Oracle® Fusion Cloud EPM

Designing with Reports for Oracle Enterprise Performance Management Cloud





Oracle Fusion Cloud EPM Designing with Reports for Oracle Enterprise Performance Management Cloud,

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Creating and Running an EPM Center of Excellence

A best practice for EPM is to create a CoE (Center of Excellence).

An **EPM CoE** is a unified effort to ensure adoption and best practices. It drives transformation in business processes related to performance management and the use of technology-enabled solutions.

Cloud adoption can empower your organization to improve business agility and promote innovative solutions. An Cloud EPM oversees your cloud initiative, and it can help protect and maintain your investment and promote effective use.

The EPM CoE team:

- Ensures cloud adoption, helping your organization get the most out of your Cloud EPM investment
- Serves as a steering committee for best practices
- Leads EPM-related change management initiatives and drives transformation

All customers can benefit from an Cloud EPM, including customers who have already implemented EPM.

How Do I Get Started?

Click to get best practices, guidance, and strategies for your own Cloud EPM: Introduction to EPM Center of Excellence.

Learn More

- Watch the Cloud Customer Connect webinar: Creating and Running a Center of Excellence (CoE) for Cloud EPM
- Watch the videos: Overview: EPM Center of Excellence and Creating a Center of Excellence.
- See the business benefits and value proposition of an EPM CoE in Creating and Running an EPM Center of Excellence.



Overview of Reports

Related Topics

- Learning About Reports
- Report Components
 Design Reports by using report components, report objects, and grid components.

Learning About Reports

Reports provides a user-friendly, robust report development framework along with an enriched report viewer experience. Reports is included with Narrative Reporting (Narrative Reporting deployment) where it enables you to insert charts and grids from multiple Oracle Enterprise Performance Management Cloud sources, Essbase Cloud, and ERP Cloud Financials. Reports is also embedded in the EPM Cloud Platform business processes and applications: Enterprise Profitability and Cost Management, Planning and Planning Modules, Financial Consolidation and Close, Tax Reporting, and FreeForm (EPM Cloud deployment) for single instance reporting.

Reports also includes books and bursting. Books provide the ability to group together one or more reports, Books, and other documents, to generate a single PDF or Excel output. Bursting enables you to run a single report or book for more than one member of a single dimension for one data source, and publish a PDF or Excel output for each member.

Reports in Narrative Reporting deployments also includes Notes for POV-based narrative text which is then displayed in formatted reports along with grids and charts. You can utilize Notes where reporting structure and narrative requirements are uniform across Entities, Departments, and so on. EPM Cloud deployments do not include Notes.

Reports provides an easy-to-use drag and drop interface for designing and editing reports. You can:

- Create, insert and position report objects (grids, charts, image, textbox) into a report.
- Design and preview the results of an individual grid or chart without having to run the entire report.
- In Narrative Reporting deployments, insert report objects contained in a shared report to
 use the report objects in multiple reports, providing a single point of maintenance for the
 shared report objects.
- Insert formulas to calculate grid values and text functions to dynamically retrieve report and grid metadata.
- Utilize enhanced charting with a variety of chart types and features.
- Use data source features in your reports such as dynamic member selection functions, substitution variables, cell text and file attachments, financial intelligence, UDAs, and Attributes.
- Apply conditional formatting, text, and suppression to format grid cells or suppress data based on member information or data values.
- Zoom on parent members to display detailed members and drill to other reports or source data.

In Narrative Reporting deployments, you can:

- Embed Reports into Narrative Reporting report package doclets to integrate them in the collaborative narrative reporting process, with centralized Point of View (POV) control and server-side refresh with automatic doclet updates.
- Combine cross-Cloud content into a single report. You create and define a data source connection to point to the desired data source.
- Reports, security, and POV selections are managed within Narrative Reporting. Artifacts
 are stored and managed in the Narrative Reporting Library.
- Reports, books, and bursting definitions can be exported and imported into another environment.
- Fonts are uploaded and managed in the Narrative Reporting Library.
- Scheduling for bursting definitions is done via the EPM Automate Commands (via Third party scheduler).
- Migrate Financial Reporting (FR reports) to Reports.
- Utilize Generative AI (GenAI) for generating narrative summaries in a text box or text rows or columns.

In EPM Cloud deployments:

- Reports does not include Notes.
- Reports are integrated with Narrative Reporting via Remote Libraries, however Reports in EPM Cloud deployments cannot be inserted into Report Packages, or Books and Bursting Definitions in Narrative Reporting.
- Reports is embedded in each business process, with single instance reporting. You cannot
 point to other EPM Cloud instances. Data Sources are automatically created based on the
 EPM Cloud application cubes that are on the instance.
- Reports, security, and POV selections are managed by the EPM Cloud platform. Reports
 are stored in the EPM Cloud repository.
- Reports, books, and bursting definitions can be moved between environments using the EPM Cloud Lifecycle Management.
- Fonts are uploaded and managed in Application Setting in Reporting Settings.
- Scheduling for bursting definitions is done via the EPM Cloud platform Job Scheduler.

Watch this overview video to understand the highlights of Reports.





Watch this tutorial video, you'll learn how to create reports.

- -- Creating Reports in Narrative Reporting Cloud.
- -- Creating Reports in EPM Cloud.



Report Components

Design Reports by using report components, report objects, and grid components.

Report Components

- **Header** An area where you can display text on the top of each page of a report. You can also add images to a header.
- Report Body— The main area of the report where you can insert and display grids, charts, images and text boxes.
- Footer— An area where you can display text on the bottom of each printed page of a report. You can also add images to a footer.

Report Objects

- Grid— A report object in which you retrieve data in the rows and columns.
- Chart— A report object that displays data from a grid. Charts are graphical representations
 of the data in a grid
- **Text Box** A report object that can contain text, or functions that retrieve data such as report settings, data values, point of view (POV) values, or dimension members.
- **Image** A report object that contains a graphic or an image file. You can add images to the body of the report and to a header or footer.
- Notes— For Narrative Reporting deployments, you can insert a Note Template into a report for structured POV-based commentary entry.
- Shared— For Narrative Reporting deployments, shared objects (grids, charts, text boxes
 and image objects), which reside in a shared report, can be inserted in multiple reports,
 providing a single point of maintenance for the shared report objects.

Grid Components

- Row— A horizontal display of information in a grid. A row can contain text, data, or derived data from a calculation. You can format individual rows in grids.
- **Column** A vertical display of information in a grid. A column can contain text, data, or derived data from a calculation. You can format individual columns in grids.
- **Cell** An intersection of a row, column, page, and Point of View (POV) for a grid. You can format individual cells in a grid.



Designing Reports

Related Topics

- Before Designing a Report
 Answer these questions to get started designing a report.
- About Connections and Data Sources
 Data sources define how Reports grids connect to cloud data sources.
- Working with the Report Designer
 Use the report designer to add and edit report objects and view and edit report properties.
- Working with Report Objects
- Learning about the Point of View
 The Point of View identifies the data that will be pulled into a report.
- Using Text Functions to Display Information
 Text functions display report information such as the report name or description, information about a database associated with a grid, or information about data in your database connection.
- Correcting Report Errors
 You may encounter errors on the entire report, or on a specific report object.

Before Designing a Report

Answer these questions to get started designing a report.

Complete this Learning Path for a hands-on example on designing a report.



-Learning Path: Designing Reports

Before designing a report, consider:

- What is the goal of the report?
- Who are the end users of the report?
- How frequently is the report generated and by how many users?
- If the report is going to be inserted into a report package, which grids and charts will be needed for that report package?
- What data sources will you need to connect to?

About Connections and Data Sources

Data sources define how Reports grids connect to cloud data sources.

In Narrative Reporting Deployments:

Connections need to be defined by the *Service Administrator* to connect Reports to the various supported data sources. A **data source** defines a specific cube to connect to.

- **Connections** streamline the creation and maintenance of Reports data sources and provide a single area of credentials maintenance for multiple cubes in an application.
- When creating or editing a **Connection**, you can select cubes to be added as data sources. **Data Source** artifacts in the **Library** can also optionally be used to maintain connections to cubes, however, this can also be done in **Connections**. Data sources use the **Connections** as a parent artifact "container". When creating or editing a data source, you can select a **Connection** to use and select a cube from that connection.

Connections also allow accessing reporting artifacts in Oracle Enterprise Performance Management Cloud platform instances on the same domain via a **Remote Library**. In the Narrative Reporting Library, users can browse remote libraries for reporting artifacts to open, or to copy Reports from the EPM Cloud Platform to Narrative Reporting.

Data sources enable you to maintain your connections on two levels:

- **Global changes**: Change all reports that use a specific connection to use a different connection. For example, all report grids that point to *server1:cubetype1* will now point to *server2:cubetype2*.
- Selective changes: For selected reports, change the connection to point to a different
 data source. For example, you have created two data source connections, and half of your
 report grids point to connection1 while the other half point to connection2. You can change
 the connection details for either connection1 or connection2 without affecting the other
 grids.

Supported data sources include:

- EPM Cloud, used for:
 - Enterprise Profitability and Cost Management
 - FreeForm
 - Planning and Planning Modules
 - Financial Consolidation and Close
 - Tax Reporting
- Oracle Essbase Cloud
- Oracle Profitability and Cost Management Cloud Essbase Provider
- Oracle Fusion Applications Essbase Provider
- Oracle Essbase Analytic Provider Services (APS)



- The User ID logged into Narrative Reporting that is creating the Connections, as well as the Administrator ID in the Connections, need to be the same User ID, also both need to be native users and not Single Sign-On (SSO).
- When connecting Narrative Reporting to EPM Cloud data sources, the release version of Narrative Reporting needs to be the same release version as the EPM Cloud data source. This is required for the Remote Library feature as well as compatibility between Narrative Reporting and the EPM Cloud Platform ADM driver, which is used for data and member gueries against the EPM Cloud Platform cubes.

In Enterprise Performance Management Cloud deployments:

Data Sources are automatically created based on the EPM Cloud application cubes that are on the instance, no manual data source creation/maintenance is necessary. You can only utilize cubes on the same EPM Cloud instance.

For Narrative Reporting Deployments:



-- Working with Connections and Remote Libraries.

Creating and Editing Data Source Connections

For Narrative Reporting Deployments:

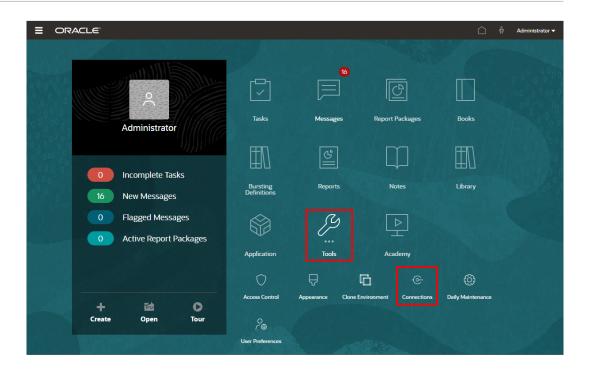
To create a connection:

On the Narrative Reporting Home page, under the **Tools** icon, you can select Connections.

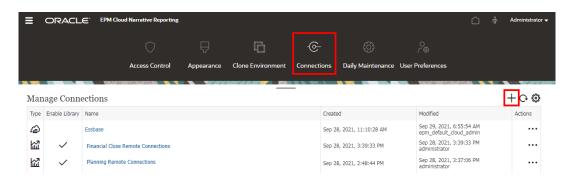


Only the Service Administrator role can create and maintain Connections.





2. In the **Manage Connections**, click to add new connections.



- 3. In **Name**, enter a descriptive identifier for the connection, such as a combination of the data source and server.
- 4. In **Type**, select the type of data source:
 - Oracle Enterprise Performance Management Cloud, used for:
 - Enterprise Profitability and Cost Management
 - FreeForm
 - Planning and Planning Modules
 - Financial Consolidation and Close
 - Tax Reporting
 - Oracle Essbase Cloud
 - Oracle Profitability and Cost Management Cloud Essbase Provider
 - Oracle Fusion Applications Essbase Provider

- Oracle Essbase Analytic Provider Services (APS)
- 5. In Server Name, enter the data source server name with no protocol or URL. For example, for Oracle Enterprise Performance Management Cloud, if data source URL is: https://
 <servername>/HyperionPlanning, the server name is: <servername>.
- 6. (Oracle Fusion Applications Essbase Provider and Oracle Essbase Analytic Provider Services (APS) only): In Essbase Server Name, enter the name of the Essbase server. By default for Fusion Applications, the server name is "Essbase_FA_Cluster" and for Essbase APS, the server name is "EssbaseCluster-1".
- 7. In **Identity Domain**, enter the identity domain of the data source pod.

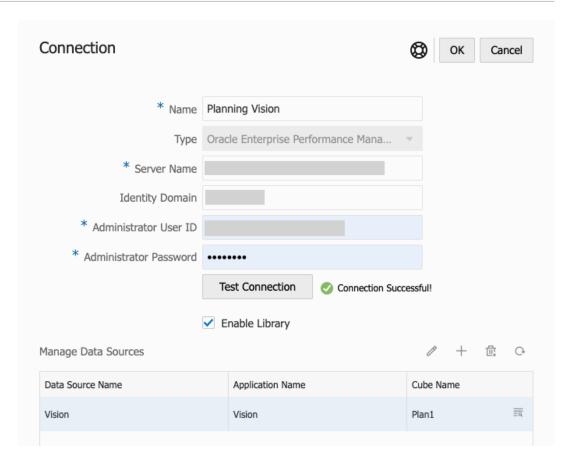
- Not required for Oracle Essbase Cloud, Oracle Fusion Applications Essbase Provider or Oracle Essbase Analytic Provider Services (APS).
- For EPM Cloud deployments on Oracle Cloud Infrastructure (OCI), this field should be left blank.
- 8. Enter the administrator User ID and Password. The administrator User ID needs to be a Service/System Administrator role at the data source level, BI Administrator role for Fusion Applications.

Note:

You must log in to Narrative Reporting with the administrator credentials for the data source that you want to create a connection to. For example, if your Planning Modules administrator is **PlanAdmin**, you must log in to Narrative Reporting with the **PlanAdmin** credentials to create a data source connection to the Planning Modules data source. Enter User ID and Password credentials used for native authentication at the source. Single Sign-on with Identity Assertion technologies is not supported.

9. Click Test Connection.

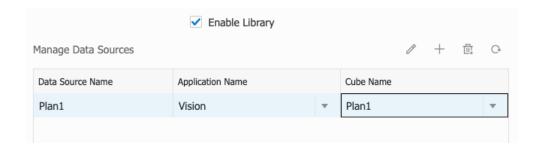




(Oracle Essbase Cloud only): Click **Yes** on the dialog box to trust the connection. This setting is stored so that you do not have to answer the question again.

- 10. For EPM Cloud connections, optionally select **Enable Library** to expose a Remote Library.
- 11. To select cubes to be added as data sources:
 - Under Manage Data Sources, click cubes to connect Reports to.

 Add Data Sources to add one or more
 - For each cube, enter a Data Source Name, select the Application and Cube names.



After selecting a cube, you can click on to preview the dimension list.

In the Manage Data Sources toolbar, you can: Edit an existing data source, create a New data source, Delete a data source and Refresh the view.

 Click OK to add the Connection. The connection will appear in the list under the Manage Connections.

To **Edit** a Connection:

In Manage Connections, select the Connection, and then select Edit from the Actions menu. When you edit a connection, you can change the Connection Name and Server, as well as the Application and Cube names.



- Changing the Connection Name does not affect any report objects that use the connection.
- Changing the **Server**, **Application**, or **Cube** names causes any report objects that use the connection to point to the new destination.
- For security purposes, you must re-enter the administrator credentials when editing the connection.



-- Working with Connections and Remote Libraries.

Working with the Report Designer

Use the report designer to add and edit report objects and view and edit report properties.

Related Topics

- Accessing the Report Designer
- About the Report Designer
- Report Designer Toolbar
- Report Properties

Accessing the Report Designer

For Narrative Reporting Deployments:

You access the report designer in the following ways:

- From the Library, in any non-system folder, click and select Report from the menu.
- From the reports panel, click
- From the home screen, click Create, and select Report.

In the reports panel, you can filter the list of existing reports on Recent, Favorites, and All.

For Enterprise Performance Management Cloud Deployments:

You access the report designer:



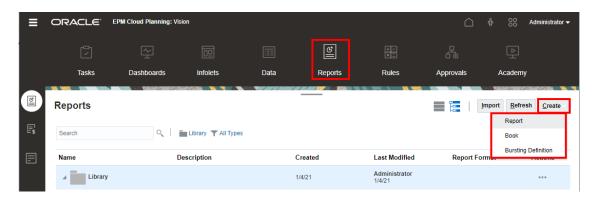
From an Oracle Enterprise Performance Management Cloud service, select



Report card (Library card in Tax Reporting).

In Enterprise Profitability and Cost Management, FreeForm, Planning, and Planning Modules, from the left pane select **Reports** icon.

In Financial Consolidation and Close, and Tax Reporting, select **Reports** from the horizontal tabs. Click the **Create** drop-down menu at the top of the content pane, and then click **Report** to launch the Report Designer.



Watch this tutorial video to learn how to add objects to Reports:

For Narrative Reporting Deployments.



For EPM Cloud Deployments.



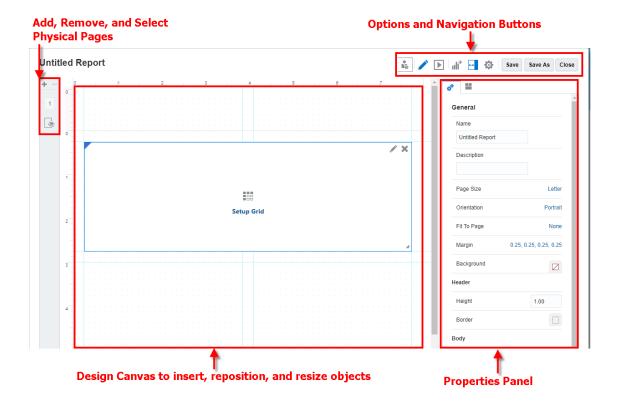
For more information, see the following links:

- · Before Designing a Report
- · Working with the Report Designer
- Working with Report Objects

About the Report Designer

The report designer has the following areas:





- From the left panel, you can add, delete, and select individual physical pages or sheets.
 The hidden sheet is where you can insert or paste grids that need to be hidden from the report output. The hidden sheet may contain grids that are created as part of a chart definition.
- The design panel is where you insert report objects. You can reposition and resize report objects, and you can also drag and drop to resize the report header and footer. See Working with Report Objects.

The header and footer drag and drop only work from the ruler.

- The toolbar lets you switch between edit and preview modes, insert and edit report objects, and change your view options. See Report Designer Toolbar
- The properties panel lets you view and edit report properties. If you select a report object, the properties panel displays the properties of the report object. See Report Properties
- The report name is displayed at the top of the report designer. When editing a report
 object, the object name will also be displayed at the top of the object designer, along with
 the report name.



When left-to-right text (English, Spanish, Korean, and so on.) is mixed with right-to-left text (Arabic, Hebrew, and so on.) between the report and object name and the current user locale uses a right-to-left reading direction, then each type of text is displayed using the direction it was entered in.

Default Report Layout

To save you time and effort, when you create a new report a default report layout is provided that offers the following:

- Horizontal and vertical guides help you position objects with a meaningful and practical layout.
- A grid is created. Click Setup Grid to set up the data source and other grid properties. See Working with Grids.

Report Designer Toolbar

The toolbar lets you do the following:

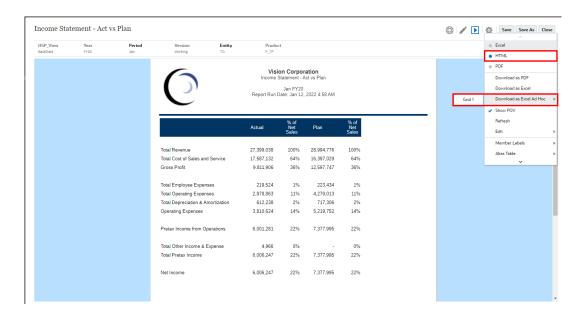


Use **Edit** and **Preview** to toggle between Edit and Preview mode. Edit mode allows you to make changes to the report, grids, or charts, while the preview mode enables you to see how the report will look when it is published.

While in preview mode, use - Actions menu to do the following:

- Select one of these formats: Excel, HTML, or PDF.
- Download as PDF You can download a Report as PDF.
- Download as Excel You can download a Report as an Excel workbook.
- Download as Excel Ad hoc You can download a Report Grid as Excel Ad hoc in Oracle Smart View for Office, on which you can then perform available ad hoc operations.





Web browser will download a Smart View link file. Click on the file to launch Excel. You will be prompted to sign on to the respective Data Source login page. If you already have an active Data Source connection, the sign-on dialog will not be shown.

Limitations to Export a Report Grid as an Ad hoc Excel:

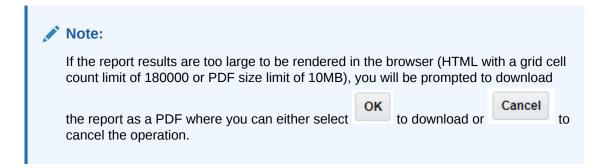
- The Download as Excel Ad hoc option is available for HTML Preview only.
- Reports Formatting is not retained in Excel.
- The data within the Formula cells are rendered as static information.
- The output data in Excel are based on the Smart View Options. Review all the Formatting settings. For more information, see Setting Smart View Options.
- This feature is not available for hidden grids.

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Tip:

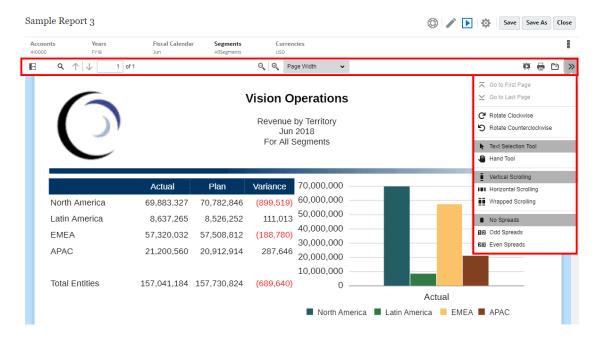
Depending on your browser settings, you may get a javascript error during processing when you preview a report with large grids or charts in HTML. Check the **Don't ask again** check box, and then click **Continue** to continue on to the HTML preview.





PDF preview of the report provides the following functionality:

- Toggle thumbnail sidebar
- Find text within the document
- Go to the previous/next page
- Go to an entered page number
- Zoom in/out buttons
- Select a zoom level (For example: %s, **Automatic**, **Page Width**, and so on.)
- Switch to Presentation Mode
- Print the document
- Download the document
- Other Navigation and Viewing Tools





Use Insert to add report objects to the report. See Inserting Report Objects.



Properties

Use **Properties** to display or hide the properties panel.



Actions

Use **Actions** to edit report objects and to control view options, such as grid lines, guides, and rulers.

Service Administrators can define a default font for reports by selecting **Set Default Font** and selecting the font and size for the reports. This setting applies the default font to all reports for all users.

Report Designers can still customize the font in grid cell formatting, chart text and labels, and individual text boxes.



Note:

If a custom font is loaded, it can be set as the default font. See Uploading Additional Fonts.

Note:

When uploading additional fonts to Narrative Reporting, you are responsible for the proper licensing of the fonts from the font vendor. For example, if you upload the Microsoft font "Times New Roman," you must obtain the licensing from Microsoft to do so. Uploading a Microsoft font sourced from a Windows machine is not typically covered by the legal use agreement from Microsoft.

Note:

For Arabic fonts, only the following are supported in Reports:

- Arial Unicode MS 1.01
- Lateef 1.0
- Scheherazade 1.0
- Simplified Arabic 1.01
- Simplified Arabic 5.00
- Simplified Arabic 5.92
- Traditional Arabic 1.01
- Traditional Arabic 5.00
- Traditional Arabic 5.92

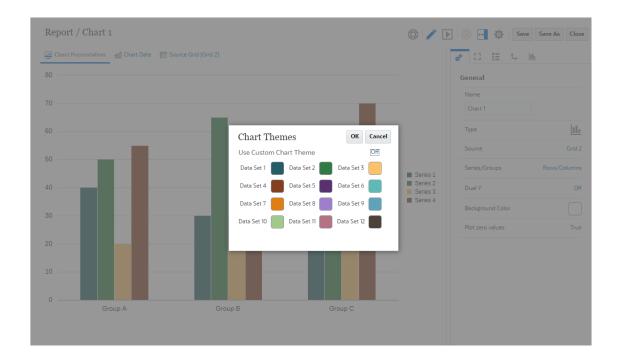


Service Administrators can also set the default chart color for the first 12 chart data sets for all charts by selecting **Set Default Chart Colors** and enabling a custom chart theme. This setting applies the default chart colors to all reports for all users unless the colors were modified in the charts during report design via the **Series** chart property.

Note:

If the Redwood Experience is set as the default theme in Cloud EPM, the Redwood theme colors will affect the default chart colors in existing reports. Enabling and defining a custom chart theme will override the Redwood color theme.

Report Designers can still adjust the chart colors for individual charts within a report via the chart's **Series** Property, which will override the default values defined in the **Action** menu.



Note:

Using the Action menu, you can Set Default Chart Colors.

Report Properties

Use the properties panel to view and edit two types of properties in a report:

- General Properties
- Layout Properties



General Properties

General properties control the page settings for the report, such as page size and orientation, margins, and header and footer size. Changes made to the general properties affect all pages of a report. The **Fit to Page** property allows fitting the report's PDF output to the length, width, both, or none.



Use the **Border** field to place borders around the report header, footer, and body. You can adjust the header and footer size by dragging the header or footer line on the design canvas.

Layout Properties

Layout properties affect the size and positioning of a selected report object, such as the horizontal and vertical alignment and the size of the indent.

Use the **Size** field to set the width and height of the report object. For text objects, you can also select one of the following options:

- Fixed (equivalent to AutoSize=Off): The text object height will not increase or decrease. If the relevant text does not fix in the design time height, it will be truncated.
- Fit (equivalent to AutoSize=On): The text object height will increase or decrease as necessary to fit the relevant text. The height will be resized as needed, up or down, to fit the text.
- Minimum: The text object height will be at least that which is specified in the report design.
 If more height is needed to show all the relevant text, it will increase as needed. It will not decrease.

Use the **Placement** field to control the way the report object is printed on the page relative to other report objects:

- **Fixed**: Places the report object in a fixed location.
- Relative: Places the report object in a location relative to other report objects to the left (Horizontal Position) or above it (Vertical Position). The selected report object adjusts its location when the size of the other report objects change.

Use the **Border** field to place borders around a report object. You can select the border style and color.

Changes made to the layout properties affect only the selected report object. You must select a report object before you can view the layout properties.

For image objects, there is a **Fit To Page Width** property, when enabled, will stretch the width of the image object to fit the width of the report. By default, this property is disabled.

Note:

- This property is not applied if there is another object next to the image.
- Only the image object width is affected by this property, the image object height is not affected.



When you edit a report object, the properties panel displays more detailed properties for that object. For more information, see:

- Overview of Grid Properties
- Formatting Text Boxes
- Formatting Images
- Chart Properties

Working with Report Objects

Report objects include grids, text boxes, images, and charts. In Narrative Reporting deployments, you can insert shared objects into a report, as well as **Notes** for structured POV-based commentary entry.

When you add report objects to a report, you define their position in the report layout. For grids and charts, you select the data source connection for the report object.

After you add a report object to a report, you can assign properties to it such as format options. Format options can include font, alignment, spacing, shading, and positioning, depending on the report object.

Watch this tutorial video to learn how to add objects to Reports:

For Narrative Reporting Deployments.



-- Adding Objects to Reports.

For Oracle Enterprise Performance Management Cloud Deployments.



- Adding Report Objects in EPM Cloud.

Inserting Report Objects

There are multiple ways that you can insert a report object:

- From the toolbar, click and select the object to insert.
- From a new report, add a page from the left panel and then click on one of the object icons.
- From the report body, header, or footer, right-click and select Add Report Content, and then select the object to insert.



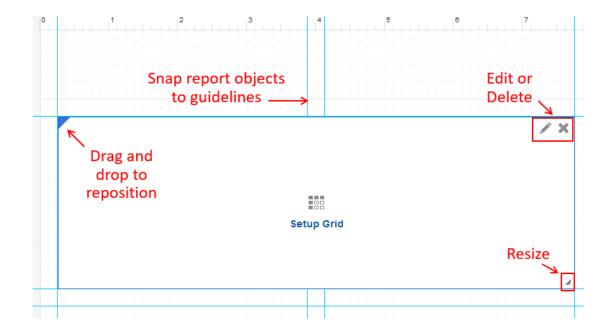
You can insert only text boxes and images in the report header and footer.



You must be in Edit mode to insert a report object. You cannot insert objects while in Preview mode.

Resizing, Editing, and Repositioning Report Objects

After you insert a report object, you can resize, edit, or reposition the object directly on the design canvas.



 To resize the report object, click the arrow in the lower right-hand corner and drag to the desired size.



Tip:

If **Snap to Guide** is enabled, you can also drag the right border to the nearest vertical guide line and the bottom border to the nearest horizontal guide line. See Resizing with Guidelines

 To reposition the object, select the object and drag it to the desired position on the design canvas.



You cannot overlap objects on the report design canvas. See Correcting Report Errors.

• To delete the object, click .



To edit the object, click or Setup (Object), where (Object) is the object type. For example, Setup Grid.

Using Guidelines

Guidelines enable you to line up your report objects horizontally and vertically for a uniform appearance. By default, report objects are set to "snap to" these guidelines. To toggle this

feature on or off, click and then **Snap to Guide**. Your setting is saved for future sessions.

You can also create new guidelines by clicking , then **New Guides**, and then specifying the horizontal and vertical position of the guide.

Finally, you can drag and drop an existing guideline to change its position in the report.

Resizing with Guidelines

If **Snap to Guide** is enabled in the grid Action menu, report objects can be resized to the nearest guidelines with the following actions:

- Drag or double-click the right edge of an object to resize the object to the nearest vertical quideline.
- Drag or double-click the bottom edge of an object to resize the object to the nearest horizontal guideline.
- Drag the bottom right corner of an object to resize the object to the nearest vertical quideline.

For more information about working with report objects, see:

- Working with Grids
- Working with Charts
- Working with Text Boxes
- Working with Images

Copying/Moving Report Objects Across Sheets

In a report with multiple sheets (physical pages), you can copy or move report objects from one sheet to another via right click menus. In addition, if you want to hide a grid from displaying in the report output, you can move it to the hidden sheet.

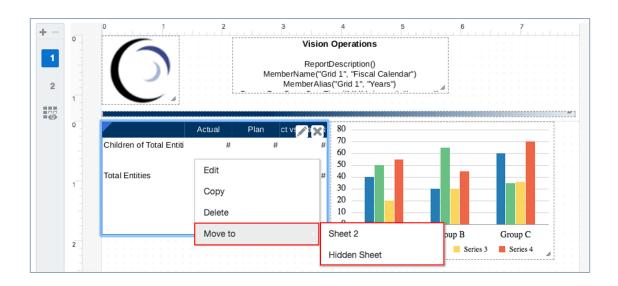
To copy or move a report object:

- In the Report Designer, select the report object (grid, chart, image, or text box) that you
 want to copy or move.
- 2. Right-click, and perform an action:
 - Select Copy, then navigate to the page that you want to place the object on, rightclick, and select Paste.
 - Select Move To, and then select the page that you want to move the object to.
- 3. Resize or reposition the report object as necessary. See Resizing, Editing, and Repositioning Report Objects.





If you copy a shared object in a report, you can only paste it as **unlinked**, and it will not be linked to the shared object in its source report.



Learning about the Point of View

The Point of View identifies the data that will be pulled into a report.

Related Topics

- Point of View Overview
- Global versus Local Point of View

Point of View Overview

Every data value in a report is derived from the intersection of a member from each dimension in your data source. The Point of View (POV) defines these intersections and identifies the data to retrieve in the report. Reports that contain data from grids have a global POV that applies to all of the grids and charts in the report. Optionally, you can also define local POVs for each grid and chart that override the global setting for that intersection. See: Global versus Local Point of View.

As a report administrator, you set up the POV for the report viewers by performing these tasks:

- Define one or more POV members for each dimension for the report viewer to select
- Allow the report viewer to select any member in the dimension, or
- Lock a dimension selection for report viewers to a single member
- Hide one or more dimensions from the report viewer





After you define the POV options, a report viewer can select POV members for each dimension in a report, based on the criteria that you established.

For more information, see Working with the Point of View.

Global versus Local Point of View

The Point of View (POV) determines the data to retrieve in a report. There are two types of POVs available in a report:

- Global POV
- Local POV

When a report viewer makes changes to the POV (both global and local), those changes are saved for that specific data source for that user. When the user opens a different report that uses the same data source, the POV changes are retained. For example, if a viewer changes the **Scenario** dimension from **Actual** to **Plan** and then opens a new report with the same data source, the POV will be set to **Plan**. However, when a different viewer opens the same report, the POV setting for the **Scenario** remains as **Actual**.

Global POV

The global POV applies to all grids and charts in a report. Where possible, it combines common dimensions across data sources so that a single selection can affect multiple data sources. For example, an Narrative Reporting data source and an Planning Modules data source may have a common dimension, **Entity**. When you set the member for the Entity dimension in the POV, it applies to both data sources.



When a report viewer makes changes to the global POV, those changes are saved for that specific data source for that viewer only. When the viewer opens a different report that uses the same data source, the POV changes are retained. For example, if a viewer changes the Scenario dimension from Actual to Plan and then opens a new report with the same data source, the POV will be set to Plan. However, when a different viewer opens the same report, the POV setting for Scenario remains as Actual.

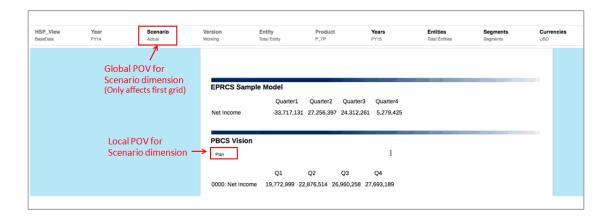


Note:

For Oracle Enterprise Performance Management Cloud Platform Deployments, Reports report Global POV is integrated with the EPM Cloud POV selected members. When previewing a report, Reports retrieves the POV members from EPM Cloud and uses these returned members as a default member selection for the report execution. Reports then updates the POV in EPM Cloud when a user makes a POV member selection in report preview.

Local POV

Optionally, you can set up a local POV for a specific grid or chart that will override the global POV setting for that dimension. For example, to display two charts that compare the Plan and Actual members of the Scenario dimension, you can set the global POV to Actual and then change the local POV for the second chart to override that setting with the Plan member.



Using Text Functions to Display Information

Text functions display report information such as the report name or description, information about a database associated with a grid, or information about data in your database connection.

You can use text functions in text boxes, text rows and columns, and as custom headings for data and formula rows or columns. The type of text functions that you can insert is context-sensitive. For example, you can insert page numbers only in a report header or footer. For more details about text functions, see <u>Text Functions</u>.

To use text functions to display information in a report:

- 1. In the design pane, do one of the following
 - When editing a text box, click f.
 - In a heading cell in a grid, click , then select **Custom Heading**, and then click ...
 - In a text cell in a grid, click f.



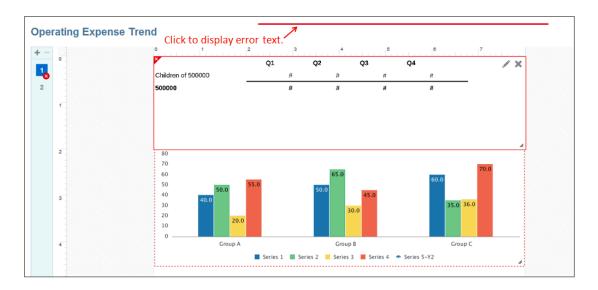
- In a formula cell in a grid, click , then select **Custom Heading**, and then click
- 2. In the **Insert Function** dialog box, select a function, and then specify the parameters for the function. Then, click **Select** to insert the text function.

For more information about text functions, see Text Functions

Correcting Report Errors

You may encounter errors on the entire report, or on a specific report object.

Report Errors

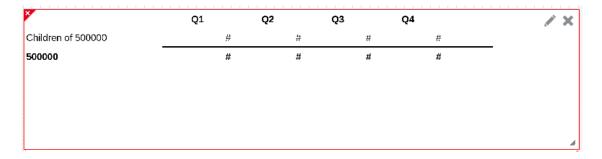


Report errors are indicated by a red bar above the report header. Click on the bar to display the error text.



The most common cause of a report error is two overlapping report objects. To correct the error, make sure that the report objects do not overlap with one another.

Report Object Errors



Report object errors are indicated by a red X in the upper left corner of the report object. Place your mouse over the indicator to display the cause of the error. Possible causes include:

- The data source connection for the report object is no longer valid (for example, it may have been deleted).
- The report object overlaps with another report object.



4

Working with Grids

Related Topics

About Grids

Grids are tables that contain data from external database connections.

Adding a Grid

Add a grid to a report to display data from an external data source.

Defining the Point of View

The Point of View (POV) determines the data that will be retrieved into your grid.

Working With Rows and Columns in Grids

You organize and add content to grids by adding data, formula, text, and separator rows and columns. In Narrative Reporting deployments, you can insert a **Note** Rows and Columns into a grid for structured POV-based commentary entry.

Using the Formula Bar

The formula bar provides a central location to create formulas and select members when setting up grids in Reports.

Working with Conditional Formatting, Text, and Suppression

Conditional formatting, text and suppression enables you to customize grid and text results that meet the criteria that you specify.

Zooming on Parent Members in Grids

Zoom allows you to expand a row or column parent member to see its children, descendants or bottom level members when you preview a report in HTML.

- Working with Grouping
- Working with Drill To Content

Drill to content allows you to set up content links on grid cells, rows, columns and member heading cells to enable end users to drill to reports, third-party documents in the Narrative Reporting library and custom URL links.

Working with Drill Through and Cell File Attachments

Reports provides the ability to drill through to a source system and drill to cell file attachments, while viewing the report or grid in HTML preview.

- Working With Valid Intersections
- Working with Butterfly Reports
- Working with the Ancestor Before Children Property

About Grids

Grids are tables that contain data from external database connections.

You can add a grid to your report, define its dimension layout, select members, and then format the grid. You can use text, dimensions, members, and formulas to define the grid content. You can hide a grid from being displayed in the report output. For example, if you use row or column formulas to pull in data from additional data sources into one grid, you can hide the source data grids by placing them in the hidden sheet.

Adding a Grid

Add a grid to a report to display data from an external data source.

To add a grid to a report:

- 1. Do one of the following:
 - From the toolbar, click and select Grid.
 - From a blank report, click
 - From the report body, right-click and select Add Report Content, and then select Grid.
- 2. Click Setup Grid.
- 3. In **Select Source**, select a data source for the grid.



You must have the **Use** permission on an Narrative Reporting model in order to use that model as a data source.

The grid is displayed in Grid Designer with a default dimension selection for the rows and columns. Typically, the **Time** dimension is placed in the columns and the **Account** dimension is placed in the rows.

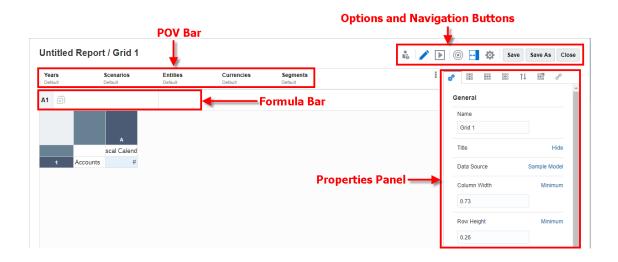
When you add a new grid, the system assigns a default name to the grid. The default name assigned is Grid n, where n is a system-assigned identification number. For example, if you save a grid that is the sixth system-named grid saved in the report, the default name is Grid 6. You can rename the grid in **Grid Properties**.

The system uses the grid name when a function or chart references the grid. For example, if you design a chart to graphically display the data from a grid, the chart properties must reference the grid by its name.

About Grid Designer

The grid designer has the following areas:





- The POV bar is where you select members for the grid point of view. See Setting Up the Point of View.
- The Formula bar enables you to create formulas and functions and select members. See Creating Formulas.
- The Properties panel displays grid, row, column, and cell properties. See Overview of Grid Properties.
- The toolbar lets you switch between edit and preview modes, display the dimension layout overlay, and change your view options. See Grid Toolbar.

About Grid Properties

Related Topics

- Overview of Grid Properties
- General Properties
- Column Properties
- Row Properties
- Formatting Grid Cells
- Sorting

Overview of Grid Properties

The following grid properties are available in the Properties panel while editing a grid:



General properties affect the entire grid. Use general properties to edit some of the following types of items:

- View or change the grid's data source
- Set a title to be displayed above the grid
- Define the default grid behaviors for row and column sizing, row banding, zoom and drill to source.



- Set the member heading properties
- Define the text replacement labels for zero, missing and error data cells
- Enable suppression

For more information, see General Properties.

Column Properties

Column properties affect an entire column. You must click in a column header to select the column that you want to view the properties for. Use column properties to override the default grid settings for column width, repeated headings, and suppression settings.

For more information, see Column Properties

Row Properties

Row properties affect an entire row. You must click in a row header to select the row that you want to view the properties for. Use row properties to override the default grid settings for row height, repeated headings, and suppression settings.

For more information, see Row Properties

Cell Properties

Cell properties affect the selected range of cells in a grid. Use cell properties to change the way cell text is formatted. For example, you can change the way positive and negative numbers are displayed, and you can change the font, color, and size of text within a cell. You can add borders or shading to a cell range, and specify zoom and indent options. You can also show or hide cell attachment links for selected cells in the grid that have attachments at the data source. See Formatting Grid Cells.

^{↑↓} Sorting

You can sort values in a grid. You can add multiple sorts (for example, you can sort by columns and then by rows), and you can add multiple rows or columns to a sort (for example, sort columns by column members, and then by row 3).

For more information, see Sorting

Conditional Properties

Conditional formatting, text and suppression enables you to define formatting, text or suppress cells in a grid that meet conditions that you define. See Working with Conditional Formatting, Text, and Suppression

3

Drill Through

Drill through properties allow you to set up content links on grid data cells, rows, columns, and member header cells. See Working with Drill To Content.

General Properties

General properties affect the entire grid. Use general properties to edit the following:



Table 4-1 Grid - General Properties

Property Name	Descriptions
Name	Edit the grid name. A best practice is to name your grids with a meaningful name for easier identification of multiple grids in a report.
Title	Specify a grid title, which can include text and text functions, to include at the top of the grid output, which can span across column headers. The grid title can also have font, border and shading formatting applied, see the related formatting topics. To add multiple lines to the grid title, use the Alt+Enter keys (Option+Enter on the Mac).
Data Source	Change the data source for the grid
Column Width / Row Height	Set the default column width and row height.
Row Banding	Apply shading to alternate rows in a grid. You can select the default shading color. Any columns or rows with existing shading in the grid are not affected by row banding.
Zoom Zoom Before	Zoom allows you to expand a row or column parent member to see its children, descendants, or bottom level members when you preview a report in HTML. See Zooming on Parent Members in Grids
Ancestors Before Children	Use Ancestor Before Children to display the ancestor members before child members instead of after the child members, when using specific member selection functions such as Children or Descendants. The default setting is False. See Working with the Ancestor Before Children Property
Drill Through to Source	To enable Drill Through to Source , where a file attached to a cell at the data source, such as an EPM Cloud cell file attachment or Essbase Linked Reporting Object (LRO), for the entire grid, set Drill Through to Source to "Show". If set to "Hide", individual cells can still be enabled in Cell Properties . See Working with Drill Through and Cell File Attachments.



Table 4-1 (Cont.) Grid - General Properties

Property Name	Descriptions
Supporting Details Option	Select to display Supporting Details either before or after a member, and with or without the unary operator.
Smart List View	Select to either display the Smart List Name or Value .
Headings	
Member Labels	Change how the row and column headings are displayed. For example, you can display member names, aliases, or both.
	Note: These settings can be overridden at the column or row level. See Overriding a Data Row or Column Heading.
Repeated Heading	Specify whether to suppress, show or merge repeated row or column headings.
Alias Table Name	By default, grids use the alias table that was selected by the end user while previewing the report. However, you can select a different alias table at the grid level. Use Alias Table Name to set an alias table for the grid.
Row Headings Before	By using the Row Headings Before Grid General property, you can define a "butterfly report", positioning the row heading between any two columns. See Working with Butterfly Reports.
Text Options No Data No Access Error	Set the text replacement options for cells with zeroes, no data, error results from a formula, or no access due to cell-level security applied. The Decimal Precision for the Zero
 Zero Values Decimal Precision for Zero 	property specifies how many decimal places are used to determine the text replacement for zero. The default is 0 decimal places. For example, with a data value of .01 :
	 If the property is set to 0 decimal places, the data value will be replaced with the zero value text replacement specified. If the property is set to 2 decimal places, the data value will be displayed as .01 and will not be replaced.



Table 4-1 (Cont.) Grid - General Properties

Property Name	Descriptions
Suppression Zero Values No Data No Access Error	Select whether you want to suppress zeroes, cells with no data, errors, no access, and missing blocks for data cells. Note:
Missing Blocks	Formula cells results are not suppressed via "suppress no data" (#missing) because:
	 Suppress no data is passed to the data source. The data source completes suppression of #missing data before returning the results to the Reports server, where the formula evaluations are performed. Formulas may reference data cells (and possibly other formula cells). The data cells that are suppressed because of #missing values are not included in the formula evaluation. For example, #missing data values are not included as part of the Average() calculation. The value of #missing does not apply to formula cells because they are never "missing" at the data source level. Formula cells, either without a value or with an invalid value, have a value of #error, not #missing.
	To suppress data values in formula cells, use conditional suppression to evaluate them.
	Note:
	If a grid's row or column suppression is disabled, at least one data or formula segment, or a text segment with the text functions CellText or CellValue , needs to be displayed in the grid, then the entire grid will be suppressed.
	If you want to hide all data segments but still want to display the text in the grid, then you can perform one of these steps:
	• Set the row height or column width for the data segment to 1, and then set the font color to White.
	Select the data segment, then enable the Replace Text , and then provide a blank string in the text field.

Table 4-1 (Cont.) Grid - General Properties

Property Name	Descriptions
	Note: For EPM Cloud platform data sources when Suppress Missing Blocks is enabled, you may receive grid results, where a few cells either rows or columns that contain missing data, were not suppressed. This is consistent with results from Smart View and forms. To suppress these missing data in either rows or columns, you need to set the suppressions option to No Data and set the Optimized value to True. The property name Optimized is only available when Suppress No Data is enabled. When Suppress No Data is enabled, and Optimized is also enabled, both Suppress Missing Blocks and Suppress missing rows/columns are applied to grid retrievals to the data source. Note: Suppress Missing Blocks with Zoom enabled on column segments is not
Date Format	supported. The date format for grid cells that contain dates is derived from the User Preferences date format setting. Use Date Format in grid properties to override the date format with a format specific to the grid. This date format will apply to any date cell values in the grid. If you do not specify a date format for the grid, the format from User Preferences is used.
Cell PaddingHorizontalVertical	Specify the number of pixels used to pad cells vertically and horizontally. The default number is 5 pixels. Migrated Financial Reporting (which does not support cell padding) reports have this value set to zero.
GroupingGroup Page BreakNo Page Breaks In Group	Defines how page breaks are handled when previewing the report in PDF format. For more information, see Grouping and Page Breaks



Table 4-1 (Cont.) Grid - General Properties

Property Name	Descriptions
Conditional Expression Use scaled/rounded value	To specify whether conditional formatting and suppression, as well as basic (grid, column or row) suppression, use scaled or unscaled raw data values within a condition, use the grid property Use scaled/rounded value.
	• The default is True , which means that the formatted and scaled data values are used within the condition. For example, if a cell with a data value of 125,016,551 is scaled to thousands and displayed as 125,016 , the 125,016 value will be used within the condition.
	• If the property is set to False , the underlying and unscaled data value will be used within the condition. This setting applies to all conditional formatting and suppression for the grid.

Column Properties

Column Properties

Column properties affect an entire column. You must click in a column header to select the column that you want to view the properties for. Use column properties to override the default grid settings for column width, repeated headings, and suppression settings. The grid setting is displayed in brackets. For example, in the suppression setting for zeroes, **Grid Setting (False)** indicates that zero values are not suppressed at the grid level. Click the setting to override the suppression settings for the selected column with **True** (always suppress zeroes) or **False** (never suppress zeroes), or to use the default for the grid.

Use column properties to edit the following:

Table 4-2 Review the Column Properties

Property Name	Descriptions	
Width	 For column width, you can either: Use the default grid column width. Specify a fixed column width. Specify a minimum column width, where the width will be auto-sized to fit the resulting content in the data cells. For column heading, the column minimum width needs to be sized to fit the desired width of the heading cells. 	
Display	Show or Hide the column	



Table 4-2 (Cont.) Review the Column Properties

Property Name	Descriptions	
Page Break Before	Inserts a page break before a column	
Repeated Heading	If you have the text and/or separator columns between the row header and data columns that you want to repeat with the column headings in HTML and PDF preview, you can use the Repeated Heading property. When enabled (By default Repeated Heading is set to No):	
	 In PDF preview, after any page break, the column headings will include the columns which have the property enabled. In HTML preview, the text or separator columns will be "sticky" along with any heading columns. 	
	Note:	
	The property is only applicable for text and separator columns in Column Properties which occur at the beginning of the columns. The property is not applicable for any text or separator columns that occur after one or more data or formula columns.	
Suppression	Select whether you want to suppress zeroes, cells with no data, errors or no access for data cells in the row.	
Note Template	In Narrative Reporting deployments, for Note Columns, you select a Note Template . For more information, see Setting the Allow Note Entry Property.	

Row Properties

Row Properties

Row properties affect an entire row. You must click in a row header to select the row that you want to view the properties for. Use row properties to override the default grid settings for row height, repeated headings, and suppression settings.

Use row properties to edit the following:

Table 4-3 Review the Row Properties

Property Name	Descriptions
Height	 For row height, you can either: Use the default grid row height Specify a fixed row height Specify a minimum row height, where the height will be auto-sized to fit the resulting content
Display	Show or Hide the row



Table 4-3 (Cont.) Review the Row Properties

Property Name	Descriptions	
Property Name	Descriptions	
Row Banding	There are three property settings for Row Banding that can be set; Grid Setting (off), On, or Off. The default is Grid Setting (Off).	
Page Break Before	Inserts a page break before the row.	
Repeated Heading	If you have the text and/or separator rows between the column header and data rows that you want to repeat with the row headings in HTML and PDF preview, you can use the Repeated Heading property. When enabled (By default Repeated Heading is set to No):	
	 In PDF preview, after any page break, the row headings will include the rows which have the property enabled. In HTML preview, the text or separator rows will be "sticky" along with any heading rows. 	
	Note: The property is only applicable for text and separator columns in Row Properties which occur at the beginning of the rows. The property is not applicable for any text or separator rows that occur after one or more data or formula rows.	
Trailing Characters	You can enable trailing characters (dot, dash, underscore, or custom), for data and formula rows, to be displayed at the end of the header label that extends the width of the row header Trailing characters are enabled and specified by selecting one or more data or formula rows and in Row properties, setting the Trailing Characters property to Dot , Dash , Underscor or Custom . The default setting is None .	
	 Note: The Trailing Characters property does not apply to text or separator rows. If there are multiple dimensions in the rows, the trailing characters are only displayed for the inner-most dimension. The use of a custom trailing characters are now an option. For Reports to be used in a Report Package, the user needs to use one of the pre-defined trailing characters. 	
Note Template	In Narrative Reporting deployments, for Note Rows, you select a Note Template . For more information, see Setting the Allow Note Entry Property	
Suppression	Select whether you want to suppress zeroes, cells with no data, errors or no access for data cells in the row.	

