding them to a formula (for example, [Sales]-[COGS], outside a formula function. You can select one or more members in the **Select Members** list, click **Insert** to insert to the formula **Definition**.

- The **Functions** tab is for inserting formula functions into the **Definition** area after selecting a function and members. You can add and remove members and constants to the

formula. Once a function is selected, it appears in the **Formula** area. Members (or dynamic references) can be added to the formula by clicking on each member/reference, then clicking on **Add** to add it to the **Arguments** area. The **Formula** area is updated with arguments once they are added. When the formula is complete, it can be inserted to the **Definition** area by clicking **Insert**.

- The **Options** tab provides **Missing Values** and **Select Positions** settings.

2 The following areas are displayed for all three tabs:

- Name — the name of the formula.

- Definition — displays the formula. It allows for manual entry and editing of the formula. The Cut, Copy, Paste, and Validate buttons become enabled.

- Mathematical Operators — symbols that provide types of calculations that you can perform on the elements of a formula; addition (+), subtraction (-), multiplication (*), division (/), parenthesis (( )).

3 You can create a formula by using members on the **Members** tab. Perform the following:

- In the **Select Members** area, select members.

- In **Advanced** — click to list all dimension member combinations and add them to the formula **Definition** area. When deselected, only members from one dimension are shown.

- In **Dynamic References** — select to enable the selection of a row or column reference

4 Click **Insert** to add the formula.

5 To create a formula using functions, in the **Functions** tab, perform the following:

a. Select a calculation type from the **Function** list.

b. Replace the undefined arguments, displayed with a (?) in the **Arguments** area, with a member located in the **Select Members** area. Do this by selecting the member and clicking the right arrow button.

c. To replace an undefined argument (?) with a value, enter a value in the **Constant** text box, and click the right arrow button.

d. To replace an undefined argument from dimension member combinations, select **Advanced** to display dimension member combinations. Click to select a dimension member combinations label, and click the right arrow button to replace an undefined argument (?).

e. Select **All Members** to quickly select all available dimension members.

f. Click **Insert** to include the formula in the definition.

g. When the calculation is defined, click **Apply** and **OK**.

The following list describes the items on the **Functions** tab.

- **Formula** — displays the formula result

- **Functions** — provides pre-written formulas such as adding values, dividing values, calculating averages

- **Select Members** — provides members to be included during calculation

- **Advanced** — click to select a dimension member combination label. If the row or column context of the calculation has multiple dimensions, **Advanced** shows all dimension in the row or column. When deselected, only members from one dimension are shown.

- **All Members** — select to select all dimension members

- **Dynamic References** — enable to select a row or column reference.

- **Constant** — type a value to use in a function. For example, instead of `Sum("Qtr1",  "Qtr2")`, you could have `Sum("Qtr2", 155)`..

- **Optional. Opposite Member** — select to evaluate a dimension member argument as a percentage of another dimension member argument. The second argument is defined by the dimension member intersected on an opposite axis

  ○ Select a **Percent of Member** calculation from the Function list.

  ○ Select a dimension member argument.

  ○ Select a dimension member from the opposite axis using the **Optional Opposite Member** list.

  Note: The **Opposite Member** list in the arguments frame is enabled only for the Percent of Member Calculation. This control evaluates a dimension member argument as a percentage of another dimension member argument. The second argument is defined by the dimension member intersected on an opposite axis.

6 On the **Options** tab, perform the following:

- **Ignore Calculations** — excludes calculated members from the equation when "All Members" is selected.

- **Optional. Missing Values** — provides option for how missing values are treated; include, exclude, or treat as a number that you specify.

  ○ **Include** — calculates missing values as they are stored.

  ○ **Exclude** — removes arguments populated by missing values from the calculation.

  ○ **Treat as Number** — populates the argument with the value indicated. Default is zero (0).

- **Select Position** — provides options for specifying the location of the calculated row or column.