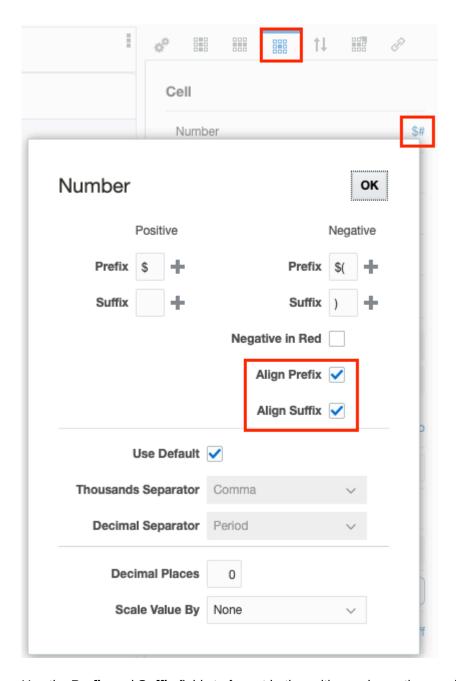


Formatting Grid Cells

Cell properties enable you to change the way the selected range of member header cells and data cells are displayed in the grid.

Formatting Numbers

When you select a data cell in the grid, the properties panel displays a **Number** property. Click the # to open the Number formatting menu.



Use the **Prefix** and **Suffix** fields to format both positive and negative numbers in the cell with characters before or after the number (such as currency symbols, or open and close parentheses for negative numbers). You can manually enter the symbols that you want to

prefix or suffix the number by, or click to select commonly-used characters from a list. You can enter more than one character as a prefix or suffix (for example, -\$). You can also display negative numbers in red text.

Use the **Align Prefix** and **Align Suffix** checkboxes to align prefix and suffix symbols in Cell Number Formatting. These properties, when selected:

- Align currency prefixes in the left-most side of each data cell.
- Align numeric data values with other cells in the same columns and suffixes in the rightmost side of each data cell.

Both properties are unselected by default.

Align Prefix and Align Suffix not selected:

	Actual	Plan	Variance	Variance %
Net Revenue	\$10,506,017	\$12,897,445	\$(2,391,428)	(19)%
Cost of Sales	7,870,438	9,013,702	1,143,265	13
Gross Profit	\$2,635,579	\$3,883,742	\$(1,248,163)	(32)%

Align Prefix and Align Suffix selected:

	Actual	Plan	Variance	Variance %
Net Revenue	\$ 10,506,017	\$ 12,897,445	\$ (2,391,428)	(19)%
Cost of Sales	7,870,438	9,013,702	1,143,265	13
Gross Profit	\$ 2,635,579	\$ 3,883,742	\$ (1,248,163)	(32)%

By default, number cells use the thousands and decimal separators from your User Preferences Formatting settings. De-select the **Use Default** check box to manually specify a thousands or decimal separator.



If Use Default is deselected, if the formatting selections are not changed, the user's formatting preferences will still be used.

Use **Decimal Places** and **Scale Values By** to specify the scale and precision of number values. If the number contains more decimal places than you specify, the system rounds the displayed number.





Tip:

In Scale Values By, use Custom to specify a scale that is not listed. You can also add a negative value in Custom to reverse the sign of the number. For example, to display a positive number as a negative number, select **Custom** and then enter -1 for the scale. Click **OK** to accept your changes.

Formatting Font and Alignment

For both member heading and data cells, the Font and Alignment fields enable you to change the font, size, color, and placement of text within a cell., and to reverse the text direction for right-to-left languages. You can also specify an indent from the left cell margin.

For row and column cells that contain member headings (and not data):

- Use **Indent By** to indent the row headings of each generation or level of a selected member. Specify the number of spaces to indent the values from the left cell margin. You can specify a reverse indentation (from right to left) by using a negative number. You can indent by Generation, or by Level if all of your level zero members are not at the same generation. Select **None** to remove the indent from the row or column.
- Use **Zoom** to enable zooming on the parent member. See **Zooming** on Parent Members in Grids.

For example, using the Narrative Reporting sample model, for Descendants of Total Entity, select **Indent by**, select **Level**, and then enter an **Indent** = 5 to produce the following:



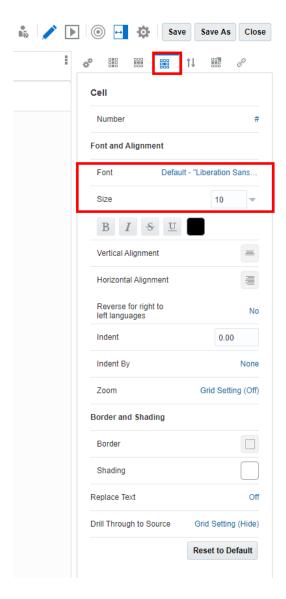
	Fiscal Calendar
North America Corporate	-35,181,985
MA	28,186,672
NY	40,200,754
PA	-9,451,090
East Sales	58,936,335
CA	36,885,174
со	2,238,490
WA	7,297,359
West Sales	46,421,024
IL	-2,914,247
MN	7,467,172
North Sales	4,552,925
FL	4,077,962
TX	-3,967,398
South Sales	110,564
USA Sales	110,020,848
Info Technology	-700,715
Human Resources	-700,715
Facilities	-451,365
Admin Serv	-1,852,795
Accounting	-2,267,072
Payroll	-582,250
Corp Finance	-770,256
Finance	-3,619,578
Marketing Admin	-584,919

Note:

When you select **Indent by** (generation or level), or **Zoom**, a **Relative Indent** field is displayed. Use Relative Indent to adjust the size of the indent of the row member labels. This field displays the current indent in inches or centimeters, depending on your user preference. (See Using the Formatting Tab). The default value is .12 inches. You can adjust this value from -1.00 to 1.00 inches. Use negative values to reverse the indent of the row member labels.

To define the font for a grid cell:

- 2. In the cell properties panel, use the **Font** and **Size** drop down boxes to define the font.



The following default fonts are available:

- Liberation Sans (Arial)
- Liberation Serif (Times New Roman)
- Liberation Mono (Courier New)
- Albany (Japanese)
- Albany (Korean)
- Albany (Simplified Chinese)
- · Albany (Traditional Chinese)

For text cells, the **Text Character Width** property allows a user to choose between more and less conservative sizing of text in a grid text cell. The property can have a value of **Large**, **Medium**, or **Small**. By default, the property is set to **Large**. For more information, see Using the Text Character Width Property.



Formatting Borders and Shading

In **Borders**, click to open the border editor. Click top, bottom, left, right, or all to specify a border, and then click the drop down arrow to specify a border style. Click the border color to change it. You can pick a color from the color picker or manually enter an RGB value. You must enable a border (for example, All) in order to specify a style and color. Click **OK** to accept your changes.

In **Shading**, click to specify a background color for the selected cells. You can pick a color from the color picker or manually enter an RGB value.

Use **Replace Text** to replace the data value of a selected cell with a text string. For example, you can display "Confidential" in a cell that contains sensitive financial information. The text that you enter will be displayed in grid designer as well as all rendered output.

Note:

When you replace zero values, the text replacement is based on the displayed value of zero (which is not necessarily the actual data value). For example, if the data value is ".001" but it is formatted to display with no decimal places, the displayed value for the data is zero and therefore it will be replaced with the text that you specify. You can specify the number of extra decimal places of precision to consider in determining that the value is zero.

Click **Reset to Default** to set all cell formatting for the selected cells back to their default settings.

Allow Note Input

For Narrative Reporting deployments in Note Column and Note Row segments, you can restrict or allow Note entry via the **Allow Note Input** formatting property for specific cells in a Note segment. For more information, see Setting the Allow Note Entry Property.

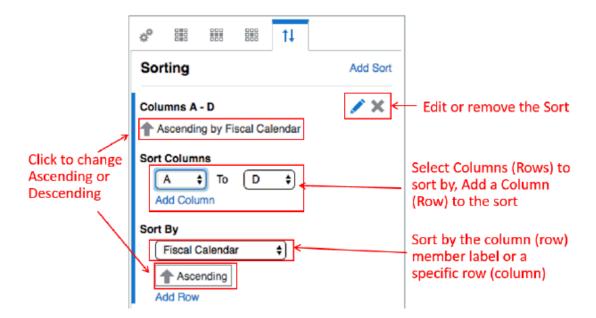
Sorting

†↓ Sorting

Sort values in a grid by clicking **Add Sort** and then selecting to sort on rows or columns. You can add multiple sorts (for example, you can sort by columns and then by rows), and you can add multiple rows or columns to a sort (for example, sort columns by column members, and then by row 3).



Figure 4-1 Sort Options



For more information on sorting with grouping, see Sorting and Grouping topic.

The Sorting dialog box provides these options:

- Ascending/Descending— toggles between ascending and descending sorts.
- Edit— enables you to edit the sort.
- Remove—deletes the sort.
- Add Column/Row—adds a column or row to the sort.

Figure 4-2 Sorting Example

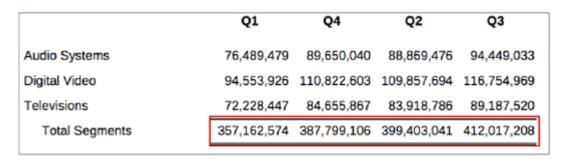


Figure 2 shows an example of the following sort: Columns A to D and Ascending on Row 4.

Grid Toolbar

The toolbar lets you do the following:





Use **Edit** and **Preview** to toggle between Edit and Preview mode. Edit mode allows you to make changes to the grid, while the preview mode enables you to see how the grid will look

when it is published. While in preview mode, use to toggle displaying the POV.



Dimension Layout

Toggles the dimension layout overlay, which enables you to drag dimensions to reorder them or to move them from the **Point of View**, **Rows**, and **Columns**.

You can place multiple dimensions into rows and columns. The dimensions that are not placed in rows or columns are displayed in the point of view bar located at the top of the grid designer.

You can layer multiple dimensions in a row or column. For example, you can place the Scenario and Time dimensions on the same axis to show actual and budget data over a period of time.



If your data source contains attribute dimensions, click the + sign in the POV, row, or column to display attribute dimensions, and then select the dimension to add. You can drag and drop attribute dimensions between axes, just like regular dimensions. Click the X in the attribute dimension label to remove it.



Properties

Use **Properties** to display or hide the grid properties panel.



Actions

Use Actions to do the following:

- Show or hide the formula bar
- Set the default display settings for member labels (member name, alias, or both) for the member selector display, and the global and local POV.
- Select the default font for the grid.
- Select the alias table for the grid.

Using Hidden Grids

You can hide a grid from being displayed in the report output. For example, if you use row or column formulas to pull in data from additional data sources into one grid, you can hide the source data grids by placing them in the hidden sheet.

To hide an existing grid:

1. In the **Report Designer**, select the grid to be hidden.



2. Right-click, and select **Move To**, and then select **Hidden Sheet**.

To create a new hidden grid:

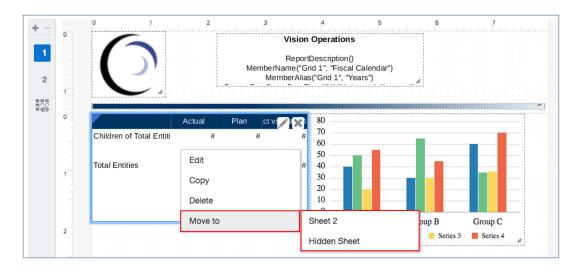


- 1. In the Report Designer, from the sheet panel, click
- 2. To add a grid to a report. See Adding a Grid topic to insert a new grid.

To unhide a hidden grid:



- 1. In the **Report Designer**, from the sheet panel, click
- 2. Select the grid in the **Hidden Sheet** that you want to unhide, then right-click, and select **Move To**, and then select a sheet, where you want to move the grid.



Formatting Best Practices

When formatting a report, keep in mind the following points:

- Cell formatting has precedence over row and column formatting and grid formatting.
- Cell formatting allows you to make exceptions to row and column formatting and grid formatting.
- Row/column formatting has precedence over grid formatting.
- Row/column formatting allows you to make exceptions to grid formatting.
- The correct sequence in formatting a report is:
 - Format the grid.
 - 2. Apply different formatting to rows and columns.
 - 3. Apply specific cell formatting.

To copy formatting from a grid cell, row, or column:

- 1. Select your source cell, row, or column.
- 2. Right-click, and select Copy Formatting.



- 3. Select your destination cell, row, or column.
- 4. Right-click, and select Paste Formatting.

Defining the Point of View

The Point of View (POV) determines the data that will be retrieved into your grid.

Related Topics

- About the Point of View
- Working with the Point of View
- Setting Up the Point of View
- Displaying the Printable Page Member
- · Attribute Dimensions and the Point of View
- Point of View Examples

About the Point of View

A report that contains the grid has a global Point of View (POV) that applies to all report objects in the report that display data. Grids also have a local point of view (POV) which contains all of the dimensions from a data source that are not on the grid rows or columns, and which determines the data that gets displayed in a grid. For more information on global and local POV, see Learning about the Point of View



When you create a report, the first time you add a grid or a chart to that report, the POV of that grid or chart becomes the global POV for that report. When you add subsequent grids or charts to the report, any common dimensions across data sources are combined so that a single selection can affect different data sources. You can override the global POV with a local POV selection for any dimension. For example, if the Scenario dimension in the global POV is set to **Actual**, you can override that selection on a particular grid or chart with a local selection of **Budget**. This setting will affect only that grid or chart; all other grids and charts will display the Actual data from the global POV.

Working with the Point of View

Default Setting

If you do not make any member selections or set any options for a POV dimension, that dimension is set to **Default** while you are in report edit mode.

When you preview a report, you can select any members in a dimension that you have security access to in the data source. Members that you have recently selected are displayed so that you can select from them more conveniently.



Selecting Multiple Members

While you are in edit mode, you can select multiple members for a dimension, and you can also use functions (for example, Children of Total Entities) to define a list of members for the report viewer to choose from.

You can also set **Display Suggestions Only** to restrict viewers to select only from the list of members that you choose. You can preview this list of members in Preview mode.

When multiple members are selected for a POV dimension, you can set the dimension to **Print All Selections**. When you preview the report in PDF or Excel, each member selection will be rendered on a different page or sheet.



If **Print All Selections** is enabled, the fixed list of POV members is output to **PDF** or **Excel**, and all members are retrieved upon report execution for these two formats. The **HTML** preview retrieves only the first POV selection.



Tip:

When a POV dimension has multiple members selected and **Print All Selections** enabled, the PDF Preview of the report displays separate pages for each POV member, but the member name is not displayed in the PDF output of the report. You must use a MemberName or MemberAlias text function to display the member name. See <u>Displaying the Printable Page Member</u>.

Locking or Limiting User Selections

When you define members in a POV dimension, you control what a report viewer can select from. Use **Display Suggestions Only** to either lock the selections so that a report viewer cannot select any other members, or to enable viewers to select members other than the ones that you defined.

If only one member is selected for each dimension, you can also hide the POV from report viewers.

Combining Dimensions from Multiple Grids in the POV

When there are multiple grids in the report that use the same data source, POV dimensions will be combined in the POV bar when previewing the report. For example, if the Scenario dimension is in the column of the first grid and in the POV of the second grid, the Scenario dimension will still appear in the global POV. However, its selections will affect only the second grid.



If you have combined shared dimensions in the Global POV, you must enable **Display Suggestions Only**.



If there are multiple grids in the report with different data sources, POV dimensions will be combined in the POV bar when previewing the report. If the data sources share the same dimension name, only one dimension will be displayed, with only common members between the two data sources listed.



If you want each data source in the POV to list members for a common dimension, move one or both of the dimensions to the local POV.

Setting Up the Point of View

To set up the point of view:

- 1. Open a grid in edit mode of Grid Designer.
- 2. In the POV bar at the top of the grid, click on a dimension label to open the member selector for that dimension.
- 3. In the member selector, select one or more members for the dimension by clicking the check mark next to a member name. You can select individual members, or you can use lists or member selection functions to select multiple members.

Note:

If you do not define a selection for the dimension, the system displays **Default**, and the report viewer can select any member that they have access to for that dimension.

- 4. To set POV options for a dimension, click next to a POV dimension, and then select from the following:
 - Reset Selection—Resets the dimension selection to Default.
 - Hide Dimension—Hides the dimension in Preview mode. This is available only if multiple selections are not defined for the dimension.
 - Global Dimension—Toggles the dimension between Global and Local POV.

Note:

If a POV dimension is defined as Local, when you preview the report in HTML preview, you select the members for that dimension above the grid and not in the Global POV bar at the top of the report. The Local POV is not displayed when previewing the report in PDF preview.

- Display Suggestions Only—Restricts report viewers to selecting only from the members that you specify in the POV. Viewers are not able to select other members for this dimension.
- Print All Selections—Renders each member of a dimension with multiple members on a separate page or sheet when outputting to PDF or Excel.



This option is available only when there are multiple POV member selections defined and **Display Suggestions Only** is selected.

5. Continue selecting members and setting POV options for the remaining POV dimensions as needed. To reset all dimensions to **Default**, click at the far right of the POV bar and select **Reset All to Default**.

Note:

When a POV dimension has a suggested list is set to a single member and the **Display Suggestions Only** property is turned off, the POV dimension will always be set to the specified suggested list member regardless of what the most previous selection for the dimension in another report.

This is done to allow a report designer to enforce a default member for a POV dimension, wherein the default member is the member always initially used when the report is first previewed.

You can change the dimension to be any member as the **Display Suggestions Only** property is turned off.

Displaying the Printable Page Member

When a POV dimension has multiple members selected and **Print All Selections** enabled, the **PDF** or **Excel** output of the report displays separate pages for each POV member, but the member name is not displayed in the PDF output of the report.

To display the member name or alias for the POV dimension in the report, you can use the MemberName or MemberAlias text functions in a grid title, text box or grid text cell. The top left cell in a grid is a text cell that can include text functions.

Inserting the POV Selection in the Grid Title

To enable the grid title and insert a text function to display the POV selection:

- 1. From the **Grid Designer**, select **General Properties**, and then set **Title = Show**. The Title bar is displayed above the grid.
- 2. In the top right of the text box, click $f^{(x)}$.
- 3. Select either MemberName or MemberAlias, and then specify the required Dimension parameters. The Dimension parameter is the POV dimension with multiple members selected and **Print All Selections** enabled.
- 4. Click **Select** to add the text function to the text box. You can add additional text as required, for example "Current Month:", before or after the text function.
- 5. Click to validate the text in the Title bar.



- 6. **Optional**: Set the format for the text and Title bar, such as font, alignment, shading and border, by clicking format next to the **Title** property, under the **General Properties** panel.
- 7. Click **Close** to return to the report design. When previewing the report in HTML or PDF, the POV dimension member will display for each page of the report in the top of the grid.

Displaying the Segment POV member in the Grid Title shows an example of using the MemberAlias function to display the Segment POV member in the Grid Title, and Displaying the Results of the Formula in the Header shows the results of that formula, with "All Segments" displaying in the header on page one and "Televisions" on page two.

Figure 4-3 Displaying the Segment POV member in the Grid Title



Figure 4-4 Displaying the Results of the Formula in the Header

Segment: All Segments	Actual	% of Net Sales	Plan	% of Net Sales
Net Revenue	157,041,184	100%	157,730,824	100%
Cost of Sales	106,377,180	68%	106,662,144	68%
Gross Profit	50,664,003	32%	51,068,680	32%

Segment: Televisions				
	Actual	% of Net Sales	Plan	% of Net Sales
Net Revenue	31,774,728	100%	31,915,657	100%
Cost of Sales	24,992,745	79%	25,059,696	79%
Gross Profit	6,781,982	21%	6,855,961	21%

Inserting the POV Selection in the Header

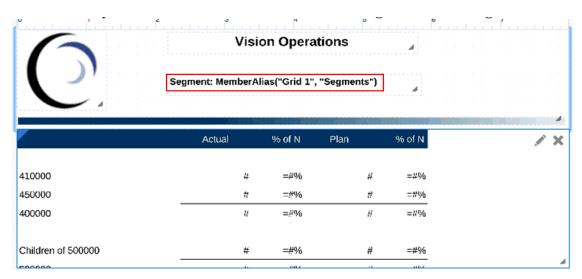
To insert a text function to display the POV selection in the header:

 From the report header or footer, right-click and select Add Report Content, and then select Text.

- 2. Click or Setup Text.
- 3. In the top right of the text box, click f^{χ}
- 4. Select either MemberName or MemberAlias, and then specify the required parameters such as Grid and Dimension. The Dimension parameter is the POV dimension with multiple members selected and **Print All Selections** enabled.
- 5. Click **Select** to add the text function to the text box. You can add additional text as required, for example "Current Month:", before or after the text function.
- **6. Optional:** Set the format for the text, such as font and alignment, in the text box properties panel.
- Click Close to return to the report design. When previewing the report in PDF, the POV dimension member will display for each page of the report in the page header.

Figure 3 shows an example of using the MemberAlias function to display the Segment POV member in the header, and Figure 4 shows the results of that formula, with "All Segments" displaying in the header on page one and "Televisions" on page two.

Figure 4-5 Formula to Display Segment POV in Header





Vision Operations Segment: All Segments Actual Plan Net Sales Net Net Revenue 157,041,184 10096 157,730,824 10096 Cost of Sales 106,377,180 68% 106,662,144 68% 50,664,003 Gross Profit 3296 51,068,680 3296 Vision Operations Segment: Televisions Actual Net Plan 31,774,728 31,915,657 Net Revenue 100% 100% Cost of Sales 24,992,745 79% 25,059,696 79% Gross Profit 6,781,982 21% 6,855,961 21%

Figure 4-6 Result of Formula to Display Segment POV in Header

Inserting the POV Selection in the Top Left Grid Cell

To insert a text function to display the POV selection in the header:

- 1. In Grid Designer, select the top left cell of the grid, which is a text cell.
- 2. In the top right of the formula bar, click f^{χ}
- 3. Select either MemberName or MemberAlias, and then specify the required parameters such as Grid and Dimension. The Dimension parameter is the POV dimension with multiple members selected and **Print All Selections** enabled.
- 4. Click **Select** to add the text function to the text box. You can add additional text as required, for example "Current Month:", before or after the text function.
- 5. Click to validate the text in the formula bar.
- Optional: Set the format for the text, such as font and alignment, in the text box properties panel.
- 7. Click **Close** to return to the report design. When previewing the report in PDF, the POV dimension member will display for each page of the report in the top left cell of the grid.

Figure 5 shows an example of using the MemberAlias function to display the Segment POV member in the top left cell, and Figure 6 shows the results of that formula, with "All Segments" displaying in the top left cell of page one and "Televisions" on page two.

Figure 4-7 Formula to Display Segment POV in Top Left Cell



Figure 4-8 Result of Formula to Display Segment POV in Top Left Cell

Segment: All Segments	Actual	% of Net Sales	Plan	% of Net Sales
Net Revenue	157,041,184	100%	157,730,824	100%
Cost of Sales	106,377,180	68%	106,662,144	68%
Gross Profit	50,664,003	32%	51,068,680	32%
		% of	Dian	% of
Segment: Televisions	Actual	Net Sales	Plan	Net Sales
		Sales		Sales
Net Revenue	31,774,728	Sales 100%	31,915,657	Sales
Net Revenue Cost of Sales		Sales		Sales

Attribute Dimensions and the Point of View

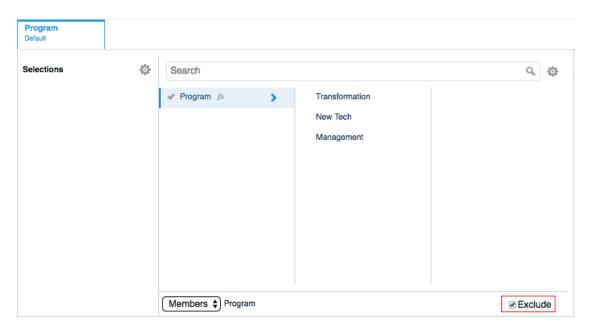
Attribute dimensions are dimensions that are associated with standard dimensions, typically used to display calculated values. Since they are dynamically calculated at retrieval time, they can add processing time to a report retrieval. When an attribute dimension is in the POV, report designers can choose to exclude the attribute dimension from the initial report query for users. This allows keeping the attribute dimension in the POV without the additional query processing, until a user chooses to select an attribute member.

To exclude an attribute dimension in the POV:

- 1. Open a grid in edit mode of Grid Designer.
- 2. In the POV bar at the top of the grid, click on an attribute dimension label to open the member selector for that dimension.
- 3. In the bottom right of the member selector, select the Exclude check box. See Figure 1.

- Optional: Select one or more members for the dimension.
- 5. Optional: Set one or more POV options.

Figure 4-9 Exclude Check Box for Attribute Dimensions



When previewing a report or a grid, attribute dimensions in the POV that are set to **Exclude** will display a – for their selections, denoting that they are not included in the report query.

A POV member can be selected and the attribute dimension will be included in the report query. If **Display Suggestions Only** is not enabled for the attribute dimension in the POV by the report designer, you can select **All Members** for the dimension and enable **Exclude** if desired. Otherwise, you can close the report or grid preview and preview the report or grid again to return to the Exclude state for the POV dimension. Any POV selection made for an attribute dimension when Exclude is enabled is not saved for future sessions. When re-running the preview, the selection will be reset to -.

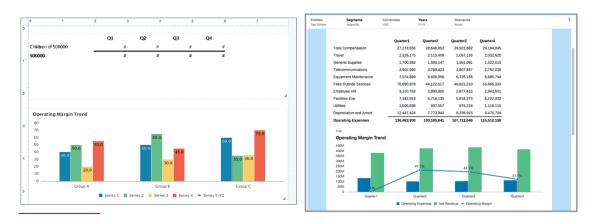
Point of View Examples

The following examples illustrate how global and local POV work together in grids, and how the POV options affect the grid display.



Example 1: Two Grids with the Same Data Source

Figure 4-10 Preview: Grid 1 and Chart 1



In this example, the report contains one grid and one chart, which uses a second embedded grid. Figure 1 shows the grid and chart in preview mode.

Figure 4-11 Example 1, Grid 1: Design Mode



Figure 2 shows grid 1 in design mode. Note the following:

- · All dimensions are Global.
- Entities, Currencies, and Scenarios are single selections with **Display Suggestions Only** enabled.
- Segments is set to Default.
- Years has multiple selections with Display Suggestions Only enabled.

Figure 4-12 Example 1, Grid 1: Preview Mode

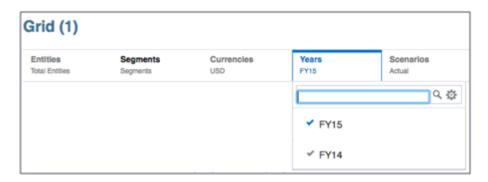


Figure 3 shows Grid 1 in preview mode. Note the following:

- Entities, Currencies, and Scenarios: viewer cannot change selections.
- Segments: viewers can select any member.
- Years: viewers can select only from the two members defined.

Figure 4-13 Example 1, Chart 1: Design Mode

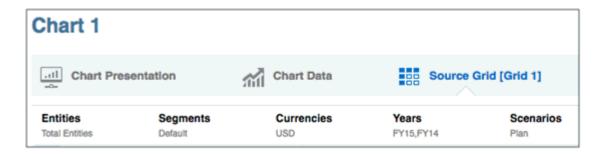


Figure 4 shows Chart 1 in design mode. Note the following:

- Scenarios is set to local, with a single selection only (Plan). Display Suggestions Only is enabled.
- The remaining selections are set from the global POV.

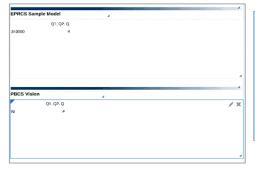
Figure 4-14 Example 1, Chart 1: Preview Mode

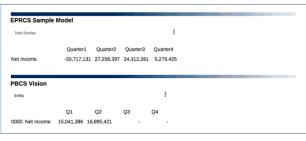


Figure 5 shows Chart 1 in preview mode. Note that Scenarios is displayed in the local POV, and cannot be changed.

Example 2: Two Grids with Different Data Sources

Figure 4-15 Preview: Two Grids with Different Data Sources







In this second example, the report contains two grids with different data sources. Grid 1 has an Narrative Reporting data source. Grid 2 has an Planning Modules data source.

The Entity and Scenarios dimensions are common across both data sources.

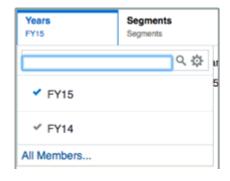
Figure 4-16 Example 2, Grid 1: Design Mode



Figure 7 shows Grid 1 in design mode. Note the following:

- The Entity dimension is local; all others are global.
- Years, Segments, and Currencies are set to Default, with Display Suggestions Only disabled.
- Scenario has multiple selections, and **Display Suggestions Only** is enabled.
- Entity has one selection (Total Entities), with **Display Suggestions Only** disabled.

Figure 4-17 Example 2, Grid 1: Preview Mode



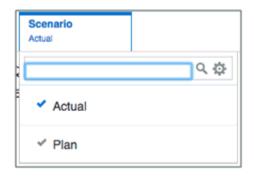


Figure 8 shows elements of Grid 1 in preview mode. Note the following:

- For *Years*, *Segments*, and *Currencies*, viewers can select any members. Recent members are displayed
- For Scenario, viewers can select only from the two members that were defined.
- For Entity, viewers can select any member. Total Entities is displayed.

Figure 4-18 Example 2, Grid 2: Design Mode



Figure 9 shows grid 2 in design mode. Note the following:

- The *Entity* dimension is local; all others are global.
- HSP_View, Year, Version, and Product each have one selection, with Display Suggestions Only enabled.
- Scenario has multiple selections, with **Display Suggestions Only** enabled.
- Entity has multiple selections, with **Display Suggestions Only** disabled.

Figure 4-19 Example 2, Grid 2: Preview Mode



Figure 10 show Grid 2 in preview mode. Note the following:

- For HSP_View, Year, Version, and Product, the viewers cannot change the selection.
- For Scenario, viewers can select only from the two defined members. .
- For *Entity*, viewers can select any member. "Entity" is displayed when the grid is previewed.

Figure 4-20 Example 2: Report Preview

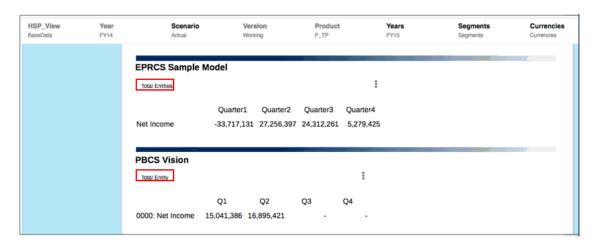


Figure 11 shows a preview of the report with both grids. Note the following:

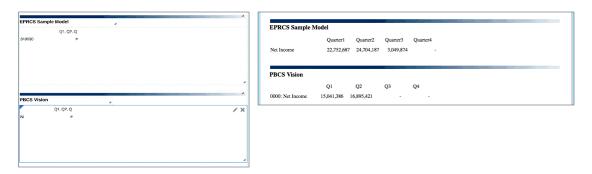
- The common dimension names are Entity and Scenario.
- The combined POV when previewing contains the following:
 - The global POV for Scenario drives both grids.
 - The local POV for Entity in each grid has a different selection.
 - Years, Segments, and Currencies for Grid 1 can be changed.



HSP_View, Year, Version, and Product for Grid 2 cannot be changed.

Example 3: Two Grids with Different Data Sources and Multiple Selections in Common Dimension

Figure 4-21 Preview: Two Grids with Multiple Selections in a Dimension



In this third example, a report contains two grids with different data sources. Grid 1 has an Narrative Reporting data source. Grid 2 has an Planning Modules data source.

The *Entity* and *Scenarios* dimensions are common across both data sources. In addition, the *Scenario* dimension uses a member selection function to return multiple members.

Figure 4-22 Example 3, Grid 1: Design Mode

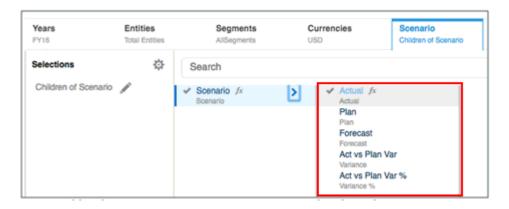


Figure 13 shows Grid 1 in design mode. Note the following:

- All dimensions are global.
- Years, Segments, Currencies, and Entity have one selection each, with Display Suggestions Only enabled.
- Scenario has a member selection function: Children (Scenario). Display Suggestions Only is enabled.



Notice that there are five members listed for Scenario: Actual, Plan, Forecast, Act vs Plan Var, and Act vs Play Var %.

Figure 4-23 Example 3, Grid 1: Preview Mode



Figure 14 shows Grid 1 in preview mode. Note the following:

- For Years, Segments, Currencies, and Entity, viewers cannot change the selection.
- For *Scenario*, only the common members between the two data sources are listed. Even though there are five members available for this data source, only the three members that are common to both data sources are available: Actual, Plan, and Forecast.

Figure 4-24 Example 3, Grid 2: Design Mode

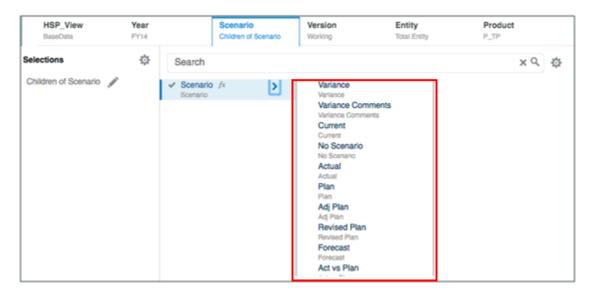


Figure 15 shows grid two in design mode. Note the following:

- HSP_View, Year, Version, Product, and Entity all have one selection each, with Display Suggestions Only enabled.
- Scenario has a member selection function: Children (Scenario). Display Suggestions Only is enabled.





Notice that there are ten members listed for scenario: Variance, Variance Comments, Current, No Scenario, Actual, Plan, Adj Plan, Revised Plan, Forecast, and Act vs Plan.

Figure 4-25 Example 3, Grid 2: Preview Mode

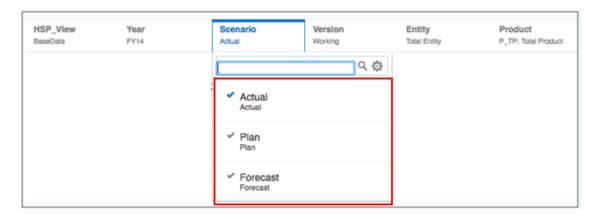


Figure 16 shows grid 2 in preview mode. Note the following:

- For HSP_View, Year, Version, Product, and Entity, viewers cannot change the selection.
- For *Scenario*, only the common members between the two data sources are listed. Even though there are ten members available for this data source, only the three members that are common to both data sources are available: Actual, Plan, and Forecast.

Figure 4-26 Example 3: Report Preview



Figure 17 shows a report preview with a common POV. Note the following:

- Scenario is the only dimension that can be changed by a viewer.
- Only the Scenario members that are common to both data sources are able to be selected: Actual, Plan, and Forecast.



Working With Rows and Columns in Grids

You organize and add content to grids by adding data, formula, text, and separator rows and columns. In Narrative Reporting deployments, you can insert a **Note** Rows and Columns into a grid for structured POV-based commentary entry.

Related Topics

- Inserting Rows and Columns
- Copying, Moving, and Deleting Rows and Columns
- Copying Member Selections from one Grid Segment to Another
- Hiding Rows or Columns
- Merging and Separating Rows or Columns
- Inserting Page Breaks Before a Row or Column
- Defining Formula Rows and Columns

Inserting Rows and Columns

You insert rows or columns into a grid to add content, such as data, formulas, text, and Notes to the grid. Types of rows and columns include:

• **Data**—Members of dimensions that are retrieved from a database connection. The member in a data row or column defaults to the top-level member of the dimension.



A data segment is a row or column that retrieves data from a database. An expanded data segment is a row or column that can expand, so that the resulting grid expands to two or more rows or columns when viewed. Often, expanded data segments use functions such as *Children Of or Descendants Of*. A single data segment is a row or column that remains a single row or column when shown in the viewer.

A # symbol in the cell, row, or column indicates that it is a data cell, row, or column.

- Formula—Values based on formulas. Commonly used to calculate totals, averages, and variances on data rows or columns.
 - An = # symbol in the cell, row, or column indicates that it is a formula cell, row, or column.
 - Formula row or column headings, which display the row number or column letter, display a symbol as an indicator.
- **Text**—Text typed into the cells or returned dynamically through a text function.

Text rows, columns, or cells in grids do not contain symbols when added to a grid. They are initially blank until populated with text.



Note:

Text segments or cells do not support special characters such as superscript and subscript.

Text row or column headings, which display the row number or column letter, display a symbol T as an indicator.

Separator—Inserts a blank row or column.

Separator rows do not contain data or text. They serve as a visual dividing line between rows or columns in a grid.

 Note - For Narrative Reporting deployments, you can insert a Note row or column into a grid for structured POV-based commentary entry. Note row or column headings, which

display the row number or column letter, display a symbol as an indicator

To insert a row or a column in a grid:

- 1. In an existing grid, select a row or column header.
- Right-click, or click the arrow next to the column or row header cell, and select Insert Before or Insert After, and then select Data, Formula, Text, or Separator or Note (Narrative Reporting deployments only).
- 3. Populate the row or column:
 - For a data row or column, right-click the row or column heading or click the arrow next to the column or row header cell, and then select dimension members to place in the row or column. See Assigning Members to Data Rows or Columns.
 - For a formula row or column, select the row or column heading and build a formula in the formula bar at the top of the Report Designer. See Defining Formula Rows and Columns
 - For a text row or column, enter text or text function directly in the row, column, or cell, in the formula bar at the top of the Report Designer. See Text Functions.
 - For a Note Row or Note Column, select member, select a Note Template, and set other properties. See Setting up the Inline Grid Entry of Notes

Copying, Moving, and Deleting Rows and Columns

When copying, moving, and deleting rows and columns, keep in mind the following points:

- Moving a row or column will delete the source row or column after you paste the contents in a new position.
- Copying a row or column will keep the source row or column after you paste the contents in a new position.
- If you copy or move a row or column, you can paste it only in the same grid.
- You must copy or move the entire row or column.

To copy or move rows and columns in grids, select the desired rows or columns, and then right-click or click the down arrow in the header, and select either **Copy** or **Move**. Then, select the row or column that you want to move the rows or columns, and right-click or click the down arrow in the header, and select **Paste Before** or **Paste After**.



To delete rows or columns, select the desired rows or columns, and then right-click or click the down arrow in the header and select **Delete**.

Copying Member Selections from one Grid Segment to Another

You can copy member selections from one grid row/column segment to another one (same dimension segment).

To copy and paste member selection between segments:

- 1. Right-click on a row/column header segment and select **Copy Members**.
- 2. Select another segment and right click and select Paste Members.
- Optionally select another segment and continue performing a Paste Members operation, as needed.



While you cannot select multiple destination header segments, you can perform a **Paste Members** operation multiple times after performing a **Copy Members**.

Hiding Rows or Columns

You can hide rows or columns in a grid so that the values are not displayed when you print or view a report.



The data and calculations in rows or columns are evaluated, regardless of the formatting that is applied to them.

To hide a row or column in a grid:

- 1. In the Grid Designer, select a row or a column.
- 2. In the Properties panel, click for columns, or for rows.
- 3. In Display, click Show to toggle it to Hide.

Merging and Separating Rows or Columns

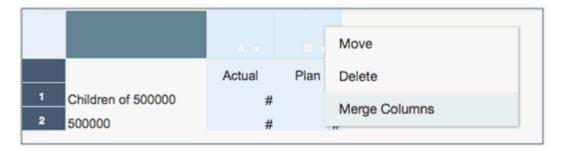
You can separate multiple member selections in a data row or column, or you can combine multiple data row or column selections into a single data row or column.

Merging Rows or Columns

To merge rows or columns, select multiple rows or columns, right-click, and select **Merge Rows** or **Merge Columns**.

As an example, Figure 1 shows a grid with the Actual member of the Scenario dimension in column A, and the Plan member in column B.

Figure 4-27 Before Merging



Select both columns, right-click, and select Merge Columns.

Figure 4-28 After Merging



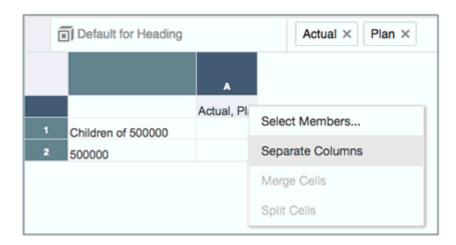
Figure 2 shows the Actual and Plan members merged together in a single column.

Separating Rows or Columns

To separate rows or columns, right-click on a row or column header and select **Separate Rows** or **Separate Columns**.

As an example, Figure 3 shows a grid with the Actual and Plan members of the Scenario dimension in column A.

Figure 4-29 Before Separating





Select the column, right-click, and select **Separate Columns**.

Figure 4-30 After Separating

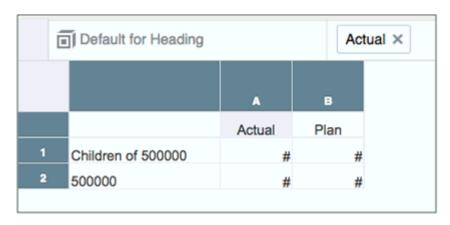


Figure 4 shows the Actual and Plan members separated into two columns.

Inserting Page Breaks Before a Row or Column

Inserting a page break before a row or column in a grid enables you to break the report data at a specified location while keeping required line items together. Page breaks are indicated with a heavy, dashed line.

To insert a page break before a row or column in a grid:

- With a grid displayed in the Report Designer, select a row or column.
 You cannot insert a page break before the first column in a report or above the first row in a report.
- 2. In the Properties panel, click for columns, or for rows.
- 3. In Page Break Before, click No to toggle it to Yes.

Defining Formula Rows and Columns

A formula consists of a combination of grid references, mathematical functions, and arithmetic operators. A grid reference uses values from the current grid or another grid in a calculation. You can define arithmetic formulas on formula rows, columns, cells, or a range of formula cells in a grid. For example, you can build a formula that adds one or more rows. Or, you can multiply two rows, add a third row, then display the result. For an explanation of the mathematical functions you can use in formulas, see Mathematical Functions.

When defining formula rows or columns, keep in mind the following points:

- Formula results are calculated based on the underlying data values in one or more specified cells. If the cells used in a formula are formatted to use scaling, the formula results may differ from the displayed values for the cells, since the underlying, unformatted data values are used in the formula.
- By default, cells that contain missing data (#MISSING) are not treated as zero (0) in formulas, unless specified differently using the "IfNonNumber" property. In a formula that uses division, an error is returned.

Inserting a Formula Row or Column

To insert a formula row or column:

 Select a row or column, then select Insert Before or Insert After, and then select Formula

The formula row or columns is inserted with a = #

2. In the formula bar at the top of the Grid Designer, enter a formula, or click to select from a list of formulas.

See Using the Formula Bar.

Calculating at the Cell Level

You can create a custom cell-level formula on cells in a formula row or column.

Figure 1 shows an example of a cell that is calculated to display the % variance. Cell D4 displays the % variance between the sum of "Jan" and the sum of "Feb"; specifically, ((356-350)/350) *100=1.71%. A cell level formula gives the intended result by placing a custom formula in the cell D4. The formula needed to get the correct result is (([B]-[A])/[A]) * 100.

Figure 4-31 Reason for Using Cell Level Calculation

		Α	В	С	D
		Jan	Feb	Var	%Var
1	Cola	100	105	5	5.00%
2	Root Beer	200	203	3	3.00%
3	Grape	50	48	(2)	(4.00%)
4	[1].sum	350	356	6	1.71%

To calculate at the cell level:

- Select a formula cell or cells.
- 2. In the formula bar at the top of the Report Designer, click ____, and perform an action:
 - Select Use the Column/Row Formula to use the default formula for the column or row.
 - Select **Custom Formula** to create your own formula. Enter the formula in the formula text box to the right, or click \sum to select from a list of formulas.

See Using the Formula Bar.



Using the Formula Bar

The formula bar provides a central location to create formulas and select members when setting up grids in Reports.

.The formula bar provides different functionality depending on the row or column type:

- For formula rows and columns, you enter formulas and set the row or column header label.
- For data rows and columns, you select members and set the row or column header label.
- For text rows and columns, you enter text to display in the grid.

The formula bar is displayed below the POV bar so you can easily access its functionality.

Creating Formulas

When you select a cell, column, or row containing a formula, you can apply a unique formula to that cell. When you create formulas, keep in mind the following points:

- For optimal performance, use row or column formulas as opposed to cell formulas whenever possible.
- Avoid using cross-axis references and consider using a cell reference if possible.

To create a formula:

1. In a grid, insert a formula row or column and select the formula cell.

To apply a formula to the entire column or row, click the column or row header cell.

When you use a cell formula in a row or column formula, the cell formula should reference the cells exactly (intersection) and not just the row and column.

See Defining Formula Rows and Columns.

2. Do one of the following:

See Using Functions.

- Enter a formula manually.
- Click , select a function from the drop-down list, and enter the formula parameters.

3. Click to validate the formula, or click to clear the formula bar and start over.

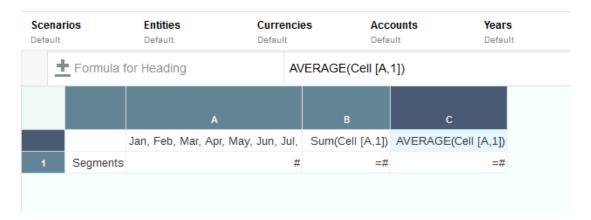
Example Report with Formulas

Figure 1 shows the use of the Sum and Average functions to summarize data for the year. It uses the Narrative Reporting sample model as its data source. You must create the sample application in order to follow along with the steps in the example.



Figure 4-32 Formula That Summarizes the Data for the Year

Grid 1



The report resulting from this formula will include:

- Monthly total figures for the "Segments" dimension
- A total for all months calculated using the Sum function
- An average amount per month, calculated using the Avg function

To create this example using Reports:

- 1. Create a grid with "Segment" for the row and "Fiscal Calendar" for the column.
- 2. Select the cell that contains "Fiscal Calendar", and then click to bring up member selection.
- 3. Place all twelve months in the selected pane and remove "Fiscal Calendar".
- Insert two formula columns: one for the annual total and another for the average monthly amount.

In this example:

• The first formula column that falls outside the months of the "Fiscal Calendar" member contains a Sum function that adds the figures for each month. Since all months are defined in one cell, the reference is to that cell location.

The formula is:

```
Sum(Cell [A,1])
```

• The second formula column calculates the average of the months for the "Fiscal Calendar" member. Because there are 12 months in a year, the Avg function adds all monthly totals and divides the total by 12.

The formula is:

```
Average(Cell [A,1])
```

In general, there are two ways to specify a data formula in a grid, a row or column formula, or a cell formula:

 Row/Column—Apply a formula to the entire row or column, relative to each cell in that row or column. To define the formula, select the formula row or column header, and then enter the formula in the formula bar. There are some performance benefits when applying row/column formulas.

• **Cell**—Apply a formula only to cells in a formula row or column.

To define the formula, select the cell, click , select **Custom Formula**, and then enter the formula in the formula bar.

If the cell intersects a formula row and formula column, you can select to use the row formula or the column formula as the cell formula. For more information, see Calculating at the Cell Level.

If a formula repeats for each cell in a row or column, use a "Row/Column" formula. If different formulas are performed on each cell, use a "cell" formula.

Modifying Member Selection Using the Formula Bar

When working with members in a grid, you use the formula bar to add and modify member selections. You can either use the member selector or manually enter members and functions in the formula bar, and auto-complete will list matches based your entry. You can make a selection by clicking on any of the suggestions shown in the drop down.

You can also copy a selection and paste it into the formula bar for another header cell for the same dimension. For functions that have "inclusive" as a parameter (for example, Children, Descendants, etc.), you can also **Toggle Inclusive** on or off from the formula bar.



The formula bar does not support manual entry of member aliases, only member names.

To modify member selection using the formula bar:

- 1. In a grid, select a heading cell of a data row or column.
- 2. Do one or more of the following:
 - Remove a selection: To remove a selection from the grid, click the X next to a
 member name.
 - Manually enter a selection: Enter a member name or function to add it to the grid.
 Using auto-complete you can select a matching member or function from the list. See
 Using Auto-complete in the Formula Bar for more details.
 - Use Member Selector: Click in the formula bar, and use the Select Members dialog box to select or remove members.
 - Copy and Paste selections: Right-click on a selection in the formula bar and select Copy. Select a heading cell of another data row or column for the same dimension, right-click in the formula bar and select Paste.
 - Toggle Inclusive: Right-click on a member selection in the formula bar and select Toggle Inclusive to toggle between including the member or not. For example, Children of Q1 vs. Children of Q1 (Inclusive).



The new members are displayed in the grid. For information on member selections, see Assigning Members Using Functions.

Note:

- Reports utilize a metadata cache to speed up member queries and member selection operations such as searches and formula bar type-ahead. The cache is generated and populated for each report designer and end-user the first time a report is accessed during their session. The cache remains in place throughout the user's current session and is cleared when a user signs out of the Cloud EPM business process (For example, Narrative Reporting, Planning, and so on) where Reports are being used and accessed.
- If a cube's dimensions and members are updated while a Reports user is in an active session, the metadata cache may not be updated to reflect dimension and member changes. A user will need to sign out and sign back into their Cloud EPM Business process to refresh the metadata cache to reflect any changes made.
- To optimize report performance for dimensions with over 25,000 members, the metadata cache will not utilized. This means the formula bar type-ahead search is disabled, and the search in the member selector is only based on the member name (not alias) and is a "starts with" type search, rather than a "contains" type search.

When modifying member selection using the formula bar, keep in mind the following points:

- Member names in the formula bar are not case-sensitive.
- You cannot combine numerical functions with member functions; for example, Sum(Children of (Product) (Inclusive)).

Using Auto-complete in the Formula Bar

You can manually enter member names, including Substitution and User Variables (preceded by an ampersand "&"), and functions in the grid formula bar, auto-complete will list matches based your entry. You can make a selection by clicking on any of the suggestions shown in the drop down.

Most of the member selection functions are supported, except for functions that require multiple parameters. Auto-complete will return error messages for invalid selections.



For dimensions with over 25,000 members, the formula bar type-ahead search is disabled.

The following functions are supported with auto-complete:

- Ancestors
- Bottom
- Children

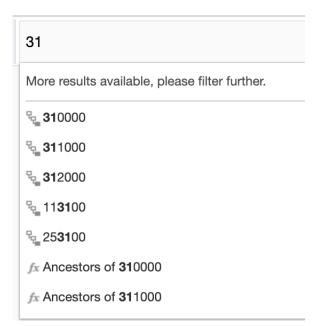


- CurrentPOV
- DynamicTimeSeries
- Descendants
- Generation
- Level
- Parent
- RelativeMembers up to (+/-) 15
- SameGeneration
- SameLevel
- Siblings

The following functions and selections are **not** supported with auto-complete:

- PeriodOffset
- Prompt
- Property
- Range
- Saved Selections
- Except
- Intersect
- Match

For example, refer to the following images.





Children of More results available, please filter further. **Children of Entities **Children of Total Entities **Children of E01 **Children of E01_101 **Children of E01_101_1000 **Children of E01_101_1100 **Children of E01_101_1100

Working with Conditional Formatting, Text, and Suppression

Conditional formatting, text and suppression enables you to customize grid and text results that meet the criteria that you specify.

Conditional Formatting enables you to apply formatting to cells in a grid if the values in those cells meet predefined conditions. For example, you can highlight all cells in a grid that contain a data value of zero with a yellow background.

Conditional Text enables you to generate dynamic text based on predefined conditions and a combination of static text and text functions, which return member labels and data values to complete the resulting text. For example, you can display text for a variance values over 10% using the following text and text functions: MemberAlias ("Entities") revenue value of CellValue ("A") was CellValue ("C") above Plan to return something like the following text in a text box, row or column: . "Division ABC revenue of 18,719 was 12% above Plan" Conditional Text that defined is inserted into a Text box, row, column or cell using the ConditionalText text function. See ConditionalText

Conditional Suppression enables you to suppress rows or columns in a grid based on specified attributes or values. For example, you can suppress all rows that contain cells with data values under 100.



When performing suppression on rows or columns for zero, no data (#missing), or error values, it is recommended to use basic suppression and not conditional suppression for better performance and efficiency. Basic suppression can be applied to the entire grid or specific rows and columns.

For more information on using conditional formatting and suppression with grouping, see Conditional Formatting and Conditional Suppression with Groupings topic.



Watch this tutorial video, you'll learn how to apply conditional formatting and suppression in reports.



- Applying Conditional Formatting and Suppression in Reports.

Watch this tutorial video, you'll learn how to apply conditional text to reports.



-- Applying Conditional Text to Reports.

Creating a Condition

In order to get started with conditional formatting, text and/or conditional suppression, you first define the condition on the Conditional Properties panel. For more information about the criteria and parameters available for each conditional format or suppression type, see Conditional Formatting, Text and Suppression Criteria and Parameters.

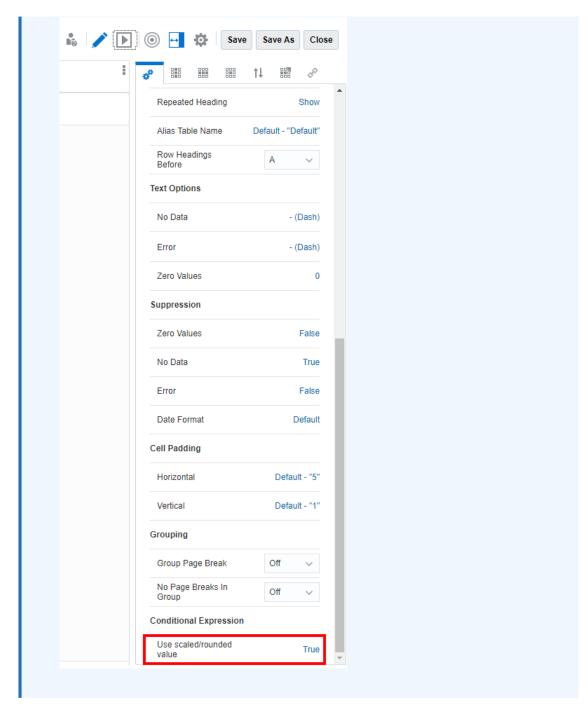


Note:

When defining a condition that tests for data values, for example, Cell Value, Row Value, Column Value or Current Cell Value, in Grid Properties, you specify if conditional formatting and suppression uses scaled or unscaled raw data values within a condition using the grid property **Use scaled/rounded value**.

- The default is **True**, which means that the formatted and scaled data values are used within the condition. For example, if a cell with a data value of "125,016,551" is scaled to thousands and displays as "125,016", the "125,016" value will be used within the condition.
- If the property is set to **False**, the underlying and unscaled data value will be used within the condition. This setting applies to all conditional formatting and suppression for the grid.





To define a condition:

- 1. Select the area of the grid that you want to add a conditional format (cells, rows, or columns) or conditional suppression (rows or columns) to.
- 2. In Grid Properties, click
- 3. Perform an action:
 - To create a conditional format and/or text, click Formats/Text, and then click



To create a conditional suppression, click Suppressions, and then click



Note:

- When performing suppression on rows or columns for zero, no data (#missing), or error values, it is recommended to use basic suppression and not conditional suppression for better performance and efficiency. Basic suppression can be applied to the entire grid or specific rows and columns.
- When using Conditional Suppression on a row or column segment(s) where there are one or more conditional expressions, such as Data Values in Current Row/Column > 1000, and if you also have Basic Suppression such as Suppress No Data enabled, then you must modify the Conditional Suppression definition to include a conditional expression for Basic Suppression applied, such as Data Values in Current Row/Column = No Data. This applies to all the Basic Suppression types (No Data, No Access, Zero, and Error).
- The Analytic Dimension setting within the Conditional Properties is specific to the Generative AI (GenAI) feature in Reports in Narrative Reporting.
- **4.** Enter a descriptive name for the conditional format/text or suppression in the **Name** field. The name must be unique for the grid.

Note:

You do not need to enter anything in the **Applies To** field. After you create the condition, the Applies To field will list the areas of the grid that you identified in step 1. You can modify the values in the Applies To field to change the area of the grid that you want the condition to apply to.

- 5. In the expression builder, click **Attribute** and select an attribute that you want to test for. For example, you can test on the current cell value, or a member name.
 - After you selected an **Attribute**, the Qualifier and Operator fields will change to reflect the available parameters.
- 6. If applicable, specify a **Qualifier**. For example, if you selected Member Name for the type, you then enter the name of the member that you want to test for as the qualifier.
- 7. Select an **Operator**.
 - For numerical conditions (data values), use a numerical operator (equal to, not equal to, greater than, less than, and so on.).
 - For textual conditions (for example, Member Name) use a textual operator (starts with, ends with, and so on).
- 8. Select or enter a **Right Qualifier**, which is the condition that you are testing for.
 - For numeric qualifiers, you can use delimiters and the negative sign (-). All other prefixes and suffixes are ignored.
 - For textual qualifiers (such as Member Name), manually enter the text string that you want to test for.



Member Selector is not available in the expression builder.

9. **Optional**: Click to insert additional expression condition rows.

Use **AND** or **OR** to combine or differentiate the conditions. For example, you can create a condition that tests for data values greater than or equal to 100 AND less than or equal to 1000.

Click to remove an expression condition row.

- **10.** Formatting/Text Only: In the right panel:
 - In the Format tab, specify the format (for example, font size, border, and shading) for the condition. Click # to open the number formatting menu. See Formatting Numbers in Formatting Grid Cells.



In the conditional formatting panel, if any format fields are not changed or defined (for example, font styles, number formatting, and so on), the affected grid cells will use the cell formatting defined in the Grid Cell properties for the undefined fields and not the undefined field in conditional formatting. For example, in conditional formatting, under number formatting, if a negative prefix and suffix are not changed or defined, the affected grid cell will use the negative prefix and suffix defined in the Grid Cell properties.

For Narrative Reporting deployments in Note Column and Note Row segments, you can restrict or allow Note entry via the **Allow Note Input** formatting property for specific cells in a Note segment. For more information, see Setting the Allow Note Entry Property.

• In the Text tab, define the text to display. You can manually enter static and insert one or more text functions using the



button. You can also format the text using



, which formats all the returned text, as text cells cannot display mixed formatted content, only one format can be applied to all the text.



Note:

Regarding formatting for Conditional Text:

If the ConditionalText function is inserted into a grid cell, the formatting defined for the Conditional Text will always override the cell formatting in the grid or report output.

If the Conditional Text function is inserted into a text box:

- In the Conditional Text Format dialog, if Use Default is not selected and a
 format is defined, even if formatting is defined for the ConditionalText
 function in the text box, the formatting defined for the Conditional Text will
 override the text box formatting in the report output.
- In the Conditional Text Format dialog, if *Use Default* is selected, and formatting is defined for the <code>ConditionalText</code> function in the text box, the text box formatting will be used in the report output.

The format and/or text that you specify is displayed in the sample at the top of the Conditional Formats/Text panel.

11. Optional: Select (or multi-select) an expression condition row, and then right-click or select



For more information on grouping expressions, see Working with Advanced Conditions

12. Click **OK** to save the condition.

The condition is displayed in the Conditional Properties panel. For formats, the sample formatting is also displayed, for text, a portion of the text definition is displayed.

Conditional Formatting Example

In this example, we will set up conditional formats to reflect "traffic lighting" on an Actual vs. Plan Variance % column, which will display either a green, yellow or red cell background color depending on the percent value:

- Cells with values greater than 0% will be highlighted green.
- Cells with values less than 0% and greater than -10% will be highlighted yellow.
- Cells with values less than or equal to -10% will be highlighted red.

The original grid is displayed in Figure 1.



Figure 4-33 Traffic Lighting Example, Original Grid

	Actual	Plan	Variance %
USA	65,172,091	66,014,146	(127.6)
Canada	3,140,824	3,220,978	(248.9)
Mexico	1,570,412	1,547,722	146.6
Argentina	1,570,412	1,570,633	(1.4)
Brazil	3,140,824	3,066,455	242.5
Colombia	1,570,412	1,580,371	(63.0)
Peru	1,570,412	1,535,119	229.9
Venezuela	785,206	773,675	149.0
Europe	54,179,208	54,343,071	(30.2)

In the grid editor, select the variance % cell, and then click to create the conditional formats. For details about creating conditions, see Creating a Condition.



For the **Green** condition, create a conditional format where the Current Cell Value is greater than 0:



For the **Yellow** condition, create a conditional format with two expressions:

- Current Cell Value is less than 0, AND
- Current Cell Value is greater than -10



For the **Red** condition, create a conditional format where the Current Cell Value is less than -10:



Figure 2 shows the final grid with all three conditions applied to the Variance % column.

Variance Actual Plan 96 USA 65,172,091 66,014,146 (127.6)Canada 3,140,824 3,220,978 (248.9) Mexico 1,570,412 1,547,722 146.6 Argentina 1,570,412 1,570,633 (1.4)Brazil 3,066,455 242.5 3,140,824 Colombia 1,570,412 1,580,371 (63.0)Peru 1,570,412 1,535,119 229.9 773,675 Venezuela 785,206 149.0 54,179,208 54,343,071 (30.2)Europe

Figure 4-34 Grid with Traffic Lighting Conditions Applied

Conditional Text Example

In this example, we will set up conditional text to display, for each Entity in the grid rows, specific text for revenue variances with a positive number and different text for revenue variances with a negative number. The text will be surfaced in a text box at the bottom of the report.

The text will display, along with some static text, the row member Entity alias, the Actual revenue value, the variance percent and the percent of revenue to total revenues. The conditions and related text assigned to the Actual vs. Plan Variance % column, will be as follows:

- Green: Cells with values greater than 0%: MemberAlias("Entities") Revenue of CellValue(A) was CellValue(C) above Plan, resulting in CellValue(D) of Total Revenue
- Red: Cells with values less than 0%: MemberAlias("Entities") Revenue of CellValue(A) was CellValue(C) below Plan, resulting in CellValue(D) of Total Revenue

In reference to the text functions used in the conditional text:

- CellValue (A) returns the Actual Revenue data value for the current row in column A
- CellValue (C) returns the Actual vs. Plan % data value for the current row in column C
- CellValue (D) returns the % of Total Revenue (report formula column, which is hidden from display) for the current row in column D. This example illustrates that the text functions can refer to hidden rows or columns that are not displayed in the grid output.

The grid preview is displayed.



	Actual	Plan	Variance %
North America	61,705,569	63,248,355	(2.4%)
Latin America	7,550,266	7,672,372	(1.6%)
EMEA	50,612,433	51,388,138	(1.5%)
APAC	18,719,667	18,687,978	0.2%
Total Entities	138,587,934	140,996,843	(1.7%)

To create the conditional text:

1. In the grid editor, select the variance % cell, and then click



to create the conditional text. For details about creating conditions, see Creating a Condition.



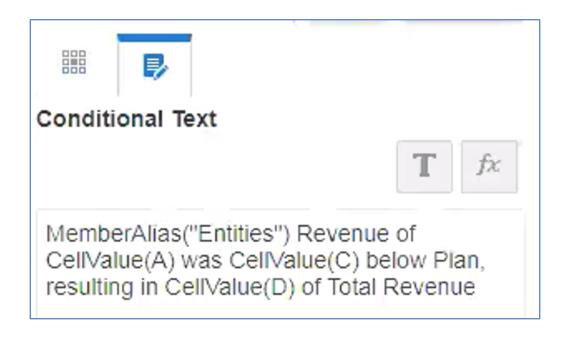
- 2. Set the condition, as below:
 - For the **Green** condition, create a conditional format where the Current Cell Value is greater than 0:





In the Conditional Text tab, use the enter the static text:

to select the required functions and manually enter the static text:

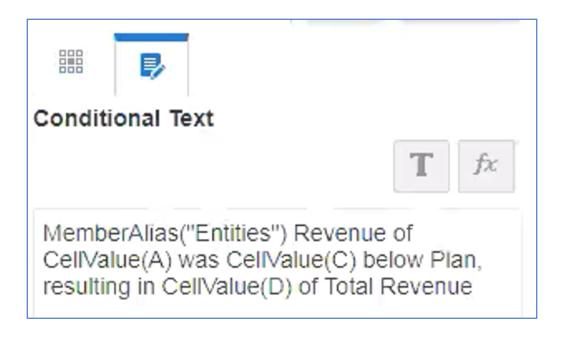


- 3. Set the condition, as below:
 - For the **Red** condition, create a conditional format where the Current Cell Value is less than 0:

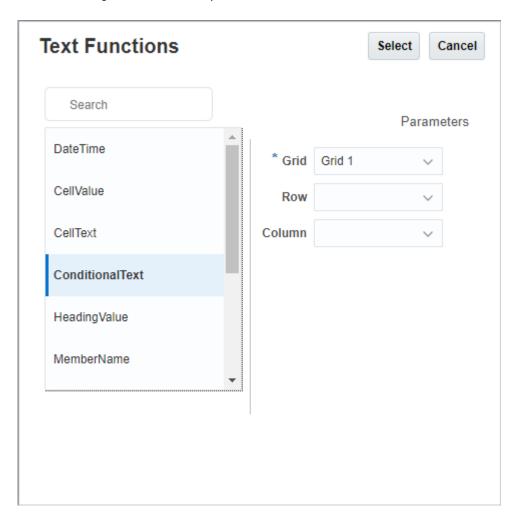


In the Conditional Text tab, use the enter the static text:

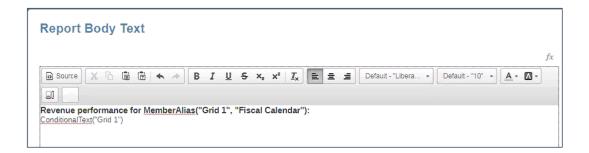
fx to select the required functions and manually enter the static text:



4. Edit an existing text box in the report and insert the Conditional Text text function.



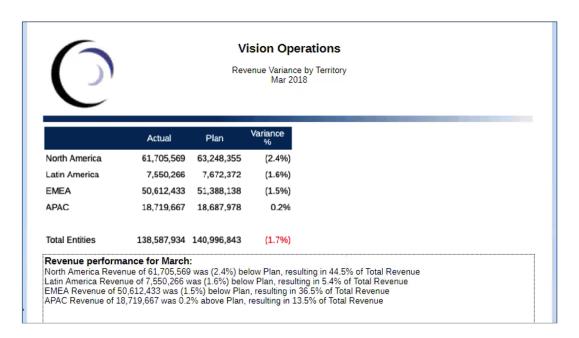
No additional parameters are needed, as we want to display all conditional text in the text box.



5. Click



to view the report with the text box results.

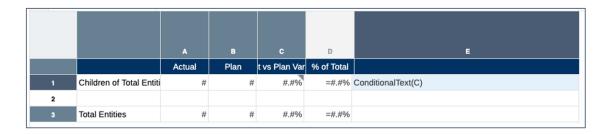


Displaying Conditional Text in the Grid

An alternate example for displaying the <code>ConditionalText</code> in the grid, instead of the conditional text being displayed in a text box at the bottom of the report, the text results for each Entity row member will be displayed in a text column in the grid.



Refer to the following grid design, where column E is a text column, which contains the ConditionalText text function. It is retrieving the text for column C (where the condition is applied), for the current row, as no row parameter has been specified.



Click



to view the grid results. You can view the text function results for each row in the text column.

	Actual	Plan	Variance %	
North America	61,705,569	63,248,355	(2.4%)	North America Revenue of 61,705,569 was (2.4%) below Plan, resulting in 44.5% of Total Revenue
Latin America	7,550,266	7,672,372	(1.6%)	Latin America Revenue of 7,550,266 was (1.6%) below Plan, resulting in 5.4% of Total Revenue
EMEA	50,612,433	51,388,138	(1.5%)	EMEA Revenue of 50,612,433 was (1.5%) below Plan, resulting in 36.5% of Total Revenue
APAC	18,719,667	18,687,978	0.2%	APAC Revenue of 18,719,667 was 0.2% above Plan, resulting in 13.5% of Total Revenue
Total Entities	138,587,934	140,996,843	(1.7%)	

Conditional Suppression Example

In this example, we will set up a conditional suppression that suppresses all Region rows where Actual revenues are less than \$1,000,000.

The original grid is displayed in Figure 1.



Figure 4-35 Conditional Suppression Example, Original Grid

	Actual	Plan
USA	65,172,091	66,014,146
Canada	3,140,824	3,220,978
Mexico	1,570,412	1,547,722
Argentina	1,570,412	1,570,633
Brazil	3,140,824	3,066,455
Colombia	1,570,412	1,580,371
Peru	1,570,412	1,535,119
Venezuela	785,206	773,675
Europe	54,179,208	54,343,071
Middle East	1,570,412	1,569,958
Africa	1,570,412	1,595,784
Australia	1,570,412	1,558,355
China	6,281,647	6,150,091
Hong Kong	4,711,236	4,668,667
Japan	3,140,824	3,078,852
Phillipines	785,206	796,577
Malaysia	1,570,412	1,578,939
South Korea	1,570,412	1,530,059
Taiwan	1,570,412	1,551,375

In the grid editor, select row 1, and then click to create the conditional suppression. For details about creating conditions, see Creating a Condition.

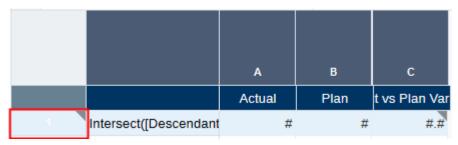
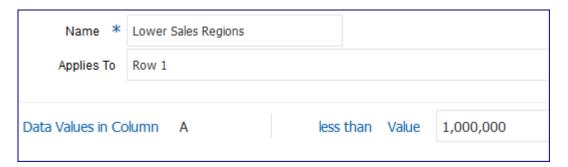


Figure 2 shows the condition to create, with Data Values in column A less than 1,000,000.

Figure 4-36 Conditional Suppression Example, Condition

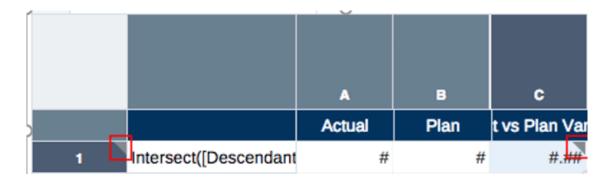


When you apply the conditional suppression, the rows with Actual data values less than 1,000,000 are no longer displayed:

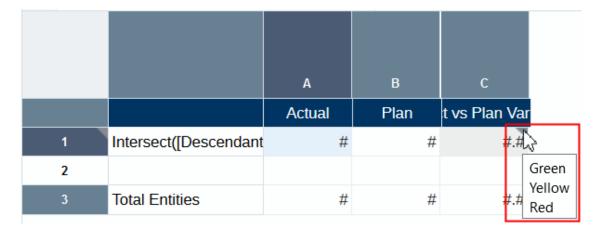
	Actual	Plan
USA	65,172,091	66,014,146
Canada	3,140,824	3,220,978
Mexico	1,570,412	1,547,722
Argentina	1,570,412	1,570,633
Brazil	3,140,824	3,066,455
Colombia	1,570,412	1,580,371
Peru	1,570,412	1,535,119
Europe	54,179,208	54,343,071
Middle East	1,570,412	1,569,958
Africa	1,570,412	1,595,784
Australia	1,570,412	1,558,355
China	6,281,647	6,150,091
Hong Kong	4,711,236	4,668,667
Japan	3,140,824	3,078,852
Malaysia	1,570,412	1,578,939
South Korea	1,570,412	1,530,059
Taiwan	1,570,412	1,551,375

Conditional Formatting, Text and Suppression Indicators and Tooltips

When a conditional format, text, or suppression applies to a cell, row, or column, a grey triangle is displayed in the upper right corner of the row or column header or the cell.



When you hover your mouse over the indicator, a tooltip displays the list of conditional formats, text, or suppressions that apply to that cell, row, or column.



Managing Conditions

After you have created conditional formatting, text or suppressions, you manage the conditions in the Conditional Properties panel. You can perform these actions on existing conditions:

• With a region of the grid highlighted, click the check box next to the condition to select or de-select it, which applies or removes it from that region. For example, if you want to apply an existing format to another cell in a grid, highlight that cell in the grid and then click the check box next to the condition to apply it to that region.



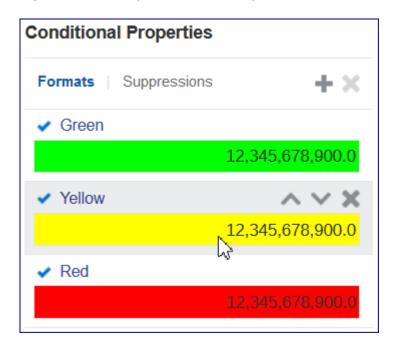
You can apply multiple conditional formats and/or text to a region of a grid, but only one suppression condition per row or column. See Applying Multiple Formats/Text to a Region.

- Click on the name of a conditional format, text, or suppression to edit that condition.
- Hover over a condition and then click or to change the precedence of that condition. See Applying Multiple Formats/Text to a Region.
- Hover over a condition and then click to delete that condition.

Applying Multiple Formats/Text to a Region

You can apply multiple formats to a selected region of a grid. When conditions overlap, conditional formats are applied in an order of precedence from top to bottom in the list. For example, Figure 1 shows three conditional formats that are active for a selected region (note that all three formats have check marks next to them). In this example, the **Green** format has precedence over **Yellow** and **Red**, and the **Yellow** format has precedence over **Red**.

Figure 4-37 Multiple Formats Example



To change the order of precedence, hover over a conditional format, and then click or very conditional format, and then click or very conditional format.

Conditional Formatting, Text and Suppression Considerations

Performance Considerations

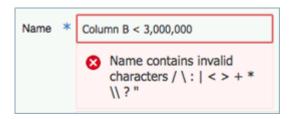
Conditional formatting, text and suppression can impact performance depending on the size of the report, the criteria used, and the frequency of use (that is, how many cells have conditional formatting, text or suppression applied to them). Keep in the mind the following considerations for performance:

- Data value comparisons are the fastest.
- Criteria such as Member Name and Member Alias/Description are also fast because they
 are part of the metadata or data query.
- Avoid criteria such as Generation, Level, and Account Type whenever possible, as
 performance is slower because those criteria are not part of the regular metadata or data
 query.

Error Handling

Syntax errors are typically displayed in the Conditional Format/Text and Suppression editor:





Non-syntax errors are displayed when you preview the report or grid. For example, if a conditional suppression on a row refers to Column B and that column is deleted from the grid, an error is displayed when you preview the report:



Conditional Formatting, Text and Suppression Criteria and Parameters

Conditional Formatting/Text Criteria and Parameters

Туре	Definition	Reference Value	Operator	Comparison Options
Cell Value	Data value (numeric, text or date) in a specified cell	Enter the cell reference defined by the column and row (for example, A,1).	For numeric and date types: equals not equals greater than less than greater than or equal to less than or equal to rextual types: equals not equals not equals starts with ends with contains does not start with does not contain	Select from one of the following: Value (enter data value) Cell Value (enter cell value: column, row) Row Value (select row number) Column Value (select column number) Zero No Data Error Suppressed

Туре	Definition	Reference Value	Operator	Comparison Options
Row Value	Data value in a specified row	Select row number from a list of rows in the grid.	For numeric and date types: equals not equals greater than less than greater than or equal to less than or equal to less than or equal to ror textual types: equals not equals starts with ends with contains does not start with does not contain	following: Value (enter data value) Cell Value (enter cell value: column, row) Row Value (select row number) Column Value (select column number) Zero No Data Error Suppressed
Colum n Value	Data value in a specified column	Select column number from a list of columns in the grid	For numeric and date types:	 Value (enter data value) Cell Value (enter cell value: column, row)
	the current	Not applicable	For numeric and date types:	Select from one of the following: Value (enter data value) Cell Value (enter cell value: column, row) Row Value (select row number) Column Value (select column number) Zero No Data Error Suppressed



Туре	Definition	Reference Value	Operator	Comparison Options
Memb er Name	Member name that applies to a cell, row or column	Select member name's dimension from a list of dimensions in the model	 equals not equals starts with ends with contains does not start with does not end with does not contain 	Enter text for member name
Memb er Alias	Member alias that applies to a cell, row or column	Select alias table and member alias' dimension from a list of dimensions in the model	 equals not equals starts with ends with contains does not start with does not end with does not contain 	Enter text for member alias
er	Either member name or member alias (searches both fields) that applies to a cell, row or column	member name or alias' dimension	 equals not equals starts with ends with contains does not start with does not end with does not contain 	Enter text for attribute dimension member name
Memb er Attrib ute	Associated attribute dimension member that applies to the cell, row or column	Select associated attribute dimension from a list of attribute dimensions	 equals not equals starts with ends with contains does not start with does not end with does not contain 	Enter text for attribute dimension member name
ation	Generation number in a specified dimension	Select generation from list of generations in the model.	 equals not equals greater than less than greater than or equal to less than or equal to 	Select a generation number for the specified dimension
	Level number in a specified dimension	Select level from list of levels in the model.	 equals not equals greater than less than greater than or equal to less than or equal to 	Select a level number for the specified dimension



Туре	Definition	Reference Value	Operator	Comparison Options
Relati ve Gener ation	A specified number of generations away in a specified dimension Note: The relative generation is calculated taking into account all the members of the row or column axis that have conditional format defined.	Select the relative generation number for a specific dimension.	 equals not equals greater than less than greater than or equal to less than or equal to 	Select a generation number away from the specified dimension
Relati ve Level	A specified number of levels away in a specified dimension Note: The relative level is calculated taking into account all the members of the row or column axis that have conditional format defined.	Select the relative level number for a specific dimension.	 equals not equals greater than less than greater than or equal to less than or equal to 	Select a level number away from the specified dimension
Zoom Level	Dimension member to zoom into.	Not Applicable	 equals not equals greater than less than greater than or equal to less than or equal to 	Select a zoom level to format for the specified dimension.



Туре	Definition	Reference Value	Operator	Comparison Options
Accou nt Type	The account type that applies to a cell, row or column	Not Applicable	Is Is Not	Select from one of the following account types: For EPM Cloud: Revenue Expense Asset Liability Equity Non-Expense For Essbase, Profitability and Cost Management, and Narrative Reporting: Expense Non-Expense
Positi on Withi n	First or last row or column of a data segment with multiple members or a member function.	Select either Row or Column	Is Is Not	Select either Top Row/ Column or Bottom Row/ Column.
UDA	User Defined Attribute (UDA) that applies to a cell, row or column	Select dimension with the UDA from a list of dimensions in the model	 equals not equals starts with ends with contains does not start with does not end with does not contain 	Enter text for UDA name



Conditional Suppression Criteria and Parameters

Туре	Definition	Reference Value	Operator	Comparison Options
Cell Value	Based on the data type of the specified cell, it can be: Numeric Value Date Smart List Text	Enter the cell reference defined by the column and row (for example, A,1).	For numeric and date types: equals not equals greater than less than greater than or equal to less than or equal to equal to For textual types: equals not equals not equals starts with ends with contains does not start with does not end with does not contain	Select from one of the following: Value (enter numeric, text, smart list, or date value) Note: Not for Text type. Cell Value (enter cell value: column, row) Row Value (select row number) Column Value (select column number) Zero No Data Error Suppressed
Data Values in Row	Data value in a specified row	Select row number from a list of rows in the grid	For numeric and date types: equals not equals greater than less than greater than or equal to less than or equal to equal to For textual types: equals not equals not equals starts with ends with contains does not start with does not end with does not contain	Select from one of the following: Value (enter numeric, text, smart list, or date value) Note: Not for Text type. Cell Value (enter cell value: column, row) Row Value (select row number) Column Value (select column number) Zero No Data Error Suppressed



Туре	Definition	Reference Value	Operator	Comparison Options
Data Values in Columns	Data value in a specified column	Select column number from a list of columns in the grid	For numeric and date types: equals not equals greater than less than greater than or equal to less than or equal to equal to For textual types: equals not equals not equals total and	Select from one of the following: Value (enter numeric, text, smart list, or date value) Note: Not for Text type. Cell Value (enter cell value: column, row) Row Value (select row number) Column Value (select column number) Zero No Data Error Suppressed
Data Values in Current Row/ Column	Data value in a current row or column	Not Applicable	For numeric and date types: equals not equals greater than less than less than or equal to less than or equal to equal to For textual types: equals not equals not equals tot ends with contains does not start with does not end with does not contain	Select from one of the following: Value (enter numeric, text, smart list, or date value) Note: Not for Text type. Cell Value (enter cell value: column, row) Row Value (select row number) Column Value (select column number) Zero No Data Error Suppressed



Туре	Definition	Reference Value	Operator	Comparison Options
Member Name	Member name that applies to a cell, row or column	Select member name's dimension from a list of dimensions in the model	 equals not equals starts with ends with contains does not start with does not end with does not contain 	Enter text for member name
Member Alias	Member alias that applies to a cell, row or column	Select alias table and member alias' dimension from a list of dimensions in the model	 equals not equals starts with ends with contains does not start with does not end with does not contain 	Enter text for member dimension
Member Name or Alias	Either member name or member alias (searches both fields) that applies to a cell, row or column	Select alias table and member name or alias' dimension from a list of dimensions in the model	 equals not equals starts with ends with contains does not start with does not end with does not contain 	Enter text for member name or alias
Member Attribute	Associated attribute dimension member that applies to the cell, row or column	Select associated attribute dimension from a list of attribute dimensions	equalsnot equals	Enter text for attribute dimension member name
Generation Number	Generation number in a specified dimension	Select generation from list of generations in the model.	 equals not equals greater than less than greater than or equal to less than or equal to 	Select a generation number for the specified dimension

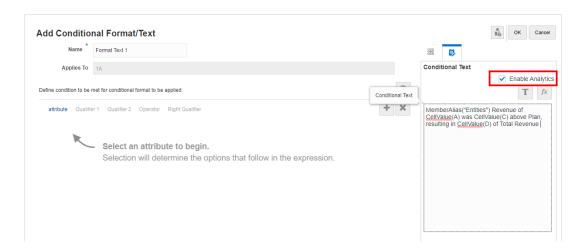
Туре	Definition	Reference Value	Operator	Comparison Options
Level Number	Level number in a specified dimension	Select level from list of generations in the model.	 equals not equals greater than less than greater than or equal to less than or equal to 	Select a level number for the specified dimension
Zoom Level	Dimension member to zoom into.	Not Applicable	 equals not equals greater than less than greater than or equal to less than or equal to 	Select a zoom level to suppress for the specified dimension
Account Type	The account type that applies to a cell, row or column	Not Applicable	Is Is Not	Select from one of the following account types: For EPM Cloud: Revenue Expense Liability Equity Non-Expense For Essbase, Profitability and Cost Management, and Narrative Reporting: Expense Non-Expense
UDA	User Defined Attribute (UDA) that applies to a cell, row or column	Select dimension with the UDA from a list of dimensions in the model	 equals not equals starts with ends with contains does not start with does not end with does not contain 	Enter text for UDA name

Analytics in Conditional Text

When previewing a report in HTML format where the conditional text is displayed in a text box, you can drill from the text to a new browser tab containing the related zoom-enabled grid for further analysis capability.

Additional information and considerations:

This feature is enabled by default in HTML preview. All conditional text in a text box will
display as hyperlinks. If you want to disable this feature for one or more conditions in the
Conditional Text definition, then you need to clear the Enable Analytics selection.



- The target grid, which is the report grid where the conditional text is defined against opens
 in a new browser with zoom enabled for all parents on the grid. No other report content (for
 example: charts, text boxes, images, or other grids) will be displayed in the target unless
 the target grid has a dependency on another grid such as formulas or text functions. In this
 case, dependent grids will appear below the source grid.
- The target grid displays an indicator on the cell where the conditional text is defined. However, if you hover the mouse on the cell, will display the original conditional text that was defined in the Conditional Text.



- In PDF preview, the hyperlinks do not appear, and the originally defined text formatting will be preserved.
- If the source report's grid is hidden, it will still be displayed in the target grid.
- Conditional text in a grid's text cells does not support this feature, the text will not be displayed as hyperlinks.
- If grouping is enabled on the source report grid, the zoom will not be enabled in the target grid, as both features cannot be enabled in a grid.
- The target grid will appear in a thin report viewer with some limited display preferences in the **Actions** menu. The ability to edit the grid or "**Save as Snapshot**" are not available.

The header and footer sections are not visible in the target grid HTML preview, hence their height is set to **0**.

Hidden rows or columns in the source report's grid will not be displayed in the target grid.

For example, using "Sample Report 6 (Cond. Format & Suppression)", note that all conditional text in the text box is displayed as hyperlinks. After clicking on the first row of text "USA Revenue of 65,172,091", the zoom-enabled grid open in a separate browser tab, where you can zoom on parent members to display detailed data.

Source Page: You can see all Analytics on conditional text information displayed as hyperlinks.



Target Page: You can see the Target grid with some of the row parent members in the zoomed state.





Working with Advanced Conditions

You can set up multiple conditional expressions to a Conditional Format/Text or Suppression definition and group together expressions as needed.

To add or remove expressions:



Click to insert additional expression condition rows.

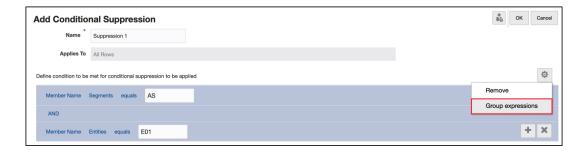
Use **AND** or **OR** to combine or differentiate the conditions. For example, you can create a condition that tests for data values greater than or equal to 100 AND less than or equal to 1000.



2. Click to remove an expression condition row.

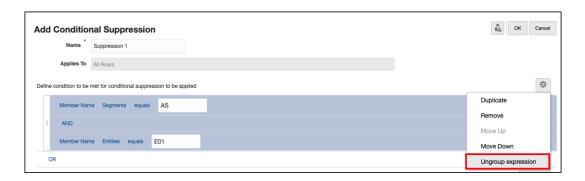
To add a grouping:

- You can use Ctrl-click to select multiple conditions and the conditional operator (AND, OR).
- In the Actions menu, select Group expressions.



To remove a grouping:

- You can use Ctrl-click to select multiple conditions and the conditional operator (AND, OR).
- 2. In the Actions menu, select Ungroup expression.



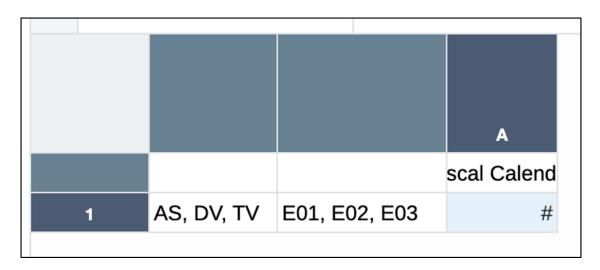
Example:



The following example illustrates an advanced conditional suppression, with multiple expressions and grouping, using the Narrative Reporting Sample Application.

Example 4-1 Initial Report Design and Preview

The example grid has the **Segments** and **Entities** dimensions in the row, each with three selections, and **Fiscal Calendar** in the columns.



The previewed result is as follows, with all three **Entities** appearing for each of the three **Segments**.



		Fiscal Calendar
AS	E01	10,458,462
	E02	106,444
	E03	27,834,681
DV	E01	3,348,439
	E02	715,244
	E03	39,169,044
TV	E01	-7,028,305
	E02	-707,496
	E03	20,923,006

Example 4-2 Conditional Suppression Setup

For the conditional suppression, we will suppress the following member combinations:

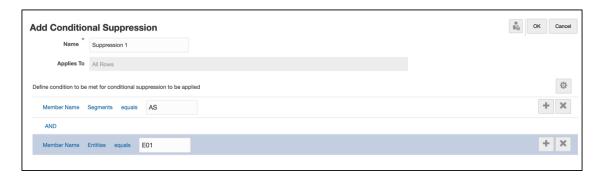
- AS > E01
- DV > E02

The conditional expressions needed to achieve the suppression are as follows:

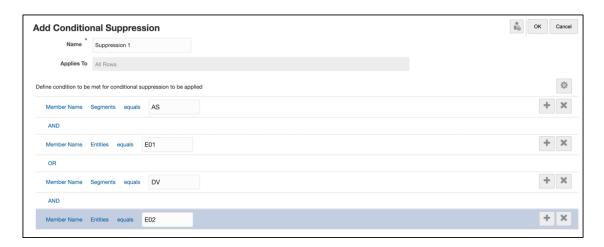
- ("Member Name for Segments = AS" AND "Member Name for Entities = E01")

 OR
- ("Member Name for Segments = DV" AND "Member Name for Entities = E02")

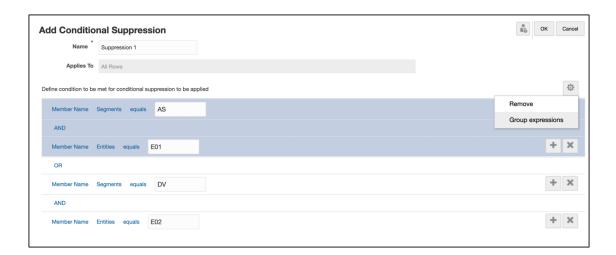
After selecting Row 1 and creating a Conditional Suppression definition, the first two expressions (to suppress the AS > E01 combination) are as follows. Note the conditional operator is **AND**, so the suppression will be executed when both expressions are true.



Next, you need to add two additional expressions (to suppress the DV > E02 combination). Note the conditional operator separating the last two expressions are **AND**, and the conditional operator separating the first two and last two expressions are **OR**.



To group the two sets of expressions, the first two expressions and their conditional operator are selected and **Group expressions** is selected from the **Actions** menu.



The second set of expressions and their conditional operator are selected and grouped.



You can preview the grid result. Note that the two-member combinations (AS > E01, DV > E02) are suppressed from the grid output.

		Fiscal Calendar
AS	E02	106,444
	E03	27,834,681
DV	E01	3,348,439
	E03	39,169,044
TV	E01	-7,028,305
	E02	-707,496
	E03	20,923,006

Zooming on Parent Members in Grids

Zoom allows you to expand a row or column parent member to see its children, descendants or bottom level members when you preview a report in HTML.

When you design a grid, you can enable three types of zoom for end-users:

- You can enable zooming on the entire grid, which enables all parent members to be zoomed into.
- You can enable zooming on specific row or column segments in a grid.
- You can enable ad hoc zooming, which allows end users to decide which members they
 want to be able to zoom into.

You can display zoomed in members either before or after the parent member in the grid by setting the **Zoom Before** grid property. See Grid-level Zooming. You can also set conditional formatting, text and suppression on specific zoom levels to format or suppress different levels of a hierarchy. For example, you can display the bottom level members in bold text in your grid. See Working with Conditional Formatting, Text, and Suppression.

Zoom in on member Zoom out on member January February March Quarter1 44,003,086 39,614,955 50,269,215 133,887,256 **Gross Profit** Operating Expenses 30,428,078 27,371,016 33,761,234 91,560,328 13,575,009 12,243,939 16,507,981 42,326,928 Pretax Income From Operations Other Exp (Inc) -2,745,368 -2,474,618 -2,678,195 -7,898,181 Total Pretax Income 10,829,641 9,769,321 13,829,786 34,428,748 Provision for Income Tax 3,901,924 3,408,315 4,365,821 11,676,061 6,927,716 6,361,005 9,463,965 22,752,687 Net Income

Some considerations when using zoom:

- If you define grid sorting for a parent member in the rows or columns where zoom is enabled, the sort will be applied to any zoomed members for each zoom level.
- You cannot zoom in snapshot reports.
- If you insert a Reports that contains a grid with zoom enabled into a report package, it is
 inserted as a reference doclet and zoom is disabled. As a best practice, you should design
 grids for reference doclets to display the members that you want in the report package
 without relying on zoom to display members under a parent.
- The zooming interaction is not available in PDF previewing. However, if you zoom a grid in HTML preview and then switch to PDF, the zoomed members will be retained and displayed.
- Zoom cannot be defined in reports with grouping.
- Suppress Missing Blocks with Zoom enabled on column segments is not supported.

Watch this tutorial video, you'll learn how to zoom on parent members in report grids in Narrative Reporting.



-- Zooming on Parent Members in Grids.

Zoom allows you to expand a row or column parent member in a grid to see its children, descendants, or bottom level members. When you design a grid, you can enable three types of zoom for end-users: zooming on the entire grid, which enables zoom for all parent members;

zooming on specific row or column segments in a grid; and Ad hoc zooming, which allows end users to pick parent members for zooming.

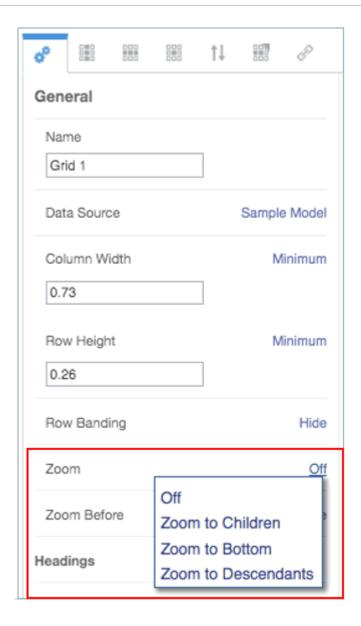
Grid-level Zooming

When you enable zooming on an entire grid, users will have the ability to zoom in on any parent member when they preview the report or grid in HTML. You can enable zoom to the Children, Bottom-level, or Descendants of parent members.

To enable zoom on the grid level:

- 1. On the Grid Properties panel, click **Off** next to Zoom.
- 2. Select the zoom level that you want to enable:
 - Off (default)
 - Zoom to Children
 - Zoom to Bottom
 - Zoom to Descendants





3. In **Zoom Before**, click to toggle between **False** (zoomed in members will display after the parent member) and **True** (zoomed in members will display before the parent member).

Zoom Before = False (Default)

	■ Quarter1	January	February	March
Net Income	22,752,687	6,927,716	6,361,005	9,463,965

Zoom Before = True

	January	February	March	■ Quarter1
Net Income	6,927,716	6,361,005	9,463,965	22,752,687

Row/Column Segment-level Zooming

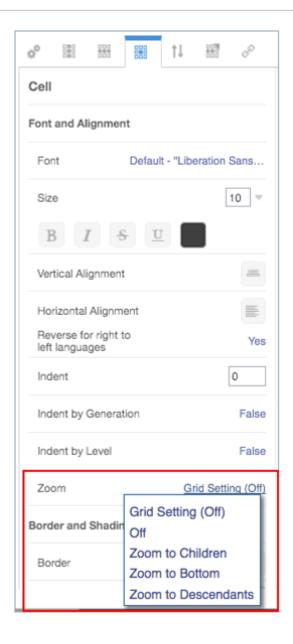
You can set zoom on individual row and column segments. This gives users the ability zoom on only the parent members in specific rows and column segments.



The zoomed members are displayed either before or after the parent member, depending on the **Zoom Before** grid-level property. See <u>Grid-level Zooming</u>.

To enable zoom on specific rows and column segments:

- 1. Select the row or column member header that you want to enable zoom on.
- 2. On the Cell Properties panel, click **Grid Setting** next to Zoom.
- 3. Select the zoom level that you want to enable:
 - **Grid Setting (current grid setting)** (default). This will set the zoom level to whatever the current setting is for the entire grid.
 - Off
 - Zoom to Children
 - Zoom to Bottom
 - Zoom to Descendants



Relative Indent and Zoom

If you enable zoom on a member header cell, you can adjust the size of the zoom indent of the row member labels by using the **Relative Indent** field. This field displays the current indent in inches or centimeters, depending on your user preference. (See Using the Formatting Tab). The default value is **.12** inches. You can adjust this value from -1.00 to 1.00 inches. Use negative values to reverse the indent of the row member labels.



The **Relative Indent** field on the Cell Properties panel is displayed only when either **Zoom**, **Indent by Level**, or **Indent by Generation** is enabled for the member header cell.

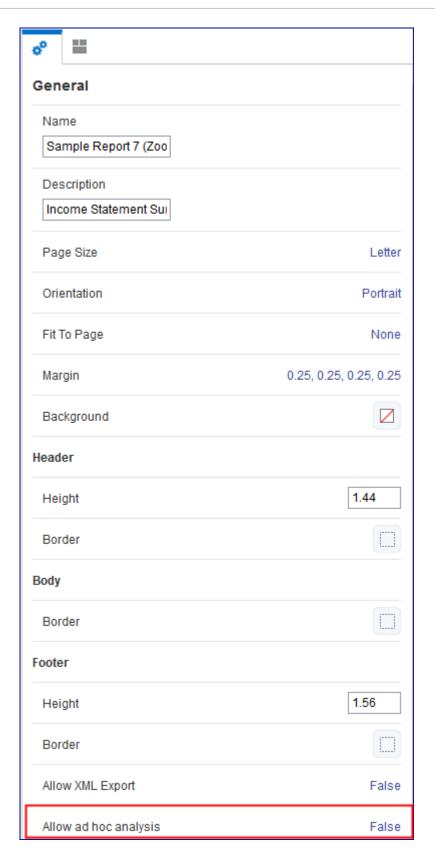
Ad hoc Zooming

Ad hoc mode enables report previewers to zoom into any parent member on all grids in the report. You enable ad hoc mode at the report level, not the grid level. After you enable ad hoc analysis on the report, report previewers will need to set their zoom options in order to use ad hoc mode. See Viewing Reports.

To enable ad hoc analysis on a report:

- 1. Open the General Properties panel for the report.
- 2. In the Allow ad hoc analysis field, click False to toggle between False (default) and True.





Working with Grouping

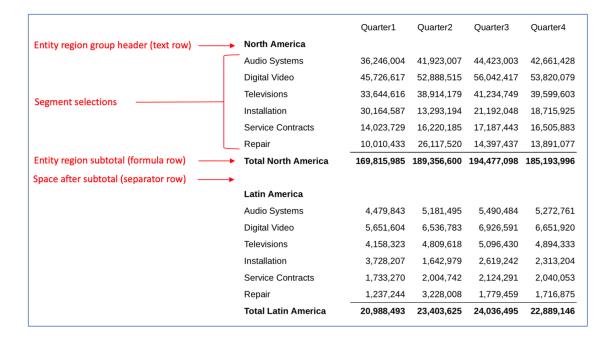
Introduction to Grouping

Grouping provides the ability to calculate, group and format nested dimensions in a row or column data segment.

A grouping may only contain one data row or column segment, you can optionally include one or more formula, text and/or separator segments. These non-data segments can be before and/or after the data segment. For example, you can add a SUM formula segment after the data segment to calculate subtotals for each nested dimension combination; you can also add a text segment before the data segment with a text function to display the member name or alias for the current member in the grouping.

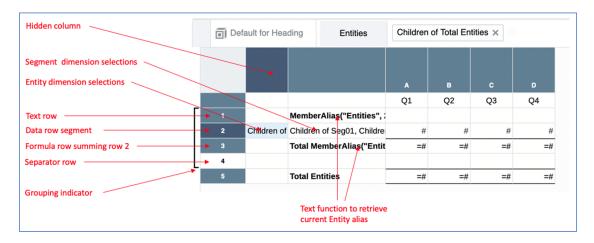
You can add a grouping if there are at least two dimensions in the rows or columns. Additional groupings can be added if there are additional dimensions.

For example, in the following grid with **Entity** and **Segment** dimensions in a single row segment, each **Entity** region (North America, Latin America) is grouped with the **Segment** selections with a group header (text row), **Segment** members, a row formula to sum the **Segments** for each **Entity** region, and a separator row after each total.





Here is the grid design:



Watch this tutorial video, you'll learn how to use grouping in grids to calculate, group and format nested dimensions in a row or column data segment.



-- Grouping Dimensions in Grids.

A grouping may contain one row or column data segment and, optionally, formula rows or columns to define totals and subtotals, text rows or columns for group headings, and separator rows or columns for blank spaces between groupings.

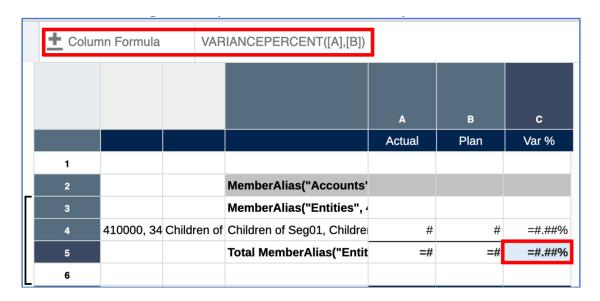
Grouping and Grid Formulas

In a grid with formulas on both the rows and columns, where grouping is applied to one of the axes, and intersecting opposite axis formula will still calculate independently of the grouping.

For example, with a row formula to sum Segments (within each Entity), where grouping is applied, and a column formula to calculate the variance % based on two columns:

- Row 5 has a SUM formula, which sums row 4 and is included in a grouping. The formula will return subtotals for the Entity groupings.
- Columns C has a Variance% formula, which calculates variance between columns A and B. Note in the formula bar that for the intersecting cell C1, the columns formula is being used (vs. the row formula).





Note in a portion of the resulting grid preview, that while the subtotal for the Entity "North America" is summed for the "Actual" and "Plan" columns, the "Var%" column is calculated based on the variance of the subtotal row and is not summed from the individual Segment variances.

	Actual	Plan	Var %
Net Revenue			
North America			
Audio Systems	41,958,340	42,702,892	-1.74%
Digital Video	56,963,458	57,956,313	-1.71%
Televisions	36,518,852	37,175,682	-1.77%
Installation	13,081,407	13,314,733	-1.75%
Service Contracts	17,824,467	18,137,251	-1.72%
Repair	28,881,628	29,311,795	-1.47%
Total North America	195,228,153	198,598,667	-1.70%

Grouping and Page Breaks

You can define how page breaks are handled when previewing the report in PDF format with the following two grid General Properties. By default, both **Group Page Break** and **No Page Breaks in Group** properties are set to **off**.

- Group Page Break
 -- Select a dimension name on which there is a grouping. If this
 property is set, each grouping on the selected dimension will start on a new page when
 previewed in PDF. The HTML preview is not affected by this property.
- No Page Breaks in Group -- Select a dimension name on which there is a grouping. If this property is set, a page-break would naturally occur within a range of rows or columns in the dimensions grouping, a page break will be inserted so that the grouping starts on a new page. After starting on a new page, if all the rows or columns cannot fit on a single page, further page-breaks will be allowed. The HTML preview is not affected by this property.

Grouping Considerations

In the current release, Grouping has a list of considerations:

- If segments are inserted or removed within a grouping, the grouping will be removed.
 However, if segments are inserted or removed before or after the outer-most grouping, the existing grouping is left unchanged.
- If there are multiple groupings on the same axis (e.g. with the Accounts, Entities and Segments dimensions in the rows), if an inner layer grouping (Entities) is removed, any groupings on the outer layers (Accounts) will also be removed. If an outer layer grouping is removed (Accounts), any groupings on inner layers (Entities) will not be affected.
- You cannot group on an axis that only has a single dimension.
- You cannot group on the innermost layer. For example, row has Accounts, Entities, and Segments dimensions, you can only group on Accounts and/or Entities, not Segments.
- If you change the dimension layout on an axis and add, remove or move dimensions, any groupings on the axis will be removed.
- When copying segments which have grouping, the grouping property is not copied. The grouping property on the source segments being copied will not be affected.
- When moving segments that are in a grouping, the grouping will be removed during the move.
- When pasting segments (which are sourced from a copy or move segment action) within a
 group of segments, the grouping will be removed (same as doing an insert within a
 grouping).
- A data segment can be in a group by itself (without any associated text/formula/separator segments). However, the only use for this would be to allow each group to start on a new printed page in PDF output.
- The Page Break property cannot be set on rows/columns which are part of a group.
- You cannot chart against grouped rows/columns. A validation error will occur if a chart
 includes references to row or columns which are part of a group. The chart can contain
 references to a grid that has groupings as long as the chart does not attempt to chart
 against the rows/columns which are grouped.

Adding a grouping

A grouping may only contain one data row or column segment. If more than one data segment is selected, grouping and ungrouping is not allowed.

In addition to the data segment, you can optionally include one or more formula, text and/or separator segments. These non-data segments can be before and/or after the data segment.



Note:

- Text, Formula, and Separator segments adjacent to the data segment can only be part of one grouping.
- You cannot add grouping to a grid that contains Zoom on Parent definitions. The Zoom definitions must be removed from the grid prior to adding a grouping.

To add a grouping to a row or column selection:

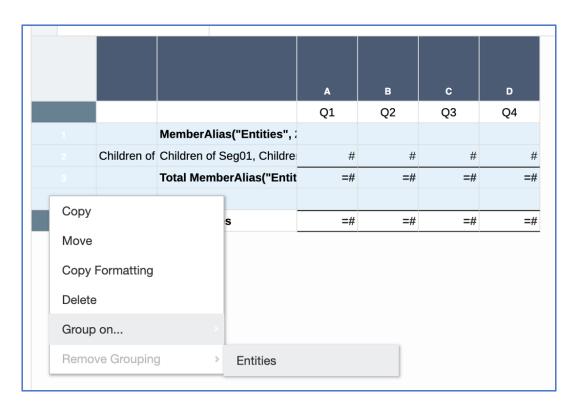
1. In the grid editor, select the desired row or column data segment, and optionally any surrounding formula, text and/or separator segments.