  ○ **Front/Top**

  ○ **Back/Bottom**

  ○ **Insert Before**

  ○ **Insert After**

  ○ **Insertion Point —** If you selected **Insert Before** or **Insert After**, select an insertion point from the corresponding list. The calculated row or column is inserted before or after the specified dimension header.

- **Ignore Calculations** — selected to exclude calculated members from the equation when "All Members" is selected.

7 When the calculation is defined, click **Apply** and **OK**.

Using the Manual Formula Syntax

If a member name contains unsupported characters or symbols, it should be enclosed in brackets – []; If the name does not contain such symbols, it can be used as is. Some guidelines:

1. [New York] + West + East — correct

2. East + New York — incorrect: member name New York contains spaces.

3. Old style syntax (member names are separated by ":"). For advanced members, can be used if member names contain "good" symbols only. for example:

    Qtr1:West + Qtr2:East — correct

    Qtr3:New York — incorrect

4. For new MDX style syntax, a list of comma – separated member names is included between "('and')". Member names must be included within [] according to the same rules as for simple members. For example:

    ([New York], West) — correct

    (New York, West) — incorrect

5. Simple and advanced members must not be mixed in one formula body. For example:

    ([New York], West) + East — incorrect

    Qtr1:West + South — incorrect

6. All members' specification in the script is defined by keyword @selectAllMembers. For example:

    Average(@selectAllMembers) + 1234 + [East]

7. All members' specification can be used in the script several times. For example:

    Sum(@selectAllMembers) – Sum(@selectAllMembers) — correct, always zero

8. Dynamic references are specified by the following way; for rows they are in form @row<ROW NUMBER>, for columns they are @col<COLUMN NUMBER>. For example:

    @col + @col5 – @col16/100@row2 – @row3

9. In one expression, row and column dynamic references should not be mixed. For example:

    @col + @row1 — incorrect. An error message occurs.

10. You can mix members and dynamics references in one expression, with the following restriction: If the axis (row or column) contains several dimensions, an advanced members' specifications must be used. For example:

    @row1 + [Qtr1] — correct only if row axis contains one dimension – Year

    @col2 + Qtr1:West — correct if column contains Year and Market.

11. Opposite members are used only for one function – Percent_of_Member. An @ character must precede the opposite member. For example:

    2* Percent_of_Member (Qtr1, @Colas) — correct

[Qtr2] + Percent_Of_Member (Qtr, @Root Beers]) — correct

Percent_Of_Member (Qtr1, @ [Root Beers]) — incorrect; space after @

Modifying Calculations

➤ To modify a calculation:

1 Right-click a dimension member header and select **Analysis Tools**, then, **Analysis Tools Manager**.

The Analysis Tools Manager is displayed.

2 Click a calculation definition.

3 Click **Edit**.

The Calculation Definition dialog box displays the arguments for the selected calculation definition.

4 **Optional:** To change the calculation definition name, enter a name in **Name**.

5 **Optional:** To move the calculation position, select another option.

6 **Optional:** If you selected Insert Before or Insert After, select an insertion point from the corresponding list.

The calculated row or column is inserted before or after the specified dimension header.

7 **Optional:** To change the calculation type, select a calculation type from **Function**.

Changing the calculation type requires that the user redefine all arguments. For instructions, see "Creating Calculations" on page 109.

8 **Optional:** To change the arguments for the calculation, perform one:

- Click an argument, click a dimension member label, and click the arrow button.
- Click an argument, enter a value in the Constant text box, and click the arrow button.
- Select **Advanced** to display dimension member combinations. Click an argument, click a dimension member combination label, and click the arrow button.

  The calculation definition is displayed in the Formula group box.

9 When the calculation is redefined, click Apply and **OK**.

10 Click **Close**.

Analytic Services Attribute Calculations

You can leverage server-based Analytic Services attribute calculations in the client. Because server-based calculations are performed before OLAP query results are sent to clients, network traffic and the result set are minimized.

To use attribute calculations, you use Data Layout to select the attribute calculations dimensions to participate in the query. Then you use Dimension Browser to select the server-based calculations to be returned by the query result set.