You must select consecutive segments when adding a grouping. You cannot select non-consecutive segments.

2. Right-click the selected column or row header cells, select **Group on...**, and then select the dimension name to group on.

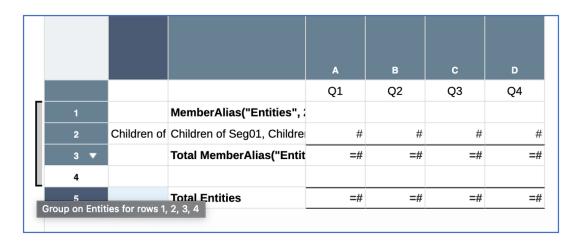
In the example below, there are two dimensions in the rows, **Entities** and **Segments**. Only the **Entities** dimension is available for grouping since it is the outermost dimension of the two dimensions in the rows.



3. The grouping will be added to the selected segments.



A grouping indicator will appear adjacent to the grouped row or column segments. When you hover your mouse over the indicator, a tooltip displays the group information such as the dimension name and rows or columns on which the grouping is applied.



Removing a grouping

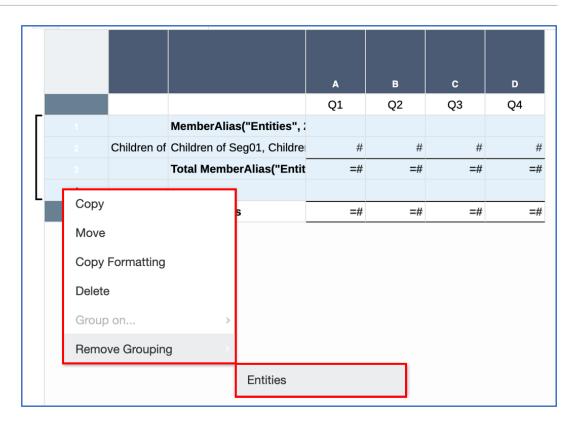
To remove a grouping from a row or column selection:

1. In the grid editor, select the all row or column segments included in the grouping.



You must select consecutive segments when removing a grouping. You cannot select non-consecutive segments.

2. Right-click the selected column or row header cells, select **Removing Grouping**, and then select the dimension name to remove the grouping on.

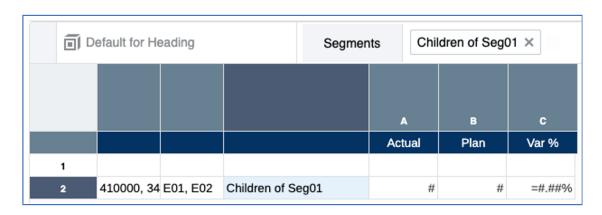


3. The grouping will be removed.

Grouping Example with Multiple Groupings

Initial Grid Design

The Accounts, Entities, and Segments dimensions are on the row axis (with multiple member selections for each dimension), the Scenarios dimension is in the column axis. The grid property "Suppress Repeats" is enabled. Row 2 is the single data segment that will be used in the grouping.



In the grid preview, note how each Segment is repeated for each Entity region, and that each set of Entities and Segments are repeated for the two Accounts. The requirement is to see a subtotal of all Segments for each Entity and a total of all Entities and Segments for each Account.



			Actual	Plan	Var %
Net Revenue	North America	Audio Systems	41,958,340	42,702,892	-1.74%
		Digital Video	56,963,458	57,956,313	-1.71%
		Televisions	36,518,852	37,175,682	-1.77%
	Latin America	Audio Systems	5,186,773	5,146,156	0.79%
		Digital Video	7,041,605	6,985,567	0.80%
		Televisions	4,514,384	4,479,225	0.78%
Net Income	North America	Audio Systems	-887,573	-577,765	-53.62%
		Digital Video	2,258,868	2,746,299	-17.75%
		Televisions	-3,269,704	-2,984,531	-9.56%
	Latin America	Audio Systems	-24,217	-95,390	74.61%
		Digital Video	417,539	323,020	29.26%
		Televisions	-335,971	-400,308	16.07%

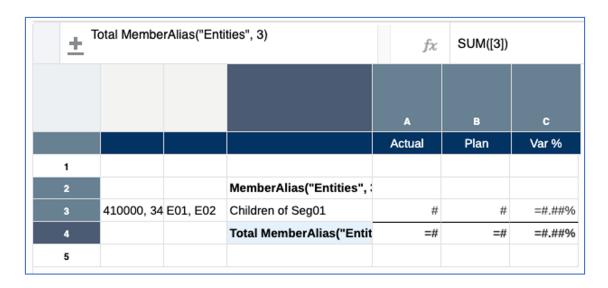
Inserting Text, Separator and Formula Rows with Text Functions

Before inserting a grouping, a formula row needs to be created to utilize the SUM function to sum the Segment row's data values for each Entity. In addition, a text row will be inserted with the MemberAlias text function to display the Entity alias for each grouping. The formula row display text will also be customized to display the word "Total" along with the Entity alias for each grouping. Lastly, a separator row will be inserted after the formula row to display a blank row after each subtotal.

In the below grid design:

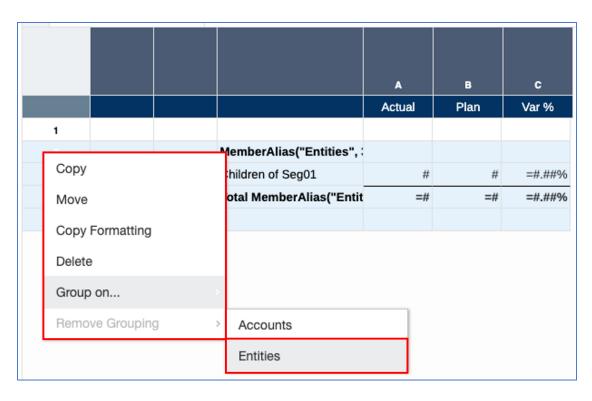
- Row 1: separator row, which will not be used in the grouping.
- Row 2: text row with the MemberAlias text function for the Entity group heading.
- Row 3: data segment with selections for each dimension.
- Row 4: formula row to sum the data segment in row 3, and to display the Entity subtotal for each grouping.
- Row 5: separator row for the blank space under the Entity subtotal formula row.





Adding the Grouping for Entities

The grouping is added by selecting rows 2-5, right-clicking on the row headings and selecting **Group on** and then click **Entities**.



The grouping indicator displays for the Entities grouping.

					Actual	Plan	Var %
	1						
Γ				MemberAlias("Entities",			
		410000, 34	E01, E02	Children of Seg01	#	#	=#.##%
				Total MemberAlias("Entit	=#	=#	=#.##%
	5						

A preview of the results displays the subtotals for each Entity region with the Entity alias, the grouping heading with the Entity alias, and the blank row under each total.

			Actual	Plan	Var %
		North America			
Net Revenue	North America	Audio Systems	41,958,340	42,702,892	-1.74%
		Digital Video	56,963,458	57,956,313	-1.71%
		Televisions	36,518,852	37,175,682	-1.77%
		Total North America	135,440,650	137,834,887	-1.74%
		Latin America			
Net Revenue	Latin America	Audio Systems	5,186,773	5,146,156	0.79%
		Digital Video	7,041,605	6,985,567	0.80%
		Televisions	4,514,384	4,479,225	0.78%
		Total Latin America	16,742,762	16,610,948	0.79%
		North America			
Net Income	North America	Audio Systems	-887,573	-577,765	-53.62%
		Digital Video	2,258,868	2,746,299	-17.75%
		Televisions	-3,269,704	-2,984,531	-9.56%
		Total North America	-1,898,410	-815,998	-132.65%
		Latin America			
Net Income	Latin America	Audio Systems	-24,217	-95,390	74.61%
		Digital Video	417,539	323,020	29.26%
		Televisions	-335,971	-400,308	16.07%
		Total Latin America	57,351	-172,679	133.21%

Adding Additional Rows and Defining the Grouping for Accounts

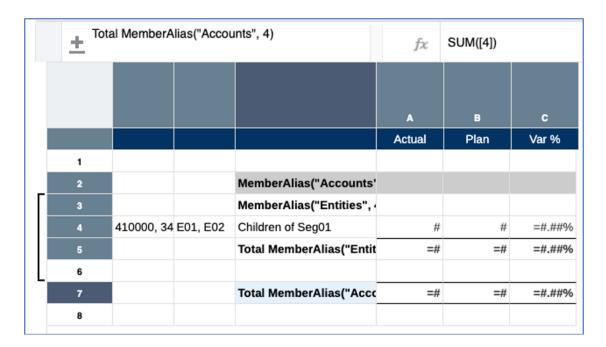
For the Account totals, an additional sum formula row will be added, in addition to a text row to display the Account alias and a separator row after the new formula row.

In the below grid design:

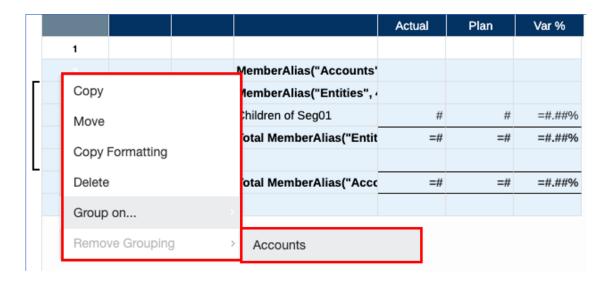
- Row 1: separator row, which will not be used in the grouping.
- Row 2: new text row with the MemberAlias text function for the Account group heading. Note that shading has been applied to the row.



- Rows 3-6: existing rows previously defined for the Entities grouping. Included is the data segment which is now on row 4.
- Row 7: new formula row to sum the data segment in row 4, to display the Account total for each grouping.
- Row 8: new separator row for the blank space under the Account total formula row.



The grouping for Accounts is added after selecting rows 2-8.



The grouping indicator displays for the Accounts grouping.

				Actual	Plan	Var %
	1					
$\lceil \rfloor$	2		MemberAlias("Accounts'			
	3		MemberAlias("Entities",			
	4	410000, 34 E01, E02	Children of Seg01	#	#	=#.##%
	5		Total MemberAlias("Entit	=#	=#	=#.##%
	6					
	7		Total MemberAlias("Acco	=#	=#	=#.##%
L	8					

Note that the preview displays, in addition to the Entity grouping content, the totals for the two Accounts with the Account alias, as well as the grouping heading with the Account alias.

			Actual	Plan	Var %
		Net Revenue			
		North America			
Net Revenue	North America	Audio Systems	41,958,340	42,702,892	-1.74%
		Digital Video	56,963,458	57,956,313	-1.71%
		Televisions	36,518,852	37,175,682	-1.77%
		Total North America	135,440,650	137,834,887	-1.74%
		Latin America			
Net Revenue	Latin America	Audio Systems	5,186,773	5,146,156	0.79%
		Digital Video	7,041,605	6,985,567	0.80%
		Televisions	4,514,384	4,479,225	0.78%
		Total Latin America	16,742,762	16,610,948	0.79%
		Total Net Revenue	152,183,412	154,445,836	-1.46%
		Net Income			
		North America			
Net Income	North America	Audio Systems	-887,573	-577,765	-53.62%
		Digital Video	2,258,868	2,746,299	-17.75%
		Televisions	-3,269,704	-2,984,531	-9.56%
		Total North America	-1,898,410	-815,998	-132.65%
		Latin America			
Net Income	Latin America	Audio Systems	-24,217	-95,390	74.61%
		Digital Video	417,539	323,020	29.26%
		Televisions	-335,971	-400,308	16.07%
		Total Latin America	57,351	-172,679	133.21%

Adding Minor Finishing Touches

The last step is to make some minor cosmetic changes. The row heading columns for the Account and Entity dimensions will be hidden in Column Properties since the dimensions' member labels are already displayed in group headers and the total rows. Also, for the data segment row, banding is enabled.

	Actual	Plan	Var %
Net Revenue			
North America			
Audio Systems	41,958,340	42,702,892	-1.74%
Digital Video	56,963,458	57,956,313	-1.71%
Televisions	36,518,852	37,175,682	-1.779
Total North America	135,440,650	137,834,887	-1.74%
Latin America			
Audio Systems	5,186,773	5,146,156	0.79%
Digital Video	7,041,605	6,985,567	0.80%
Televisions	4,514,384	4,479,225	0.78%
Total Latin America	16,742,762	16,610,948	0.79%
Total Net Revenue	152,183,412	154,445,836	-1.46%
Net Income			
North America			
Audio Systems	-887,573	-577,765	-53.62%
Digital Video	2,258,868	2,746,299	-17.75%
Televisions	-3,269,704	-2,984,531	-9.56%
Total North America	-1,898,410	-815,998	-132.65%
Latin America			
Audio Systems	-24,217	-95,390	74.619
Digital Video	417,539	323,020	29.26%
Televisions	-335,971	-400,308	16.07%
Total Latin America	57,351	-172,679	133.219

Sorting and Grouping

Sorting is available on grouped segments. You can select the data segment in a grouping and create a Sort definition. You can also include one or more formula/text/separator segments in the grouping and sort on them as a unit. Lastly, you can select the formula/text segments in the grouping and sort on those separately.

Note that in all these cases, when a grouped dimension combination is sorted, it is sorted with respect to the grouping level it occurs in. For example: With Accounts, Entities and Segments on the row axis (with multiple member selections for each dimension), with grouping on Accounts and Entities, the data combinations will be sorted with each Entity and then on Each Account.

In the design view of the grid below, all of the grouped segments are sorted on column A:

Grid design:



				A	В	С
				Actual	Plan	Var %
 1						
2	410000, 34	E01, E02, E	Children of Seg01, Childre	#	#	=#.##%
3			Total MemberAlias("Entit	=#	=#	=#.##%
4			Total MemberAlias("Acco	=#	=#	=#.##%

Sort definition:

Sort definition:



Here is the unsorted result, where the members are displayed in the hierarchy order for each dimension (only Net Income results are displayed):

			Actual	Plan	Var %
Net Income	North America	Audio Systems	-887,573	-577,765	-53.62%
Net Income	North America	Digital Video	2,258,868	2,746,299	-17.75%
Net Income	North America	Televisions	-3,269,704	-2,984,531	-9.56%
Net Income	North America	Installation	2,151,883	2,296,250	-6.29%
Net Income	North America	Service Contracts	4,747,368	4,957,110	-4.23%
Net Income	North America	Repair	7,659,903	7,978,099	-3.99%
		Total North America	12,660,743	14,415,461	-12.17%
Net Income	Latin America	Audio Systems	-24,217	-95,390	74.61%
Net Income	Latin America	Digital Video	417,539	323,020	29.26%
Net Income	Latin America	Televisions	-335,971	-400,308	16.07%
Net Income	Latin America	Installation	50,324	33,651	49.55%
Net Income	Latin America	Service Contracts	303,784	281,519	7.91%
Net Income	Latin America	Repair	462,757	425,460	8.77%
		Total Latin America	874,216	567,952	53.92%
Net Income	APAC	Audio Systems	-10,183,101	-10,380,084	1.90%
Net Income	APAC	Digital Video	-11,869,947	-12,131,475	2.16%
Net Income	APAC	Televisions	-10,239,933	-10,418,979	1.72%
Net Income	APAC	Installation	-1,951,976	-2,007,751	2.78%
Net Income	APAC	Service Contracts	-1,797,090	-1,869,197	3.86%
Net Income	APAC	Repair	-3,053,624	-3,161,896	3.42%
		Total APAC	-39,095,672	-39,969,382	2.19%
Net Income	EMEA	Audio Systems	12,375,128	12,498,586	-0.99%
Net Income	EMEA	Digital Video	18,638,078	18,808,167	-0.90%
Net Income	EMEA	Televisions	9,489,758	9,590,323	-1.05%
Net Income	EMEA	Installation	4,279,751	4,336,238	-1.30%
Net Income	EMEA	Service Contracts	6,836,329	6,915,291	-1.14%
Net Income	EMEA	Repair	10,993,402	11,091,473	-0.88%
		Total EMEA	62,612,446	63,240,078	-0.99%

Here is the sorted result. Note within each Entity (For example, APAC, Latin America, and so on.) the "Actual" values are sorted ascending; and each Entity total for "Net Income" (For example, Total APAC, Total Latin America, and so on.) the "Actual" values are sorted ascending.



			Actual	Plan	Var %
Net Income	APAC	Digital Video	-11,869,947	-12,131,475	2.16%
Net Income	APAC	Televisions	-10,239,933	-10,418,979	1.72%
Net Income	APAC	Audio Systems	-10,183,101	-10,380,084	1.90%
Net Income	APAC	Repair	-3,053,624	-3,161,896	3.42%
Net Income	APAC	Installation	-1,951,976	-2,007,751	2.78%
Net Income	APAC	Service Contracts	-1,797,090	-1,869,197	3.86%
		Total APAC	-39,095,672	-39,969,382	2.19%
Net Income	Latin America	Televisions	-335,971	-400,308	16.07%
Net Income	Latin America	Audio Systems	-24,217	-95,390	74.61%
Net Income	Latin America	Installation	50,324	33,651	49.55%
Net Income	Latin America	Service Contracts	303,784	281,519	7.91%
Net Income	Latin America	Digital Video	417,539	323,020	29.26%
Net Income	Latin America	Repair	462,757	425,460	8.77%
		Total Latin America	874,216	567,952	53.92%
Net Income	North America	Televisions	-3,269,704	-2,984,531	-9.56%
Net Income	North America	Audio Systems	-887,573	-577,765	-53.62%
Net Income	North America	Installation	2,151,883	2,296,250	-6.29%
Net Income	North America	Digital Video	2,258,868	2,746,299	-17.75%
Net Income	North America	Service Contracts	4,747,368	4,957,110	-4.23%
Net Income	North America	Repair	7,659,903	7,978,099	-3.99%
		Total North America	12,660,743	14,415,461	-12.17%
Net Income	EMEA	Installation	4,279,751	4,336,238	-1.30%
Net Income	EMEA	Service Contracts	6,836,329	6,915,291	-1.14%
Net Income	EMEA	Televisions	9,489,758	9,590,323	-1.05%
Net Income	EMEA	Repair	10,993,402	11,091,473	-0.88%
Net Income	EMEA	Audio Systems	12,375,128	12,498,586	-0.99%
Net Income	EMEA	Digital Video	18,638,078	18,808,167	-0.90%
		Total EMEA	62,612,446	63,240,078	-0.99%

Formulas and Text Function references to Groupings

If a formula/text segment in a grouping references a data segment in the same grouping, the reference is adjusted to include only the dimension combination within the 'current' grouping.

If a formula/text segment which is not in a grouping references a data segment in a grouping, the reference refers to all the dimension combinations in a data segment regardless of the grouping.

In the following grid, there is a grouping on rows 1 to 4. The formula on row 3 (SUM of row 2) is part of a group, and so will apply to the groups. The formula on row 5 (SUM of row 2) is not part of a group, and so will apply to all the dimension combinations in row 2 (as if there was no grouping).





Note that for the grouped results, the formula row reference in row 3 will sum up the values in row 2 for each group (e.g. Total North America, Total Latin America, etc.)

In the formula which is outside of the group, the formula row reference in row 5 will sum up all the values in row 2, regardless of which group they occur in (Total Entities).

Total Entities	259,814,016	300,507,194	318,427,348	305,800,25
Total APAC	35,074,892	40,568,471	42,987,692	41,283,03
Televisions	10,206,794	11,805,425	12,509,418	12,013,36
Digital Video	13,872,120	16,044,830	17,001,632	16,327,44
Audio Systems	10,995,979	12,718,216	13,476,641	12,942,23
APAC				
Total EMEA	94,832,116	109,685,126	116,225,982	111,617,09
Televisions	27,596,146	31,918,372	33,821,761	32,480,57
Digital Video	37,506,102	43,380,467	45,967,376	44,144,56
Audio Systems	29,729,868	34,386,287	36,436,845	34,991,95
EMEA				
Total Latin America	14,289,771	16,527,896	17,513,504	16,819,01
Televisions	4,158,323	4,809,618	5,096,430	4,894,33
Digital Video	5,651,604	6,536,783	6,926,591	6,651,92
Audio Systems	4,479,843	5,181,495	5,490,484	5,272,76
Latin America				
Total North America	115,617,237	133,725,702	141,700,170	136,081,11
Televisions	33,644,616	38,914,179	41,234,749	39,599,60
Digital Video	45,726,617	52,888,515	56,042,417	53,820,07
Audio Systems	36,246,004	41,923,007	44,423,003	42,661,42
North America				
	Quarter1	Quarter2	Quarter3	Quarter4

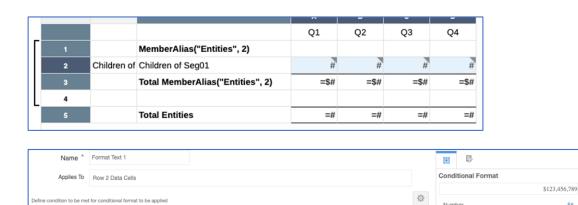
Conditional Formatting and Conditional Suppression with Groupings

If a conditional format or conditional suppression expression references a row or column which is a grouped segment, the condition will be evaluated to include only those tuples in the group.

The 'Row Value', 'Column Value' and 'Cell Value' conditions in conditional format will apply to a group when the row or column referenced is part of a group. The same applies to the 'Data Values in Row', 'Data Values in Column' and 'Cell Value' conditions in conditional suppression.

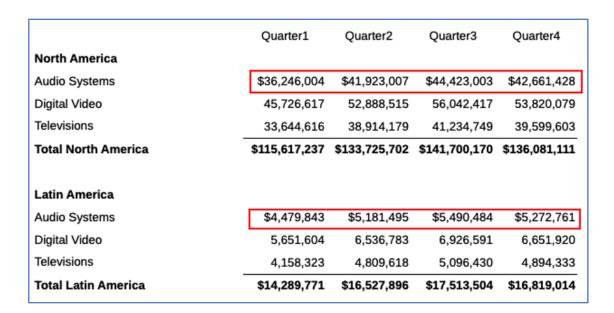
Font and Alignment

In the example below, conditional formatting has been applied to the data cells in row 2. The conditional format tests if the "position within" the member in the row is the "top row", then a \$ sign prefix is applied.



Position Within Row is Top Row

In the resulting output, note that each "top row" in the grouping has the \$ sign prefix applied.



Example: Using Grouping with formulas that reference multi-member rows or columns

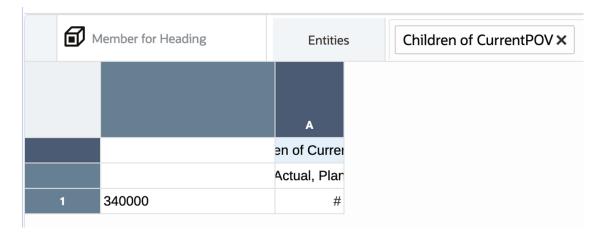
You can use grouping to execute formulas against a single row or column with multiple members selected, generating a formula result for each member grouping. The multiple members can either be several individually selected members in a single row or column, or a dynamic member selection function, such as "Children" or "Descendants". A common use case for this is either **Period** or **Scenario** variance formulas in the columns with another dimension with multiple members selected.

For example, in a grid with the **Entity** and **Scenario** dimensions in a single column, where the **Scenario** dimension has "Actual" and "Plan" selected and the **Entity** dimension that can have

multiple members selected, the requirement is to display a grid variance formula column for each **Entity** member.

In the below grid design, with **Accounts**, "Net Income" selected, in the rows, **Scenarios** and **Entities** in the columns, Column A has:

- Entities: "Children of Current POV", which will display the children of the currently selected Entities member in the POV. This will result in multiple columns being returned for Entities.
- Scenarios: "Actual" and "Plan".



Here is a preview of the grid output with "Total Entities" select for the Entities POV:



To accomplish having an "Actual vs Budget" variance display for each **Entity** member, insert a formula column to calculate the variance using expanded member references, to refer to the Actual and Plan member, which are both in Column A:

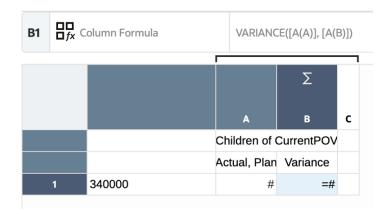
VARIANCE ([A(A)], [A(B)])

A custom heading of "Variance" was also added in the formula columns in the Scenario row.



To add the grouping and apply some formatting:

- To separate each Entity's Actual, Plan and Variance columns, a Separator column is inserted to the right of the Variance formula Column B.
- To display the same Entity name across the Actual, Plan and Variance columns, select the Entity cells for columns A and B, right-click and then select Merge Cells.
- With Columns A, B, and C selected, create a Grouping on the Entities dimension.



Here is a preview of the resulting grid:



The results will adjust if a different Entity member is selected in the POV:



Working with Drill To Content

Drill to content allows you to set up content links on grid cells, rows, columns and member heading cells to enable end users to drill to reports, third-party documents in the Narrative Reporting library and custom URL links.

When an end user previews the report in HTML, they can drill into the content link and execute the specified target linked report (passing the POV where applicable), launch the third-party document, or launch the URL. See Drilling to Content, Drill Through, and Cell Attachments.



Note:

- Drill to content is supported for Reports to use as either the source or target reports, and for snapshot reports to use as a target report.
- Drill to Custom URL does not support passing the POV or SSO tokens to the target URL.

Drill to content detail cannot be used to:

- Drill to transactional detail
- Define content links on a text box, image object or chart
- Define content links as part of a conditional formatting condition

The server references for content links are maintained when using a report in another environment. For example, if you move a report from a Test to a Production pod, the Drill to Content links in the reports will point to the Production Pod reports. You do not have to change the drill to server.

If you insert a Reports that has drill to content links enabled in a grid as a reference doclet in a report package, the content links are disabled.

Watch this tutorial video, you'll learn how to drill to content in report grids in Narrative Reporting.



Drilling to Content in Report Grids.

Drill to content allows you to set up content links on grid cells, rows, columns and member heading cells to enable end users to drill to Reports, third-party documents in the Narrative Reporting Cloud library, and URL links.

Defining Drill To Content Links

You can define links to drill to Narrative Reporting library files, such as Reports, or to URL links, such as an external website.

To define a drill to content link:

- Select the area of the grid that you want to add a content link to (cells, rows, columns, or member heading cell).
- In Grid Properties, click



- Click
- In the Add Drill To Content dialog box, enter a descriptive name for the drill to and, optionally, a description.



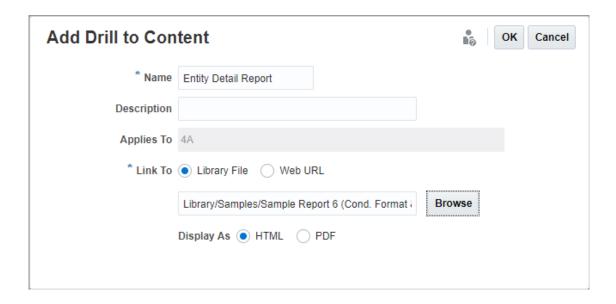


The **Applies To** field displays the area of the grid that you selected to add a content link to. It is read-only.

- 5. In the **Link To** field, perform an action:
 - Select **Library File**, and then click **Browse** and select a file in the Narrative Reporting library as the target. If you select a report, specify if you want the target to display as **PDF** or **HTML**.
 - Select Web URL and enter the target URL, and then specify whether you want to hide the URL parameters in the Web URL.

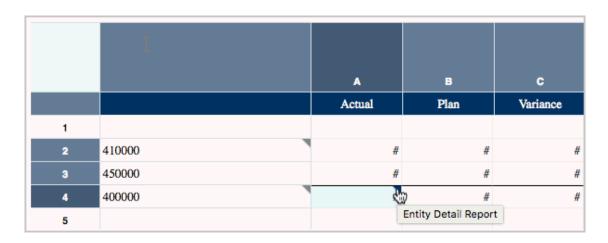
Note: Web URL does not support passing the POV or SSO tokens to the target URL. See Passing the Point of View to the Target Report

.



Drill To Indicators and Tooltips

When a drill to link applies to a cell, row, or column, a grey triangle is displayed in the upper right corner of the row or column header or the cell. When you hover your mouse over the indicator, a tooltip displays the list of drill to links that apply to that cell, row, or column.



Managing Drill To Content Definitions

After you define drill to content links, you manage the links in the Drill To Content properties panel.

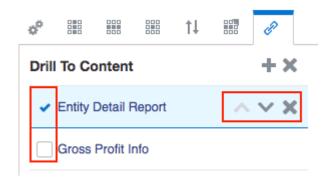
You can perform these actions on existing drill to links:

• With a region of the grid highlighted, click the check box next to the drill to link to select or de-select it, which applies or removes it from that region.



You can apply multiple drill to links to a cell, row, or column in the grid. When a user clicks the drill to link, a list of target links is displayed.

- Click on the name of a link definition to edit that definition.
- Hover over a definition and then click or to reorder the display of definitions.
- Hover over a definition and then click to delete that definition.



Passing the Point of View to the Target Report

When you define a URL link, you have the option of passing the point of view (POV) of the source report to the target.

If you select to pass the POV through, the following conditions apply:

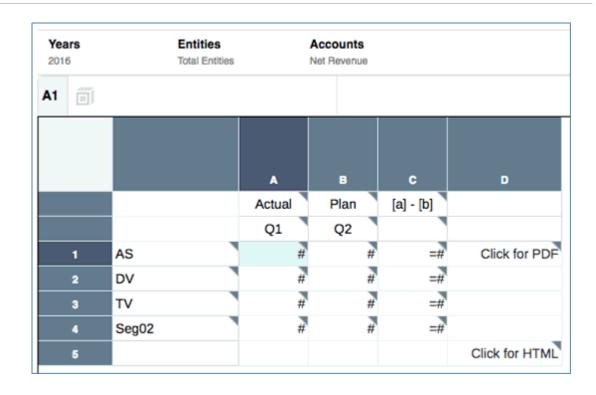
- The POV context will be passed to the Global POV of the target report for dimensions that exist in the target report data source.
 - POV context in the source report includes POV and cell member selections
 - The Local POV of the target report is not updated upon drill to content
- If the source and target report data sources are different, only the POV dimensions (and selected members) that exist in the source will be passed to the target report.
 - If the dimension from the source report is not found on the Global POV of the target report, the passed POV selection will not be used
 - If the source report dimension exists, but the passed POV member doesn't exist, then
 the user will receive an invalid member validation and won't be able to view the report
 results
- POV context that is passed will be applied to the target report POV, regardless if the POV member selection is valid as defined in the target report definition. For example, if the source report POV context has "Currency" = USD, it will be used as POV selection in the target report, even if USD is not a valid selection for POV Dimension Currency in the target report's definition.

Examples of Drill to Content Results in Grid Cells

The following report has drill to content defined on all cells.

Years, Entities and Accounts are on the Point of View (POV), Segments are on rows 1 to 4, Fiscal Calendar and Scenarios are on columns A and B. Column C is a formula column and column D is a text column. Row 5 is a text row.





Years 2016	Entities Total Entities	Accounts Net Revenue		
	Actual	Plan	[a] - [b]	
	Quarter1	Quarter2		
Audio Systems	78,965,495	95,159,438	-16,193,942	Click for PDF
Digital Video	101,696,191	129,158,346	-27,462,154	
Televisions	70,658,362	82,838,108	-12,179,746	
Services	123,358,853	135,415,192	-12,056,339	
				Click for HTMI

The following describes the POV context that is passed to the target report, depending on where the drill to content is executed.

- If you execute a drill on one of the data cells in columns A or B, all dimensions will be included.
- If you execute a drill on the row headings (Audio Systems, Digital Video, Televisions, Services), the POV included in the drill to content link includes all ofthe dimensions except Fiscal Calendar and Scenarios. You cannot specify a Fiscal Calendar or Scenarios member when clicking on the row heading since it is ambiguous which member you want.
- If you execute a drill on the formula cells, Segments, Accounts and Entities are included; Fiscal Calendar and Scenarios are not included.

- If you execute a drill on the formula heading cell "[a] [b]", only Years, Entities and Accounts from the POV are included.
- If you execute a drill on the "Click for HTML" text cell, only Years, Entities and Accounts from the POV are included.
- If you execute a drill on the "Click for PDF" text cell, Segments, Years, Entities and Accounts are included; Fiscal Calendar and Scenarios are not included.

Working with Drill Through and Cell File Attachments

Reports provides the ability to drill through to a source system and drill to cell file attachments, while viewing the report or grid in HTML preview.

Links appear in data cells where attachments are available and enabled to display by the report designer. A user can click on the link to view the source system detailed data or launch the cell file attachment. The following conditions need to be in place for drill through or file attachments to be available in Reports.

- Drill through needs to be defined in the underlying data source (EPM Cloud source with Cloud Data Management or Fusion Applications Essbase Provider).
- Files need to be attached to a cell at the data source, such as an EPM Cloud cell file attachment or Essbase Linked Reporting Object (LRO).

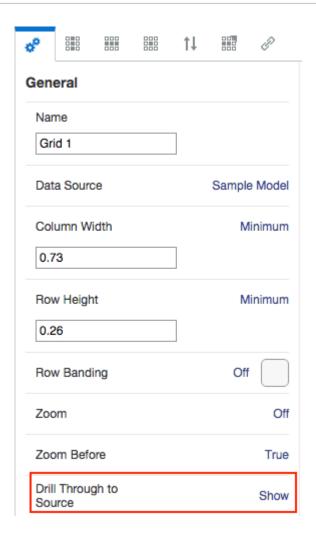


The report designer still needs to enable drill through either for the entire grid or for specific cells.

To display drill through and attachments links for all cells in the grid, where applicable:

- 1. On the Grid Properties panel, next to drill through to source click **Show**
- 2. This displays drill through to source links for any cells in the grid that have drill though definitions when the grid is previewed or if the report is opened in HTML preview.

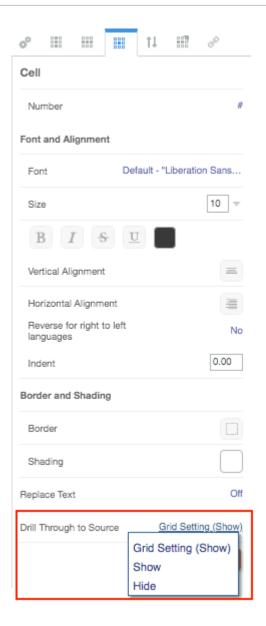




To display drill through and attachments links for selected cells in the grid, where applicable:

- 1. Click the cells that you want to display drill through on.
- On the Cell Properties panel, next to drill through to source, select the desired display setting:
 - Grid Setting (current grid setting) (default). This sets the display to whatever the current setting is for the entire grid.
 - Show
 - Hide





This displays drill through to source links for the selected cells in the grid that have drill through and attachments, when the grid is previewed or if the report is opened in HTML preview.

Working With Valid Intersections

Review the following topics:

- Learning About Valid Intersections
- Understanding Valid Intersections from the Point of View
- Understanding Valid Intersections on Grid Data

Learning About Valid Intersections

In the Cloud EPM Platform business processes, administrators can enable applications to include valid intersection rules. For example, you can specify that certain **Products** are valid only for certain **Entities**. Valid intersections also provide Point of View (POV) member filtering

between dimensions where valid intersection rules are defined. For example, when selecting a member in the **Entity** dimension, the **Product** dimension will only list the members that are valid for the selected **Entity**.

In data entry forms, valid intersections allow users to view or enter data only at predefined valid intersections. In Reports, when previewing a report, POV member filtering is enabled for valid intersections, and grid data will only display for valid intersections.

Note:

- Valid Intersection POV member filtering is only supported for report grids. Books and bursting definitions are not supported and will not filter the POV members for valid intersections.
- Valid Intersection POV member filtering is only supported when selecting members in the POV bar, and not when selecting POV members in a prompt.
- Substitution and User Variables with member values that are included in valid intersection rules are not supported with POV member filtering.

When previewing a report, you can choose to view all members in a POV dimension, including invalid members, by selecting **Show Invalid Members** in the POV drop-down list or in the POV member selector for the dimension. You can also choose to show valid or invalid intersections by selecting or deselecting the **Show Only Valid Intersections** preference in the report preview, using the Reports **Actions** menu. This preference is not selected by default, and it applies to all reports connecting to the same data source for the user.

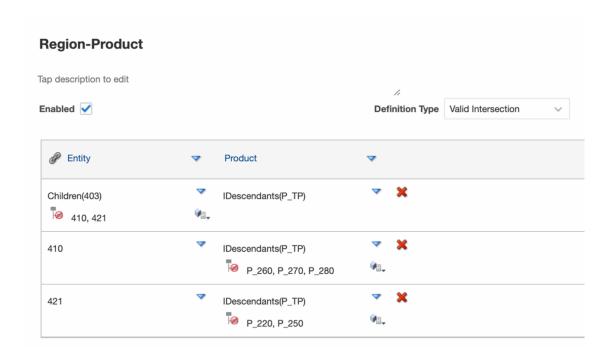
Note:

- Due to the additional processing required for valid intersection POV member filtering, there may be some performance impact with valid intersections enabled when accessing the POV. The number of dimensions in the valid intersection rules and the number of rules defined can affect performance.
- When valid intersection rules are created against a POV dimension with more than 25,000 members and Show Only Valid Intersections is enabled, Reports will display a flat list of members that are valid in the Member Selector instead of a hierarchical display.
- The following two sections illustrate working with valid intersections in POV member selections and with data in a report:
 - Understanding Valid Intersections from the Point of View
 - Understanding Valid Intersections on Grid Data
- In these examples, the valid intersection rules are set up in the Cloud EPM business process application as follows, Valid Intersection rules shows an example of the valid intersection rules.
- When the 403: Sales member is selected in the Entity dimension, all products in the Product dimension are available for selection.



- When the 410: International Sales member is selected in the Entity dimension, the members P_260: Game, P_270: Camera, and P_280: Television are not available for selection. All other members are available for selection.
- When the 421: Sales North East member is selected in the Entity dimension, the members P_220: Software Suite and P_250: Network Card are not available for selection. All other members are available for selection.

Valid Intersection rules



Related Topics

- Understanding Valid Intersections from the Point of View
- · Understanding Valid Intersections on Grid Data

Understanding Valid Intersections from the Point of View

This example shows selecting members in the **Entity** and **Product** dimensions to change the POV of a report grid within the scope of the valid intersection rules.

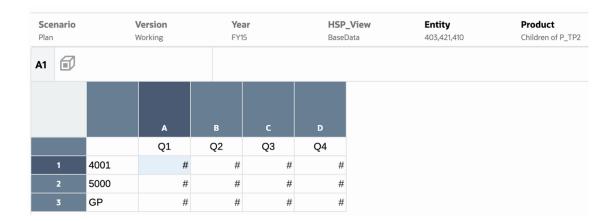


See Learning About Valid Intersections for the valid intersection rules used in this example.

The below grid design has changeable **Entity** and **Product** dimensions in the POV, with the following selections:

Entity: 403: Sales, 410: International Sales, and 421: Sales North East

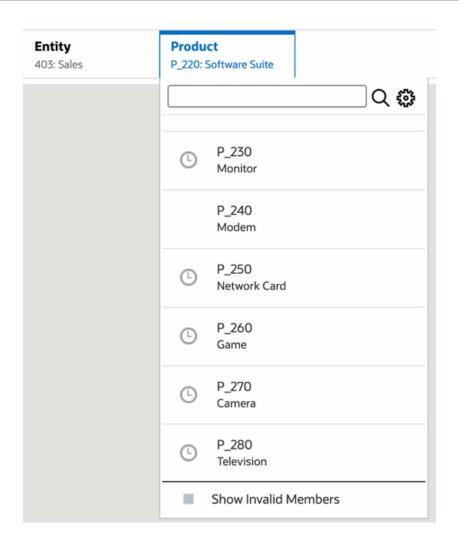
• Product: **Children of P_TP2**, which includes the **P_2*** members shown in the valid intersections rule above.



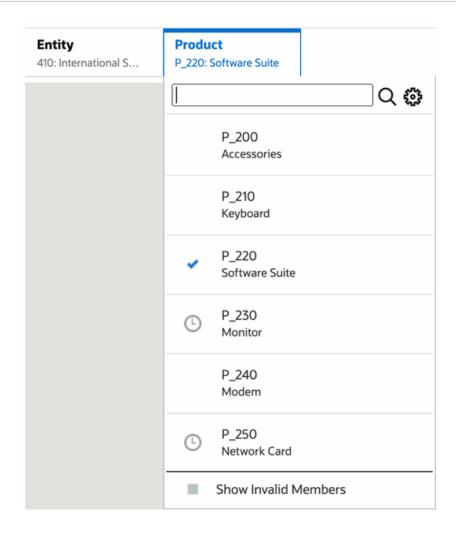
According to the valid intersection rules:

When the 403: Sales member is selected in the Entity dimension, all products in the
Product dimension are available for selection. Since Children of P_TP2 was defined as
the POV selection for the Product dimension; only these members will be displayed when
running the report. For example:

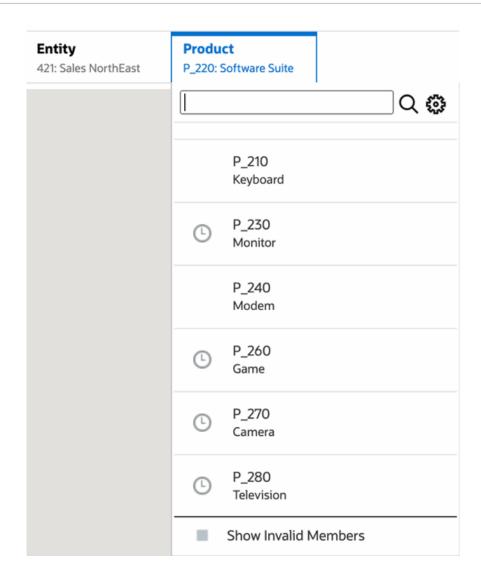




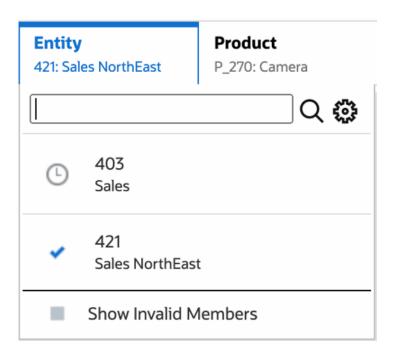
 When the 410: International Sales member is selected in the Entity dimension, the members P_260: Game, P_270: Camera, and P_280: Television are not available for selection. All other members are available for selection. For example:



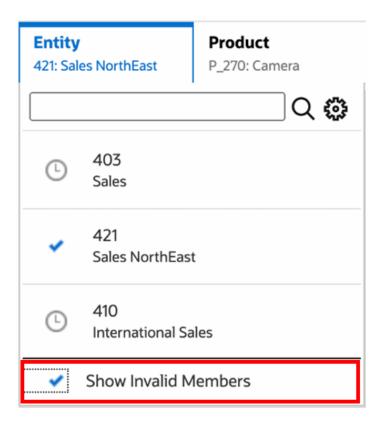
 When the 421: Sales North East member is selected in the Entity dimension, the members P_220: Software Suite and P_250: Network Card are not available for selection. All other members are available for selection. For example:



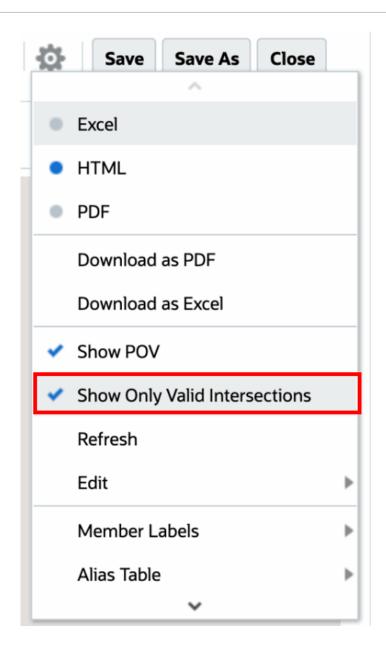
When selecting POV members in one dimension that are not valid for another POV dimension that is displayed, you show all members by selecting **Show Invalid Members** in the POV list or member selector. For example, when the **Entity 421: Sales North East** member is selected along with the **Product P_270: Camera**, the **Entity** POV list will not display the **410: International Sales** member since the **Product P_270: Camera** is not valid for it:



To display the **410: International Sales** member in the **Entity** list, select **Show Invalid Members**.



Alternately, you can also choose to show valid or invalid intersections by selecting or deselecting the **Show Only Valid Intersections** preference, while previewing the reports using **Action** menu.



Note:

If the **Entity** dimension **410: International Sales** is selected along with the **Product** dimension **P_270: Camera**, since this is an invalid combination of data, the following message will be displayed in the report:



Understanding Valid Intersections on Grid Data

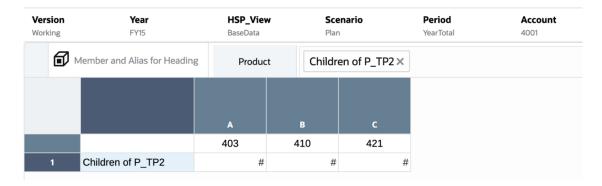
This example shows a grid with the Entity and Product dimensions in the grid to show how invalid combinations of data are not displayed.



See Learning About Valid Intersections for the valid intersection rules used in this example.

The grid design below is as follows:

- Columns: Entity: 403: Sales, 410: International Sales, and 421: Sales North East
- Rows: Product: Children of P_TP2



When previewing a grid, you must note that data for invalid intersections is displayed as #MISSING:

- For the first column with the **403: Sales** member, data for all products is displayed since all Products are valid for **403: Sales**.
- For the second column with the 410: International Sales member, data for the following products are displayed as #MISSING since these members are not valid for 410: International Sales: P_260: Game, P_270: Camera, and P_280: Television.
- For the third column with the 421: Sales North East member, data for the following products are displayed as #MISSING since these members are not valid for 421: Sales North East: P_220: Software Suite, and P_250: Network Card.

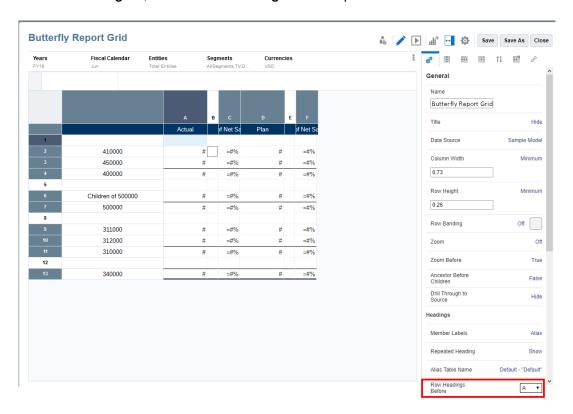
Version	Year	HSP_View	Scenario	Period	Account
Working	FY15	BaseData	Plan	YearTotal	4001
	403: Sales	410: International Sales	421: Sales NorthEast		
_200: Accessories	21,463,426	2,870,809	3,523,947		
_210: Keyboard	13,665,957	2,519,056	1,954,009		
_220: Software Suite	17,865,738	3,016,795	#MISSING		
2_230: Monitor	11,902,983	1,991,325	1,735,706		
_240: Modem	27,751,398	2,853,149	5,016,043		
_250: Network Card	6,294,063	1,282,060	#MISSING		
_260: Game	6,943,600	#MISSING	1,534,797		
_270: Camera	3,251,232	#MISSING	462,498		
280: Television	25,027,563	#MISSING	3,992,870		

Working with Butterfly Reports

By using the **Row Headings Before** Grid General property, you can define a "butterfly report", positioning the row heading between any two columns. For example, select the forth column (D), to place the heading before the forth column (D).

To view the Butterfly Report format:

1. In the Grid Designer, set the Row Headings Before option to the desired column.

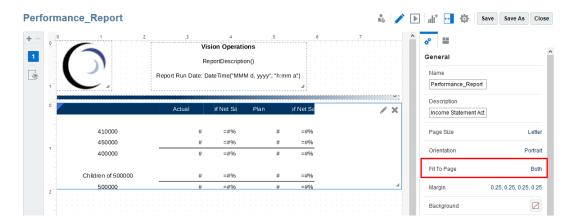




Note:

By default Row Headings Before option is set to Column A.

2. In the **Report Designer**, set the report's **Fit to Page** property to either **Width** or **Both**.



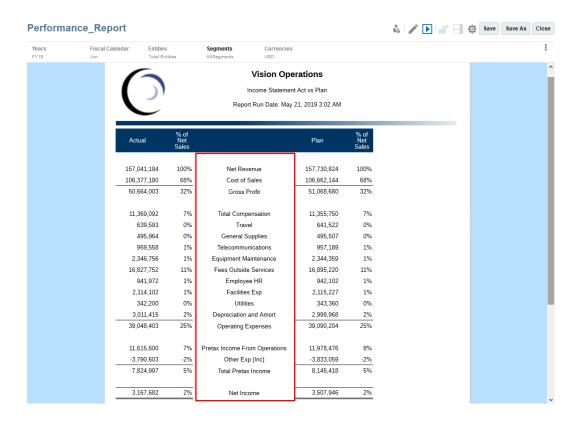
Note:

If the **Heading Before** property has a selection other than **Column A**, then you must set the report's **Fit to Page** property to either **Width** or **Both**.

3. In the Report Designer, select



to view the "Butterfly Report".



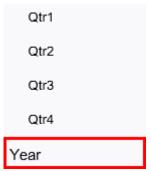
Working with the Ancestor Before Children Property

You can use the Ancestor Before Children option to display the ancestor members before child members instead of after the child members when using specific member selection functions.

For example, let us consider the "Year" hierarchy with four-quarter (Qtr) members, where the member selection function is "Children of Year (Inclusive)". If you set Ancestor Before Children to True, then the "Year" hierarchy is displayed in the grid as follows:



By default setting for **Ancestor Before Children** is set to **False**. For example, with **Ancestor Before Children** set to **False**, then the "**Year**" hierarchy is displayed in the grid as follows:



The following member selection functions are supported by this property:

- Descendants
- Children
- Bottom
- Ancestors
- Parent
- Match
- Except
- Intersect

Note:

- For the "Children", "Descendants", "Bottom" and "Parent" functions: The ancestor or parent members are displayed either before or after the children, depending on the property setting.
- For the "Ancestors" function: The resulting hierarchy is shown sorted, the
 ancestor or parent members are displayed either before or after the children,
 depending on the property setting.
- For the "Match", "Except" and "Intersect" functions, all resulting members are shown sorted, the ancestor or parent members are displayed either before or after the children, depending on the property setting.
- When using this property with the "Except" function or "Intersect" function, the
 first parameter of each function must contain a hierarchy-based member
 selection function that is supported by this property: "Bottom", "Children",
 "Descendants", "Ancestors" and "Parent", and not individual member
 selections.

For example:

- Supported Syntax: "Except (Children(Q1), Feb)" or "Intersect (Children(Q1), Jan)"
- Not Supported Syntax: "Intersect (Jan, Feb, Mar, Jan)"



5

Working with Text Boxes

Related Topics

- Adding a Text Box
 - Text boxes are report objects that can contain text and text functions.
- Formatting Text Boxes
 You can format Reports text, location and size of text boxes.
- Using the Text Character Width Property

Adding a Text Box

Text boxes are report objects that can contain text and text functions.

You can enter a label, description, or a function that retrieves the current date in a text box. You can also enter multiple paragraphs of text. Like other report objects, you can move, resize, or reposition the area containing the text.

To add a new text box:

- 1. Do one of the following:
 - From the toolbar, click and select Text.
 - From a blank report page, click $\stackrel{f A}{=}$.
 - From the report header, footer, or body, right-click and select Add Report Content, and then select Text.
- 2. Click or Setup Text.
- 3. Enter the text in the text box.

Use the properties panel to format the text.

When using a text box with the Notes text function, you can enable and select a data source to expose POV controls for the text box. For more information refer to:

- Using the Notes Text Function
- Inserting the Notes Text Function in a Report

To insert a function in the text box, click . See Text Functions



Pasting formatted text into a Text Box, copied from Microsoft Word or an HTML page, has some rendering limitations. See Pasting Formatted Text into a Text Box Limitations.