Note: You can reproduce many attribute calculations on the client, but you are responsible for defining the calculations, and the client is responsible for processing the result set.

Reasons to use attributes in calculations:

● To select, aggregate, and report on data that shares attributes

● To select attributes by data type: text, numeric, Boolean, and data type

● To group numeric data types into statistical ranges

● To use sum, count, min, max, and average functions on the attribute calculations dimension automatically generated by Analytic Services

● To use numerical attribute values from calculation scripts and member formulas in calculations

● To create crosstabs of attribute data for a dimension and analyze the dimension in terms of each attribute

Print as PDF from EPM Workspace

Web Analysis documents can be printed to Adobe Portable Document Format (PDF) from the EPM Workspace. There are two printing options:

● Print Screen — Prints the content area. A print view and Microsoft Print dialog is displayed.

● Print Selected Object — Prints the specified OLAP pages of the current data object (For Example, Spreadsheet, Chart or Pinboard). A Print via PDF dialog presents print options (orientation, scale, and an option to allow print settings to be saved with document).

Print Screen prints the current display quickly and easily. Because documents can contain multiple data objects, Print Screen does not specify OLAP pages. If you want to include OLAP pages or object-specific document summaries, you should select Print Selected Object.

➤ To print a report as PDF, perform one:

1 Open a report and Select **File** , then **Print via PDF** , then **Screen** to print the screen, or, Select **File** , then **Print via PDF**, then **Selected Object** to print the selected reporting object in the report. The Print via PDF dialog is displayed. See "Print via PDF" on page 115.

2 Right click a data object and select **Print via PDF**, then **Selected Object**. The Print via PDF dialog is displayed. See "Print via PDF" on page 115.

Note: If Print via PDF is not available, the System Administrator has configured Web Analysis to only print to HTML in the EPM Workspace and Print via PDF has been disabled.

Print via PDF

The Print via PDF dialog is used to specify print options when you select to print Selected Object.

- Orientation — Specifies how a document is positioned on the page
  - Portrait: Prints across the width of the page (letter style).
  - Landscape: Prints across the length of the page (spreadsheet style).
- Scale — Fit to page printing. Enables you to determine how document content is broken down into print job pages.
- Allow print setting to be saved with document — Automatically inserts a print summary into the printer output when checked.

Database Connections

Database connections are portable files that define terms, conditions, and methods for connecting to data sources. You must use Web Analysis Studio, not Web Analysis, to create and modify database connections.

Documents are dependent on database connection files to query data sources. A document can use multiple database connections to connect to one or more data sources.

To access data sources, you may be prompted to provide logon credentials.

Information provided in the view pane Information tab:

- Database—displays the database connection name for the current data object
- Database User Name—displays the user name by which access to the database connection is granted

Data sources and database connections supported by Web Analysis documents:

- OLAP data sources
  - Analytic Services 6.5.6, 7.0.1, 7.1, and 7.1.2
  - IBM DB2 OLAP Server 7.1 Service Pack 11, 8.1 Service Pack 3, and 8.2
  - SAP BW 3.0, 3.1, and 3.5
- Hyperion data sources
  - Financial Management 3.4, 3.5, 3.5.1, and 4.0
  - Planning 3.3, 3.5 with Analytic Services 3.5.1, and 4.0
- Relational database connections:
  - IBM DB2
  - Microsoft SQL Server
  - Oracle
  - Teradata

System RDBMS requirements vary. See the *Oracle Enterprise Performance Management System Installation and Configuration Guide* for descriptions of relational system requirements.

Database Connection Files

Database connections are stored as repository files and adhere to most file management conventions. You see only database connections that you own or to which you are granted permissions. Various kinds of permission are needed to read, write, edit, and change database connection file properties.

Database Connection Access and Document Permissions

Documents or presentations distributed to users may require database connections that the users cannot access. Document access is independent of database connection access.

Database connection permissions that deny access may prevent access to only one connection. Users can use other connections to the primary data source or to alternate data sources. Users can leverage document definitions independently of database connections.

User and Group Permissions

Users can access database connections assigned to them or to groups to which they belong.

When documents are assigned to groups, the database connections that the document uses must also be assigned to the groups. Otherwise, group members can access the document, but not its data values (unless they are granted individual user access).

To mitigate the risk of conflicting permissions, store documents and their database connections in the same folders. Whenever possible, distribute documents and database connections to groups. It is easier to set permissions for all files in a folder and all users in a group than to manage permissions for individual files and users.

Integrating OLAP and Relational Data

Web Analysis Studio users can construct seamless liaisons between OLAP data and relational data sources. Navigation from OLAP to relational data is called *relational drill-through*.

After relational drill-through is configured, users can navigate from the dimension bottom (level 0) of the OLAP database and drill down to relational data.

Relational drill-through is a client-based integration solution comparable to the server-based Analytic Integration Services drill-through.

The Relational Drill-Through dialog box is a graphical user interface for creating SQL relational database queries. Users can use complex SQL syntax to specify table joins and to select and order by clauses.

Note: Relational drill-through supports an array of JDBC relational data sources but does not support queries by levels, generations, or previously selected members.

Relational drill-through definitions are saved as properties of database connection files.

Analytic Services Database Connections

Analytic Services, the analytic solution that integrates data from multiple sources and meets the needs of users across an enterprise, enables the quick and easy implementation of solutions, adds value to previously inaccessible data, and transforms data into actionable information.

Analytic Services integrates with existing business intelligence infrastructure, requiring a minimum of IT overhead and enabling organizations to realize maximum return on their IT investments.

Various Analytic Services features are extended through the Web Analysis graphical user interface:

Restrict Data

Restrict Data narrows the return set by requiring data values to be relevant to specific rules and operands. Data can be filtered by two-column comparison or by single-column fixed limits.

Retrieve Only Top/Bottom

Retrieve Only Top/Bottom Analysis leverages Analytic Services sorting and ranking to control the size and order of OLAP query result sets, thus protecting the network server from transmitting and the client from processing large result sets.

Edit Data

If you have permission, you can edit data values and write edits back to Analytic Services databases. After edits are applied, users can recalculate the databases and measure the impact of changed values.

Suppress Missing Rows, Zeros, and Shared Members

Web Analysis documents leverage Analytic Services to suppress missing rows, zeroes, and shared members from the query result set, thus preventing return of irrelevant information, reducing network traffic, and increasing query speed.

Label Mode and Alias Tables

Label mode enables you to select whether members are listed by ID number, description, or both. Label mode options are database-specific and can be set for database connections, specific documents, and specific dimensions.

Label mode indicates whether descriptions or ID numbers are used, and Analytic Services alias table definitions provide the displayed values.

Analytic Services Drill Settings

Web Analysis documents use Analytic Services features to provide customized drilling, dependent upon three factors:

- The nature of the hierarchical navigation
- Whether current members are replaced or augmented
- Whether drilled members are replaced or augmented

Linked Reporting Objects (LROs)

Analytic Services LROs, which include the following types, enable users to annotate data values by associating external media with cells.

- Text documents
- File attachments
- URLs

Relational Drill-through

Web Analysis documents enable you to drill through to related relational data from the lowest level of the Analytic Services outline by defining links on Analytic Services database connections. Users can pass pages, filters, and row limits to focus and control the relational query result set.

Analytic Integration Services Drill-through

Analytic Integration Services enables you to organize, format, and present relational data as OLAP cubes in Analytic Services. Web Analysis documents enable you to access Analytic Integration Services data through Analytic Services linked reporting objects by drilling on cells marked for Analytic Integration Services drill-through.

Analytic Services Advanced Member Selection

In dimensions with large member sets, users can define selections with the Dimension Browser right-click menu. Right-clicking member names enables selection by familial relationship and database-specific options.

Attribute Dimensions and Attribute Calculations

In addition to member names, locations, and relationships, Analytic Services can store characteristics about members. Analytic Services does not store attribute dimensions as part of OLAP cubes, but dynamically calculates them upon request. Attribute dimensions are displayed in dimension hierarchies and used in calculations, as standard dimensions are displayed and used.