Formatting Text Boxes

You can format Reports text, location and size of text boxes.

You format the text in a text box in two places:

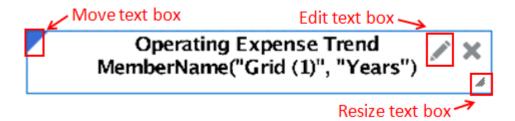
 Use the properties panel to edit properties for the entire text box, such as the name, background color, default font and font size, and vertical alignment. You can also Reset format properties to Default to restore the default format settings.



The default font and font size apply to the entire text object to override the default font for text boxes with varying fonts.

Use the text editor toolbar to format the text within the text box.

You can also format the display of text boxes in a report. For example, once you place a text box, you can move or resize the text box, specify horizontal and vertical positions for the text box, and place a border around the text box.



To move a text box, place your mouse on the upper left corner of the text box frame and drag to the desired location.

To resize a text box, place your mouse over the lower right corner of the text box and drag to the desired size.

To specify the horizontal and vertical position or to place a border around the text box, click

in the properties panel of the report. See Adding Borders and Aligning Text.

To edit the text in a text box, click . See Editing Text Properties

Editing Text Properties

Text within a text box is broken down into text blocks. As you enter text, every time you press Enter, you create a new text block. Each text block can be formatted differently. For example, the title of a report can have a large font size, and the subtitle can have a smaller font size. You

do not need to create new text boxes for each block of text. Click to view the text block in your text object.

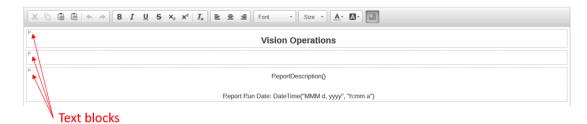
Figure 1 shows an example of a text box with three text blocks:

A report title



- An empty block used as a spacer
- Text functions for the report description and run date

Figure 5-1 Text Block Example





To insert a new line within a text block without creating a new text block, press Shift+Enter.

To define font for text:

- 1. Edit a text box.
- 2. In the toolbar, use the **Font** and **Size** drop down boxes to define the font.

The following default fonts are available:

- Liberation Sans (Arial)
- Liberation Serif (Times New Roman)
- Liberation Mono (Courier New)
- Albany (Japanese)
- Albany (Korean)
- Albany (Simplified Chinese)
- Albany (Traditional Chinese)

Note:

You cannot enter a custom size for the font. You must pick from the list of available font sizes.

In addition to the default fonts, you can upload your own fonts by navigating to the **Fonts** folder in the Library, clicking **Create**, and then **Upload File**. Uploaded fonts will be displayed in the **Font** drop down box.

B $I \cup S \times_2 \times^2 I_x$

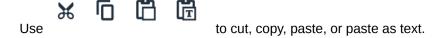
Use the buttons to format text with bold, italics, underline, strikethrough, subscript, or superscript.

Use $\mathbf{I}_{\mathbf{x}}$ to remove formatting from text.

Use to select the color and background color of the text. You can also define a custom color.

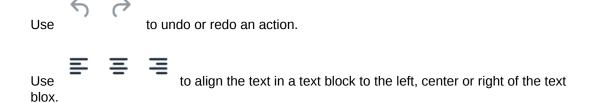


You must pick a color from the color palette. You cannot manually enter an RGB value for a color.



Note:

Pasting formatted text into a Text Box, copied from Microsoft Word or an HTML page, has some rendering limitations. See Pasting Formatted Text into a Text Box Limitations.



Pasting Formatted Text into a Text Box Limitations

If you are pasting content from Microsoft Word or HTML, an attempt is made to maintain as much formatting information as possible based on the currently supported feature set in text boxes. Currently, all these formatted text includes bold, italic, underline, strikethrough, superscript, subscript, foreground color, background color, font family, font size, and horizontal alignment. Any other features such as tables, lists and images will be removed.

If formatted text are pasted into a Text Box, then the HTML conversion may result in some rendering differences:

- The conversion only handles inline styling and style-based tags (For example: , <i>, and <u>), and all other formatted text are not recognized by Cascading Style Sheets (CSS).
- 2. Font family lists are parsed and the first supported (exact match) font family is used.
- 3. All font sizes are converted to pt and rounded to integers, with absolute units using known conversion factors, and relative units using the default font size as the basis (For example: 2em = 2 * default font size 12pt = 24pt)

Inserting Text Functions

Click to insert a text function into a text object. For example, you can insert the current date, or the report description. See Text Functions.

Adding Borders and Aligning Text

In the report editor, click in the properties panel to add borders and align the text box within the report.

To add a border to the text box:

- . In the layout panel, click
- 2. From the **Border** dialog box, select a border type (upper, lower, left, right, or all).
- 3. **Optional:** After you enable a border type, click the **Line Type** and **Color** drop down boxes next to that type to change the line style and color of that border.

Use **Horizontal Alignment** and **Vertical Alignment** to modify the placement, alignment, and indent of the text within a text box.

Automatically Size a Text Box Width using the Grid Width

You can automatically size the width of a text or note box to match the runtime width of a grid, when the report's **Fit To Page** property is set to **Width** or **Both**. If you do not automatically size the text box based on a grid width, the text box may not fit within the page. This can occur when the rendered grid is wider due to expanded columns.

To automatically size a text or note box width based on a selected run time grid width:

- 1. In the report editor, select the text or Note box and click in the properties panel.
- 2. In Size Width to Grid Width, select the grid.



Note:

- The text or note object and the grid object need to exist on the same sheet.
- The text or note object need to be in the body of the report, not the header or footer.
- By default, the Size Width to Grid Width property has a value of Off. When the
 property value is Off the preview width of the text or note object is the same as
 the design time width of the text or note object.
- If a text or note object has the Size Width to Grid Width property set to a grid, and that grid is deleted or moved to a different sheet, the Size Width to Grid Width property will be reset to Off.
- If the grid object has columns with a Page Break Before property enabled, the text or note object width will match the width of the first page of the grid in PDF preview. For example, if the grid has 12 columns, and the 7th column has Page Break Before property enabled, the grid is split into two parts on different PDF pages. First part has columns 1 6, second has columns 7 12. A text or note object with Size Width to Grid Width will be sized to the width of the first grid (columns 1 6).

Example

The following report has one grid and one text box, where the report's **Fit To Page** property is set to **Both**.

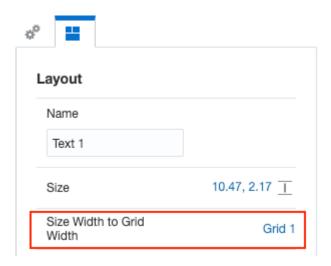


This initial report preview shows the text box which is not automatically sized to fit the width of the report page.





After setting the **Size Width to Grid Width**, the text box width matches the rendered grid width.



This report preview shows the text box width matches the rendered grid width.



Setting the Text Character Width

You can use the **Text Character Width** property to choose between more and less conservative sizing of text in a text box. The property can have a value of **Large**, **Medium**, or **Small**. By default, the property is set to **Large**. For more information, see Using the Text Character Width Property



Using the Text Character Width Property

Overview

The Text Character Width property is available for text and heading cells in a grid, as well as text and Note objects. In a grid, the property can be set for the entire grid, or individual text or heading cells. The property does not have any effect on data or formula cells.

The property allows you to choose between more and less conservative sizing of text in a grid text cell or text in a text or Note object. The property can have a value of **Large**, **Medium**, or **Small**. By default, the property is set to **Large**.

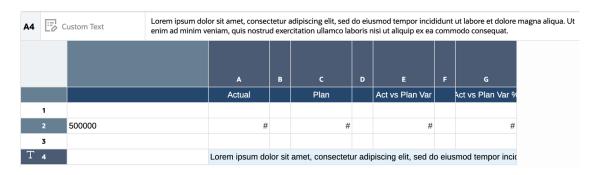
- A value of **Large** means that the most conservative sizing of text is used. This will result in a larger amount of space taken for displaying the text and may result in the text value word-wrapping earlier than necessary, and/or extra empty space. However, this will ensure that the text is never truncated because it can't fit.
- A value of **Medium** means that a less conservative sizing of text is used. This will result in
 a smaller amount of space taken for displaying the text and may result in the text value
 word-wrapping later, and/or less empty space. However, there is a slight chance that the
 text will be truncated.
- A value of Small means that the least conservative sizing of text is used. This will result in the smallest amount of space taken for displaying the text, and the least amount of empty space. However, there is more of a chance that the text will be truncated with this property setting. Care should be taken when using the Small property set on a text cell where the amount of text in the cell is likely to vary significantly because of text function evaluation (for example when using a CellText function), or within a Note Column.

Using the **Medium** or **Small** setting for the **Text Character Width** property will result in word-wrapping later in a line of text. It can also result in a narrower column width for columns with a **Width** property set to **Minimum**, and a smaller row height for rows with a **Height** property set to **Minimum**. For text or Note objects with a **Size** property set to **Fit** or **Minimum**, the height of the text or Note object may be smaller, resulting in less empty space at the bottom of the text or Note object, especially when the text or Note object contains a large amount of text.

Examples

Example 1: Single text row, merged across columns

Design View:



Text Character Width = Large:



	Actual	Plan	Variance	Variance %
Operating Expenses	30,428,078	34,564,452	4,136,375	12

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

Text Character Width = Medium:

	Actual	Plan	Variance	Variance %
Operating Expenses	30,428,078	34,564,452	4,136,375	12

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Text Character Width = Small:

	Actual	Plan	Variance	Variance %
Operating Expenses	30,428,078	34,564,452	4,136,375	12

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Example 2: Text box

Design View:

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore mag aliqua. Eget sit amet tellus cras adipiscing enim. Aliquet nec ullamcorper sit amet risus nullam eget. Bibendum enim facilisis gravida neque convallis a cras semper. Nisl pretium fusce id velit. Orci eu lobortis elementum nibh. Quis enim lobortis scelerisque fermentum dui. Tincidunt dui ut ornare lectus sit amet. Id aliquet lectus proin nibh nisl condimentum id. Arcu dui vivamus arcu felis bibendum. Suspendisse potenti nullam ac tortor. Quisque egestas diam in arcu cursus euismod. Aliquet nec ullamcorper sit amet risus. Blandit volutpat maecenas

volutpat blandit aliquam etiam. Accumsan lacus vel facilisis volutpat est velit. Suspendisse in est ante in nibh mauris. Integer enim neque volutpat ac tincidunt vitae. Sit amet nulla facilisi morbi. Elit scelerisque mauris pellentesque pulvinar pellentesque habitant morbi tristique senectus. Ut ornare lectus sit amet. Risus viverra adipiscing at in tellus integer feugiat. Diam maecenas sed enim ut sem viverra aliquet eget. Ultrices in iaculis nunc sed augue lacus viverra. Mauris in aliquam sem fringilla ut. Adipiscing bibendum est ultricies integer quis. Tortor id aliquet lectus proin nibh. Interdum velit laoreet id donec ultrices tincidunt. Ante in nibh mauris cursus mattis molestie a. Cursus eget nunc scelerisque viverra mauris. Ultrices sagittis orci a scelerisque. Tempus egestas sed sed risus pretium.

Text Character Width = Large:



Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Eget sit amet tellus cras adipiscing enim. Aliquet nec ullamcorper sit amet risus nullam eget. Bibendum enim facilisis gravida neque convallis a cras semper. Nisl pretium fusce id velit. Orci eu lobortis elementum nibh. Quis enim lobortis scelerisque fermentum dui. Tincidunt dui ut ornare lectus sit amet. Id aliquet lectus proin nibh nisl condimentum id. Arcu dui vivamus arcu felis bibendum. Suspendisse potenti nullam ac tortor.

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Text Character Width = Small:

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6

Working with Images

Related Topics

- Inserting Images
 - You can add images to the header, footer, or body of a report.
- Formatting Images
 You can format the display of images in a report.

Inserting Images

You can add images to the header, footer, or body of a report.

After you add an image to a report, you can format the image. The following image formats can be inserted into a report:

- Portable Network Graphics: .png
- Graphics Interchange Format (GIF): .gif
- Joint Photographic Experts Group (JPEG): .jpg



Image are saved with the report. As a result, the speed of the rendered report may be affected by the size of the image.

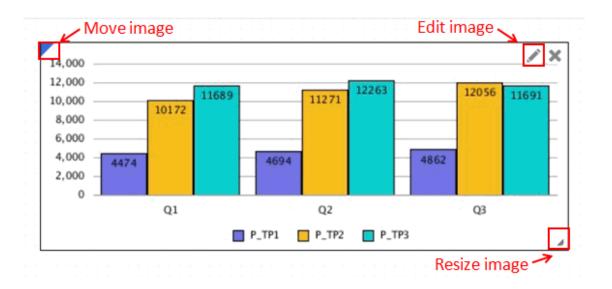
To insert an image:

- 1. Do one of the following:
 - From the toolbar, click and select Image.
 - From a blank report page, click
 - From the report header, footer, or body, right-click and select Add Report Content, and then select Image.
- 2. Browse to select the image, and click **OK** to upload it.

Formatting Images

You can format the display of images in a report.

Once you place an image in a report, you can move or resize the image, specify horizontal and vertical positions for the image, and place a border around the image.



To move an image, place your mouse on the upper left corner of the image frame and drag to the desired location.

To resize an image, place your mouse over the lower right corner of the image and drag to the desired size. The image stretches automatically to fit the new size.

To specify horizontal and vertical positions for the image, select the image, and in the

properties panel, click . Use the **Placement**, **Alignment**, and **Indent** fields to adjust the horizontal and vertical position.

To place a border around an image:

- 1. On the image, click
- 2. In the properties panel, click **Border** to toggle the border on and off.
- 3. **Optional:** Click the color drop down to select a color for the border. Choose from the default colors, or you can select a custom color.



7

Working with Charts

Related Topics

About Charts

A chart is a graphical representation of report data from a grid on a report.

Inserting a Chart

The chart retrieves data dynamically from the grid, so if data in the grid changes, the chart is updated automatically. You create charts to portray data graphically in your reports.

About Chart Designer

The chart designer has different areas to use for look and feel in a report.

Chart Designer Views

The view tabs for the chart designer enables you to preview the chart, define the chart data, and edit the data source for the chart.

Chart Properties

The properties panel for the chart designer displays the options and navigation buttons.

- Understanding the Size of Chart Data Points and Label Display
- Understanding the Dual Y Axis in Charts

When the data values in a chart vary widely from data series to data series, or when you have mixed types of data (for example, currency and percentages), you can plot one or more data series on a secondary vertical (Y) axis.

About Waterfall Charts

These charts display a running total of positive and negative values, which is helpful in showing how you arrived at a net value from an initial value.

About Scatter and Bubble Charts

A bubble chart is a variation of a scatter chart in which the data points are replaced with bubbles, with an additional dimension of data represented in the size of the bubbles.

- About Treemap and Sunburst Charts
- About Gauge Charts

About Charts

A chart is a graphical representation of report data from a grid on a report.

You can use the different chart types to illustrate trends and tendencies or to highlight differences and improvements.

Types of Charts

- Bar: includes Bar, Stacked Bar, Horizontal Bar, Horizontal Stacked Bar
- Line: includes Line, Stacked Line, Horizontal Line, Horizontal Stacked Line
- Area: includes Area, Stacked Area, Horizontal Area, Horizontal Stacked Area
- **Combination**: includes Combination, Stacked Combination, Horizontal Combination, Horizontal Stacked Combination

- Waterfall
- Pie: includes Pie, Donut
- Pyramid
- Polar: includes Polar, Polar Bar, Polar Line, Polar Fill
- Radar: includes Radar Line, Radar Fill
- Scatter
- Bubble
- Treemap
- Sunburst
- Gauge

Watch this tutorial video, you'll learn how to create charts in Narrative Reporting.



-- Creating Charts in Narrative Reporting.

Inserting a Chart

The chart retrieves data dynamically from the grid, so if data in the grid changes, the chart is updated automatically. You create charts to portray data graphically in your reports.

To insert a chart:

- 1. Do one of the following:
 - From the toolbar, click in and select **Chart**.
 - From a blank report, click
 - From the report body, right-click and select Add Report Content, and then select Chart.
- 2. Click Setup Chart.
- In Select Source, do one of the following:
 - Click Models, and select a data source to create a new grid that is stored in the Hidden Sheet.
 - Click Existing Grids, and select a grid that already exists in the report to use as the data source for the chart.
- 4. Modify the chart using the options in **Chart Properties**.

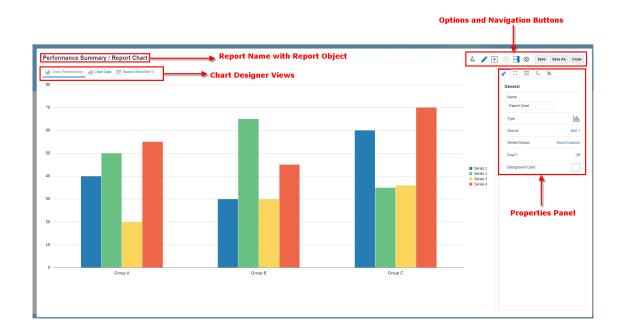
The chart is displayed in Chart Designer.

About Chart Designer

The chart designer has different areas to use for look and feel in a report.

The chart designer has the following areas:





- The Views tabs enable you to toggle between chart presentation, chart data, and source grid views. See Chart Designer Views
- The Properties panel displays general, plot area, title, axis, and legend properties, as well as display options for each data set in a chart. See Chart Properties
- The toolbar lets you switch between edit and preview modes, show or hide the properties panel, and select a different report object to edit.

Chart Designer Views

The view tabs for the chart designer enables you to preview the chart, define the chart data, and edit the data source for the chart.

Chart Presentation

Chart Presentation view enables you to see how the chart will be displayed with the current property settings. You can adjust the chart properties and preview the chart.

Chart Data

Chart Data view enables you to select the rows and columns from a grid to include in a chart. When defining chart data, you identify the rows and columns from the controlling grid that contain the data to display. You can reference data or formula rows and columns by selecting contiguous or non-contiguous rows and columns for the data range.

If you are designing a line, bar, or combination chart, you can reference multiple rows or columns from the grid. If you are designing a pie chart, you can reference any single row or column from the grid, depending what the **Series/Groups** property is set to. If **Series/Groups** is set to Rows/Cols, you select a single column for the pie chart. If **Series/Groups** is set to Cols/Rows, you select a single row for the pie chart. When you define a combination chart, you specify the data rows and columns for the bar and line.

Charts display aggregate rows or aggregate columns that expand. For example, if you specify a row that contains a function that retrieves ten child members, the chart displays ten data sets, or one data set for each child member.

To define chart data:

- Click the Chart Data tab.
- Click the headers of the rows and columns that you want to include in the chart.

Source Grid

Source Grid enables you to edit the grid that the chart is based on. You can change the data source to a different grid, or you can edit the source grid's dimension layout, member selection, and properties. You can also create formula rows and columns in the source grid.

Chart Properties

The properties panel for the chart designer displays the options and navigation buttons.

General Properties

General properties affect the entire chart. Use general properties to edit the following:

- Edit the chart name or data source
- Edit the chart type, such as Bar or Scatter.
- Select the grouping for the legend elements by Rows/Columns (each row is a different chart element, such as a bar or line) or Columns/Rows (each column is a different chart element).
- Set chart type-specific properties, such as:
 - Orientation and Stack for Bar, Line, Area, and Combination chart types.
 - Subtype for Pie, Polar, and Radar chart types.
- Toggle a dual-Y split. See Understanding the Dual Y Axis in Charts.
- Set the background color for the chart. The background color applies to the entire chart area from border to border.
- By default, the Plot Zero Values is set to True. From this setting, you can view zero data values are plotted in charts.

Plot Area

Plot Area properties affect the visual display of the chart. Use plot area properties to:

- Show or hide the chart title and subtitle.
- Edit the chart title and subtitle style, size, alignment (left, center, right), and font.
- Adjust the background color.
- Display grid lines (horizontal, vertical, or both).
- Adjust the color of the grid lines.

Legend

Legend properties affect the visual display of the chart's legend. You can change the position of the legend, as well as displaying a title for the legend, changing the background and border colors, and editing the font and format of chart labels.



Chart Axes

Chart Axes properties affect the visual display of the chart's axis labels. You can create a title and label for the X-axis, and the primary and secondary Y-axes of the chart. You can also edit the text and number format of the Y-axes, and define a custom range for both Y-axes.

Note:

The custom scaling for the Y-axis is based on the displayed data values in the grid (with number formatting scaling applied) and not the unformatted and underlying data values.

About Custom Ranges

For chart types with a Y-axis, you can define a **Fixed** Custom Range to change the starting and ending numbers of your axis and the numeric intervals. For example, you can display values 40 through 60 at three-step intervals by entering 40, 60, and 3 as the values for Min, Max, and Step.

For chart types with a Y-axis, except radar and polar charts, you can specify a custom range to dynamically apply an Offset of either a **Value** or a **Percent**, applied to the minimum and maximum plotted data values. A step is not user entered for offset by value or percent, it is automatically calculated.

Offset by Value

For Offset by Value, the specified minimum is subtracted from the minimum data value plotted; the specified maximum is added to the maximum data value plotted. The axis step values, as well as the minimum and maximum, may be rounded up or down.

For example:

With Offset by Value set to the following:

Min: 10000 Max: 10000

Minimum plotted data value: 143,679

Maximum plotted data value: 475,774

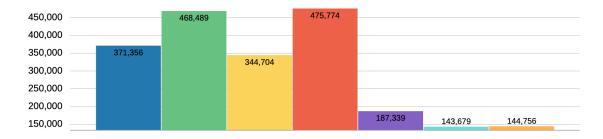
Minimum: 143,679 - 10,000 = 133,679

Maximum: 475,774 + 10,000 = 485,774

Note:

The axis step values, as well as the minimum and maximum, may be rounded up or down.





Offset by Percent

- The specified minimum percent is applied to the difference between the minimum and maximum plotted data values and then subtracted from the minimum data value plotted.
- The specified maximum percent is applied to the difference between the minimum and maximum plotted data values and then added to the maximum data value plotted.

The axis step values, as well as the minimum and maximum, may be rounded up or down.

For example:

With Offset by Percent set to the following:

Min: 20% Max: 20%

Minimum plotted data value: 143,679 Maximum plotted data value: 475,774

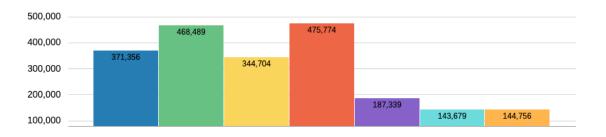
Difference between the minimum and maximum plotted data values:

475,774 - 143,679 = 332,095

Minimum: $143,679 - (332,095 \times 20\%) = 77,260$ Maximum: $475,774 + (332,095 \times 20\%) = 542,193$

Note:

The axis step values, as well as the minimum and maximum, may be rounded up or down.





Options

Chart Options enable you to set visual properties, such as fill style and color, for each data set in a chart. The properties are specific to the type of chart selected. For example, for bar charts you can set the bar width, labels, and borders.

Note:

If the Redwood Experience is set as the default theme in Cloud EPM, the Redwood theme colors will affect the default chart colors in existing reports. Enabling and defining a custom chart theme will override the Redwood color theme. For more information on setting a default custom chart theme, see Report Designer Toolbar.

Data Set Maximum

This property allows you to specify the maximum number of data sets for the chart, where each data set can have its own color and fill setting.

The default number of data sets is 12.

For example, if the **Data Set Maximum** property was set to 24, each data set in the chart can have its own color and fill defined.

Note:

- Previously, the maximum number of data sets, where you could set the data setspecific selections such as color and fill, was 12.
- For example, if you had a chart that resulted in 24 data sets plotted, data set 1 and 13 would have the same color and fill, as well as 2 and 14, and so on.

Label Location

This property defines how and where data labels are displayed in relation to the elements in a chart.

For example, in a Bar chart, the available label locations are: **Auto**, **None**, **Center**, **Inside Bar Edge**, and **Outside Bar Edge**.

For all chart types, you set the **Label Location** in the **Options** section, which applies to all data set elements in the chart.

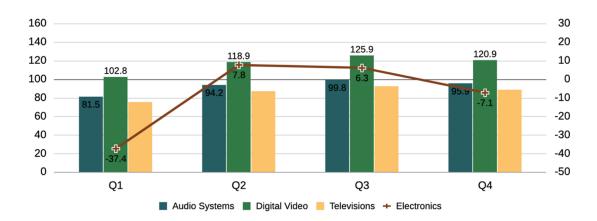
For Bar, Line, and combination charts, you can set the **Label Location** for each data set in the **Series** section. Any selections other than **Auto** will apply to the selected **Data Set** element.

For example, this combination chart has the following **Label Location** settings at the **Series** level:

- Audio Systems (Data Set 1): Auto (uses the Options Label Location setting of Auto)
- Digital Video (Data Set 2): Outside Bar Edge
- Televisions (Data Set 3): None



Electronics (Data Set 4): Below Line



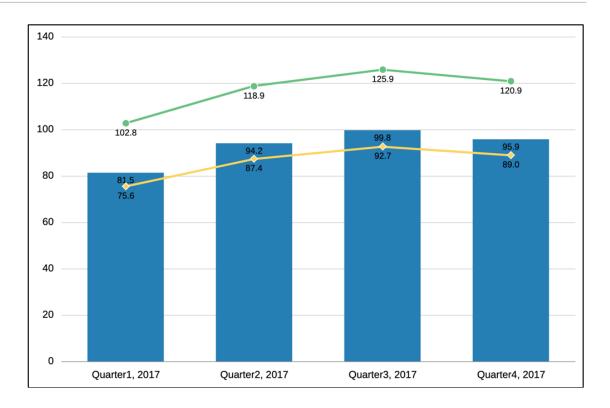
Combine Y Axes

For some chart types, the property "Combine Y Axes", allows combining the plotting of the primary and secondary Y axes and data points to reflect plotting for both the bars and lines on only the primary Y-axis.

The property is most applicable when the bar and line data values have similar scaling and fall within the same numerical range. For example, in the following combination chart, where the "Combine Y Axes" property is enabled, note that both the bar and line data values correspond to the primary Y-axis and the secondary Y-axis is not displayed.

The property applies to the following chart types:

- Bar
- Line
- Area
- Combination



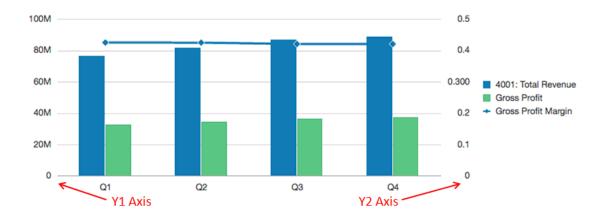
Understanding the Size of Chart Data Points and Label Display

The display of chart data values, as well as X-axis and legend labels, may be truncated due to automatic sizing by the charting engine. This behavior differs by chart type and is dependent on the chart and font size, as well as the length of the data point values and member labels. In some cases, with chart data points and long legend labels, the chart may need to be resized and/or the font size reduced to achieve proper display. For long numeric data point values, scaling may need to be applied to shorten the number length. Also, for long X-axis and legend labels, the member names may need to be shortened in the source grid for the chart.

Understanding the Dual Y Axis in Charts

When the data values in a chart vary widely from data series to data series, or when you have mixed types of data (for example, currency and percentages), you can plot one or more data series on a secondary vertical (Y) axis.





The scale of the secondary Y-axis reflects the values for the associated data series.

While the secondary Y-axis can be used with any line and bar chart type, it is more commonly used with the combination chart type, which helps to distinguish the data series that are plotted on the secondary Y-axis. For example bar for the primary Y- axis and line for the secondary Y-axis.

You can also plot the secondary Y-axis as a split dual chart, where the secondary Y-axis appears with its data series below the original chart. In this case you can use any bar or line chart type.

Setting up a chart with a secondary Y-axis requires changes to two places:

- In the Chart General Properties, set Toggle Dual Y Split to one of the following:
 - On—creates a secondary Y-Axis in the same chart.
 - Split Dual—displays the secondary Y-Axis below the chart.

Note:

When a Combination Chart Type is used, the Dual Y property is Split Dual (On/Off).

 In the Chart Data view, select the data rows and columns to include in the secondary Y-Axis.

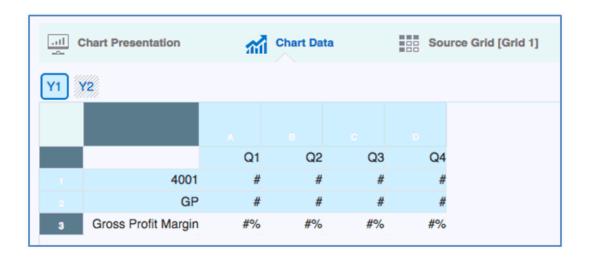
Let's look at a couple of examples illustrating the usage of the secondary Y-Axis. For both examples the source grid has Accounts in the rows for Revenue and Gross Profit, as well as Gross Profit Margin, which is displayed as a percentage. Figure 1 shows the source grid for the chart that we will use in the following examples.

Figure 7-1 Source Grid for Dual Y Examples

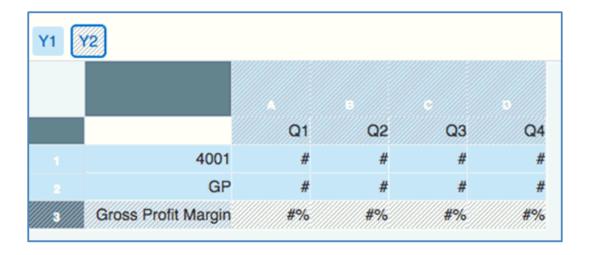
	Q1	Q2	Q3	Q4
4001: Total Revenue	76,932,643	82,181,618	87,018,879	89,252,106
Gross Profit	32,825,598	35,039,613	36,737,003	37,656,853
Gross Profit Margin	43%	43%	42%	42%

Example 1: Dual Y = On (Split Dual = Off)

- 1. Because all of the data series will be displayed in the same chart, in chart general properties, change the **Chart Type** to **Combination**.
- 2. Set Split Dual Y to Off.
- 3. In the Chart Data view, select the rows and columns for the primary (Y1) axis. In this example, we select rows 1 and 2, and columns A-D:

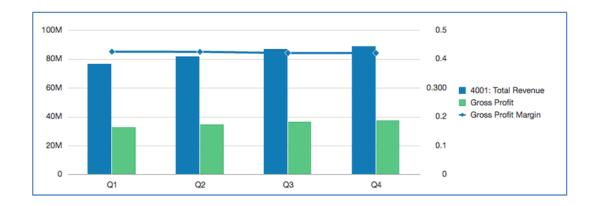


4. Click the **Y2** button and select the row and columns for the secondary Y-Axis. In this example, we select row 3 and columns A-D:



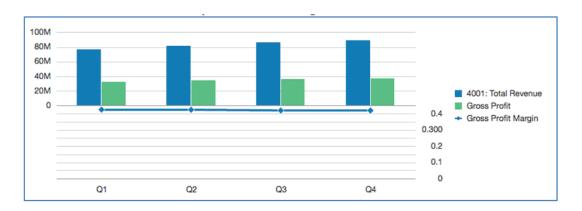
5. Preview the chart. Note that the Gross Profit Margin values, plotted as a line, are reflected in the secondary Y-Axis on the right. The Total Revenue and Gross Margin values are reflected in the primary Y-axis on the left.



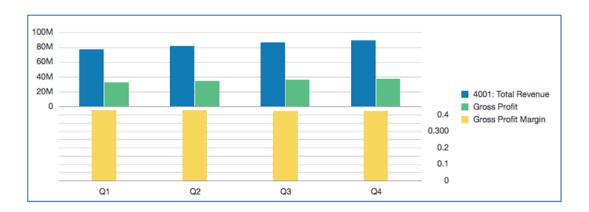


Example 2: Dual Y = Split Dual (Split Dual = On)

- 1. Using the same chart, data and selections in Example 1: Dual Y = On (Split Dual = Off), in the Chart General Properties, set the **Split Dual Y** to **On**.
- 2. Preview the chart. Note that the Gross Profit Margin values, plotted as a line, are reflected in the secondary Y-Axis on the right and below the bar series:



3. Change **Chart Type** to **Bar**, and then preview the chart. Note that the chart displays all data series as bars, with the Gross Profit Margin plotted below.



About Waterfall Charts

These charts display a running total of positive and negative values, which is helpful in showing how you arrived at a net value from an initial value.

The, Figure 1 starts with **Net Revenue** and then shows the positive and negative contributions that led to **Net Income**.

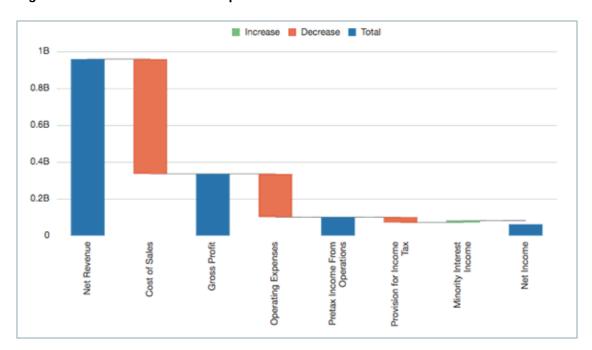


Figure 7-2 Waterfall Chart Example

Waterfall chart data is typically plotted on grid row data values with a single column, where row elements are plotted on the X axis.

- The default setting for the Series/Groups is "Columns/Rows".
- If the X-axis data appears in the grid columns, use "Rows/Columns" instead.

Positive Values, Negative Values, and Totals

Typically, EPM data is displayed as positive values in a grid. You must manually set data values as negative (for example, Cost of Sales and Operating Expenses) or as totals (for example, Gross Profit and Net Income).

To set a data value as negative:

- 1. Select the row or column that contains the data value that you want to set as negative.
- 2. On the row header, click the down arrow, and select **Plot As Negative**.

The row or column displays a minus sign to indicate that it is a negative value.



Figure 7-3 Waterfall Negative Data Values

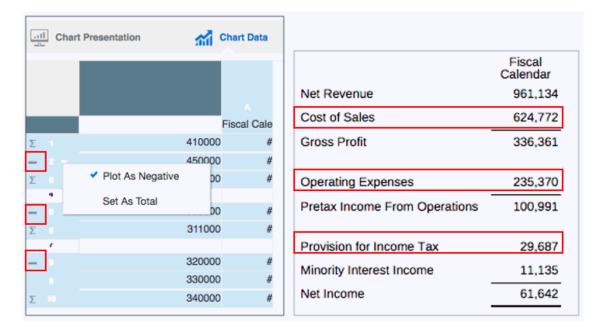


Figure 2 shows an example of Cost of Sales, Operating Expenses, and Provision for Income Tax set as negative data values.

To set a data value as total:

- 1. Select the row or column that contains the data value that you want to set as a total.

Figure 7-4 Waterfall Total Data Values

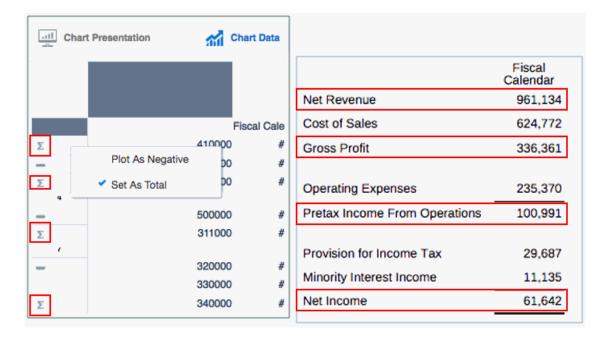


Figure 3 shows an example of Net Revenue, Gross Profit, Pretax Income From Operations, and Net Income set as total data values.

Properties

You can set these properties for waterfall charts:

- Set the bar colors for increase, decrease and total, as well as the connecting line color and style.
- Set the label location, with text and number formatting. Use either the Auto or Center settings to show the labels for all bars.
- Set the bar width and border.

Figure 7-5 Waterfall Chart Finished Example

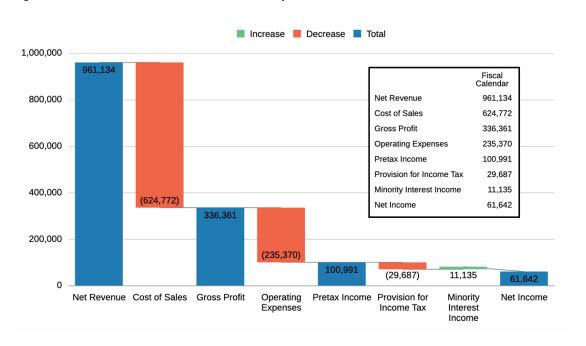


Figure 4 shows a finished example of a waterfall chart with the corresponding data values inset.



Sample Report 2b (Advanced Charts) contains a bubble chart example.



About Scatter and Bubble Charts

A bubble chart is a variation of a scatter chart in which the data points are replaced with bubbles, with an additional dimension of data represented in the size of the bubbles.

About Scatter Charts

. They have two axes: one to show a set of numerical data along a horizontal axis, and another to show a second set of numerical data on a vertical axis. Let's look at an example of a scatter chart that compares Actual and Plan data for a set of products and services.

Figure 7-6 Scatter Chart and Data



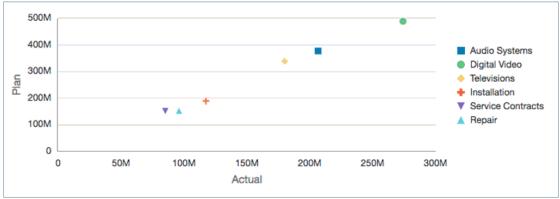


Figure 1 displays a set of Actual and Plan data for products and services for an electronics store. In the accompanying scatter chart, the Actual data is plotted along the horizontal X-axis, and the Plan data is displayed on the vertical Y-axis.

To create a scatter chart:

- 1. Insert the scatter chart into your report.
- 2. On the **Chart Data** tab, select the **X** button, and then highlight the data to be plotted on the X-axis.
- 3. Select the Y button, and then highlight the data to be plotted on the Y-axis.
- 4. Optionally, set labels for the axes in Axes Properties.
- 5. Optionally, set the marker color, style, and size in **Scatter Properties**.

Figure 2 shows the setup of the Actual data in the X-axis and the Plan data in the Y-axis.

Chart Data **Chart Presentation** Source Grid [Grid 1] Actual Plan Variance AS DV =# TV =# IN =# SC =# RP =# Chart Data ... Chart Presentation Source Grid [Grid 1] Actual Plan Variance AS =# DV =# TV IN =# SC =# RP =#

Figure 7-7 Scatter Chart Setup

About Bubble Charts

Let's look at an example of a bubble chart that uses the same Actual and Plan data as the scatter chart above, but adds the variance between the two as a third data set.

Figure 7-8 Bubble Chart and Data

	Actual	Plan	Variance
Audio Systems	206,879,190	377,699,937	170,820,747
Digital Video	274,429,234	489,043,637	214,614,403
Televisions	180,365,337	339,572,238	159,206,901
Installation	117,737,452	189,850,043	72,112,591
Service Contracts	85,418,722	151,205,801	65,787,079
Repair	96,303,770	154,011,439	57,707,669

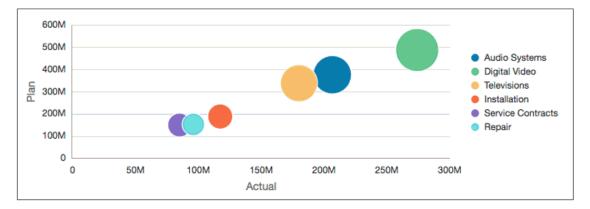


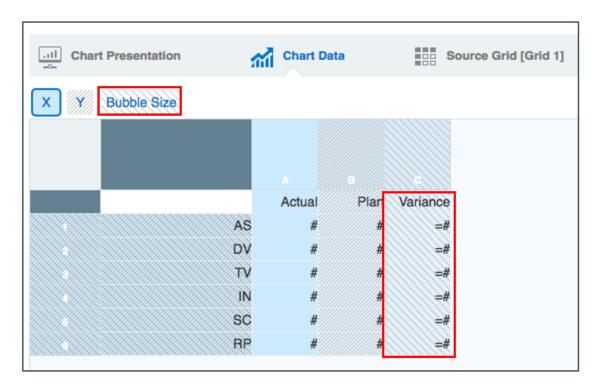
Figure 3 displays a set of Actual and Plan data for products and services for an electronics store, as well as a third column that shows the variance between the two. In the accompanying bubble chart, the Actual data is plotted along the horizontal X-axis, the Plan data is displayed on the vertical Y-axis, and the Variance data is represented by the size of the bubbles.

To create a bubble chart:

- Insert the bubble chart into your report.
- 2. On the **Chart Data** tab, select the **X** button, and then highlight the data to be plotted on the X-axis.
- 3. Select the Y button, and then highlight the data to be plotted on the Y-axis.
- 4. Select the **Bubble Size** button, and highlight the data to be used for the bubble size.
- 5. Optionally, set labels for the axes in Axes Properties.
- 6. Optionally, set the bubble color and marker style in **Bubble Properties**.

Figure 4 shows the setup of Variance as the bubble size.

Figure 7-9 Bubble Chart Setup



Note:

Sample Report 8 (Waterfall and Bubble Charts) contains a bubble chart example.

About Treemap and Sunburst Charts

Treemap Charts

A Treemap Chart is a data visualization that shows hierarchical data using nested rectangles of varying sizes and colors. Each level hierarchy is depicted as a rectangle, often called a branch, which contains other rectangles (leaves). The space inside each of the rectangles that compose a Treemap is highlighted based on the quantitative value in the corresponding data point.

Sunburst Charts

A Sunburst chart is also for visualizing hierarchical data structures. A sunburst chart consists of an inner circle surrounded by rings of deeper hierarchy levels. The angle of each segment is proportional to either a value or divided equally under its inner segment.

Both of these chart types make it easy to spot data patterns or to compare data quantities. In Reports, you select members and functions from a single dimension to visualize the hierarchy in a Treemap or sunburst chart. You can also set chart properties and define element colors, as needed.

Note:

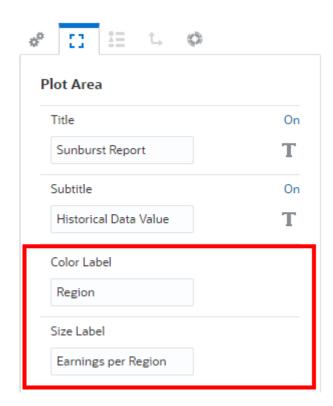
- The hierarchy elements plotted need to be in the grid rows with a single column selected in **Chart Data**. If more than one column is selected in Chart Data, then only the first column will be used to plot values in the chart.
- The grid row selections can contain individual members and member selection functions for one dimension. The hierarchy rendered in both chart types is based on the member selections defined and rows selected in **Chart Data**.
- If multiple dimensions are defined in the grid rows, then the chart results will not appear in a hierarchy format, hence a single dimension should only be defined in the grid rows.

Common Properties for both Treemap and Sunburst Charts

Since neither the Treemap nor Sunburst chart have a legend (member labels are displayed with each chart element) or axes, these two tabs are disabled for both chart types.



In the **Plot Area** properties, there are two additional optional label properties for the Treemap and Sunburst chart types: Color Label and Size Label.



Both properties display additional labels at the bottom of the chart.

Size Earnings per Region Color Region

Chart Colors

For each data set color defined is either visible in **Default Chart Colors** or in **Chart Series** properties.

- In the Sunburst chart:
 - Each inner ring node has its color set based on Data Set 1, Data Set 2, and so on.
 - Each child element under each parent element in the next outer ring has its color set based on **Data Set 1**, **Data Set 2**, and so on.
- In the Treemap chart:

Each node rectangle element has its color plotted based on each node's position in the hierarchy under the parent member and the colors set for **Data Set 1**, **Data Set 2**, and so on.

For example:

- If Data Set 1 color = Blue and Data Set 1 color = Red
- Parent 1 has two children: "Child1" and "Child2"
- When plotted in a Treemap chart, "Child1" will be colored Blue, "Child2" will be colored Red.

Example: Treemap and Sunburst Charts

Let's look at examples of each chart type and their related properties and colors. Both examples use a grid design with the following row member selections for the **Segments** dimension:

Descendants of Seg01 (Inclusive), excluding Gen 6; Descendants of Seg02 (Inclusive)

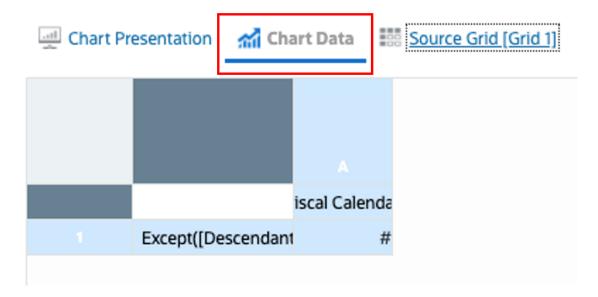
Here is the grid preview.

Note the indented list of the descendants of Seg01 and Seg02:

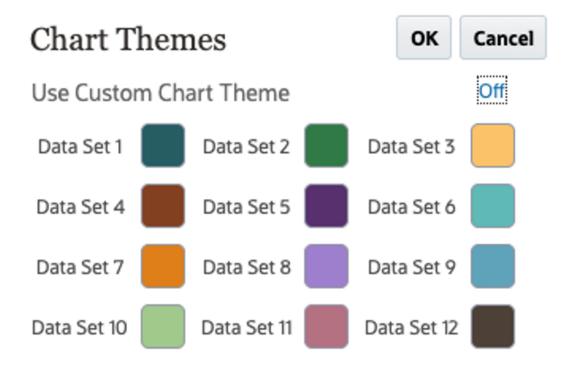


	Fiscal Calendar
НА	88,676,619
AG	141,352,602
AS	230,029,221
DV1000	95,489,669
DV2000	31,899,016
DV3000	81,721,013
DV4000	51,911,291
DV5000	42,805,176
DV	303,826,165
TVHDTV	54,400,764
SmartTV	47,508,995
ProjTV	44,510,558
PLTV	56,446,141
TV	202,866,458
Seg01	736,721,844
IN	130,592,127
sc	94,445,783
RP	106,096,435
Seg02	331,134,344

Here is the **Chart Data** selection for both chart types:

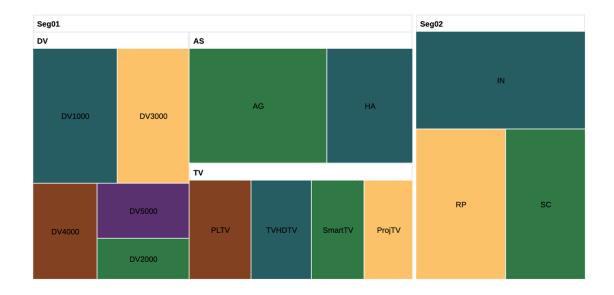


Here are the **Default Chart Colors** which will be displayed in the example:



Treemap Chart

Based on the above grid definition and Chart Data selection, the following is a preview of the Treemap chart:



Note:

- All the level 0 members are plotted as rectangles, the size of the rectangles reflects the data values of each element in proportion to the other elements.
- All parent members are represented as rectangles, grouping their children within it.
- The leaf node rectangles have colors based on the Data Set colors and their
 position in the hierarchy. HA and AG are children of AS. HA is the first child, so it
 has the color for Data Set 1. AG is the second child with the color for Data Set 2,
 so on.

Treemap Properties

The Treemap chart has the following Tree-specific properties:

Table 7-1 Tree Options

Field	Description
Layout	Squarified: Makes the nodes as square as possible, allowing for easy comparison of node sizes.
	Horizontal: First divides nodes horizontally, then vertically.
	 Vertical: First divides nodes vertically, then horizontally.
Label Location	Display within the Node , or Off (don't display labels).
Format	Format the text displayed for the node labels.
Horizontal Alignment	Alignment for the node labels: Center , Start or End .

Table 7-1 (Cont.) Tree Options

Field	Description
Separators	Separators between the node boxes: Gaps or Bevels .
Tooltip Number	Tooltip number formatting for the underlying numerical data value.

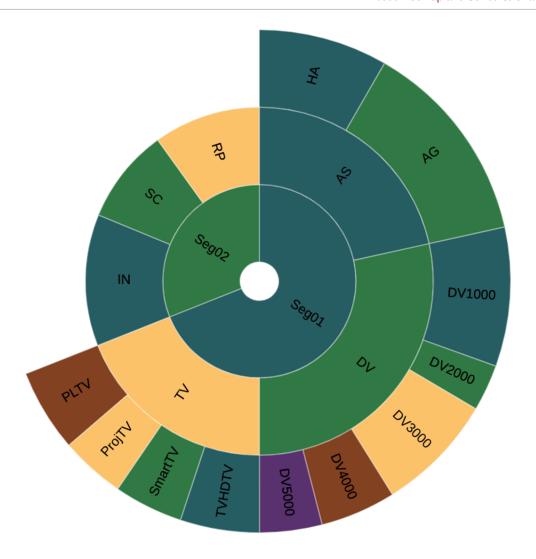
Table 7-2 Header Options

Field	Description
Background Color	Background color for the header rectangles.
Border Color	Border color for the header rectangles.
Use Node Color	Use the node color for the header rectangles.
Format	Format the text displayed for the header labels.
Horizontal Alignment	Alignment for the header labels: Center , Start or End .

Sunburst Chart

Based on the above grid definition and Chart Data selection, the following is a preview of the sunburst chart:





Note:

- All the member elements are plotted as slices; the size of the slices reflects the data values of each element in proportion to the other elements.
- Each level of the hierarchy is represented by a circle or ring with the innermost ring representing the top of hierarchy data and the outermost ring represents the leaf nodes of the hierarchy.
- Seg01 and Seg02 have their slice colors based on Data Set 1 and Data Set 2, respectively. AS, DV and TV are the three children of Seg01, and each has its color based on its position in the hierarchy based on Data Set 1, 2 and 3.

Sunburst Properties

The Sunburst chart has the following sunburst-specific properties:

Table 7-3 Sunburst Options

Field	Description
Sorting	Sunburst nodes can be sorted based on the numerical values. You can turn sorting On or Off .
Start Angle	Set the angle where the outer node element plotting starts; the default is 90 degrees.
Label Location	Set either: Auto, Horizontal, Off or Rotated.
Format	Format the text displayed for the slice labels.
Border	Enable or disable a border between each slide, and set the border color, if enabled.
Tooltip Number	Tooltip number formatting for the underlying numerical data value.

Considerations for both Treemap and Sunburst Charts

Based on the chart size, the number of elements, and font size, the member label display in the chart elements may be truncated due to the automatic label sizing of the charting engine.

If you experience truncated labels, it is recommended that you do one or more of the following, if possible:

- Shorten the member labels by either using member names or custom labels instead of member labels.
- Reduce the font size.
- Increase the chart size.

About Gauge Charts

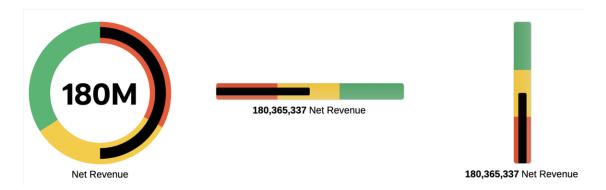
Gauge Charts

Gauge chart types show you whether data values fall within an acceptable range or not. You set the minimum and maximum values, the range maximums, and the gauge by default uses **Red**, **Yellow**, and **Green** traffic lighting to help you quickly assess a current value and identify problems in important data points or measures. You can select **Circular**, **Horizontal**, and **Vertical** gauge types.

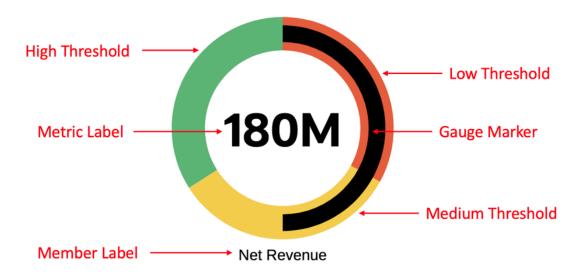
For the gauge markers, you can either use thresholds, reference lines or no markers. You can also customize the chart threshold colors, labels and other items in Chart properties.

Examples of circular, horizontal and vertical gauge charts





Gauge Chart Components



Each gauge chart displays a single cell from the underlying Reports grid. The selected cell is defined in **Chart Data** in the chart editor. If multiple cells are selected in **Chart Data**, the first cell is used for the chart. For multiple gauges to display different cells of data, you create multiple gauge charts and select different cells for each one in **Chart Data**. Depending on the data intersections, you can use a single grid to drive the multiple gauge charts.