Financial Management

Financial Management is a centralized, scalable, financial management and reporting solution. With Financial Management, users can unify their financial information (actuals, budgets, forecasts, statistics) in one Web-based application. Financial Management contains packaged features to support tasks and practices:

- Compliance with global reporting standards, currency management, automation of inter-company activities, and production of auditable results

- Links between legal and management reporting and operating plans to achieve enterprise-wide consistency and visibility

- Multidimensional, line-of-business analysis

- Improved collaboration through the Web

- Key external industry metrics that provide one central point of financial intelligence

Designed for large-scale, centralized Web deployment, Financial Management acts as a shared financial resource for thousands of users across the enterprise, enabling them to collaborate and cooperate in the day-to-day business management. In one application, users can produce auditable documents and forecasts for multiple consumers, such as regulatory bodies, financial analysts, stakeholders, and business partners.

Financial Management Features Available in Web Analysis Documents

Financial Management features extended to Web Analysis documents:

- Organization by period

- Advanced member selection

- Cell text, related content

- Line-item detail, related content

- User-defined fields

- Entity currency display

Related Content

The Related Content dialog box links to previously configured, related content and applications.

When LRO indicates are enabled, blue triangles are displayed in spreadsheet cells that contain links to related content. Right-clicking linked cells and selecting Related Content displays the Related Content dialog box.

Cell text and line-item detail are accessed as related content.

Cell Text

You can launch cell text notes, read-only text strings stored in the Financial Management data source.

Line-Item Detail

You can launch line-item-detail spreadsheets, read-only relational spreadsheets created from Financial Management data sources.

Related Content Changes

Changes to cell text and line-item detail items are not displayed in Web Analysis documents until Financial Management is recalculated and changes registered.

Organization by Period

Financial Management Organization by Period functionality enables an organization's latest consolidation structure to coexist with past structures in one application.

Thus, dimension hierarchies can be consolidated differently during different periods. Organizational structures can change for many reasons, including acquisitions, disposals, mergers, and reorganizations.

You can access Org by Period functionality when Org by Period is configured and set on the Financial Management server.

When querying Financial Management database connections configured with Org by Period, the Data Layout Options button displays an Org by Period item. The Org by Period dialog box offers an interface for enabling Org by Period and selecting three members.

Note: You can review and set this feature only in Web Analysis Studio, but settings are observed by the HTML Web client.

For information on Org by Period, See "Managing Metadata" in the *Oracle Hyperion Financial Management Administrator's Guide.*

Financial Management Advanced Member Selection

In dimensions with large member sets, users can define selections with the Dimension Browser right-click menu. Right-clicking member names enables selection by familial relationship and database-specific options.

Financial Management offers a smaller set of advanced member selection methods than does Analytic Services.

Table 33   Financial Management Advanced Member Selection Methods

Right-Click Menu Command	Description
All Members	Selects all members—a Financial Management member selection method
Select Dim Top	Selects the highest ancestor
Select Dim Bottom	Selects the lowest descendants
Also Select Descendants	Selects the currently member and its descendants
Member List	Displays the Member List dialog box, used to select lists of members—a Financial Management member selection method
User Defined Fields 1, 2, and 3	Displays the User Defined Field dialog box, used to select members with specific user-defined field values
Search	Displays the Search dialog box, used to locate members

User-Defined Fields

User-defined fields are typically defined only for Account, Scenario, Entity, and custom dimensions and are limited to 20 characters.

Users can compose compound selection statements by using multiple values for one field (for example, User Defined Field 1= West AND User Defined Field 1= East).

To define a user-defined field, users cannot use an empty string as a value.

Display Entity Currency

Financial Management stores currency metrics in the Value dimension and as Entity dimension attributes, thus enabling users to query data sources using selected or default currency values.

When using Financial Management data sources with defined Entity dimension currency information, you can enable the Display Entity Currency option, to append Entity members with their default currency values. Before querying, you use Data Layout options; after querying, you use the Data Display right-click menu; for all subsequently created documents, you use OLAP Server user preferences.

Note: You can use Web Analysis Studio only to review and set this feature, but settings are observed by the HTML Web client.

Financial Management Conventions

Financial Management outlines have 12 dimensions, eight predefined (Period, View, Entity, Account, ICP, Scenario, Value, and Year) and four custom.

No Drill To Top

When you query Financial Management, you cannot drill to top as you can when querying Analytic Services. Financial Management and Analytic Services track parent-child relationships differently. The Financial Management hierarchies enable multiple consolidations, thus enabling multiple parents for one child.

No Edit Data

Users cannot write back data to Financial Management data sources, as they can to Analytic Services data sources.

Adding and Deleting Members

Users must click the Reload button to display added or deleted members.

New Databases

Current sessions cannot interact with Financial Management data sources added during the session. Only data sources operating when a session is established can communicate with Web Analysis documents. To connect to new Financial Management databases, log off and then log on again.

Deleted Users

After you establish a Financial Management session, connection is valid until you log off, even if your user name is deleted server-side. Access is not revoked until the current session ends.

SAP BW

You can access SAP BW data sources in Web Analysis documents. Thus, you can extend your SAP BW investment by using advanced analytics and dashboards. Using the custom document freeform grid component, you can present OLAP, relational, and manually entered data on one data object and leverage all data sources in integrated dynamic calculations. Visually compelling SAP BW documents typically surpass the presentation, reporting, and distribution requirements of information consumers.

SAP BW Prerequisites

After installation, you must download the SAP BW JCo driver 2.1.4 or 2.1.5 from an SAP Web site.

Two Microsoft DLL files, MSvcr71.dll and MSvcp71.dll, are deployed to a common directory during installation. The files are used by Production Reporting, Financial Reporting, and Web Analysis.

You must locate the SAP BW JCo Driver in the DLL files directory.

SAP BW Conventions

SAP data sources differ from other data sources. For example, level 0 is the highest ancestor in SAP and the lowest descendant in Analytic Services. SAP member properties are analogous to Analytic Services attribute dimensions.

SAP BW Advanced Member Selection

In dimensions with large member sets, users can define selections with the Dimension Browser right-click menu. Right-clicking member names enables selection by familial relationship and database-specific options.

SAP BW and Analytic Services offer different sets of advanced member selection methods.

Table 34   SAP BW Advanced Member Selection Methods

Right-Click Menu Command	Description
All Members	Selects all members
Select Dim Top	Selects the highest ancestor, or, in multiple hierarchies, all top level ancestors
Select Dim Bottom	Selects all lowest level descendants
Also Select Descendants	Selects the current member and its descendants
Select Parent	Selects the parent of the current member
Also Select Ancestors	Selects the current member and its ancestors

Right-Click Menu Command	Description
Also Select Children	Selects the current member and its children
Also Select Siblings	Selects the current member and members on the same level and of the same parent
Also Select Level	Selects the current member and all members on the same level and of the same dimension
Select At Level	Selects all members at a level specified by name or number
Also Select Previous	Selects a variable number of previous members from the level of the current member; uses MDX LAG to indicate the number of previous members to return
Also Select Next	Selects a variable number of next members from the level of the current member; uses MDX LEAD to indicate the number of subsequent members to return
Date Time Series	Selects time members based on time definition criteria. SAP BW does not return aggregated values for DTS selections and returns only members that satisfy the criteria.
Select Top/Bottom	Returns a variable number of members, based on their rank You can select top or bottom values, but not both. Rank can be calculated by percentage, sum, or count. Sum uses a threshold value to select members up to and including the value that limits the threshold. Result sets may differ from Dimension Browser preview, due to custom filter selections on the query.
Filter on Member Properties	Displays the Member Properties dialog box, used to select member subsets by member SAP BW property values
Find in Tree	Locates members in large dimensions; expands the hierarchy but does not add found members to the Selection list

Relational Access

Web Analysis documents, using one of five methods, can access OLAP, Hyperion, and supported relational databases.