There are two options to specify the **Low**, **Medium**, and **High** thresholds. Note that the high threshold is set as part of the maximum. The **Percent** type is the default and provides and initial automatic calculation of the thresholds, which will also adjust the thresholds with changes in data values, for example with end user POV changes. The **Value** type uses hard-coded numbers for the thresholds; these values remain static with any changes in data values.

To change between the two types, you set the **Maximum Value** type in the **Gauge** Chart properties; you set the **Low** and **Medium** threshold types in the **Threshold Type** property in the **Thresholds** Chart properties.

Percent:

- For the maximum (high threshold), the default selection is Percent of Metric value with a default value of 200%. This is set in the Gauge Chart Property for Maximum Value.
- For the Low and Medium thresholds, the default is Percent of Maximum value, with default values of 33% and 66% for the low and medium thresholds, respectively. This is set in the Thresholds Chart properties.

- The percentage results are calculated and applied at run time based on the metric value.
- Value: You can manually set the maximum (high threshold) as well as the low and medium thresholds by entering a value for each. You set the maximum in **Gauge** Chart Properties and low and medium thresholds in **Thresholds** Chart properties.

Gauge Chart Properties

The gauge chart has the following properties:

Table 7-4 General Properties

Property Name	Description
Orientation	Select from the following options:

Table 7-5 Plot Area

Property Name	Description
Gauge Color	Sets the color of the gauge marker; the default is black. For example, see About Gauge Charts, the markers for all the charts are colored black.
Background Color	Applies to when the Gauge Marker property is set to either None or Reference Lines . Select the background color of the gauge plot; the default is light gray.

Table 7-6 Gauge Chart Properties

Property Name	Description	
Minimum Value	Specify a minimum value; the default is zero.	
Maximum Value	Select either:	
	 Percent of Metric value and enter the desired percentage; the default is 200% Value and enter the desired value. If a Value is not specified, the maximum value is automatically set as greater than the metric value. Note: The calculated Maximum Value needs to be larger than the Minimum Value; if this is not the case, the Maximum Value will be set to be the Minimum Value +1, so the gauge is still plottable. 	
Metric Label		
Label Display	Show or Hide the metric label from appearing in the gauge output.	
Format	Specify the metric label's text format.	



Table 7-6 (Cont.) Gauge Chart Properties

Property Name	Description
Number	 Specify the number format for the metric label. For the Circular gauge, if Use Default is selected, the metric label value will be automatically formatted. For the Horizontal and Vertical gauges, if Use Default is selected, the formatting from the chart's source grid value will be applied. For all gauge chart types, if Use Default is not selected, you can set the number formatting for the metric label.
Member Label	
Label Display	Show or Hide the member label from appearing in the gauge output.
Format	Specify the member label's text format.
Override Text	Optionally, you can enter custom text to be used as the member label.
Advanced	
Start Angle	Applies to the Circular gauge. Specify the start angle for the gauge marker and thresholds. The default is 90 , where the gauge marker and thresholds start at 90 degrees from the center of the gauge (top of the circle). Valid values are between 0 and 360 .
Angle Extent	Applies to the Circular gauge. The default is 360 , which results in a full circle for the gauge. You can create semi-circular circular gauges, by using the Angle Extent property. Valid values are between 0 and 360.
Indicator Size	Set the gauge marker thickness relative to the gauge thickness. The default is 0.5 which means the marker thickness will be half of the gauge thickness.
Inner Radius	Applies to the Circular gauge. Specifies the inner radius of a circular gauge, defined by the distance from the center of the gauge to the innermost edge of the indicator and plot area. Valid values are a percent or ratio from 0 to 100. The default is 70, which means 70%.
Gauge Thickness	Applies to the Horizontal and Vertical gauges. Specifies the width (for vertical gauge) or height (for horizontal gauge) ratio compared to the plot area. Valid values are a percent or ratio from 0 to 100. The default is 10, which means 10%.

Table 7-7 Gauge Thresholds

Property Name	Description
Gauge Marker	Select either:
	• Thresholds – displays the colored thresholds in the chart. Thresholds is the default selection.
	• Reference Lines – displays cross-sectional colored lines as thresholds.
	None – No thresholds are displayed in the gauge. If None is selected, none of the remaining Thresholds are available.

Table 7-7 (Cont.) Gauge Thresholds

Property Name	Description
Threshold Display	Select either:
	• All – displays all three thresholds in the chart. All is the default.
	• On Indicator – displays the current threshold as the gauge marker.
	Current – displays only the current threshold; the gauge marker is still displayed.
Desired Goal	Specify whether High values or Low values are desirable. High is the default.
Threshold Type	Select either:
	 Percent of Maximum value – use a percentage of the maximum value (set in gauge properties) with default values of 33% and 66% for the low and medium thresholds, respectively. Percent of Maximum value is the default. Value – allows entering a value for the low and
111	medium thresholds.
Low Threshold	
Label	Specify a label for the Low threshold that is displayed when hovering over the thresholds in the gauge. The default label is Low .
Color	Customize the Low threshold color; the default color is red.
Value	Enter either a percent or value for the Low threshold, depending on the Threshold Type property selection.
Medium Threshold	
Label	Specify a label for the Medium threshold that is displayed when hovering over the thresholds in the gauge. The default label is Medium .
Color	Customize the Medium threshold color, the default color is yellow.
Value	Enter either a percent or value for the Medium threshold, depending on the Threshold Type property selection
High Threshold	
Label	Specify a label for the High threshold that is displayed when hovering over the thresholds in the gauge. The default label is High .
Color	Customize the High threshold color, the default color is green.

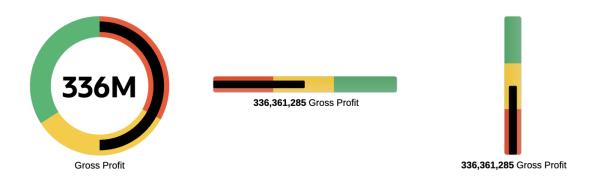
Example: Gauge Charts

The following examples illustrate the three gauge chart types for each of the three threshold settings, **Thresholds**, **Reference Lines** and **None**. All of the examples are driven by a hidden grid with one data point and the default settings for minimum, maximum, low and medium selections.

Example 1: Thresholds

The following examples illustrate the **Circular**, **Horizontal**, and **Vertical** gauge chart types for a Threshold property setting of **Thresholds**.

Note: The low, medium and high thresholds (**Red**, **Yellow**, and **Green**, respectively) are displayed in the body of the chart with the black gauge marker plotting the metric value.



Example 2: Reference Lines

The following examples illustrate the **Circular**, **Horizontal**, and **Vertical** gauge chart types for a **Threshold** property setting of **Reference Lines**.

Note: The low, medium and high thresholds (**Red**, **Yellow**, and **Green**, respectively) are displayed as line intersecting the body of the chart with the black gauge marker plotting the metric value.



Example 3: No Thresholds

The following examples illustrate the **Circular**, **Horizontal**, and **Vertical** gauge chart types for a **Threshold** property setting of **None**, which means that the low, medium and high thresholds are not displayed. Only the black gauge marker plotting the metric value is displayed. In addition, the following chart property changes were made to modify the display of the gauges so that the gauge marker fills the entire chart area, with a semi-circle for the circular gauge:

Circular gauge, Options property tab

- Start angle = 180
- Angle extent = 180
- Indicator size = 1

Horizontal and Vertical gauges, Options property tab:

Indicator size= 1





Working with Shared Reports and Objects

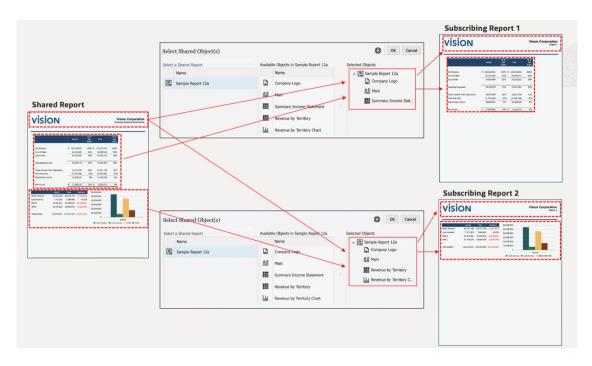
Related Topics

- · About Shared Reports and Objects
- Saving a Report as a Shared Report
- Inserting a Shared Object into a Report
- Unlinking a Shared Object in a Report
- Limitations and Behaviors for Shared Reports and Objects

About Shared Reports and Objects

Shared reports are an artifact type that designates all report objects (**Grids**, **Charts**, **Text boxes**, and **Images**) in the shared report as shared objects. Shared objects can be inserted into other reports, providing a single point of maintenance for the inserted objects within the shared report. If a shared object is updated in its source shared report, all subscribing reports that the object was inserted into will be updated to reflect the object's updates.

For example, when a text box and image object in a shared report are inserted into ten other reports, if the text box and image object are updated in the Shared Report, the ten subscribing reports will also reflect the changes



You can change the layout (size and positioning) of inserted shared objects. Layout changes made to shared objects in their source shared report will not be propagated to the inserted shared objects in a subscribing report.

You cannot edit inserted shared objects, as all object-specific properties are view-only in the subscribing report. However, inserted shared objects can be **unlinked** from the source shared object so that the inserted shared object in a report becomes a copy of the source shared object and is no longer linked to the original shared object.

Saved objects (Grids, Text boxes, and Images) in Financial Reporting will be migrated to a shared report as each migrated Financial Reporting object. Financial Reporting Chart objects do not contain the chart definition or related grid information, therefore they are not supported for migration to Reports.

Note:

After migrating Financial Reporting saved objects in EPM Cloud Platform deployments, the migrated Shared Reports will need to be opened in edit mode and re-saved to avoid object insertion errors.

For example, in Financial Reporting if there is a saved grid and a saved text box (**MyGrid** and **MyTextBox**), upon migrating the objects, two shared reports will be created, each containing a single object. The shared report **MyGrid** will contain the migrated grid, the shared report **MyTextBox** will contain the text box.

You create a shared report by performing a **Save As** action on a report and selecting **Save As Shared Report**. Shared reports can be exported from one environment and imported into another environment via native Library export/import in Narrative Reporting.

Note:

- Shared reports cannot be inserted into **Report Packages**, **Books**, or **Bursting Definitions**.
- There is no property to revert a Shared Report to a regular Report. Once a report is saved as a Shared Report, you cannot change or remove the Shared Artifact Type assigned to a report, unless you perform a Save As action with Save As Shared Report deselected.

You insert shared objects into a report by selecting **Shared** from one of the **Insert** menus, selecting the desired Shared Report to see a list of shared objects that it contains, and then selecting one or more shared objects to insert.

When inserting shared objects into a report, objects are automatically inserted into the same report section (Header, Report Body, Footer) that they are contained in the source shared report. For example, if a text box and image are in the Header in the source shared report, when inserting these objects into a report, they will automatically be inserted into the report's Header.

When inserting shared grids into a report:

POV selections and options are included with the grid in the subscribing report unless there already is a grid in the subscribing report, where the existing grid's POV selections and options will be used. In this case, a shared grid's POV dimension will be used only if the dimension is not present in the subscribing report.



 Saved Selections, if they exist in the shared grid, are included with the grid in the subscribing report, unless there is a Saved Selection with the same name already existing in the subscribing report.

When inserting a shared chart into a report, if the chart's source grid has not already been inserted into the report, the shared source grid will automatically be inserted into the hidden sheet. If the chart's source grid, or a grid with the same name as the source grid, has already been inserted into the report, the chart will be linked to the existing source grid in the report.

When inserting a shared text box, which is configured as a Note text box, into a report, the Note text box's Named POV will also be inserted into the report.

Subscribing reports containing shared objects can be inserted into a Report Package as either Reference Doclets or Doclets (PDF report packages only). If the subscribing reports are inserted into the Report Package as linked (to the report in the Library), the shared objects will remain linked to their source shared report. If the subscribing reports are inserted as unlinked, or stored in the report package, the shared objects will be unlinked from their source shared report.

For a list of limitations and behaviors when using shared reports and objects, see Limitations and Behaviors for Shared Reports and Objects.

Saving a Report as a Shared Report

You create a shared report by performing a **Save As** action on a report and selecting **Save As Shared Report**.

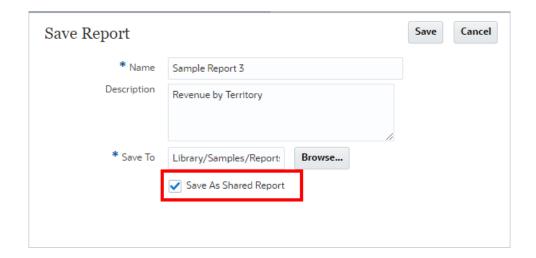


- Shared reports cannot be inserted into Report Packages, Books, or Bursting Definitions.
- There is no property to revert a Shared Report to a regular Report. Once a
 report is saved as a Shared Report, you cannot change or remove the Shared
 Artifact Type assigned to a report, unless you perform a Save As action with
 Save As Shared Report deselected.

To save a report as a shared report:

- 1. In the Report Designer, click Save As.
- 2. In the Save Report dialog, optionally you can modify the Name, Description, and Save To fields, and then select Save As Shared Report.





Note:

- In Narrative Reporting deployments, shared reports cannot be saved to the My Library folder.
- In EPM Cloud Platform deployments, you cannot save a shared report as the same name as its original report in the same folder. The EPM Cloud Platform Library does not support artifacts with the same name is the same folder location.
- 3. Click **Save**. The report will be saved in the **Library** as a shared report.

The **Report Designer** displays a subtitle, under the report title, designating that the report is shared.

Sample Report 12a (Shared Report)



For a list of limitations and behaviors when using shared reports and objects, see Limitations and Behaviors for Shared Reports and Objects.

Inserting a Shared Object into a Report

When inserting shared objects into a report, objects are automatically inserted into the same report section (Header, Report Body, Footer) that they are contained in the source shared report.

For example, if a text box and image are in the Header in the source shared report, when inserting these objects into a report, they will automatically be inserted into the report's Header.

When first inserted into a report, shared objects will retain the positioning that was defined in the source shared report. Inserted shared objects can have their layout (size and positioning)

changed, but they cannot be edited, all object-specific properties are view-only in the subscribing report.

You can:

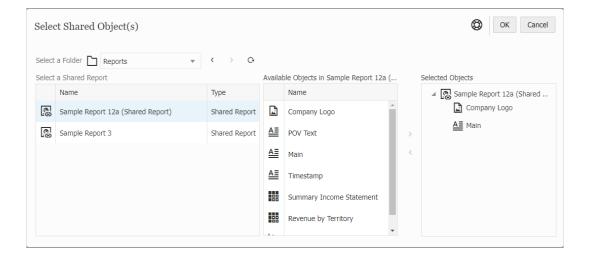
- Insert all four shared object types (Grid, Chart, Text box and Image) into the body of a report.
- Insert shared Text boxes and Images into the header or footer of a report.
- Insert a grid into a hidden sheet of a report.

Note:

After migrating Financial Reporting saved objects in EPM Cloud Platform deployments, the migrated Shared Reports will need to be opened in edit mode and re-saved to avoid object insertion errors.

To insert a shared object into a report:

- 1. In the **Report Designer**, you can perform one of these steps
 - From the toolbar, click , and select **Shared**.
 - From a blank report, click
 - From the report body, header, or footer, right-click and select Add Report Content, and then select Shared.
- In the Select Shared Object(s) dialog, under Select a Folder, select the desired Library folder, and then select any shared report that are listed in the Select a Shared Report pane on the left.
- 3. In the middle pane, under **Available Objects in...** contains a list of all shared objects from the selected shared report. Select one or more objects from the **Available Objects in...**
 - list, and click **Move Right** button to move the desired objects to the **Selected Objects** pane on the right.

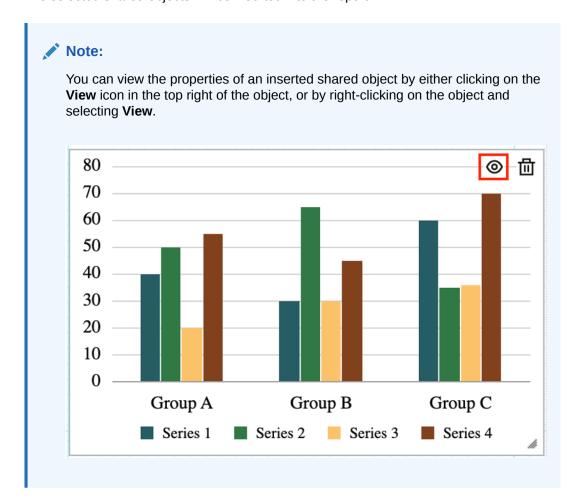




Note:

- Using the Move Right and Move Left buttons, you can add or remove documents within the Selected Objects pane on the right.
- You cannot insert the same shared object multiple times into a report.
- You cannot insert a shared object into a report which has an object with the same name as the shared object being inserted.
 - For example, if your subscribing report has an existing grid named **Grid 1**, you would not be able to insert a shared grid named **Grid 1**.
- In the **Select Shared Objects** dialog, only the shared reports that the report designer has access to will be listed.
- 4. **Optional**: You can browse and select another shared report and select some of its shared objects to insert at the same time.
- 5. Click **OK** to return to the **Report Designer**.

The selected shared objects will be inserted into the report.



Note:

When viewing an inserted shared object, the path to its source shared report is displayed as a subtitle under the report object title.

Sample Report 12c (Target Report 2) / Revenue by Territory Chart

Library/Samples/Reports/Sample Report 12a (Shared Report)/Revenue by Territory Chart

- Optional: You can move or resize the object, either by dragging your mouse on the report object manually or by selecting the report object and then click the Layout tab in the Report Designer properties.
- 7. To edit the inserted shared object, you can unlink it from the source shared object so that the inserted shared object in a subscribing report becomes a copy of the source shared object and is no longer linked to the original shared object.

For more information, see Unlinking a Shared Object in a Report.

Note:

- · When inserting shared grids into a report:
 - POV selections and options are included with the grid in the report unless there already is a grid in the report, where the existing grid's POV selections and options will be used. In this case, a shared grid's POV dimension will be used only if the dimension is not present in the report.
 - Saved Selections, if they exist in the shared grid, are included with the grid
 in the report, unless there is a Saved Selection with the same name already
 existing in the report.
- When inserting a shared chart into a report, if the chart's source grid has not
 already been inserted into the report, the shared source grid will automatically be
 inserted into the hidden sheet. If the chart's source grid, or a grid with the same
 name as the source grid, has already been inserted into the report, the chart will
 be linked to the existing source grid in the report.
- When inserting a shared text box, which is configured as a Note text box, into a report, the Note text box's Named POV will also be inserted into the report.

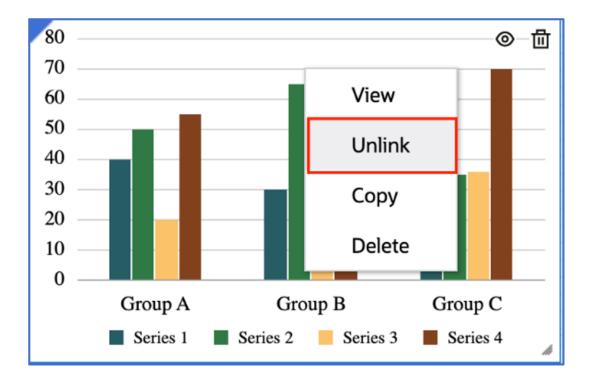
For a list of limitations and behaviors when using shared reports and objects, see Limitations and Behaviors for Shared Reports and Objects.

Unlinking a Shared Object in a Report

Inserted shared objects can be **unlinked** from the source shared object so that the inserted shared object in a subscribing report becomes a copy of the source shared object and is no longer linked to the original shared object.

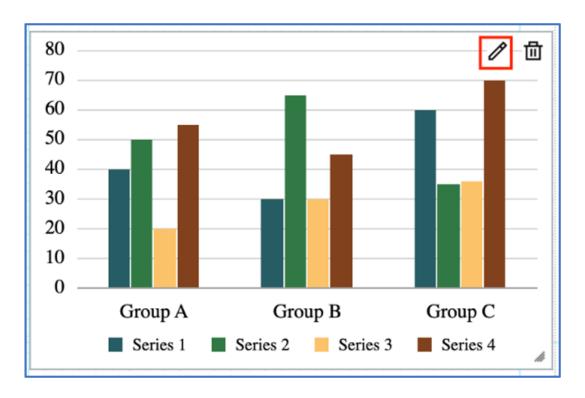
To unlink an inserted shared object in a report:

1. In the Report Designer, right-click on the inserted shared object and then select Unlink.



2. The unlinked object is a copy of the original shared object and is no longer linked to the original shared object.

You can click the **Edit** button to edit the object.





Once an inserted shared object is unlinked, it can no longer be relinked to the source shared object.

For more information, see Limitations and Behaviors for Shared Reports and Objects.

Limitations and Behaviors for Shared Reports and Objects

Before working on the shared reports and objects, you need to review the list of limitations and behaviors.

Table 8-1 The list of limitations and behaviors for shared report and objects:

Shared Reports and Objects	Limitations and Behaviors
Shared Reports	 A shared report cannot have linked objects pointing to another shared report. A shared report cannot be chosen as a report for a Drill to Content link. You can generate a snapshot report for a shared report, in the same manner as a snapshot generated using a regular report. If a shared report is missing or if a shared object from a shared report is deleted, when editing the subscribing report, a validation error will be returned indicating that the shared object is missing. Shared reports can be renamed or moved to a different location, and the links to the inserted shared objects in subscribing reports will be retained. In Narrative Reporting deployments, you cannot add or include a Note in a shared report. Shared reports cannot be inserted into Report Packages, Books, or Bursting Definitions. You cannot use a shared report from a Remote Library to insert shared objects into reports.
Inserting Objects	You cannot insert a shared object into a report which has an object with the same name as the shared object being inserted. For example, if your report has an existing grid named Grid 1 , you would not be able to insert a shared grid named Grid 1 .
Grids	 When inserting a shared grid that has references to another grid in the shared report (cross-grid formulas or text functions in a text segment), the other grid should be inserted at the same time. If the other grid is not inserted, you may receive a validation error for the invalid formula or text function references. Note: If the report has an existing grid with the same name as the referenced grid, then the existing report grid will be referenced by the cross-grid formula or text function. You cannot change the data source for inserted shared grids, you would need to unlink the grid or make the change at the source object in the source shared report.
	 A shared grid saved with the Drill to Content links retains the links when the grid is inserted into a report.



Table 8-1 (Cont.) The list of limitations and behaviors for shared report and objects:

Shared Reports and Objects	Limitations and Behaviors	
Point of View and Shared Selections	 POV selections and options are included with the grid in the subscribing report unless there already is a grid in the subscribing report, where the existing grid's POV selections and options will be used. In this case, a shared grid's POV dimension will be used only if the dimension is not present in the subscribing report. If a shared grid's POV dimension is set to be a Global Dimension in POV options, it can be changed to Local if necessary, by disabling Global Dimension in POV Options. If a shared grid's POV dimension is set to be Local, it cannot be changed and will always remain at Local. Saved Selections, if they exist in the shared grid, are included with the grid in the subscribing report, unless there is a Saved Selection with the same name already existing in the subscribing report. Note: You can unlink the shared Saved Selection in the Member Selector. The 	
	local Saved Selection no longer has a link to the source shared report.	
Charts	 If a shared chart is sourced by a hidden grid in the shared report, the hidden grid will be automatically inserted as hidden to the subscribing report. To source an inserted shared chart with a different grid, you would need to unlink the chart to make it editable to change the source grid. You cannot delete the source grid for an inserted shared chart, a validation error will be received. 	
Text Boxes	 Text functions in an inserted shared text box that have unresolved grid references (For example, a text function that references Grid 1, when that grid does not exist in the subscribing report) will return a validation error until the grid reference is resolved. When inserting a shared text box, which is configured as a Note text box, into a report, the Note text box's Named POV will also be inserted into the subscribing report, unless there is a Named POV with the same name already existing in 	
	the subscribing report. Note: You can unlink the shared Named POV through Named POV manager. This essentially duplicates Named POV into the report and hides the shared Named POV. The local Named POV no longer has a link to the source shared report.	
Access Permissions	 While inserting shared objects into a report, only the shared reports that the report designer has access to will be listed. When editing a subscribing report with inserted shared objects, if the report designer does not have access to the source shared report, they can still access the shared object in the subscribing report. In addition, a report viewer does not need access to the source shared report to access shared objects in a subscribing report. 	
Integration with Report Packages	Subscribing reports containing shared objects can be inserted into a report package as either reference doclets or doclets (PDF report packages only). If the subscribing reports are inserted into the report package as linked (to the report in the Library), the shared objects will remain linked to their source shared report. If the subscribing reports are inserted as unlinked, or stored in the report package, the shared objects will be unlinked from their source shared report.	



9

Defining Members

Related Topics

About Defining Members

When you specify data for a grid, you set criteria that identifies the data to retrieve. The criteria set is member assignment.

Assigning Members

You assign members, functions, substitution variables, and lists to retrieve data for your reports.

Overriding a Data Row or Column Heading

By default, labels for data row and column headings, such as member name, alias, or both, are inherited from the **Headings** section of the grid properties.

Searching For Members

Search uses the **Member Labels** setting from the grid Actions menu to search on Member Name, Alias, or Both.

Previewing Selected Members

You can preview the members, functions, and lists selected for yourReports before you run it.

Working with Saved Member Selections

Saved member selections enable you to define a list of members that can be reused as a member selection within a report.

Suppressing Shared Members

You can suppress the display of shared members in a grid.

Showing Supporting Detail

When you use an applicable EPM Cloud data source and select a row with the **Account** dimension in it, you can display supporting detail for a member.

About Defining Members

When you specify data for a grid, you set criteria that identifies the data to retrieve. The criteria set is member assignment.

The criteria is set by assigning members to the rows and columns in the grid, as well as to the global and local grid points of view. You can also use functions to retrieve members dynamically.



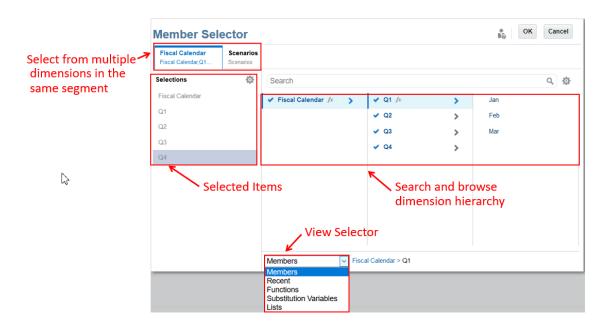
The members displayed in the member selector are dependent on the user's metadata security defined at the data source.

Note:

- Reports utilize a metadata cache to speed up member queries and member selection operations such as searches and formula bar type-ahead. The cache is generated and populated for each report designer and end-user the first time a report is accessed during their session. The cache remains in place throughout the user's current session and is cleared when a user signs out of the Cloud EPM business process (For example, Narrative Reporting, Planning, and so on) where Reports are being used and accessed.
- If a cube's dimensions and members are updated while a Reports user is in an
 active session, the metadata cache may not be updated to reflect dimension and
 member changes. A user will need to sign out and sign back into their Cloud
 EPM Business process to refresh the metadata cache to reflect any changes
 made.
- To optimize report performance for dimensions with over 25,000 members, the metadata cache will not utilized. This means the formula bar type-ahead search is disabled, and the search in the member selector is only based on the member name (not alias) and is a "starts with" type search, rather than a "contains" type search.

Before you define members, you must insert a grid in the report and define its dimension layout. (See Working with Grids.)

You use Member Selector to define members. Member Selector has the following areas:



- The dimensions tabs on the top enable you to select from multiple dimensions in the same segment.
- The Selections panel displays your currently selected items.
- The View Selector changes your view from Members, Recent, Functions, Substitution Variables, and Lists.



The Selector Pane lets you search and browse the dimension hierarchy.



You can change the way members are displayed (for example, member names or aliases) in the menu for the grid.

Assigning Members

You assign members, functions, substitution variables, and lists to retrieve data for your reports.

You can select members to be displayed in your report, or you can use functions to select dimension members dynamically. You can insert a separate row or column in a grid for each selected member, or you can place all of the selected members in one row or column. If the selected members need different formatting (for example, font, border, etc.). they must be placed in separate rows or columns.

Note:

- Reports utilize a metadata cache to speed up member queries and member selection operations such as searches and formula bar type-ahead. The cache is generated and populated for each report designer and end-user the first time a report is accessed during their session. The cache remains in place throughout the user's current session and is cleared when a user signs out of the Cloud EPM business process (For example, Narrative Reporting, Planning, and so on) where Reports are being used and accessed.
- If a cube's dimensions and members are updated while a Reports user is in an
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 EPM Business process to refresh the metadata cache to reflect any changes
 made.
- To optimize report performance for dimensions with over 25,000 members, the
 metadata cache will not utilized. This means the formula bar type-ahead search
 is disabled, and the search in the member selector is only based on the member
 name (not alias) and is a "starts with" type search, rather than a "contains" type
 search.

Assigning Members to Data Rows or Columns

You can use the **Select Members** dialog to assign members to data rows or columns in a report.

To assign members to data rows or columns:

- Open a report and select a grid.
- 2. Open the **Select Members** dialog box by doing one of the following:



- Right-click a dimension, or click the down arrow next to a row or column heading, and click Select Members.
- Select a dimension in the grid, and then click in the formula bar with the dimension name.
- 3. In the **Select Members** dialog box, select the members, members lists, substitution variables, or functions to assign to the selected data row or column.

Use the following conventions to select members.

- Click to drill into a parent member.
- Click to select and deselect a member.



A blue check indicates that a member is currently selected. A grey check when hovering over a member indicates that the member is not currently selected.

- Click next to a member to select the member using a function. See Assigning Members Using Functions
- Click in the Selector Pane to sort the members.
- 4. Optional: To change the order of a selected member in the Selections list, select a member and drag it to the desired location, or right-click and select Move Up or Move Down. To remove a member from the Selections list, right-click the member and select Delete. You can also right-click and select Show in Hierarchy to expand the parent members of that member and show it in the member hierarchy.
- 5. Optional: To edit the parameters of a selected member function, select the member function in the Selections list and click . For example, select Inclusive in a member function to include that member in the function.
- 6. Click OK.

Assigning Members Using Functions

You use functions to select members dynamically.

After you select a function, you can edit its parameters. You create functions in two ways:

- Using a quick-select function
- Using the full Function Builder to select a function and then specifying its parameters

Assigning Members Using Quick-Select Functions

To assign members using a quick-select function:

- Open a report and select a grid.
- Open the Select Members dialog box by doing one of the following:



- Right-click a dimension in the grid and click Select Members.
- Select a dimension in the grid, and then click in the formula bar with the dimension name.
- 3. In the **Select Members** dialog box, click $f^{(x)}$ next to a member to open function builder.
- 4. Select a quick function from the list. Quick functions include:
 - Bottom
 - Children
 - Descendants
 - Parent
 - SameGeneration
 - SameLevel
 - Siblings
- 5. Optional: Click to include the selected member with the function. For example, Children of 500000 will retrieve the child members of Account 500000 only, while Children of 500000 (Inclusive) will return the child members of Account 500000, as well as Account 500000 itself.

The selected function is added to the Selections panel.

Assigning Members Using the Full Function Builder

To assign members using the full function builder:

- Open a report and select a grid.
- 2. Open the **Select Members** dialog box by doing one of the following:
 - Right-click a dimension in the grid and click Select Members.
 - Select a dimension in the grid, and then click in the formula bar with the dimension name.
- 3. In the **Select Members** dialog box, perform an action:
 - Click next to a member, and then select View All Functions to open function builder.
 - Select Functions in the View Selector drop down menu at the bottom of the dialog box.
- 4. Select a function from the list.
- Enter the parameters for the function in the Parameters pane. The parameters depend on the type of function selected. For example, for the Range function, specify the From and To members.
- 6. In the Parameters pane, click **Select** to add the function to the Selections panel.





Tip:

You may have to scroll down to see the Select button if a function has several parameter fields.

The selected function is added to the Selections panel.

Functions Available Through Member Selection

Functions can be used as shortcuts in Reports.

The functions listed in Table 1 can be selected from the **Functions** tab in the **Select Member** dialog box.

Table 9-1 Functions Available Through Member Selection

Function	Parameters Needed	Description
Ancestors	Ancestors of member (Inclusive)	Members at all levels above the specified member
Bottom	Bottom dimension (Inclusive)	All Level 0 members
Children	Children of member (Inclusive)	Members one level below the specified parent
CurrentPOV	CurrentPOV	Returns a member for a row or a column from the POV for a dimension.
DynamicTimeSeries	DTS member (Time Dimension member) This applies to the Time dimension only. Depending on the data source, the following DTS members are available. Only the members enabled at the data source will be displayed. HTD (History to date) YTD (Year to date) STD (Season to date) PTD (Period to date) QTD (Quarter to date) MTD (Month to date) MTD (Week to date) DTD (Day to date) NOTE: Select a Level 0 Time dimension member or CurrentPOV. Member selection functions are not supported as parameters for the Dynamic Time Series function.	Returns period to date values for the selected Level 0 time dimension member and the selected DynamicTimeSeries member (e.g. QTD, YTD, etc.) For example, YTD (Apr) returns the sum of January through April.
Descendants	Descendants of <i>member</i> (Inclusive)	Members at all levels below the specified parent
Except	Except (member1, member2, etc.) Select two, which can be fixed members, CurrentPOV, or other member functions.	Evaluates two selections and removes the items in the first selection that also exist in the second selection. For example, Except (Children(Q1), Feb) returns Jan, Mar
Generation	Generation number	Members based on a generation number in a hierarchy



Table 9-1 (Cont.) Functions Available Through Member Selection

Function	Parameters Needed	Description
Intersect	Intersect (member1, member2, etc.) Select between two and ten members, which can be fixed members, CurrentPOV, or other member functions.	Member or members that are the result of intersecting all specified selections in the function. For example, Intersect (Children(Q1), Jan,) returns Jan.
Level	Level number	Members based on a level number in a hierarchy
Match	Include CurrentPOV (No, Member Name as prefix, Member Name as suffix) Match with (member name, alias, or both)	Members that match a specified pattern or set of characters. You can append the Match string with the Current POV selection as either a prefix or suffix by setting Include CurrentPOV to either Member Name as prefix or Member Name as suffix. The default setting is No.
		Note : This combination is not available when selecting members for a dimension that is already in the Report or Book POV. It is only supported for Report row and column selections, and in Books in either a Report or Section POV.
		For more information, see Example: Using the Match function with CurrentPOV.
		Note: You can use wildcard characters such as * and ? in your search, using either leading or trailing wildcards.
Parent	Parent of member (Inclusive)	Member one level above the specified member
PeriodOffset	PeriodOffset (member, offset, secondary dimension, periods below member) Applies to the Time dimension only Example: PeriodOffset (Jan, -2, Years) returns November of the previous calendar year, where the year dimension is named "Years". Note: periods below member is an optional parameter that is used when there are additional Level 0 Time dimension members other than months (for example, Beginning Balance), and you want the period offset on descendant Level 0 members under a certain member only.	Returns members an arithmetic offset (positive or negative)
Property	User Defined Attributes (UDAs) or Associated Attribute dimension. Operator: equals (=) or not equals (<>) NOTE: EPM Cloud data sources do not support the "not equals" (<>) operator for UDAs. Property Value: For UDA: select a User Defined Attribute. For Associated Attribute: select the desired attribute dimension member.	Returns members based on specified User Defined Attributes (UDAs) or Associated Attribute dimension members.



Table 9-1 (Cont.) Functions Available Through Member Selection

Function	Parameters Needed	Description
Range	Range (frommember, tomember) The starting and ending members can be fixed members, CurrentPOV, or a prompt.	Defines a range of members. For example, you can use the "Year" dimension to specify all months in the first quarter by selecting "January" as the start member and "March" as the end member.
		You can use the Range function with either the RelativeMember or PeriodOffset functions to produce a "rolling" report that displays months before and after the "current month" (For example, three months before through three months after the current month). See Example: Using the Range function to create rolling reports.
		Note: If the range <i>frommember</i> occurs after the range <i>tomember</i> (for example: from November to August), the data returned varies based on the data source:
		 Narrative Reporting models will return members in reverse order of the outline (November, October, September,August).
		 All other cloud EPM data sources will return members in forward order and will wrap when the last member in the hierarchy is reached (November, December, January, August).
RelativeMember	RelativeMember (<i>member</i> , <i>offset</i> , <i>Hierarchy under member</i>) Example: RelativeMember(Mar,-1) returns February.	Members an arithmetic offset (positive or negative) away from the specified member. Applies to any dimension.
	Note:	
	Hierarchy under member is an optional parameter that is used when there are additional hierarchies in the dimension and you want the RelativeMember on descendant Level 0 members under a certain member only.	
SameGeneration	Same generation as member	Members of the same dimension and generation as the specified member
SameLevel	Same level as member	Members from the same dimension and on the same level as the specified member
Siblings	Siblings of member (Inclusive)	Members with the same parent as the specified member

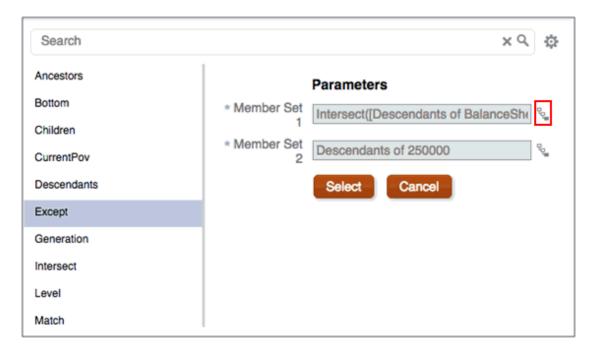
Example: Combining the Intersect and Except Functions

The Intersect function combines selections between members. The Exclude function excludes members from a selection.

You can combine these functions to narrow your results. In this example, we will create the following function: **Except** the *Descendants of 'Total Equity'* (250000) from the **Intersection** of *Descendants of 'Balance Sheet'* AND *Level 1*.

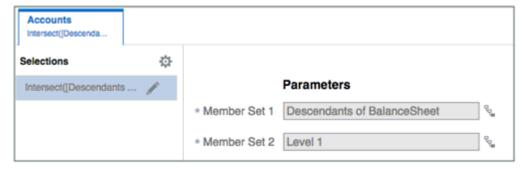


Figure 9-1 Except Function



- 1. Begin by selecting a member, click the fx button, and then select **View All Functions**.
- 2. Select the Except function.
- 3. In the Parameters panel, click next to Member Set 1. Figure 1 shows the Except function with the member select button highlighted.
 - This opens a second iteration of function builder that enables you to nest an Intersect function inside the Except function.
- 4. Select Intersect, and then enter Descendants of BalanceSheet in Member Set 1, and Level 1 in Member Set 2.

Figure 9-2 Intersect Function



- 5. Click **Select**, and then click **OK**.
- 6. In Member Set 2, enter Descendants of 25000.



Figure 9-3 Result of Except and Intersect Functions

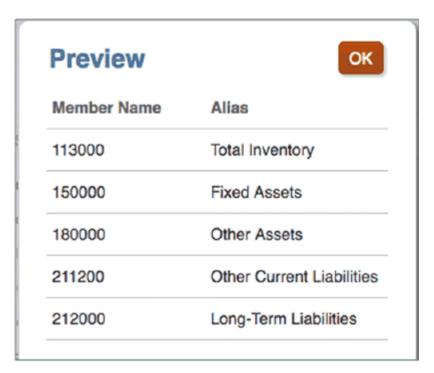


Figure 3 shows the results. The members returned include all of the level 1 descendants of Balance Sheet, except for those that are also descendants of Total Equity.

Example: Using the Range function to create rolling reports

The Range member selector function returns a range of members based on specified start and end members. It is commonly used with the CurrentPOV or Prompts in a Time (for example, Period) dimension to produce a "rolling" report that displays months before and after the "current month" (For example, three months before through three months after the current month).

- The Range function can be used with the RelativeMember function to span across a single year, optionally across a Scenario dimension (for example, Jan to CurrentPOV (Period) for Actual, CurrentPOV +1 (Period) to Dec for Plan), when years and periods are in separate dimensions. You can also use the Range and RelativeMember functions with Fusion ERP or custom Essbase cube data source where periods and years are in the same dimension to span across the single time dimension.
- You can use the Range function with the PeriodOffset function, which can produce a rolling report across the specified year and period dimensions.

For example, if the member selection functions are defined as:

Range from: PeriodOffset of CurrentPOV - 2 for periods

To: PeriodOffset of CurrentPOV + 14 for periods

Where the CurrentPOV for Year and Periods are Jan and FY19, the results of the report are where the starting period is Nov, FY18 (Current POV - 2) and the ending period is Mar, FY20 (Current POV + 14).



Example 1: Range and RelativeMember functions

Sample Report 4 in Narrative Reporting has an example of using the **Range** and **RelativeMember** functions for a rolling report with **January** through **December** across scenarios.

It contains a grid with income statement accounts in the rows, **Scenarios** and **Fiscal Calendar** dimensions in the columns.

- The grid columns are defined as follows:
 - January to the currently selected month in the POV (June by default) for Actual data in FY17.
 - The Current POV + 1 (July by default) to December for Plan data in FY18.
- The POV can be changed to select a different month. The columns use a combination of the Current POV, Range and Relative Member selection functions.
- To account for displaying only Actual data when December is selected for the POV, there is a third hidden data column (C) which is used for conditional suppression definitions on columns B and C, so that Plan data is suppressed when the POV selection is December.

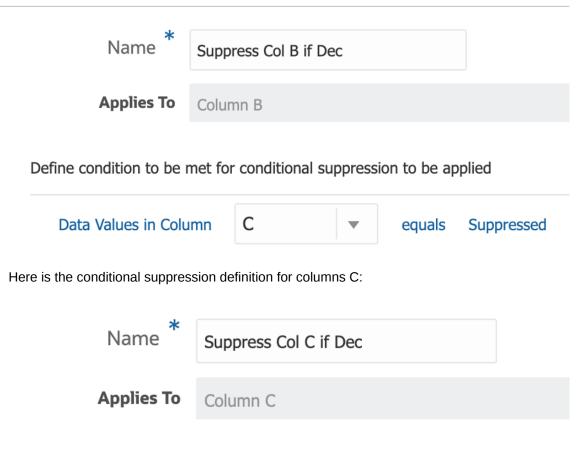
Here is the high-level report design:

		A	В	С	D
		FY17	FY18	FY18	
		Actual	Plan	Plan	YTD
		n Jan to C	ember of	CurrentPOV	
1	410000	#	#	#	=#
2	450000	#	#	#	=#
3	400000	#	#	#	=#

- Column A: Range from Jan to CurrentPOV
- Column B: Range from Relative Member of CurrentPOV + 1 to Dec
- Column C (hidden column): CurrentPOV
- Column D (formula column): SUM([A],[B])

Here is the conditional suppression definition for columns B:





Define condition to be met for conditional suppression to be applied



Here is the report preview with "June" selected for the **Fiscal Calendar** dimension:



Example 2: Range and PeriodOffset functions

The report used in this example utilizes the Planning Vision Plan1 cube as a data source. The example uses the **Range** and **PeriodOffset** functions for a rolling report across years and periods. The grid has the account "Net Income" in the column and the **Period** and **Year** dimensions in the rows to display the time-related members more easily.



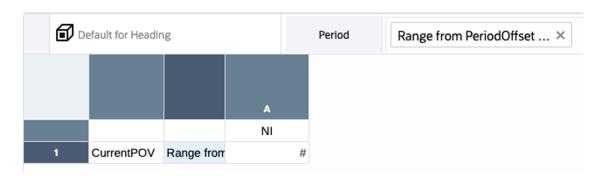
Note:

The correct **Year** dimension will not be returned when either of the following conditions are present, when using the **PeriodOffset** function in a single row or column segment

- Multiple members are selected in another dimension in the same segment.
- A CurrentPOV function or any other member or member function for the Period dimension is in the same segment as the PeriodOffset function.

The POV can be changed to select a different month and year.

Here is the high-level report design:



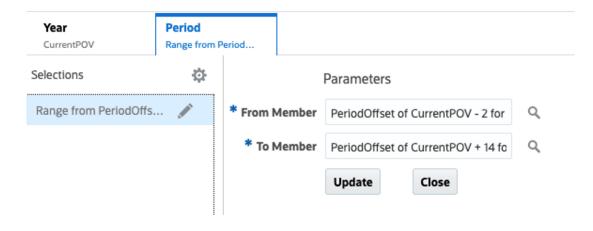
In row 1:

- · The Year dimension member selection is "CurrentPOV".
- The Period dimension member selection is: Range from PeriodOffset of CurrentPOV 2 for periods under YearTotal to PeriodOffset of CurrentPOV + 14 for periods under YearTotal.

Here are the member selector definitions:

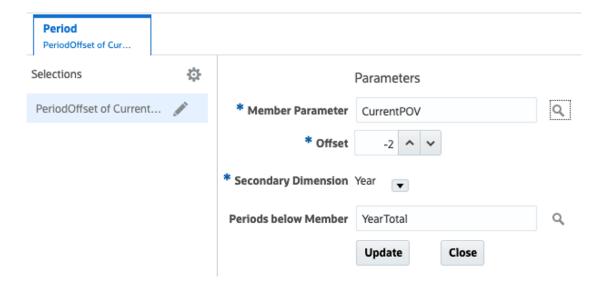
Range function:

Member Selector

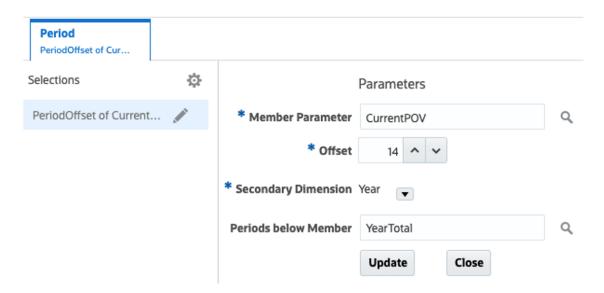




From member selection:



To member selection:



Here is the report preview with **Jan** selected for the Period dimension POV and **FY19** selected for the Year dimension POV:

Period	Year	
Jan	FY19	

		Net Income
FY18	Nov	-
FY18	Dec	-
FY19	Jan	7,377,995
FY19	Feb	4,711,140
FY19	Mar	7,382,344
FY19	Apr	7,941,803
FY19	May	5,689,966
FY19	Jun	8,941,050
FY19	Jul	8,206,918
FY19	Aug	8,975,042
FY19	Sep	9,474,746
FY19	Oct	7,195,424
FY19	Nov	8,635,875
FY19	Dec	11,558,340
FY20	Jan	-2,775,818
FY20	Feb	426,644
FY20	Mar	2,959,409

Example: Using the Match function with CurrentPOV

The **Match** function allows selecting members that match a specified pattern or set of characters. The **CurrentPOV** function returns the selected member from the POV for a dimension.

You can append the **Match** string with the Current POV selection as either a prefix or suffix by setting **Include CurrentPOV** to either **Member Name as prefix** or **Member Name as suffix**. The default setting is **No**.

This example shows how the combination of **Match** and **CurrentPOV** can be used with a modified Oracle Essbase Sample Basic cube with alternate hierarchies for **JanyTD**, **FebYTD**, ...**DecYTD** in the **Year** dimension.

This allows you to select a month for the CurrentPOV for the **Years** dimension and have its related **YTD** member selected. For example, selecting **Aug** and having **AugYTD** returned.

Here is the modified Essbase Sample Basic cube Year dimension.

Name	со	Data Storage Type
▲ ○ Year		Dynamic Calculation
▶ Qtr1	+ (Add)	Dynamic Calculation
▶ Qtr2	+ (Add)	Dynamic Calculation
▶ Qtr3	+ (Add)	Dynamic Calculation
▶ Qtr4	+ (Add)	Dynamic Calculation
⊿ YTD	~ (Ignore)	Label Only
▶ JanYTD	~ (Ignore)	Dynamic Calculation
✓ FebYTD	~ (Ignore)	Dynamic Calculation
Jan	+ (Add)	Shared Member
Feb	+ (Add)	Shared Member
▶ MarYTD	~ (Ignore)	Dynamic Calculation
▶ AprYTD	~ (Ignore)	Dynamic Calculation
▶ MayYTD	~ (Ignore)	Dynamic Calculation
▶ JunYTD	~ (Ignore)	Dynamic Calculation
▶ JulYTD	~ (Ignore)	Dynamic Calculation
▶ AugYTD	~ (Ignore)	Dynamic Calculation
▶ SepYTD	~ (Ignore)	Dynamic Calculation
▶ OctYTD	~ (Ignore)	Dynamic Calculation
▶ NovYTD	~ (Ignore)	Dynamic Calculation
▶ DecYTD	~ (Ignore)	Dynamic Calculation

With the following grid design with the **Measures** dimension **Descendants of Profit** (Inclusive) in the row and **Year** in the columns set to:

CurrentPOV – to display the month selected in the POV.

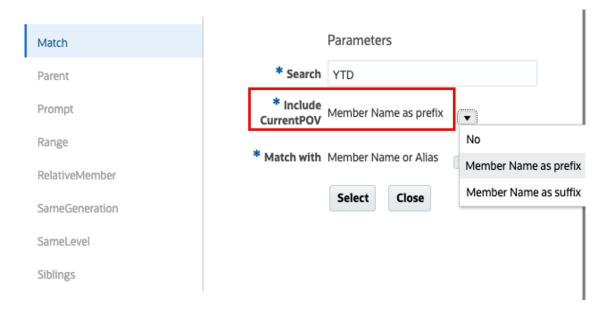


Members matching YTD with CurrentPOV as the prefix.



For column B, in the member selector under Functions with the **Match** function selected:

- Enter a Search string of YTD.
- Set the Include CurrentPOV to Member Name as prefix.
- The Match with option is set to Member Name or Alias.



When previewing the grid with **Aug** as the **Year** POV selection, note that the first column displays **Aug**, which is the current POV; the second column displays **AugYTD**, which is the match for the Current POV of **Aug** and **YTD**.

Year	
Aug	

	Aug	AugYTD
Sales	36,008	269,641
COGS	16,272	120,633
Margin	19,736	149,008
Marketing	6,046	44,586
Payroll	4,056	32,523
Misc	89	666
Total Expenses	10,191	77,775
Profit	9,545	71,233

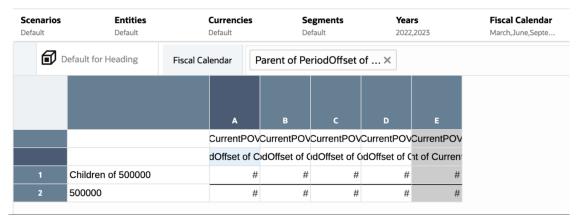
Example: Using the PeriodOffset and Parent Functions to Return Rolling Quarters

The **PeriodOffset** function allows returning relative Period dimension members across both the Period and Year dimensions. This function can be used to create a rolling report across months and years.

The **PeriodOffset** function returns only level 0 periods, however by combining it with the **Parent** function, you can return quarters in a rolling report. For example, display the prior 4 quarters relative to the current quarter.

The following example utilizes the Narrative Reporting Sample Application. Note the following report design:





The **Account** dimension, with **Operating Expenses** selected, is in the grid rows. The **Years** and **Fiscal Calendar** (Period) dimensions are in the columns. The **Years** dimension has CurrentPOV selected for all five columns. The **Fiscal Calendar** dimension utilizes a combination of the CurrentPOV, Parent, and PeriodOffset members, detailed below. Note that the **Fiscal Calendar** POV member selection definitions are just the four quarter-end months (March, June, September, and December).

Table 9-2 The PeriodOffset and Parent functions to return rolling quarters

Column	Function	Description
A	Parent (PeriodOffset of CurrentPOV-12)	Takes the CurrentPOV month selection, returns the month for 12 months prior, spanning across Years, then returns the parent quarter member for the month.
В	Parent (PeriodOffset of CurrentPOV-9)	Takes the CurrentPOV month selection, returns the month for 9 months prior, spanning across Years, then returns the parent quarter member for the month.
С	Parent (PeriodOffset of CurrentPOV-6)	Takes the CurrentPOV month selection, returns the month for 6 months prior, spanning across Years, then returns the parent quarter member for the month.
D	Parent (PeriodOffset of CurrentPOV-3)	Takes the CurrentPOV month selection, returns the month for 3 months prior, spanning across Years, then returns the parent quarter member for the month.
Е	Parent of Current POV	Returns the parent quarter of the CurrentPOV month selection

Note the following results with **Years** = 2023 and **Fiscal Calendar** = June. The last shaded column returns Quarter2 of 2023, reflecting the quarter for the currently select month of June. The prior 4 columns return the prior four quarters across years, based on the **June** selection:

Scenarios Entiti		Cu	rrencies	Segments		Years	Fiscal Calenda	
Scenarios	Entities	Cu	rrencies	Total Segm	ents	2023	June	
		2022	2022	2022	2023	2023		
		Quarter2	Quarter3	Quarter4	Quarter1	Quarter2		
Total Compensation		28,648,853	29,921,682	29,194,845	24,762,818	29,591,774		
Travel		2,110,408	2,067,139	2,032,620	1,976,320	2,153,087		
General Supplies		1,590,147	1,561,081	1,522,015	1,495,651	1,639,226		
Telecommunications		2,789,423	2,807,857	2,752,029	2,534,584	2,870,942		
Equipment Maintenance		6,605,956	6,725,156	6,685,744	5,901,271	6,771,380		
Fees Outside Services		44,122,517	46,621,210	53,666,333	39,411,600	45,560,979		
Employee HR		2,890,800	2,877,416	2,842,501	2,666,731	2,980,400		
Facilities Exp		5,716,135	5,918,373	6,222,202	5,085,534	5,914,723		
Utilities		937,557	976,218	1,118,115	846,364	978,499		
Depreciation and Amort		7,773,844	8,235,915	9,475,704	6,879,454	8,112,783		
Operating Expenses		103,185,641	107,712,046	115,512,108	91,560,328	106,573,793		

The following example shows the results for **Fiscal Calendar** = March, reflecting the current quarter in the last shaded column and the prior 4 columns return the prior four quarters across years, based on the **March** selection.

Scenarios Scenarios	Entities Entities	Currencies Currencies		Segments Total Segments		Years 2023	Fiscal Calenda March
		2022	2022	2022	2022	2023	
		Quarter1	Quarter2	Quarter3	Quarter4	Quarter1	
Total Compensation		27,278,656	28,648,853	29,921,682	29,194,845	24,762,818	
Travel		2,328,175	2,110,408	2,067,139	2,032,620	1,976,320	
General Supplies		1,700,393	1,590,147	1,561,081	1,522,015	1,495,651	
Telecommunications		2,902,990	2,789,423	2,807,857	2,752,029	2,534,584	
Equipment Maintenance		7,074,899	6,605,956	6,725,156	6,685,744	5,901,271	
Fees Outside Services		70,890,879	44,122,517	46,621,210	53,666,333	39,411,600	
Employee HR		3,150,763	2,890,800	2,877,416	2,842,501	2,666,731	
Facilities Exp		7,182,913	5,716,135	5,918,373	6,222,202	5,085,534	
Utilities		1,506,838	937,557	976,218	1,118,115	846,364	
Depreciation and Amort		12,447,424	7,773,844	8,235,915	9,475,704	6,879,454	
Operating Expenses		136,463,930	103,185,641	107,712,046	115,512,108	91,560,328	

Assigning Members Using Prompts

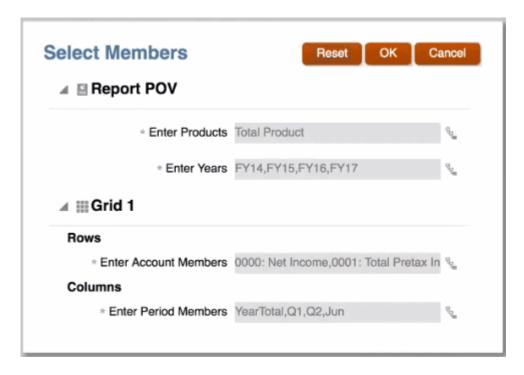
Prompts enable a report viewer to select the members for a grid row, column, or POV when they run the report.

You define the member selections for the prompt when you design the report, and then report viewers choose from the members that you defined when they run the report. You can define prompts in the Global POV (where **Print All Selections** is enabled) and the rows and columns of the grids in your report. For example, Figure 1 shows a prompt that is displayed to users when they run the report that allows them to select the Products and Years in the global POV, members of Account in the grid row, and members of Period in the grid column.

See ____ - Defining Prompts in Reports.



Figure 9-4 POV and Grid Prompt Example



Some considerations when using prompts:

- You can select prompts on POV dimensions when Print All Selections is enabled. This
 enables users to select one or more members for the POV dimensions when they run the
 report.
- You can define a prompt on a grid row or column segment within another member selection function. For example, Range (prompt1, prompt2).
- You can use prompts in reports that are inserted into report packages as reference doclets.

Defining Prompts

To define a prompt:

- Open a report and edit a grid.
- Open the Select Members dialog box by doing one of the following:
 - Right-click a dimension in the grid and click Select Members.
 - Select a dimension in the grid, and then click in the formula bar with the dimension name.
- 3. In the **Select Members** dialog box, perform an action:
 - Click next to a member, and then select View All Functions to open function builder.
 - Select Functions in the View Selector drop down menu at the bottom of the dialog box.
- 4. From the Functions list, select **Prompt**.



- 5. In Prompt Label, enter the prompt text that is presented to the users. For example, "Select a Ouarter:".
- 6. In **Choice List**, select the members that are available to the users. Considerations:
 - Choice list is mandatory for Global POV prompts on reports with multiple data sources.
 - Choice list is optional for all other prompts. If you do not specify a choice list, users can select any members for that dimension that they have access to.
- 7. Use Allow Multiple Selections to restrict users to a single selection or to allow them to choose multiple dimension members. You cannot allow multiple selections for prompts that are used as parameters in other member selection functions (for example, Children (Prompt)).
- Optional: In Default Selection, select the member or members that are listed as the default for the prompt. If Allow Multiple Selections is disabled, you can select only one default member.



You cannot specify a function as a default member.

Using Prompts in the POV

There are some considerations when using prompts in the POV:

- Prompts are supported in the global POV only. You cannot define prompts in a local POV.
- Display Suggestions Only is always enabled. Users cannot edit the POV selection other than responding to the prompts.
- Print All Selections is always enabled for printable pages.
- You can use a prompt with a single selection as a parameter for another member selection function in the POV. For example, in the Period (Time) Dimension you can define the selection as Children (Prompt), where the prompt allows a user to select Qtr1, Qtr2, Qtr3 or Qtr4. When the user runs the report, the system returns the children of the selected quarter (for example, if a user selects Qtr1, the system returns Jan, Feb and Mar).
- A POV dimension with a prompt defined cannot include additional members or functions (except as a prompt for a single member, as described in the previous bullet) as POV selections.
- You cannot use prompts in the POV dimension if Current POV for the same dimension is selected in the grid.
- If a report has multiple data sources and the POV dimension with the prompt is shared between them, the prompt will display a list of common members between the data sources (as is currently done with the POV).

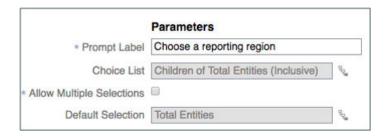
Using Prompts in Reports Reference Doclets

You can insert a report with prompts into a report package as a reference doclet. You respond to the prompt when you insert the report and when you refresh the snapshot. When you check the reference doclet in, all doclets that consume that reference doclet are updated to reflect the prompt selection.

For example, Figure 2 shows a prompt for Children (inclusive) of Total Entities, with Total Entities as the default selection.



Figure 9-5 Reference Doclet Prompt Example: Definition



When you insert the report into a report package as a reference doclet, the system displays a Prompts tab in the report POV dialog box. Select the Prompts tab and make a selection. In this example, we will leave the default value of Total Entities.

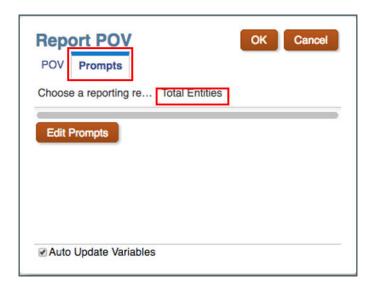
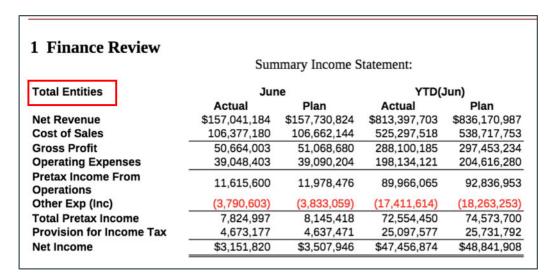


Figure 3 shows the output of the inserted reference doclet, with Total Entities displayed in the POV.

Figure 9-6 Reference Doclet Prompt Example: Output





Working with Substitution Variables and User Variables

Substitution variables are variables that are defined at the EPM Cloud or Essbase data source that serves as a placeholder for specific members that change regularly.

In the EPM cloud, you can set user variables to limit the number of members displayed on a report, helping users focus on certain members. For example, if you create a user variable called Division for the Entity dimension, users can select a member for their own division.

You can use the variable *CurrMonth* to represent the current month (Jan), and you can insert it as a member selection in a report. Create variables at the data source by creating the variable and the string value. You can then change the value of the variable at the data source at any time.

When you select members for a grid, the member selector displays the substitution and user variables that are available for the selected dimension. Both the variable name and the value are displayed for grid columns, rows, and point of view (POV). Variables are prefixed with an "&" (for example, &CurrMonth).

Some considerations when working with substitution and user variables:

- You can use variables as member selections within other member selection functions, just as you would use a regular member. For example, "Children (&CurrentQuarter)".
- You can enable report previewers to select variables in POV selections.
- Variable values are retrieved when the system first connects to the data source. The
 member selector and/or POV will display the Variable's value. When running a Report, the
 latest Variable value will be retrieved. However, if a Variable value changes during a user's
 session, then the change will not be reflected in the Variable value displayed in the
 member selector or POV, until the user reconnects to a new session by logging out and
 logging in again.
- For Reports reference doclets in a report package, you can select variables from the member selector.

Note:

- Substitution variable values that are surrounded by quotes (for example: "Net Income") are not supported in Narrative Reporting. Only substitution variable values that are not surrounded by quotes are visible in the Narrative Reporting member selector.
- Substitution Variable names that are surrounded with quotes (for example: "Current Month") in the data source are not supported in Reports. Reports only supports Substitution Variable names that are not surrounded by quotes (for example: Current Month).
- Only Substitution Variable values with a member name are visible in the member selector. Substitution Variable values with member aliases will not appear.
- User variables with multiple members defined for the variable value will only display the first value in the member selector.



Overriding a Data Row or Column Heading

By default, labels for data row and column headings, such as member name, alias, or both, are inherited from the **Headings** section of the grid properties.

You can override the default settings at the row or column level.

To override a specific data row or column heading in the grid:

1. In a data row or column heading cell, click $\overline{\square}$.



Tip:

You can select multiple header cells for the same dimension.

- 2. Select a display option:
 - Accept the grid default for the label.
 - Display the member name only.
 - Display the member alias only.
 - Display the member name and alias.
 - Create a custom header.



Note:

For custom headers, enter the text, text function, or both, that you want to display for the header, or click to select a text function. See About Text

Searching For Members

Search uses the **Member Labels** setting from the grid Actions menu to search on Member Name, Alias, or Both.

You can perform searches for members to edit.

To search for a member:

- 1. Open a report and select a grid.
- Open the Select Members dialog box by doing one of the following:
 - Right-click a dimension in the grid and click Select Members.
 - Select a dimension in the grid, and then click in the formula bar with the dimension name.
- 3. In the Member Selector dialog box, enter the text to search for in the search box and click





The system displays the fully-qualified member name of the search result, as well as its ancestors where applicable.

- 4. Optional: In the search results, click to expand the parent members of that member and show it in the member hierarchy
- **5. Optional:** Use the **View Selector** drop down menu to change your view from your search results to the member hierarchy, recent, functions, or lists.



For dimensions with over 25,000 members, the search in the member selector is only based on the member name (not alias) and is a "starts with" type search, rather than a "contains" type search.

Previewing Selected Members

You can preview the members, functions, and lists selected for yourReports before you run it.

The members that you view, result from an evaluated member list or function.

To preview members:

- 1. Open a report and select a grid.
- Open the Select Members dialog box by doing one of the following:
 - Right-click a dimension in the grid and click Select Members.
 - Select a dimension in the grid, and then click in the formula bar with the dimension name.
- 3. In the **Select Members** dialog box, in the **Selections** pane, click
- Select Preview.

Working with Saved Member Selections

Saved member selections enable you to define a list of members that can be reused as a member selection within a report.

You can save one or more members, functions, or a prompt as your saved member selection, and then use that selection in multiple segments in a report.

Some considerations when working with saved member selections:

- You can use a saved selection as a member selection parameter in a function when a single member or prompt result is defined.
- You must be a report designer to view and use saved selections. View-only users cannot view or use saved selections.
- At this time, saved selections can be used only in the report in which they were created.
 You cannot use a saved member selection across reports (like User-defined lists).



- If you insert a report with saved selections as a reference doclet into a report package, the saved selections are not exposed when you generate a report snapshot.
- When working with report packages, saved selections are available only when you edit the report definition.

Creating, Editing, Deleting, Renaming and Duplicating Saved Member Selections

Creating Saved Member Selections

To create a saved member selection:

- In Member Selector, select one or more of the following:
 - Members
 - Functions
 - Prompts
- 2. From the

menu, select Save Selection.

3. Enter a name for the saved selection, and click **OK**.

Editing, Deleting, Duplicating or Renaming Saved Member Selections

To edit or delete a saved member selection:

- 1. Open the member selector dialog for the dimension where the saved selection exists.
- From the View Selector drop-down menu, select Saved Selections.
- Perform an action:
 - To edit the saved selection, click the **Saved Selection Actions** drop-down menu next to the saved selection and then **Edit**.
 - To delete the saved selection, click the Saved Selection Actions drop-down menunext to the saved selection and then Delete.
 - From the Saved Selection Actions drop-down menu next to the saved selection, select Duplicate.
 - From the Saved Selection Actions drop-down menu next to the saved selection, select Rename.

Using Saved Selections in Member Selection

After you have created a saved member selection (see Creating, Editing, Deleting, Renaming and Duplicating Saved Member Selections), you can use the saved selection as a member selection.

To use a saved selection as a member selection:

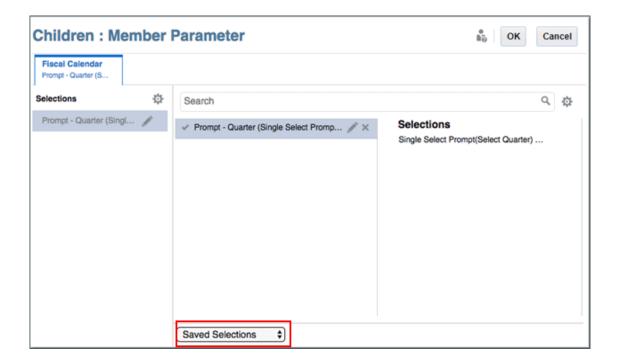
- Open the member selector dialog for the member on which you want to use a saved selection.
- From the View Selector drop down menu, select Saved Selections. The Save Selection dialog is displayed.



3. Select a saved selection to use as a member selection.



Click a saved selection to view its definition in the right panel. You can also search on saved selections.



Suppressing Shared Members

You can suppress the display of shared members in a grid.

To suppress the display of shared members in a grid:

- 1. Open the Member Selector.
- 2. In the Selections pane, click .
- 3. Click next to Suppress Shared Members.

Showing Supporting Detail

When you use an applicable EPM Cloud data source and select a row with the **Account** dimension in it, you can display supporting detail for a member.

If supporting detail exists for one or more cells in the selected row, additional rows are inserted to show the supporting detail.

To show supporting detail:

- 1. In a grid, select a row with the Account dimension in it that contains a member with supporting detail.
- 2. Right-click, or click the down arrow in the header, and choose **Select Members**.
- 3. In Selections, click and then click the check mark next to Show Supporting Detail.
- 4. Click OK.

Cells with supporting detail enabled are indicated with a triangle in the upper right corner of the cell.



Using Functions

Related Topics

- Mathematical Functions
- About Mathematical Functions

Mathematical functions perform calculations on numeric values or data from a grid. Mathematical functions, formulas, and their syntax are not case-sensitive.

- Arguments in Mathematical Functions
- Numeric Arguments
- Row, Column, or Cell Reference Arguments
- Embedded Functions as Arguments
- Mathematical Operators in Expressions
- Mathematical Operands in Expressions
- Using Formulas to Reference Other Grids in the Same Report
- Natural Precedence
- Absolute
- Average
- AverageA
- Count
- CountA
- Difference
- Eval
- IFThen
- Max
- Min
- PercentofTotal
- Product
- Rank
- Round
- Sum
- SumV
- Truncate
- Variance
- Expected Results Using Essbase
- Expected Results Using EPM Cloud



- Variance Behavior
- Examples
- VariancePercent
- Expected Results Using Essbase
- Expected Results Using EPM Cloud
- VariancePercent Behavior
- Examples
- Text Functions
- About Text Functions

 Text functions return report information, such as the report name or the report description.
- Text Function Considerations
- Parameters for Text Functions
- AncestorName / AncestorAlias
- AutoTextSummary
- CellText
- CellValue
- ColumnNumber/RowNumber
- ConditionalText
- DateTime
- GridNotes
- HeadingValue
- Left/Right/Mid
- MemberAlias
- MemberName
- MemberProperty
- Notes
- PageCount
- PageNumber
- ReportAuthor
- ReportCreatedOn
- ReportDescription
- ReportLocation
- ReportModifiedBy
- ReportModifiedOn
- ReportName
- ReportRunBy
- Conditional Functions
- IFThen,If



- Conditional Operators
- Complex Conditions

Mathematical Functions

Related Topics

About Mathematical Functions

Mathematical functions perform calculations on numeric values or data from a grid. Mathematical functions, formulas, and their syntax are not case-sensitive.

- Absolute
- Average
- AverageA
- Count
- CountA
- Difference
- Eval
- IFThen
- Max
- Min
- PercentofTotal
- Product
- Rank
- Round
- Sum
- SumV
- Truncate
- Variance
- VariancePercent

About Mathematical Functions

Mathematical functions perform calculations on numeric values or data from a grid. Mathematical functions, formulas, and their syntax are not case-sensitive.

The syntax for a mathematical function is:

FunctionName(arguments)

where:

FunctionName is the name of the mathematical function.

arguments are a numeric value, a row, column, or cell reference, or an embedded function.



Arguments in Mathematical Functions

Related Topics

- Numeric Arguments
- Row, Column, or Cell Reference Arguments
- Embedded Functions as Arguments

Numeric Arguments

The syntax for a numeric argument is:

```
(numeral1, numeral2,...numeraln)
```

where numerals 1 through n are real numbers. For example, the expression Average (10, 20, 30) returns the value 20.



It is recommended to have a space after a comma between two numerical numbers within a function call. For example, Average (1200, 2400) is considered as two numerical numbers separated by comma and a space. If there are two numbers, such as: 1 and 2345 separated by a comma without space is interpreted as single number. Average (1,2345), which returns a syntax error. For example, Grid "Grid With Formula Member" formula row 15 has a syntax error at or after")".

Row, Column, or Cell Reference Arguments

The syntax for a row, column, or cell argument is:



A validation error occurs if the user does the following: A column-level formula contains a row reference or a row-level formula contains a column reference.

FunctionName(GridName.GridElement[segment(range)])

Table 10-1 Argument Components

Argument	Description
GridName	(Optional) Name of a grid.
	For example, Difference (grid1.row[5], grid2.row[5]) returns the difference of two rows on grid1 and grid2.
	If GridName is not specified, the default is the current grid where the formula is entered.
	If a GridName has a space in it (for example,. Income Statement), when using it in a formula, it needs to be surrounded by quotes (for example, "Income Statement").
	You can reference another grid row or column within the same report by prefixing the row or column reference with the grid name. For example, in Grid 1, in a formula row, you can refer to row 1 in Grid 2 with the following: "Grid 2".[1]
GridElement	(Optional) One of the following keywords: row, col, column, or cell.
	For example, Max (row[1], row[2], row[3]) returns the maximum value of three rows. (The keyword row and column or col is optional.)
	You must specify row and column segment IDs. For example, $cell[2, A]$ refers to the cell that is the intersection between row 2 and column A.
	The keyword cell is optional. For example, [5,B] refers to the cell that is the intersection between row 5 and column B. Cell references can use [row, col] syntax or [col, row] syntax.
	Note:
	 The keyword cell is optional. For example, [5,B] refers to the cell that is the intersection between row 5 and column B. Cell references can use [row, col] syntax or [col, row] syntax. The keywords row and column are also optional. For example, [5] refers to row 5 and [C] refers to columns C
	If GridElement is specified, letters represent columns and numbers represent rows; for example, Max ([1,A], [2,A], [3,A])
segment	(Required) Row, column, or cell reference number of a grid. For example, [2] addresses row segment 2. Segments are enclosed in square brackets [].
range	(Optional) Rows, columns, or cells that are expanded from the specified segment. If <i>range</i> is specified, the formula is calculated using only the specified range. For example, row [2 (3:5)] uses only the 3rd through 5th rows of expanded segment 2.
	When range is not provided, all expanded cells are used.
	Note:
	If a segment expands to only one row or column, do not use the range argument.

Embedded Functions as Arguments

You can embed functions as arguments within a function. In the following example, the function <code>Average</code> is embedded in the function <code>Sum:</code>

```
sum(row[3:5], avg(row[4:6], 40, 50), row[7; 9], 70, 80)
```

Or without the optional *GridElement* keywords:

```
sum([3:5], avg([4:6], 40, 50), [7; 9], 70, 80)
```

- Row segments 3, 4 and 5
- The average of row segments 4, 5 and 6, with the numbers 40 and 50

- Row segments 7 and 9
- The numbers 70 and 80

Mathematical Operators in Expressions

Operators are symbols that perform arithmetical tasks or comparisons, or refer to ranges of columns, rows, or cells. Use operators in formulas that perform calculations on data rows or columns.

Table 10-2 Operators and Components in Standard Formulas

Туре	Operator or Component	Description	Example
Arithmetical	+	Add	Add the values in rows 4 and 5. [4] + [5]
			A space is needed after + . Incorrect: 5+4 Correct: 5+ 4 Correct: 5+ -4
Arithmetical	-	Subtract	Subtract 3 from the values in row 4.
			 [4] - 3. A space is needed after Incorrect: 5-4 Correct: 5 - 4 Correct: 54
Arithmetical	*	Multiply	Multiply the absolute values in row 4 by 150. Abs ([4]) * 150
Arithmetical	/	Divide	Divide the values in row 4 by the values in row 5. [4] / [5]
Arithmetical	%	Percentage	Add the values in row 4 and multiply it by 10%. row [4].Sum*10%
Arithmetical	۸	Exponential	Return the sixth exponent of row 4.
			[4]^6
Arithmetical	Decimal	Decimal number	Multiply the values in row 4 by 5.67.
			[4] * 5.67
Reference	0	Specifies a row, column, or cell in a grid. Use numbers for	Add the values in rows 4 and 12.
		rows and letters for columns.	Sum ([4],[12])
Unary minus	-	Changes the sign of a value	Divide the values in row 4 by 12 and change the sign of the result.
			-([4] / 12)





Tip:

Use the ${\tt Eval}$ function to perform arithmetic operations as part of a function parameter. See Eval.



Tip:

Natural precedence determines the order to carry out operations in expressions with multiple operators. See Natural Precedence.

Mathematical Operands in Expressions

Operands specify the values that an operator uses to produce a result.

Table 10-3 Operands Supported in Reports

Operand	Examples
Literal	3, 0.0, 27.5, 65.334, -841
Row or column reference number	[1], [4], [8], [A], [C:D]
Cell reference number	[2, E], [E, 2] This cell reference addresses row 2 column E.
Functions	Average, Min, Max
Scoping	Grid1.row[3]

In the following row formula, which multiplies the values in row 3 by 100, the row reference [3] and 100 are both operands:

[3] * 100

Using Formulas to Reference Other Grids in the Same Report

You can use formulas to reference rows, columns or cells from another grid to combine content from multiple grids into one. This can be used to pull together content from different data sources, sourced in one or more grids, into a single grid. The source grids for the formulas can exist in the hidden sheet, so they are not displayed in the report output.

The formula syntax is as follows:

<grid>.<reference>

<grid> - is the name of the grid you are referring to. If the grid name has a space in it,
surround the grid name in quotes. For example: "Grid 1".

<reference> - is the reference to the row, column or cell, surrounded by square brackets. For
example [b] [1] [b,1].

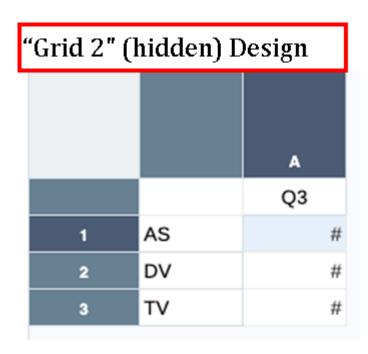




For cross-grid references, only specific cells can be referenced, and not entire columns or rows.

For example:

The report contains three grids: " $Grid\ 1$ " contains formulas referring to other hidden grids, " $Grid\ 2$ " and " $Grid\ 3$ ".



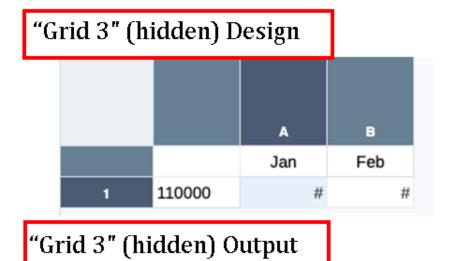
"Grid 2" (hidden) Output

Quarter3
Audio Systems 1,986,838

Digital Video 2,506,521

Televisions 1,844,242





January February

Current Assets 1,010,931,599 873,241,572

 ${\tt Grid}\ 1$ contains few formulas in it. For example: The grid contains a row, column and cell formula:

- Column C column formula: "Grid 2".[a] refers to Grid 2, column A
- Cell D2 cell formula: "Grid 2".[a,2] refers to Grid 2, cell A2
- Row 4 row formula: "Grid 3".[1] refers to Grid 3, row 1

"Grid 1" (which contain	s the formulas) Design
-------------------------	------------------------

		A	В	С	D
		Q1	Q2	"Grid 2".[a]	"Grid 2".[a,2]
1	410000	#	#	=#	=#
2	450000	#	#	=#	=#
3	400000	#	#	=#	=#
4	"Grid 3".[1]	=#	=#	=#	=#

"Grid 1" Output

	Quarter1	Quarter2	"Grid 2".[a]	"Grid 2".[a,2]
Net Revenue	381,608,955	425,520,449	1,986,838	-
Cost of Sales	243,660,748	273,102,182	2,506,521	2,506,521
Gross Profit	137,948,208	152,418,267	1,844,242	-
"Grid 3".[1]	1,010,931,599	873,241,572		-

Natural Precedence

If a standard formula has two or more operators, the system performs the operations in the order of the operators' natural precedence.

The order of natural precedence to perform operations in an expression that has multiple operators is:

- Unary minus (-# where # is any number)
 Do not add a space after the unary minus operator.
- Multiplication (*) and division (/)
- 3. Subtraction (- #) and addition (+ # where # is any number)
 Add a space after the subtraction and addition operator.

For example, if row 10 has a value of 8, the following expression produces a value of 20 for that column by calculating 3 * 4 + 8 = 20, following the order of natural precedence:

$$3 * 4 + [10]$$

Absolute

Absolute is a mathematical function that returns the absolute value of a numeric value, row, column, or cell. The absolute value of a number is that number's distance from zero without

regard to its sign. A negative number becomes positive, while a positive number remains positive.

Syntax:

Absolute(argument)

where <code>argument</code> is one of the following values:

Argument	Description
numeric A numeric value. For example, Absolute (-20) returns the value	
	Numeric values can include decimals and negative values. See Numeric Arguments.
row, column, or cell reference	A pointer to a row, column, or cell within a grid.
function	An embedded function.
	See Mathematical Functions.

Examples:

Return the value 30:

Absolute(-30)

Return the absolute value of the value in row 1:

Absolute(row[1])

Point to expanded rows 1 through 3 within design segment 3 of Grid1:

Absolute(Grid1.row[3(1:3)])

Average

Average is a mathematical function that returns the average of a group of numeric values, rows, columns, or cells. Average excludes #missing and #error cells when obtaining the average.



The calculation does not include missing values regardless of whether they are suppressed.

Syntax:

Average (arguments)

or

Avg(arguments)



where arguments is one or more of the following values:

Argument	Description
numeric	A numeric value. For example, Average (10, 20, 30) returns the value 20.
	Numeric values can include decimals and negative values. See Numeric Arguments.
row, column, or cell reference	A pointer to a row, column, or cell within a grid. For example $Avg(Gridl.row[4(3:5)])$ returns the average of grid1, row segment 4, range 3 through 5.
function	An embedded function. See Mathematical Functions.

Examples:

Return the value 20:

Avg(10,30,20)

Return the average of all numbers that are part of three aggregate rows:

Average([1],[6],[8])

Calculate the average of aggregate row 3 and divide the average by 100:

Avg(row[3])/100

AverageA

AverageA is a mathematical function that returns the average of a group of numeric values, rows, columns, or cells. AverageA includes #missing and #error cells, which are treated as zero values when obtaining the average.



#missing and #error are included only for rows or columns that are not suppressed.

Syntax:

AverageA(arguments)

or

AvgA(arguments)

where arguments is one or more of the following values:



Argument	Description
numeric	A numeric value. For example, AverageA(10,20,30) returns the value 20.
	Numeric values can include decimals and negative values. See Numeric Arguments.
row, column, or cell reference	A pointer to a row, column, or cell within a grid. For example, AvgA (Grid1.row [4 (3:5)] returns the average of grid1, row segment 4, range 3 through 5.
function	An embedded function. See Mathematical Functions.

Example:

If a grid has four rows with the values 10, 20, 30, and #error, the following formula in the 5th row returns the value 15:

AverageA([1:4])

Count

Count is a mathematical function that returns the number of values in a group of numeric values, rows, columns, or cells. Count excludes #missing and #error when obtaining the count.

Syntax:

Count(arguments)

where arguments is one or more of the following values:

Argument	Description		
numeric	A numeric value. For example, Count (10, 20, 30) returns the value 3.		
	Numeric values can include decimals and negative values. See Numeric Arguments.		
row, column, or cell reference	A pointer to a row, column, or cell within a grid.		
function	An embedded function.		
	See Mathematical Functions.		

Examples:

If a grid has four rows with the values 10, 20, 30, and #error, the following formula in the 5th row returns the count of three rows:

Count([1:4])

Return the count of three rows:

Count([1], [6], [8])



CountA

CountA is a mathematical function that returns the number of values in a group of numeric values, rows, columns, or cells. CountA includes #missing and #error cells when obtaining the count only for rows or columns that are not suppressed.

Syntax:

CountA(arguments)

where arguments is one or more of the following values:

Argument	Description
numeric	A numeric value. For example, CountA(10,20,30,50) returns the value 4.
	Numeric values can include decimals and negative values. See Numeric Arguments.
row, column, or cell reference	A pointer to a row, column, or cell within a grid.
function	An embedded function.
	See Mathematical Functions.

Examples:

If a grid has four rows with the values 10, 20, 30, and #error, the following formula in the 5th row returns the count of four rows:

CountA([1:4])

Return the count of four rows:

CountA(row[1], row[6], row[8] row[where data yields #error])

Difference

Difference is a mathematical function that returns the absolute value of the difference of a numeric value, row, or column subtracted from another numeric value, row, or column.

Syntax:

Difference(arg1, arg2)

where arg2 is subtracted from arg1 and is one or more of the following values:

Argument	Description
numeric	A numeric value. For example, Difference (3, 5) returns the absolute value 2.
	Numeric values can include decimals and negative values. See Numeric Arguments.
row, column, or reference	A pointer to a row, column, or cell within a grid. The following example returns the difference of two rows on grid1 and grid2: Difference(grid1.row[1], grid2.row[6])



Argument	Description
function	An embedded function.
	See Mathematical Functions.



Difference returns the absolute value of arg2 subtracted from arg1, whereas the minus sign in subtraction negates a number.

Examples:

Return the absolute value of 8:

Difference (3, -5)

Calculate the difference of two aggregate columns:

Difference([E], [G])

Calculate the difference of two columns that are located on different grids, grid1 and grid2:

Difference(grid1.column[E], grid2.column[E])



You can type the text label "Difference" or "Variance".

Eval

 ${\tt Eval}$ is a mathematical function that evaluates an expression. Use ${\tt Eval}$ as an embedded function argument to consolidate multiple expressions into one expression.

Syntax:

Eval (expression)

where expression is one or more of the following values:

Argument	Description
numeric	A numeric value.
	Numeric values can include decimals and negative values. See Numeric Arguments.
row, column, or reference	A pointer to a row, column, or cell within a grid.



Argument	Description
function	An embedded function.
	See Mathematical Functions.
operators	Any of the supported arithmetic operators (+, -, *, /, ^, %).

Example:

Divide row 1 by row 2, and then round the data to four places:

Round (Eval ([1]/[2]), 4)



In this example, you must use EVAL to get the desired result. The following does not work: Round (([1]/[2]),4).

IFThen

IfThen is a conditional function that returns a value when the condition equals True, and another value when the condition equals False. For more information about working with conditional functions, see Conditional Functions

Max

 ${\tt Max}$ is a mathematical function that returns the maximum value in a group of numeric values, rows, columns, or cells.

Syntax:

Max(arguments)

where arguments is one or more of the following values:

Argument	Description	
numeric	A numeric value. For example, Max (10, 20, 30) returns the value 30.	
	Numeric values can include decimals and negative values. See Numeric Arguments.	
row, column, or cell A pointer to a row, column, or cell within a grid. reference		
function	An embedded function.	
	See Mathematical Functions.	

Examples:

Return the maximum value in rows 1, 6, and 8:

Max([1], [6], [8])



Min

Min is a mathematical function that returns the minimum value in a group of numeric values, rows, columns, or cells.

Syntax:

Min(arguments)

where arguments is one or more of the following values:

Argument	Description		
numeric	A numeric value. For example, Min (10, 20, 30) returns the value 10.		
	Numeric values can include decimals and negative values. See Numeric Arguments.		
row, column, or cell reference	A pointer to a row, column, or cell within a grid.		
function	An embedded function.		
	See Mathematical Functions.		

Example:

Return the minimum value in rows 1, 6, and 8:

Min ([1], [6], [8])

PercentofTotal

PercentOfTotal is a mathematical function that returns the result of a numeric value, row, column, or cell divided by another numeric value, row, column, or cell which is multiplied by 100.

Syntax:

PercentOfTotal (arg1, arg2)

where:

- arg1 is a component of the running total (arg2), usually a row or column reference.
- arg2 is the running total relative to arg1, usually a cell reference containing the grand total.
- arg1 is divided by arg2 with the result multiplied by 100. Arg1 and arg2 are one or more of the following values:

Argument	Description
numeric A numeric value. For example, PercentofTotal (100,20) retuvalue 500.	
	Numeric values can include decimals and negative values. See Numeric Arguments.
row, column, or cell reference	A pointer to a row, column, or cell within a grid.



Argument	Description
function	An embedded function.
	See Mathematical Functions.

Examples:

Return the value of 5.

PercentofTotal(20,400)

Divide the value of each cell in column A by the total market value in cell A5, multiply the result by 100, and display the resulting PercentOfTotal in column B.

PercentOfTotal ([A],[A,5])

Using the above example, the following table shows the PercentOfTotal results in column B:

		A	В	
1		Sales	% Total	
2	Mkt1	60	20%	
3	Mkt2	120	40%	
4	Mkt3	120	40%	
5	Total Mkt	300	100%	



Tip:

You enter the formula by clicking on the header for Column B and using the formula bar.

Product

Product is a mathematical function that multiplies all numbers or references and returns the product.

Syntax:

Product (arguments)

where arguments is one or more of the following values:

Argument	Description
numeric	A numeric value. For example, Product (2, 20) returns the value 40.
	Numeric values can include decimals and negative values. See Numeric Arguments.



Argument	Description
row, column, or cell reference	A pointer to a row, column, or cell within a grid.
function	An embedded function.
	See Mathematical Functions.

Example:

Return 40:

Product (2,20)

Rank

 \mathtt{Rank} is a financial function that provides a rank value for a value in a specified range. \mathtt{Rank} is processed by Financial Reporting and does not depend on the database connection.

Syntax:

Rank([Reference], Order)

Rank([Reference], Order, Unique)

Argument	Description
Reference	The range of cells, rows, or columns to rank, with letters identifying columns and numbers identifying rows. For example, specify [A,1:5] to rank the values for rows 1 through 5 in column A.
	You can use the .ifNN property with a range of cells to assign numbers to any cells with nonnumeric values so that those cells can be ranked. For example, you can use .ifNN(-1) to assign the value -1 to any cell with a missing value.
Order	Indicates the order by which the values are ranked. The lowest value ranked in ascending order receives a rank result of 1. The largest value ranked in descending order receives a rank result of 1. The order can be indicated by any of the following keywords or values:
	Ascending
	Descending
	• Asc
	• Des
	• Desc
	 1 (the number 1 is the same as Ascending)
	 0 (zero is the same as Descending)
	The keywords are not case-sensitive.
	Do not enclose the number or keyword indicating order in quotation marks.
Unique	(Optional) A Boolean keyword indicating how to treat equal values in the Reference parameter where:
	 false (or omitted) — equal values receive the same ranking; ranked results may be duplicated
	 true — equal values receive a unique ranking; there are no duplicate rankings. Values in the Reference parameter are ranked on a first come, first ranked basis. For example, if values in rows 2 and 5 are equal, the value in row 2 is ranked before that of row 5.

Examples:

This formula in column B ranks the values in rows 1 through 5 in column A in descending order:

Rank([A,1:5], descending)

The result might be as follows:

	East	Rank	
Cola	16	2	
Fruit Drinks	23	1	
Beer	16	2	
Diet	missing	missing	
Root Beer	0	4	

When two values are equal, they receive the same rank value. In the example above, Cola and Beer have the same value and therefore the same rank.

This formula in column B assigns the value of -1 to any nonnumeric value so it can be ranked:

Rank([A,1:5].ifNN(-1), descending)

In the following result, the missing value now has a rank of 5:

	East	Rank	
Cola	16	2	
Fruit Drinks	23	1	
Beer	16	2	
Diet	missing	5	
Root Beer	0	4	

Example:

The following example builds on the previous example explaining how the new "unique" parameter affects the results:

This formula in column B assigns the value of -1 to any nonnumeric value so it can be ranked, and also indicates that each ranking should be unique:

Rank([A,1:5].ifNN(-1), descending, true)



In the following result, the missing value now has a rank of 5, and Beer has a value of 3 (even though it has the same data value as Cola):

	East	Rank	
Cola	16	2	
Fruit Drinks	23	1	
Beer	16	3	
Diet	missing	5	
Root Beer	0	4	

Round

Round is a mathematical function that rounds a number up or down by the specified digits.

Syntax:

Round (arg1, integer)

where <code>arg1</code> is one or more of the following values:

Argument	Description
numeric	A numeric value. For example, Round (81.3987, 3) returns the value 81.399.
	Numeric values can include decimals and negative values. See Numeric Arguments.
row, column, or cell reference	A pointer to a row, column, or cell within a grid.
function	An embedded function.
	See Mathematical Functions.

Integer specifies the number of digits to round the number:

- If *integer* is greater than zero, the number is rounded to the specified number of decimal places.
- If *integer* is zero, the number is rounded to the nearest integer.
- If integer is less than zero, the number is rounded to the left of the decimal point.

Examples:

Round to 3 decimals:

Round (3594.5567, 3) = 3594.557



Round to the nearest integer:

Round (3594.5567, 0) = 3595

Round to the thousand, (also known as scaling):

Round (3594.5567, -3) = 4000

Sum

Sum is a mathematical function that returns the summation of a group of numeric values, rows, columns, or cells.

Syntax:

Sum(arguments)

where arguments is one or more of the following values:

Argument	Description
numeric	A numeric value. For example, Sum (10, 20, 30) returns the value 60.
	Numeric values can include decimals and negative values. See Numeric Arguments.
row, column, or cell referenc	A pointer to a row, column, or cell within a grid.
function	An embedded function.
	See Mathematical Functions.

Examples:

Return the value 30:

sum(10,20)

Return the sum of three rows:

sum([1], [6], [8])

Calculate the sum of three aggregate columns:

sum([E], [G], [I])

Calculate the sum of two columns that are located on different grids:

sum(grid1.col[E],grid2.colmn[E])

SumV

SumV is a mathematical function that returns the summation of a group of numeric values, rows, columns, or cells that are in visible, and not hidden, rows and columns.

Syntax:

SumV (arguments)

where arguments is one or more of the following values:

Argument	Description
numeric	A numeric value. For example, Sum (10, 20, 30) returns the value 60.
	Numeric values can include decimals and negative values. See Numeric Arguments.
row, column, or cell referenc	A pointer to a row, column, or cell within a grid.
function	An embedded function.
	See Mathematical Functions.

Examples:

Return the sum of three rows, where row 6 is a hidden row and will not be included in the result

```
SumV([1], [6], [8])
```

Calculate the sum of three aggregate columns, where column G is a hidden column and will not be included in the result.

Truncate

Truncate is a mathematical function that removes the specified number of digits from numeric values.

Syntax:

Truncate(arg1,integer)

where arg1 is one of the following values:

Argument	Description
numeric	A numeric value. For example, 234.567.
	See Numeric Arguments.
row, column, or cell reference	A pointer to a row, column, or cell within a grid.
function	An embedded function.
	See Mathematical Functions.

Integer specifies the number of digits to remove:

- A positive *integer* determines the number of digits to the right of the decimal point.
- A zero (0) *integer* returns the integer located to the left of the decimal point.
- A negative integer indicates the number of digits to the left of the decimal point.



Examples:

The following statement uses a positive integer of 3. The first three digits to the right of the decimal point remain, and the following digit is removed:

Truncate (3594.5567,3)=3594.556

The following statement uses a zero (0) integer. All digits to the right of the decimal point are removed:

Truncate (3594.5567,0) = 3594

The following statement uses a negative integer of -2. All digits to the right of the decimal point are removed and the last 2 digits of the integer are truncated.

Truncate (3594.5567, -2) = 3500



Any formatting previously applied to a cell, column, or row is maintained when you use the Truncate function. The following example shows the results of a Truncate function where the cell value was previously formatted to display three decimal places: Truncate(234.567, 0) = 234.000

Variance

Variance is a financial function that evaluates the difference between the specified values based on account type for the current account. For example, for a Non-expense, Income, Flow, Asset, or Balance account, a positive result represents a favorable variance, so the result appears as a positive number. For Expense or Liability accounts, a positive result represents an unfavorable variance, so the result appears as a negative number.

Syntax:

Variance (reference1, reference2)

where *reference1* and *reference2* are references to a row, column, or cell that correspond to members of the same Account dimension whose variance results are to be calculated.

Expected Results Using Essbase

Table 10-4 Expected Results When Using Variance With Essbase

Column A	Column B	Var ([A] , [B])=0	Var ([A] , [B])>0	Var ([A] , [B])<0
Non-Expense	Non-Expense	0	Returns a positive value	Returns a negative value
Expense	Expense	0	Returns a negative value	Returns a positive value



Expected Results Using EPM Cloud

Table 10-5 Expected Results When Using Variance With EPM Cloud

Column A	Column B	Var ([A] , [B])=0	Var ([A] , [B])>0	Var ([A] , [B])<0
Asset	Asset	0	Returns a positive value	Returns a negative value
Liability	Liability	0	Returns a negative value	Returns a positive value
Equity	Equity	0	Returns a positive value	Returns a negative value
Revenue	Revenue	0	Returns a positive value	Returns a negative value
Expense	Expense	0	Returns a negative value	Returns a positive value

Variance Behavior

Variance expects comparison of the same account type. When you compare two different account types, like Sales & Expense, Variance performs the math without applying the logic of the account type. For example:

Sales	Expense	Result
-400	100	-500

Examples

Variance accepts cell, column, or row references only. For more information, see Row, Column, or Cell Reference Arguments.

Syntax	Example
Sample syntax referencing a column:	Var ([A], [B])
Sample syntax referencing a row:	Var ([3], [4])
Sample syntax referencing a cell:	Var (Cell [3,A], [3,B])

In this example, the variance between column A (Actual) and column B (Budget) is calculated as:

Var([A],[B])

This example produces the following report:

	Actual	Budget	Variance
Sales (Income)	400,855	373,080	27,775
COGS (Expense)	179,336	158,940	-20,396

VariancePercent

VariancePercent is a financial function that evaluates the difference, in percent, between the specified values based on account type for the current account. For example, for a Non-expense, Income, Flow, Asset, or Balance account, a positive result represents a favorable variance, so the result appears as a positive number. For Expense or Liability accounts, a positive result represents an unfavorable variance, so the result appears as a negative number.

Syntax:

VariancePercent (reference1, reference2)

where *reference1* and *reference2* are references to a row, column, or cell that correspond to members of the same Account dimension whose VariancePercent results are calculated.

Expected Results Using Essbase

Table 10-6 Expected Results When Using VariancePercent with Essbase

Col A	Col B	VarPer ([A] , [B])=0	VarPer ([A] , [B])>0	VaPer ([A] , [B])<0
Non-Expense	Non-Expense	0	Returns a positive value	Returns a negative value
Expense	Expense	0	Returns a negative value	Returns a positive value

Expected Results Using EPM Cloud

Table 10-7 Expected Results When Using VariancePercent With EPM Cloud

Column A	Column B	Var ([A] , [B])=0	Var ([A] , [B])>0	Var ([A] , [B])<0
Asset	Asset	0	Returns a positive value	Returns a negative value
Liability	Liability	0	Returns a negative value	Returns a positive value
Equity	Equity	0	Returns a positive value	Returns a negative value
Revenue	Revenue	0	Returns a positive value	Returns a negative value
Expense	Expense	0	Returns a negative value	Returns a positive value



VariancePercent Behavior

VariancePercent expects comparison of the same account type. When you compare two different account types, like Sales and Expense, the VariancePercent function performs the straight math without applying the logic of the account type. For example:

Sales	Expense	Result
-400	100	-5.

- #missing is treated as zero (0), unless specified differently using ifnonnumber property.
- #error results in #error, unless specified differently using ifnonnumber property.

Examples

VariancePercent accepts, cell, column, or row references only. See Row, Column, or Cell Reference Arguments.

Syntax	Example
Sample syntax referencing a column:	VarPer ([A], [B])
Sample syntax referencing a row:	VarPer ([3], [4])
Sample syntax referencing a cell:	VarPer (Cell [3,A], [3,B])

In this example, the VariancePercent between column A (Actual) and column B (Budget) is calculated as follows:

VarPer([A],[B])

This example produces the following report:

	Actual	Budget	VariancePercent
Sales (Income)	400,855	373,080	7%
COGS (Expense)	179,336	158,940	-13%

Text Functions

Related Topics

- About Text Functions
 Text functions return report information, such as the report name or the report description.
- AncestorName / AncestorAlias
- AutoTextSummary



- CellText
- CellValue
- ColumnNumber/RowNumber
- ConditionalText
- DateTime
- GridNotes
- HeadingValue
- · Left/Right/Mid
- MemberAlias
- MemberName
- MemberProperty
- Notes
- PageCount
- PageNumber
- ReportAuthor
- ReportCreatedOn
- ReportDescription
- ReportLocation
- ReportModifiedBy
- ReportModifiedOn
- ReportName
- ReportRunBy

About Text Functions

Text functions return report information, such as the report name or the report description.

You use text functions in grids or in text objects.

Text Function Considerations



If you don't explicitly specify a row or column in a text function that supports row or column, then the current row or column is used by default.

- You can use spaces between arguments.
- All arguments are enclosed in quotes, except for numeric arguments.

For example, the parameter "NYC, New York" in the function MemberName ("Grid1", NYC, New York) should be restated as MemberName ("Grid1", "NYC, New York").

Arguments related to date formatting are case-sensitive.



- Text functions can be entered in a text box, row, or column.
- To apply text functions to a grid, create a text row or column, or a heading cell, and then
 insert the text function.
- When you insert a text function into a text row or column, by default the text function applies to the current grid. Therefore, the text function builder does not include a selection for the Grid parameter. If the text function refers to another grid in the report, specify the Grid parameter after you insert the function.

List of Functions in the User Interface

When you launch the function builder, a list of functions that are appropriate based on the context of that function is displayed. While any text function is allowed in either a text object or grid object text or heading cell (with the exception of RowNumber/ColumnNumber, as described in Validation Errors), to provide guidance about which functions are most relevant for a given context, we show one of the following filtered lists:

- Grid text cell: CellValue, CellText, HeadingValue, MemberName, MemberAlias, MemberProperty, RowNumber, ColumnNumber
- Text Object in report body: CellValue, CellText, DateTime, MemberName, MemberAlias, MemberProperty
- Text Object in header/footer: DateTime, CellValue, CellText, MemberName, MemberAlias, MemberProperty, PageNumber, PageCount, ReportAuthor, ReportCreatedOn, ReportModifiedBy, ReportModifiedOn, ReportName, ReportDescription, ReportLocation, ReportRunBy

Parameters for Text Functions

The following table describes the parameters that you can use in text functions. Not all parameters can be used in all functions. Refer to the section about a specific function to see which parameters apply to that function.

Table 10-8 Text Function Parameters

Parameter	Definition
Grid	The name of the grid. If the function occurs within a grid, or if the function occurs within a text object and there is only a single grid in the report, the grid parameter is optional. If there is more then one grid in the report, the grid parameter is required when the function occurs in a text object and is optional for text cells in a grid where the "current" grid is assumed if not specified.
Row/Column	Either the row number or the column reference (letter) on the grid. The row/column parameter is optional if the function occurs within a grid. If not provided, the "current" row or column is assumed based on the axis of the given dimension. If the dimension occurs on the POV, the row/column parameter is ignored. If the function occurs in a text object, the row/column parameter is required unless the given dimension occurs on the POV
Row	The row number on the grid. It is optional for the CellText function. It is required for the CellValue function. For the CellText function, if you do not specify the row, the cell text for all rows are returned. The row parameter value must be between 1 and row-count.



Table 10-8 (Cont.) Text Function Parameters

Parameter	Definition
Column	The column number on the grid. It is optional for the CellText function. It is required for the CellValue function. For the CellText function, if you do not specify the column, the cell text for all columns are returned. The column parameter value is a letter sequence corresponding the available columns (for example: A to AC in a grid with 29 columns).
Dimension	The dimension name. The dimension parameter is required. If the dimension refers to a dimension which is on the POV, the Row/Column parameters are ignored.
DateFormat	Format of a date field. The date-format parameter is optional. If you do not specify the format, the date-format from the user preference is used.
TimeFormat	Format of a time field. The time-format parameter is optional. If you do not specify the format, the time-format from the user preference is used.
Property	The value of the property parameter is specific to the underlying data source. The property parameter is required. Commonly used property values are "Level", "Gen" or "Generation", "AccountType", "IsExpense", and "UDA".) For dimensions which have member-attributes, the attribute name ((for example, "Pkg Type")can be used as a member property. For data sources which have multiple alias tables, an alias table name can be used as a member property. You can also use an alias table name for a property value to return a different alias from the one specified on the user POV (for example, the "LongNames" property for the alias table with the name "LongNames").
SkipEmpty	An optional true/false parameter. When the parameter is true, any text or separator rows/columns would be skipped in the given row or column numbering. For example, if rows 1, 3, and 5 are data rows and row 2 and 4 are text or separator rows, the RowNumber (SkipEmpty) function will return a value of 1, 3, and 5 for the data rows and no value for rows 2 and 4. The RowNumber () function (with no skip-empty parameter) would return a value of 1, 2, 3, 4, and 5 for each respective row. If you do not specify this parameter, the default value is False.
Qualified	An optional true/false parameter. When the parameter is true, the member name shown is the fully-qualified member name. In Oracle Essbase outlines which allow non-unique member names, a member which is not unique will have a unique name which includes enough ancestor members to make the name unique. For example if a member called Coke is a child of a member called Colas and also a child of a member called Sodas , then the member unique name would be either Colas.Coke or [Sodas].[Coke] . If you do not specify this parameter, the default value is False.