Custom Document SQL Spreadsheet

SQL spreadsheet objects represent relational data sources as spreadsheets, using standard SQL syntax queries.

Custom Document Freeform Grid

Freeform grids enable users to combine data values from multiple data sources in one data object and thus leverage custom document database connections.

Relational Drill-through

You can construct seamless liaisons between OLAP data and relational data sources. Navigation from OLAP to relational data is typically called *relational drill-through.* Users can navigate from the dimension bottom (level 0) of OLAP databases and drill down to relational data.

Web Analysis documents store relational drill-through definitions, which can be defined with Select statements and clauses, as database connection properties of Analytic Services database connections. Query result sets are presented as SQL spreadsheets.

See "Integrating OLAP and Relational Data" on page 116.

Relational Database Connections

Web Analysis Studio provides users with an easy-to-use graphical interface for defining relational database connections. You are prompted to specify relational database type and login credentials, select a relational table, and define database-connection properties.

Web Analysis documents relational data sources, aggregates result sets, and expresses data as OLAP cubes.

Analytic Integration Services Drill-through

Analytic Integration Services Drill-through is a server-based form of relational drill-through. Like conventional relational drill-through, you can construct seamless connections between OLAP and relational data. Unlike conventional relational drill-through, you can drill to relational data sources from all Web Analysis document intersections.

Analytic Services administrators must establish Analytic Integration Services drill-through reports. Relational queries are stored as intersection-specific metadata and flagged with LRO indicators. When users double-click flagged cells, OLAP documents navigate to the specified relational report.

Repository

Repository access is the only mandatory form of relational database access. The repository centrally stores system data, user names, user preferences, and document definitions in relational database tables. Without repository access, you cannot save information. Administrators establish repository access during installation.

Controlling Query Result Set Size

Query governors vary for relational access methods.

Custom document SQL spreadsheets and relational drill-through methods enable users to declare query governors as they create SQL queries or relational drill-through definitions.

When you drill from OLAP to relational data, passing only the drilled OLAP member to the relational data source may result in a large query result set. To focus and diminish query result sets, users can pass page and filter dimensions specified in the OLAP documents.

Other relational access methods rely on the Analysis.properties file to limit query result sets.

Custom Web Analysis Documents

Web Analysis Studio provides twenty-one coding-free components, each of which can be customized and added to custom documents multiple times. Combination options provide almost unlimited creative opportunities for custom-document designers.

Note: Custom documents cannot be created in Web Analysis Oracle Hyperion Enterprise Performance Management Workspace.

Containers

Panel and Split Panel objects enable you to control space and layers on custom documents. It is best to use container panels to design documents and to orient components inside panels. Components placed with absolute alignment in the main document panel maintain position even as other components fluctuate. Thus, components may overlap and shift.

You can size, align, and establish properties for panels. Properties control appearance and behavior.

Content Panels

Panels that provide specialized content:

- **Label**—Static or dynamic text for use as titles, labels, or captions
- **Text Area**— Dynamic text used for annotations
- **Image**—A graphic used to include graphic backgrounds, pictures, illustrations, and graphic controls
- **HTML Browser**—Static HTML

The panels function without additional coding. Label objects support the dynamic text labels used in printing headers, footers, and SQL spreadsheets.

Data Objects

Data objects representing display types (on the component toolbar):

- **Chart**— query result sets as charts
- **Spreadsheet**— query result sets as spreadsheets

- **Freeform Grid**— content from freeform grids

- **Pinboard**— query result sets as pinboards

SQL spreadsheet data objects are also available, at the end of the component toolbar.

Subscription Controls

You can add controls to documents to enable users to navigate dimensional hierarchies, browse the documents, or execute commands.

- **Combo Box Subscription**— View a list of members.

- **Radio Button Group Subscription**— Select a member option.

- **Checkbox Group Subscription**— Select multiple members.

- **Tab Group Subscription**— Select a member tab.

- **Multi-level Combo Box Subscription**— Select from interdependent lists (members changing as selections change).

- **Slider Subscription**— Select a member, based on its position on a slider bar.

- **Selection Button Subscription**— Apply member selections to data objects that use the same data source.

- **Alias Controller**— Toggle data objects between alias table labels.

- **Services Button**— Execute preset commands and create hot spots.

Subscription buttons can control data objects that share a database connection query.

SQL Spreadsheet and SQL Subscription

Components that present and control SQL query result sets.

- **SQL Spreadsheet**— a data object that displays a SQL query to a relational data source
- **SQL Subscription**— a subscription button designed for SQL spreadsheets

Linking Components by Query

Specifications required for document creation:

- Data source—provides data values

- Data object—displays data values

- Query—Retrieves data values from data sources and returns them to data objects

Properties that customize the specifications:

- Database connection properties indicate data-source type, logon credentials, database applications, dimension formatting, and drill-through properties.

- Data objects can be set to display types that feature specific options.

- Queries can be explicit, requesting information on members, or dynamic, requesting information about all members that satisfy a set of criteria.

In Design Document mode, query definitions are referred to as *data sources.*

Common Data Sources

Design document components using the same data source are coordinated (follow the same navigation lines).

Unlinking Components

If you do not want coordinated document components, you can assign multiple data sources to a data object. Identical data sources with different names are treated as individual sources.

Linking Dimensions

You can use Custom settings to link dimensions within data objects on a document.

Dimension linking enables data objects that share dimensions but use different data sources to remain coordinated. Links are unidirectional. Navigation on a data object triggers coordinated navigation on the data objects linked to it. Navigation on the other data objects triggers coordinated navigation only the objects have defined links.

Edit Data Mode

If you have permission, you can edit cell values and write edits back to Analytic Services. You can initiate Edit Data mode only from the spreadsheet display type.

➤ To initiate Edit Data mode in a Web Analysis document, right-click the data object, and select **Edit Data.**

Edit Data buttons are added to the content area. Editable cells in Analytic Services are converted to data-entry cells.

Table 35   HTML Web Client Edit Data Controls

Control	Description
Calculation list	Specifies the calculation script to use when the database is recalculated from the HTML Web client
Run	Prompts the database server to recalculate the database
Exit	Closes Edit Data mode

Control	Description
Send Data	Applies edits to the database

Editing Data Values

➤ To edit data values:

1   Right-click the data object, and select **Edit Data**.

2   To recalculate the database, from **Calculation,** select a calculation script, and click Run.

3   Click a cell to edit its data value.

4   Enter a data value, and click the column or row heading.

5   Click Send Data.

   Only authorized users can successfully write changes to the database. The Confirmation dialog box is displayed if write-back is successful.

6   **Optional**: Preform Step 2 to recalculate the data.

7   Click **Exit.**

   Note: On long spreadsheets, you may need to scroll down and to the right to locate the Send Data and Exit buttons, on long spreadsheets.

Copying, Cutting, and Pasting To and From Excel

While in Edit Data mode, you can cut, copy, and paste ranges of cells from Excel spreadsheets into Web Analysis spreadsheets. The edits can then be posted to Analytic Services. You can also cut, copy, and paste between values.

Keyboard shortcuts:

- To copy, select a range of cells, and press Ctrl + C.

- To cut, select a range of cells, and press Ctrl + X.

- To paste, select a range of cells, and press Ctrl + V.

Tips for Edit Data Mode

- You cannot edit calculated members or attribute dimensions, because their values do not reside in the database.

- Dimensions composed of implied shares (or user-defined hierarchies) do not aggregate as conventional dimension hierarchies do. Therefore, implied shares may overwrite data edits made to parents of implied shares as the model is pivoted.

Example: Actual and Budget are implied shares of the parent Scenario. Scenario, however, is a categorical label, not an aggregation of Actual and Budget measures.

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 eanbles 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 email 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.

scraping 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.

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