AncestorName / AncestorAlias

AncestorName and AncestorAlias text functions return parent and ancestor members for a specified row, column, or POV member.

Syntax

AncestorName("Grid", "Dimension", Row/Col, (Index))
AncestorAlias("Grid", "Dimension", Row/Col, (Index))

The Index number references how many ancestors level upward in the hierarchy to return, (1) returns the immediate parent.

Example

Let us look at the following grid design:

- Row 1 members selection: Bottom Level of AllSegments
- Row 1 custom heading: AncestorAlias("Segments", (1))
- Text column A: MemberAlias("Segments")

Report Design:



Report Preview:



		Fiscal Calendar
Home Audio	Bookshelf Audio System	8,780,320
Home Audio	Home Theater Audio System	1,048,791
Audio on the Go	Boom Box	-3,750,519
Audio on the Go	Personal CD Player	1,067,590
Audio on the Go	MP3 Player	3,618,763
Digital Video	DVD Player	8,590,273
Digital Video	DVD Recorder	1,739,567
Digital Video	Portable DVD	8,750,837
Digital Video	DVD/VCR Combo	2,817,132
Digital Video	Smart Set-Top box	-12,696,802
Televisions	High Definition TV	865,319
Televisions	Smart TV	-16,750,030
Televisions	Projection TV	-46,566
Televisions	Plasma TV	1,092,725
Services	Installation	17,302,717
Services	Service Contracts	18,329,632
Services	Repair	20,881,836



See Parameters for Text Functions for parameter definitions.

AutoTextSummary

 ${\tt AutoTextSummary} \ is \ a \ text \ function \ that \ returns \ the \ resulting \ narrative \ text \ from \ the \ Generative \ AI \ (Gen \ AI) \ service \ for \ a \ conditional \ text \ condition \ defined \ by \ the \ report \ designer.$

Syntax:

AutoTextSummary (Summary Type)

Summary Type is the type of narrative to be returned by the Gen Al service, based on the desired Gen Al use case.

The Summary Type can either be:

- If the Gen AI use case is "Describe exceptions", you can leave the Summary Type parameter blank.
- If the Gen AI use case is "Describe the causality for exceptions", set the Summary Type parameter to "ZOOM".
- If the Gen AI use case is "Do a comparative analysis", set the Summary Type parameter to "COMPARE".

Examples:

Here are a few examples:

- AutoTextSummary ()
- AutoTextSummary (ZOOM)
- AutoTextSummary (COMPARE)

CellText

CellText retrieves the textual content attached to a cell from the data source. This applies to all data sources, except Narrative Reporting model.

The row and column arguments apply to the intersection in a grid that contains the linked text or note.

Syntax:

CellText("Grid", Row, Column)



See Parameters for Text Functions for parameter definitions.

If a row parameter is not included, the cell text for all rows will be returned. If a column parameter is not included, the cell text for all columns will be returned. If both the row and column parameters are not included, the cell text for all cells in the grid will be returned.

Example:

Create a report with linked text in the cell that is in row 21, column B of a grid.

```
CellText("mygrid",21,B)
```

CellValue

CellValue is a text function that returns a data value from cell in a grid.



Syntax:

CellValue("GridName", Row, Column)



See Parameters for Text Functions for parameter definitions.

Example:

Set up a grid to show the net income for several quarters, and display this value in a text box that contains an executive summary of the report.

The grand total for the period was CellValue("mygrid",21,B).

The report is created with the value in the cell that is in row 21, column B of a grid.

ColumnNumber/RowNumber

ColumnNumber or RowNumber are functions that return the column number or row number in a grid.

Syntax:

ColumnNumber(SkipEmpty)



See Parameters for Text Functions for parameter definitions.

Example:

Returns the column number for data and formula columns, but not for text or separator columns.

ColumnNumber(true)

Returns the row number for all rows (data, formula, text and/or separator).

RowNumber()

Validation Errors

A validation error will occur if the following situations occur in the report:

- The RowNumber and ColumnNumber functions are not allowed in text boxes.
- The RowNumber function cannot be used in column heading cells, and the ColumnNumber function cannot be used in row heading cells.
- The RowNumber and ColumnNumber functions cannot be used in the corner cells (upper left corner of the grid).



ConditionalText

ConditionalText retrieves the defined conditional text results defined for a row, column or cell as part of a conditional format/text definition.

The row and column arguments apply to the intersection in a grid that contains the linked text or note.

Syntax:

ConditionalText("Grid", Row, Column)



See Parameters for Text Functions for parameter definitions.

If a row parameter is not included, the cell text for all rows will be returned. If a column parameter is not included, the cell text for all columns will be returned. If both the row and column parameters are not included, the cell text for all cells in the grid will be returned.

Example:

Display the text results of a Conditional Text defined for the cell that is in row 21, column B of a grid.

ConditionalText("mygrid", 21, B)

DateTime

DateTime is a text function that returns the date and time that a report is populated with data. The date and time is retrieved from the report server and corresponds to the country in which the report server is located. You can use DateTime in a text box, text cell, or a row or column heading.



The time zone used in the text function results upon report preview is based on each user's time zone specified in **User Preferences**.

Syntax:

DateTime("DateFormat", "TimeFormat")



Note:

If the DateTime function parameters are left blank, for example, $DateTime\ ()$, or if "none" is used in both parameters, for example, $DateTime\ (none,\ none)$, then the Narrative Reporting User Preferences for **Date** and **Time** will be used for the format.

Note:

See Parameters for Text Functions for parameter definitions.

Alternatively, you can specify locale-neutral values for short, medium, long, and full formats: DateTime (short|medium|long|full|none, short|medium|long|full|none). (Do not use quotes when entering these values.) Examples (examples given for the United States):

- DateTime(short, short): 01/03/2017 1:54 PM
- DateTime (medium, medium): Jan 03, 2017 1:54:32 PM
- DateTime(long, long): January 03, 2017 1:54:32 PM PDT
- DateTime(full, none): Tuesday, January 03, 2017 (Note: the time is not shown.)
- DateTime(none, short): 1:54 PM (Note: the date is not shown.)

Table 10-9 Date and Time Format Characters

Format Characters	Meaning	Data Type	Example
G	era designator	text	AD
M	month in year	text or number	If the month is July: M displays: 7 MM displays: 07 MMM displays: Jul MMMM displays: July
d	day in month	number	10
h	hour in am/pm (1-12)	number	11
Н	hour in day (0-23)	number	22
m	minute in hour	number	30
S	second in minute	number	25
S	millisecond	number	978
Е	day in week	text	E: Tue EE: Tuesday
D	day in year	number	189
F	day of week in month	number	Date("dd-MMM-yy 'is the' F 'th ' E 'of' 'MMM") displays:
			24-Dec-02 is the 4th Tue of Dec
W	week in year	number	27
W	week in month	number	2
а	am/pm marker	text	PM
k	hour in day (1-24)	number	23



Table 10-9 (Cont.) Date and Time Format Characters

Format Characters	Meaning	Data Type	Example
К	hour in am/pm (0-11)	number	In the United States, if the time is 3:37 PM: 3
Z	time zone	text	Pacific Standard Time
у	year	number	2017,02
•	literal text	text	Date(" D'the day of 'yyyy") displays:105th day of 2017
***	two single quotes to produce one single quote	text	Date("k:mm 'O''Clock' a") displays: 6:15 O'Clock PM
			Use 2 single quotation marks to produce a single quote or an apostrophe as in O'Clock (O''Clock).

Considerations when using format characters:

- The number or count of *format* characters determines the format:
 - For text, less than four pattern letters means use a short or abbreviated form, if it exists.
 - Four or more pattern letters means use full form.
 - M or MM means use the month as a number.
 - MMM means use the three-letter abbreviation for the month.
 - MMMM means use the full name of the month.

For example, if the date is April 24:

```
Date("dd-M-yy") displays 24-4-17

Date("dd-MM-yy") displays 24-04-17

Date("dd-MMM-yy") displays 24-Apr-17

Date("dd-MMMM-yy") displays 24-April-17
```

• For numbers, the number of pattern letters is the minimum number of digits. Shorter numbers are padded with zeros. Year is a special case. If you use "yy", the last two digits of the year are displayed, but if you use "yyyy," the four-digit year is displayed.

For example, if the month is February:

```
Date("MM-yyyy") displays 02-2017
```

- All upper and lower case alphabet characters are considered patterns, regardless of whether they are designated format characters.
- Enclose literal text within single quotation marks. To use a single quotation mark in literal text, enclose the text within single quotes and use two single quotes for the apostrophe.

For example, the format to print 4 o'clock is:

```
Date("hh 'o''clock' ")
```



Examples:

Date Format	Result
Date("d/M/yy")	23/3/17
Date("d-MMM-yy")	23-Mar-17
Date("EEEE, MMMM dd, yyyy")	Tuesday, March 23, 2017
Date("h:mm:ss a")	12:52:05 PM
Date("h:mm:ss a zzzz")	12:52:05 PM Eastern Standard Time
Date("EEEE, MMMM dd, yyyy G 'time:' h:mm:ss a zzzz")	Tuesday, March 23, 2017 AD time: 12:52:05 PM Eastern Standard Time
Date("hh 'o''clock' a, zzzz")	12:00 PM, Eastern Standard Time
	You must use two single quotation marks to produce one single quotation mark in the text of your formatted result.

GridNotes

GridNotes retrieves Note text attached to a cell based on the selected Note Format and Note Template.

The row and column arguments apply to the intersection in a grid that contains the Note.

Syntax:

GridNotes ("Grid", Row, Column, Note Format, Note Template)



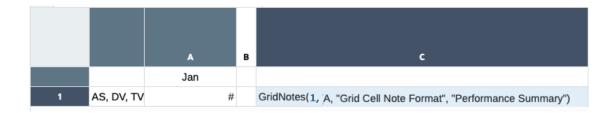
See Parameters for Text Functions for parameter definitions.

If a row parameter is not included, the cell text for all rows will be returned. If a column parameter is not included, the cell text for all columns will be returned. If both the row and column parameters are not included, the cell text for all cells in the grid will be returned.

Example:

Create a report with linked text in the cell that is in row 1, column A of a grid. Create the report so that **Grid Cell Note Format** is the **Note Format** used and **Performance Summary** is the **Note Template** referenced.

GridNotes (1, A, "Grid Cell Note Format", "Performance Summary")





- Note Formats are defined in the Note Format Manager. For more information, see Working with Note Formats.
- You can select a Note Template to display. For examples and more usage information, see Creating and Managing Note Templates

Here is the Grid Notes report preview:

Accounts 340000	Years FY18	Scenarios Actual	Entities E01_101_1110	Currencies USD
	January			
Audio Systems	709,688	quis. Egestas sed ter	porta non pulvinar. Ne	pharetra massa massa
Digital Video	997,415			
Televisions	551,363	Blandit volutpat mae Nunc pulvinar sapien libero nunc. Sed risu:	u tincidunt tortor aliqu cenas volutpat blandit et ligula ullamcorper s pretium quam vulput Pharetra convallis posu	aliquam etiam erat. malesuada proin ate dignissim

HeadingValue

HeadingValue is a text function that returns the value in a heading cell for the specified dimension in a row or column..

Syntax:

HeadingValue("GridName", "Dimension", Row/Column)



See Parameters for Text Functions for parameter definitions.

Examples:

Use HeadingValue to return the following column and row headings.



		A(A)	A(B)	A(C)	
		Actual	Actual	Actual	
		Jan	Feb	Mar	
1(1)	Georgia	112	67	73	
1(2)	East	5,864	3,322	3,789	
1(3)	Market	15,904	9,277	10,640	

Use the syntax below to return the data in the previous sample grid:

HeadingValue Example	Gets or Returns
HeadingValue("Grid1","Month",A)	Jan
<pre>HeadingValue("Grid1","Month",B)</pre>	Feb
<pre>HeadingValue("Grid1","Market",1)</pre>	Georgia
<pre>HeadingValue("Grid1","Market",2)</pre>	East

Left/Right/Mid

Left, Right, and Mid allow you to trim text from the results of other text functions such as MemberAlias and MemberName to keep only the left-most, right-most, or center text.

Syntax

```
Left (text, [number_of_characters])
Right (text, [number_of_characters])
Mid (text, start position, [number of characters])
```



"number_of_characters" is optional for the Mid function.

Examples

On a row segment with Accounts (MemberAlias (Accounts) = "10000 - Net Income")

Left (MemberAlias (Accounts), 5) yields 10000.

Right (MemberAlias (Accounts), 6) yields Income.

Mid (MemberAlias (Accounts), 9) yields *Net Income*. (In this example, 9 is the starting position for the Mid function.)

MemberAlias

MemberAlias is a text function. Based on the syntax used, it returns the alias of the member assigned to a dimension in the row, column, or Point of View (POV).

Syntax

```
MemberAlias("Grid", "Dimension", Row/Col, Qualified)
```

 The following syntax returns the alias of a row or column heading. The syntax can be deployed from any heading cell, text cell, or text box object and can reference any grid in a current report.

```
MemberAlias ("Dimension")
```

 The following syntax returns the alias of a POV. The syntax can be deployed from any text cell or text box object and can reference any grid and corresponding POV in a current report.

```
MemberAlias ("Grid", "Dimension")
```



See Parameters for Text Functions for parameter definitions.

Examples:

Yield the alias Diet Root Beer, which is the alias that is assigned to the Product dimension in Grid1, column A:

```
MemberAlias("Grid1", "Product", A)
```

Yield the alias for the Year dimension. The syntax is placed on the grid's custom heading:

```
MemberAlias("Year")
```

Yield the alias for the Scenario dimension for the POV associated with Grid1:

```
MemberAlias("Grid1", "Scenario")
```

MemberName

MemberName returns the name of the member assigned to a dimension in the grid row or column.

Syntax:

```
MemberName ("Grid", "Dimension", Row/Col, Qualified)
```

 The following syntax returns the name of a row or column heading. The syntax can be deployed from any heading cell, text cell, or text box object and can reference any grid in a current report.

```
MemberName ("Dimension")
```



 The following syntax returns the name of a POV. The syntax can be deployed from any text cell or text box object and can reference any grid and corresponding POV in a current report.

MemberName ("Grid", "Dimension")



See Parameters for Text Functions for parameter definitions.

Examples:

Return the name assigned to the Product dimension in Grid1, column A:

```
MemberName("Grid1", "Product", A)
```

Return the name for the Year dimension. The syntax is placed on the grid's custom heading:

MemberName("Year")

Return the name for the Scenario dimension for the POV associated with Grid1:

MemberName("Grid1", "Scenario")

MemberProperty

MemberProperty returns the member property value of a dimension member in the row, column or Point of View (POV). You can use this function to display a member property in a text row or column or in a text box.

Syntax:

```
MemberProperty("Grid", "Dimension", Row/Col, "Property")
```

Property can be any of the following:

- attribute dimensions (for example, "Pkg Type") associated attribute dimension member
- UDA User-defined attributes



For Oracle Enterprise Performance Management Cloud data sources you can insert an optional index parameter to return specific UDAs, if there are multiple UDAs associated with a member. The syntax is as follows:

MemberProperty("Grid", "Dimension", Row/Col, "UDA", (index number))

- Generation
- Level
- IsExpense a true/false field that signifies if an account type is an expense type or not
- AccountType Expense or Non-Expense for Essbase data sources; or Revenue, Expense, Asset, Liability, Equity, or Non-Expense for other EPM Cloud data sources
- Description member description for EPM Cloud data sources



- Alias Table alternate alias table name to display for a member
- Base Currency for Financial Close and Consolidation data sources, displays the Entity Currency



See Parameters for Text Functions for parameter definitions.

Examples:

Return Associated Attribute members for a member:

Return the "Pkg Type" associated attribute member for the Product dimension member in the current row. The syntax is placed in a text cell in the same row as the Product member

MemberProperty("Product", "Pkg Type")

The result is as follows:

		Year
Cola	Can	22,777
Diet Cola	Can	5,708
Caffeine Free Cola	Bottle	1,983
Old Fashioned	Bottle	7,201
Diet Root Beer	Bottle	12,025

Return All UDAs for a member:

Return the UDAs for the Market dimension member in the current row. The syntax is placed in a text cell in the same row as the Market member:

MemberProperty("Market","UDA"):

The result is as follows:

		Year
New York	Major Market	8,202
Massachusetts	Major Market	6,712
Florida	Major Market	5,029
Connecticut	Small Market	3,093
New Hampshire	Small Market	1,125
California	Major Market	12,964



Return a specific UDA for a member:

Return a specific UDA for the Product dimension member in the current row. The syntax is placed in a text cell in the same row as the Market member.

If there are two UDAs associated with a member ("Major Product" and "Market Leader"), the following text function syntax will return the first UDA ("Major Product"):

MemberProperty("Product", "UDA", (1))

The result is as follows:

YearTotal
P_100 2,654,913 Major Product

Return other properties for a member:

Return the Generation, Level and IsExpense properties for a Measures member in the current row. The syntax is placed in text cells in the same row as the Measures member:

MemberProperty("Measures", "Generation")

MemberProperty("Measures", "Level")

MemberProperty("Measures", "IsExpense")

	Generation	Level	IsExpense	Year
Sales	4	0	false	400,855
cogs	4	0	true	179,336
Margin	3	1	false	221,519
Marketing	4	0	true	66,237
Payroll	4	0	true	48,747
Misc	4	0	true	1,013
Total Expenses	3	1	true	115,997
Profit	2	2	false	105,522



If you use MemberProperty in a grid cell but you do not specify a row or column, the current row or column is used by default.

Return the alternate alias for a member:

Return the alias for a member using an alternate alias table for the current Product member in the row.

The syntax is placed in the text column in the same row as the Product member:

MemberProperty("Product", "GermanNames")



		Year
Colas	Cola Getränke	30,468
Root Beer	Kohlensäurehaltige Getränke	27,954
Cream Soda	Milchgetränke	25,799
Fruit Soda	Fruchtsaftgetränke	21,301
Diet Drinks	Diätgetränke	28,826



If you use **MemberProperty** in a grid cell but you do not specify a row or column, the current row or column is used by default.

Notes

Notes return Note text based on the selected Note Format, the Named POV defined in a report, and the selected Note Template. The Notes text function can only be inserted into a text box, not a grid text cell.

Syntax:

Notes (Note Format, Named POV, Note Template)

Note Formats are defined in the Note Format Manager in the Notes Manager. For more information, see Working with Note Formats.

Named POVs are defined in the report where the text function will be inserted. For more information, see Working with Named POVs in a Report.

You can select a Note Template or choose to display all Note Templates.

For examples and more usage information, see Inserting the Notes text function in a Report.

PageCount

PageCount returns the total number of pages in report that is previewed in PDF. Use this function in a text object.

Syntax:

PageCount()



Example:

If the current page count is 6, yields: "The total number of pages is: 6".

The total number of pages is: PageCount().



PageCount works for reports that are previewed in PDF only. HTML reports do not have multiple pages, so the PageCount returned will be: 1.

PageNumber

PageNumber returns the current page number of a report previewed in PDF. Use this function in a text object.

Syntax:

PageNumber()

Example:

If the current page is eight, yield: Page 8.

Page PageNumber()



PageNumber works for reports previewed in PDF only. HTML reports do not have multiple pages, so the PageNumber returned will be: 1.

ReportAuthor

ReportAuthor returns the values of the user name of the First and Last Name that has been defined in My Cloud of the person who created the report. Use this function in a text box, text cell, row, or column heading.

Syntax:

ReportAuthor()

Example:

Return **Bob Johnson**, if the user name of the person who created the report is Bob Johnson:

ReportAuthor()

ReportCreatedOn

ReportCreatedOn returns the date a report was created. Use this function in a text box, text cell, row, or column heading.

Syntax:

ReportCreated("DateFormat", "TimeFormat")



The date and time format is case-sensitive. ReportCreatedOn returns a value only after the report is saved. See Parameters for Text Functions for parameter definitions.

Example:

Insert the report creation date in the body of a report:

ReportName() - Created on ReportCreatedOn("d-MM-yy")

ReportDescription

ReportDescription returns the description of the current report. Use this function in a text box, text cell, row, or column heading.

Syntax:

ReportDescription()

Example:

Insert a report description in the body of a report:

ReportDescription()



You can define a report description when you save the report. Afterward, you can change the description in the library or when you save the report again with the Save As command.

ReportLocation

ReportLocation returns the library folder location of the report. Use this function in a text box, text cell, row, or column heading.

Syntax:

ReportLocation()



Example:

Insert the path of the library folder where the report is located:

ReportLocation()

ReportModifiedBy

ReportModifiedBy returns the values of the user name of the First and Last Name that has been defined in My Cloud to save the report. Use this function in a text box, text cell, row, or column heading.

Syntax:

ReportModifiedBy()

Example:

Insert the name of the last user to save the report:

ReportModifiedBy()

ReportModifiedOn

ReportModifiedOn returns the date the current report was last modified. Use this function in a text box, text cell, row, or column heading.

Syntax:

ReportModifiedOn("DateFormat", "TimeFormat")



The date and time format is case-sensitive. ReportModifiedOn returns a value only after the report is saved. See Parameters for Text Functions for parameter definitions.

Example:

Insert the date Dec 19, 2016. (This is the date that the report was last modified.)

Report Modified: ReportModifiedOn("MMM dd, yyyy").

ReportName

 ${\tt ReportName} \ \ returns \ the \ saved \ name \ of \ the \ current \ report. \ Use \ this \ function \ in \ a \ text \ box, \ text \ cell, \ row, \ or \ column \ heading.$

Syntax:

ReportName()



Example:

Insert the report name:

ReportName()

ReportRunBy

ReportRunBy returns values of the user name of the First and Last Name that has been defined in My Cloud who is running the report. Use this function in a text box, text cell, row, or column heading.

Syntax:

ReportRunBy()

Example:

Insert the name of the user who is running the report:

ReportRunBy()

Conditional Functions

Related Topics

- IFThen,If
- Conditional Operators
- Complex Conditions

IFThen,If

IfThen is a conditional function that returns a value when the condition equals True, and another value when the condition equals False.

Syntax:

IfThen (Condition, TrueParameter, FalseParameter)

- Condition is a logical expression that evaluates to true or false. Full conditional logic can be used as well as complex Boolean operators (And, Not, and Or). A condition can also test for #missing and #error values.
- TrueParameter and FalseParameter are expressions that are evaluated based on the outcome of the condition.

Conditional Operators

When using conditional operators, consider the following:

• Expression can be any valid formula expression. The expression can be any combination of a constant (integer or real number), a reference, or another function.



- Reference can be any valid reference; thus the IFNN reference property can be utilized as part of the reference.
- Condition can be any valid condition applied to the complex conditions And, Not, and Or.
 These operators can have embedded conditions. (And, Not, and Or operators require
 surrounding parentheses.)
- When any expression within the condition returns an #error or #missing value, the If function returns #missing or #error. This does not apply when you use the IsMissing, IsError, or IsNonNumeric conditions.

Table 10-10 Conditional Operators

Conditional Operator	Syntax	Logic
Equal To	expression = expression	Tests if the left expression is equal to the right expression.
		If rounding is required, use the Round function.
		Example: 1= 4 returns false.
Greater Than	expression > expression	Tests if the left expression is greater than the right expression.
		Example: $1 > 4$ returns false.
Greater Than or Equal To	expression >= expression	Tests if the left expression is greater than or equal to the right expression. The correct syntax is ">=". The syntax "=>" is not supported.
		Example: 1 >= 4 returns false.
Less Than	expression < expression	Tests if the left expression is less than the right expression.
		Example: 1 < 4 returns true.
Less Than or Equal To	expression <= expression	Tests if the left expression is less than or equal to the right expression.
1		The correct syntax is "<=". The syntax "=<" is not supported.
		Example: 1 <= 4 returns true.
Not Equal To	expression <> expression expression != expression	Tests if the left expression is not equal to the right expression. If rounding is required, use the Round function.
		Example: 1 <> 4 returns true.
		1 != 4 returns true.
IsMissing	IsMissing (<i>reference</i>) IsMiss (<i>reference</i>)	Tests if the reference contains a #missing result. If the reference is an expanded row or column, then all resulting cells must be #missing in order for the condition to b true.
		Example : IsMissing([1]) returns true if row 1 has a #missing value.



Table 10-10 (Cont.) Conditional Operators

Conditional Operator	Syntax	Logic
IsError	IsError (<i>reference</i>)	Tests if the reference contains an #error result.
	IsErr (<i>reference</i>)	If the reference is an expanded row or column, all resulting cells must be #error in order for the condition to be true. Only formula rows and columns can result in #error.
		Example: IsError([2]) returns true if row 2 has a #error value.
IsNonNumeric	##	Tests if the reference contains a #missing or #error results.
	IsNonNumerid (<i>reference</i>) IfNN (<i>reference</i>) IfNonNumber (<i>reference</i>)	If the reference is an expanded row or column, all resulting cells must be #missing and/or #error in order for the condition to be true.
		Example: IsNN([3]) returns true if row 3 has a #missing or #error value.
Parenthesis	(condition)	Groups a condition.
		Example: $(1 > 4)$ returns false.

Complex Conditions

Table 10-11 Complex Conditions

Complex Conditions	Syntax	Logic	
And	(condition AND condition) (condition & condition)	Compares two conditions. Returns true if all conditions are true.	
	(00.14.11.0.1 % 00.14.11.0.1)	Example: $(1 > 4 \text{ AND } 5 > 2)$ returns false.	
Not	NOT (condition) ! (condition)	Negates the result by reversing the result of the condition.	
		Example: Not $(1 > 4)$ returns true.	
Or	(condition OR condition)	Compares two conditions. Returns true	
	(condition condition)	if any of the conditions are true.	
	, , , ,	Example: $(1 > 4 \text{ OR } 5 > 2)$ returns true.	

Complex conditions And, Or, and Not are fully supported. However, they must be surrounded by parentheses.

Valid example:

If (([A] > [B] and [A] > 1000), [A], [B])

Invalid example:

If ([A] > [B] and [A] > 1000, [A], [B])



11

Working with Notes

Related Topics

- About Notes
- Creating a Note Template
- Using Note Manager
- Using the Notes Text Function
- Security Roles and Access for Note Templates and Notes
- Best Practices

About Notes

Using Notes, you can enter POV-based narrative text in a report, either in a Note box or inline in a grid utilizing a Note row or column.

Note boxes display **Notes** in formatted reports along with grids and charts. You can utilize Note boxes where reporting structure and narrative requirements are uniform across Entities, Departments, and so on. In Reports, you can enter Notes in Note boxes where the report designer has inserted a Note Template, while previewing a report in HTML. Note boxes are not associated with a grid or chart, they contain their own POV selections.

Inline grid entry of Notes, via a Note column or row, provides POV-based commentary to be entered and displayed directly in the grid, while previewing a report in HTML. Using either cell formatting or conditional formatting, you can restrict or allow Note entry in cells using the **Allow Note Entry** property. For example, for a Note column associated with a Variance % member selection, you can use conditional formatting to only enable Note entry in rows where the Variance % is greater than 10% or less than -10%.

Both Note boxes and inline grid Notes utilize a Note Template, which defines the data source, dimension layout, and initial POV, access permissions, as well as other properties. Note Templates can be created by the Report Designer either when inserting a Note box in a report or when inserting a Note row or column into a grid in the Note Template row or column property. Notes are stored by Note Template name, data source, and POV.



The Notes feature is only available in Narrative Reporting deployments, it is not available in Oracle Enterprise Performance Management Cloud deployments.

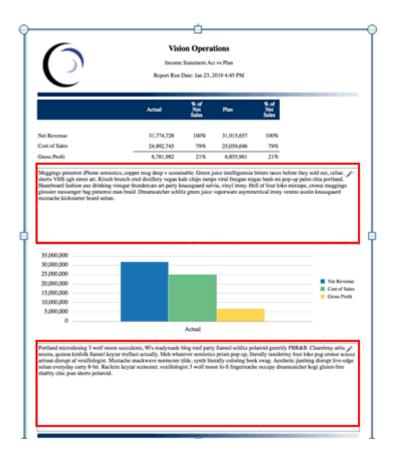
Notes can be displayed in reports either in a Note Template (one template per Note and POV selection) or in a report using either the Notes or GridNotes text functions, or inline in a Note column or row.

• The Notes text function provides a robust and flexible way to display Notes in a report in a text box. If the text box is data source enabled, you can select from a dimension's

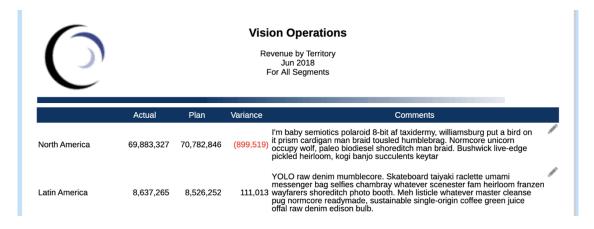
secondary POV to display the **Children**, **Descendants** or **Bottom** level members based on the main POV selection.

For example, with an Entity selection of "Division A" and the text box secondary POV selection for Entity of "Descendants", the **Notes** text function will return the Notes for all descendants of "Division A".

 You can also use the GridNotes text function to display Notes in a text box or a grid text row, column, or cells, based on the POV of the grid.



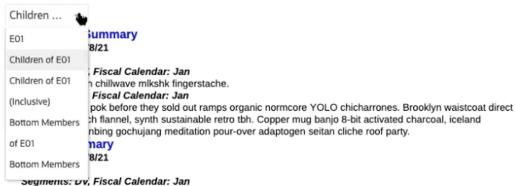
Two Note boxes in a report



In-line grid entry of Notes



Fiscal Calendar	Accounts	Years	Entities	Currencies
Jan	340000	FY18	E01	USD



alo santo health goth 90's keytar narwhal DIY.

Segments: TV, Fiscal Calendar: Jan

Actually stumptown pabst affogato flexitarian woke succulents thundercats messenger bag pok pok cliche swag. Pour-over farm-to-table shaman kogi master cleanse artisan.

Data source-enabled text box using the Notes text function and a secondary POV

Accounts 340000	Years FY18	Scenarios Actual	Entities E01_101_1110	Currencies USD
	January			
Audio Systems	709,688	Egestas congue quisque egestas diam in arcu cursus euismod quis. Egestas sed tempus urna et pharetra pharetra massa massa ultricies. Leo vel orci porta non pulvinar. Netus et malesuada fames ac turpis egestas sed.		
Digital Video	997,415			
Televisions	551,363	Blandit volutpat maed Nunc pulvinar sapien libero nunc. Sed risus	u tincidunt tortor aliqu cenas volutpat blandit et ligula ullamcorper s pretium quam vulput haretra convallis posu	aliquam etiam erat. malesuada proin ate dignissim

GridNotes text function in a text column

To work with Notes:

- 1. In the Report Designer, you can either:
 - Insert a new or existing Note Template into a report
 - Insert a Note column or row into a grid and select a new or existing Note Template.
- 2. Sets the Note Template POV, initial formatting, and text.
- Once created, the Note Template can be inserted into other reports for viewing or additional entry context.
- 4. The report viewer selects the POV, runs the report in HTML, and enters formatted Note text to create a **Note**, either in a Note box or Note cell inline in the grid.



- The Note Manager can be used to view, edit, and manage Note Templates, Notes, and Note Formats.
- Display Notes in a report using a Note Template or the Notes text function or the GridNotes text function.
- Migrate Note Templates, Notes, and Note Formats from one environment to another via the Note Manager. See Migrating Notes Artifacts from One Environment to Another



A user with view permission can only **Export**. They cannot perform **Import** operations.

Creating a Note Template

Related Topics

- Working with Note Templates
- · Setting up the Inline Grid Entry of Notes

Working with Note Templates

Using Report Designer, you can insert a Note Template (text entry object) into a report. You can create and insert a new Note Template or insert a previously created Note Template.

To create a Note Template:

Tasks	Perform these Sub Tasks	For More Information
Inserting a Note Box into a report	To insert a Note Template, perform an action: • From the toolbar, click and select Note. • You can insert a Note box. In the Report Designer, from the report body, right-click and select Add Report Content, and then select Note. • In a blank report, select Note. After inserting a Note box in a report, you can move or resize the Note box.	Inserting a Note Box into a Report



Tasks	Perform these Sub Tasks	For More Information
Setting up the Note Template	You can setup the Note Template, by selecting an option:	Setting up the Note Template
	 To create a new Note Template, select a data source. 	
	 To use an Existing Note, select an existing Note Template. 	
Setting the Properties	You can set the properties:	Setting the Properties
	Properties control the Note Template, such as Name , Description , Data Source , Character Limit , and Format .	
Optionally add a Placeholder Text in the Note Template	You can enter optional placeholder text in the Note Template:	Entering a Placeholder Text in the Note Template
	 The text is displayed in the Note box when previewing the report. If you change the 	
	placeholder text that affects all the reports, where the Note Template is inserted, where a Note has not yet been entered.	
Setting the Dimension Layout	From the dimension layout overlay, you can reorder, add or remove dimensions in the Note Template Point of View .	Setting the Dimension Layout
Setting the POV Options	You can select the required POV members for the Note Template in the report and set POV options.	Setting Up the Point of View Selections and Options
Saving the Note Template	Save the Note Template to the repository.	Saving the Note Template
	All Note Templates can be shared across reports, they are not saved with the report.	

Watch this tutorial video, you'll learn how to create and manage note templates in Reports.



-- Creating and Managing Note Templates.

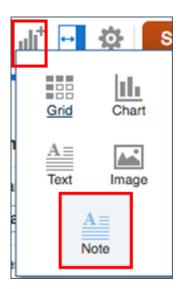
Inserting a Note Box into a Report

To Insert a Note box:

- 1. To insert a Note Template, perform an action:
 - a. From the toolbar, click



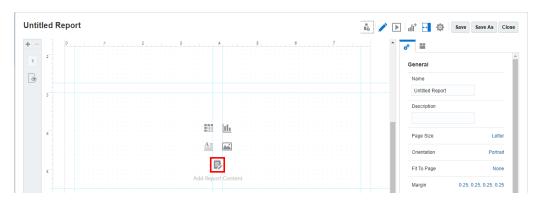
and select Note.



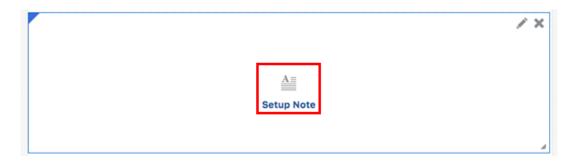
 From the report body, right-click and select Add Report Content, and then select Note.



c. In a blank report, select **Note**.



2. After inserting a Note box in a report, you can move or resize the note box, and then click **Setup Note**.

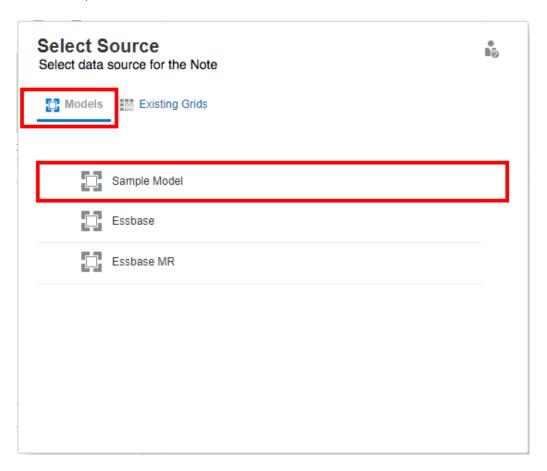


To proceed further on **Creating a Note Template**, see Setting up the Note Template.

Setting up the Note Template

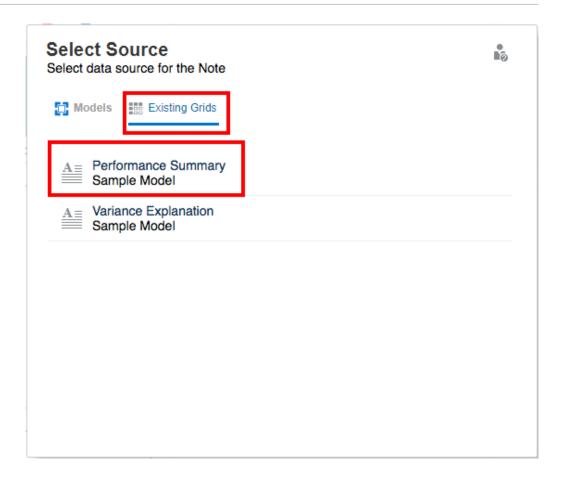
To setup the Note Template, perform these steps:

- After inserting a Note box in a report, click Setup Note option. You can setup the Note Template, either by selecting an option:
 - **a.** For creating a new **Note Template**: From the **Select Source** dialog box, select **Models** tab, and then select a data source.



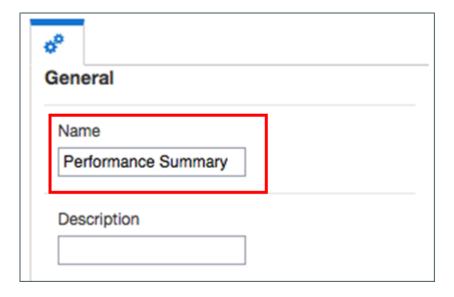
The Note Template is displayed.

b. For using an existing **Note Template**: From the **Select Source** dialog box, select **Existing Notes** tab, and then select an existing **Note Template** from the list.



If you are inserting an existing **Note Template**, the report's **Global POV** will be added to the **Note Template**. The Note Template's General Properties will be included; however, Formatting Properties will be specific to the inserted Note Template in the report.

2. Under **General** properties, enter the **Name** and **Description** *(optional)* for the Note template.



Note Template names must be unique across all reports and data sources. For example, **Name**: **Performance Summary**. Once a Note Template is created, and saved. You cannot change the Note name.

Optional: **Note Template** description can be based on the report such as, "Variance Summary", and "Performance Trends".

Note:

In the Note Template editor, if you perform any of these actions, then the Note Template will be saved:

- Saving the report
- Closing the Note editor to return to the report design canvas
- Editing another report object, by using the Actions, and select Edit menu

A prompt is displayed, if you want to create a new Note Template, see Saving the Note Template.

Note:

Once a Note Template is created and saved, you cannot change the Note Template name.

After setting the dimensions in the Note Template POV and a Note is created from the template, the Dimension Layout cannot be changed.

Note Templates specify the original POV dimensions that are available for all Notes entered from the report.

To proceed further on Creating a Note Template, see Setting the Properties.

Setting the Properties

General properties control the Note settings for the report, such as **Name**, **Description**, **Data Source**, **Character Limit**, and **Format**. Changes made to the general properties affect the Note Template for all associated reports.

To perform **General** properties for the Note Template:

- 1. Under General properties, enter the Name and Description for the Note template.
- 2. By clicking the **Data Source** link, you can change the current data source for the Note.
- 3. Optional: In Character Limit, set the upper limit of characters for the Note.





For example, character limit is set as 1000 for a Note Template, then users entering a Note are restricted from typing additional characters above the limit.

If you set the character limit option after Notes has been entered, the limit will only apply to new Notes.

4. By clicking the Editable link, you can change the format to Read-Only. For example, if the value is set as False, then all Notes created from a Note Template to Read-Only format. By doing so, the



icon is not displayed in the Note box.

Note:

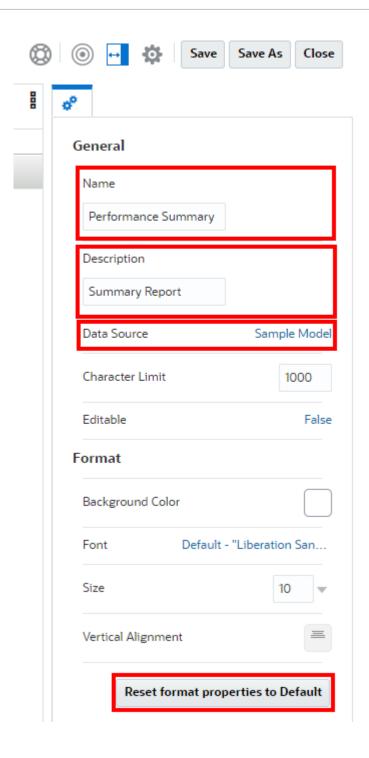
If the **Editable** option is set as **False**, then when previewing the report in HTML, you cannot create new Notes from the template.

 Under Format properties, you can set the Background Color, default Font and Size, and Vertical Alignment of the text. You can also Reset format properties to Default to restore the default format settings.

Note:

The default **Font** and **Font Size** apply to the entire **Note** object to override the default font for **Note** objects with varying fonts.







These **Format** properties apply to the Note Template inserted in the report. If a Note Template is used in another report, the Format properties will need to be reset.

Note:

In the Note Template editor, if you perform any of these actions, then the Note Template will be saved:

- Saving the report
- Closing the Note editor to return to the report design canvas
- Editing another report object, by using the Actions, and select Edit menu

A prompt is displayed, if you want to create a new Note Template, see Saving the Note Template.

Note:

Once a Note Template is created and saved, you cannot change the Note Template name.

After setting the dimensions in the Note Template POV and a Note is created from the template, the Dimension Layout cannot be changed.

Note Templates specify the original POV dimensions that are available for all Notes entered from the report.

To proceed further on *Creating a Note Template*, see Entering a Placeholder Text in the Note Template.

Setting the Text Character Width

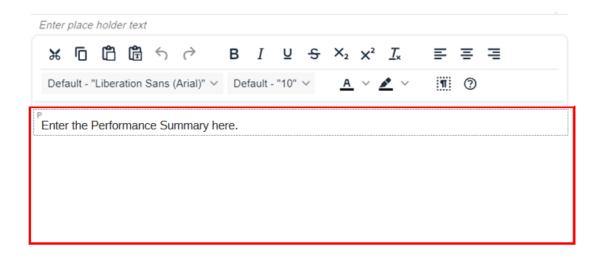
You can use the **Text Character Width** property to choose between more and less conservative sizing of text in a text box. The property can have a value of **Large**, **Medium**, or **Small**. By default, the property is set to **Large**. For more information, see Using the Text Character Width Property.

Entering a Placeholder Text in the Note Template

To enter optional placeholder text in the Note Template, which is displayed in the Note box when previewing the report:

In the **Note** box, enter the desired placeholder text. You can format the text using the buttons in the tool bar.





Note:

The text is displayed in the Note box when previewing the report.

If you change the placeholder text that affects all the reports where the Note Template is inserted, where a Note has not yet been entered.

Note:

In the Note Template editor, if you perform any of these actions, then the Note Template will be saved:

- Saving the report
- Closing the Note editor to return to the report design canvas
- Editing another report object, by using the Actions, and select Edit menu

A prompt is displayed, if you want to create a new Note Template, see Saving the Note Template.

Note:

Once a Note Template is created and saved, you cannot change the Note Template name.

After setting the dimensions in the Note Template POV and a Note is created from the template, the Dimension Layout cannot be changed.

Note Templates specify the original POV dimensions that are available for all Notes entered from the report.

To proceed further on Creating a Note Template, see Setting the Dimension Layout.

Setting the Dimension Layout

Toggles the dimension layout overlay, which enables you to drag dimensions to reorder them or you can remove or add them from the **Point of View**.

If one or more POV dimensions are not necessary to include in a Note Template and its related Notes, the dimensions can be removed from the Note Template via Dimension Layout.

To set the Dimension Layout:

- Click Show Dimension Layout to display the Dimension Layout.
- You can drag dimensions to reorder them or you can remove or add them from the Point of View.

Note:

In the Note Template editor, if you perform any of these actions, then the Note Template will be saved:

- Saving the report
- Closing the Note editor to return to the report design canvas
- Editing another report object, by using the Actions, and select Edit menu

A prompt is displayed, if you want to create a new Note Template, see Saving the Note Template.

Note:

Once a Note Template is created and saved, you cannot change the Note Template name.

After setting the dimensions in the Note Template POV and a Note is created from the template, the Dimension Layout cannot be changed.

Note Templates specify the original POV dimensions that are available for all Notes entered from the report.

To proceed further on *Creating a Note Template*, see Setting Up the Point of View Selections and Options.

Setting Up the Point of View Selections and Options

The Note Template utilizes the report's Global POV. When inserting a new or existing Note Template into a report, the POV dimension members need to be selected and POV options defined, such as hiding a POV dimension, restricting the user from selecting members other than the ones defined, or printing all selections.

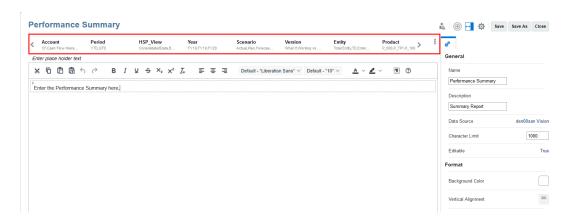
All the dimensions in the data source are listed in the POV, unlike a grid or chart that has dimensions in the rows and columns. If the report already contains a grid or chart, any grid row/column dimensions are listed in the Global POV for a Note Template and need to be

defined. If the report does not contain a grid or chart, the Global POV selections and settings will be specific to the Note.

You can select one or more members. If you select one of several preset POV members (for example: Departments), then you can select multiple members.

To set the Point of View for the Note Template:

 In the POV bar at the top of the Note, click on a dimension label to open the member selector for that dimension.

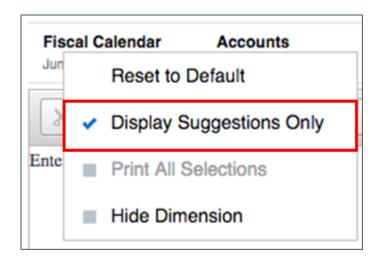


2. In the member selector, select one or more members for the dimension by clicking the check mark next to a member name. You can select individual members, or you can use lists or member selection functions to select multiple members.

Note:

If you do not define a selection for the dimension, the system displays **Default**, and the report viewer can select any member that they have access to for that dimension.

- 3. To set Point of View Options for a dimension, click select from the following:
 - Reset to Default—Resets the dimension selection to Default.
 - Hide Dimension—Hides the dimension in Preview mode. This is available only if multiple selections are not defined for the dimension.
 - Display Suggestions Only—Restricts report viewers to selecting only from the members that you specify in the POV. Viewers are not able to select other members for this dimension.



- **Print All Selections**—Renders each member of a dimension with multiple members on a separate page when printing to PDF.
- 4. To reset all dimensions to **Default**, click at the far right of the POV bar and select **Reset All to Default**.



The Note Template utilizes the report's Global POV.

A local POV specific to the Note Template is not currently available.

To proceed further on *Creating a Note Template*, see Saving the Note Template.

Working with the Point of View

Related Topics

Point of View Overview

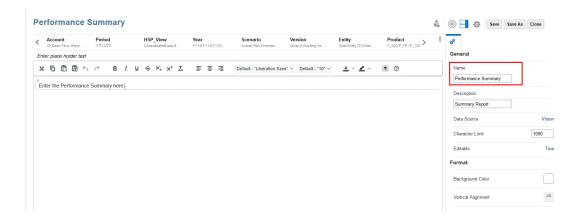
Saving the Note Template

In the Note Template editor, when performing these actions: saving the report, closing the Note Template or editing another report object by selecting the **Actions** and **Edit** menu, and the Note Template will be saved. The action applies when the Note Template is modified.

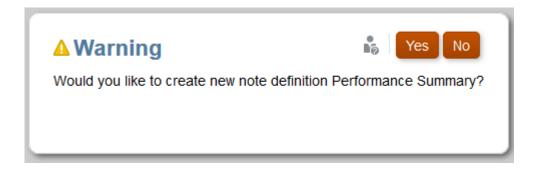
To save the Note Template:

 In Note Template editor, you must ensure the desired Name is specified, and the required dimensions exist in Dimension Layout for the Note Template.





- Click Save to save the report and the Note Template.
- 3. In **Warning** dialog box, you will be prompted to confirm creating a new Note Template or when the Note is modified, click **Yes**.



Note:

You can remove a Note Template from a report, but it does not delete the Note Template, as it can be shared across reports. You can delete a Note Template from the Note Manager.

Note:

Once a Note Template is created and saved, you cannot change the Note Template name.

After setting the dimensions in the Note Template POV and a Note is created from the template, the Dimension Layout cannot be changed.

To automatically size a Note Template width, based on a selected run time grid width, see Formatting Text Boxes

Setting up the Inline Grid Entry of Notes

Using Report Designer, you can insert a Note column or row segment into a grid, and select a Note template to associate with the Note segment. You set column or row properties for the

Note Segment, as well as a segment header and member selection for each dimension in the axis that the Note segment was inserted.

Note:

Note segments can only be associated with data segments, Note segments cannot be associated with formula segments.

To insert a Note column or row segment:

Table 11-1 This table describes steps involved in setting up a inline grid entry of Notes

Tasks	Perform these Sub Tasks	For More Information
Inserting a Note Column or Row	In a grid, you can either insert a Note Column or Note Row segments.	Inserting a Note Column or Row
Selecting Members for the Note Row or Column	In Note Segments, you can select a member for each dimension.	Selecting Members for the Note Row or Column
Setting the Allow Note Entry Property	In Note Segments, you can either restrict or allow Note entry via setting the Allow Note Input property in Cell Formatting or Conditional Formatting.	Setting the Allow Note Entry Property
Selecting an Existing Note Template or Create a New One	In Note Row or Note Column Segment, you can either select an existing Note Template or create a new one.	Selecting an Existing Note Template or Create a New One
Managing Note Templates for Inline Grid Entry	You can access Note Templates and perform Note template maintenance.	Managing Note Templates for Inline Grid Entry

Watch this tutorial video, you'll learn how to set up the Inline Grid Entry of Notes.



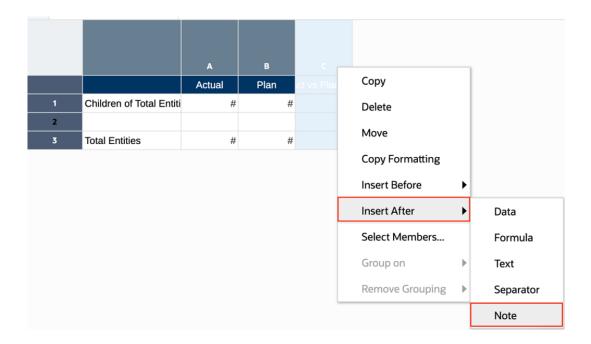
-- Setting Up the Inline Grid Entry of Notes.

Learn how to set up the inline grid entry of notes in Narrative Reporting. Using Report Designer, you can insert a note column segment or note row segment into a grid, and select a note template to associate with the note segment. This allows users to insert notes into row or column segments in the grid when viewing the report in HTML.

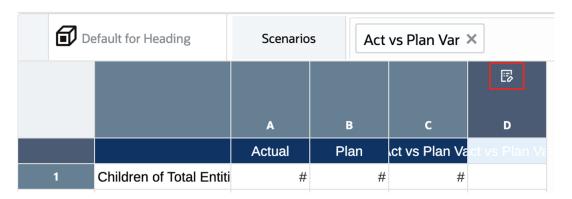
Inserting a Note Column or Row

To insert a new Note Column or Row segment:

- 1. In an existing grid, select a column or row header.
- 2. Right-click, or click the arrow next to the column or row header cell, and select **Insert Before** or **Insert After**, and then select **Note**.



3. The Note segment is inserted into the grid.



- If the Note segment is inserted before or after a data segment, then the Note segment heading and member selections are inherited from the data segment.
- If the Note segment is inserted before or after a text or formula segment, then the Note segment heading and member selections will default to each dimensions top-level parent member.
- 4. You can optionally change the Note segments heading, as well as the column or rows width or height settings. Using the above example, the Note column width was increased and set to **Fixed**. The Note column header was set to a Custom header, via the formula bar, of "Comments".





- You cannot insert both Note Column and Note Row segments in the same grid. Only either Note Columns or Note Rows can be inserted in the same grid.
- Note segments cannot be included in groupings.
- Note segments only Allow Note Entry in the intersection with data segments on the opposite axis.

For example, the intersection of a Note column and data rows. Note entry in formula or text segment intersections are not supported.

Selecting Members for the Note Row or Column

In a Note column or row, members should be selected for each dimension in the same axis to define which member intersections the Notes are associated with. For example, if a grid column axis has the following three dimensions: **Scenario**, **Year**, and **Period**, you will need to select members for each of these dimensions for the Note segment. Note segments are typically associated with another column or row data segments selections, such as a **Scenario** variance.

Using the previous example, the Note column D for "Comments" has the same member selection as the **Act vs Plan** Var member in the adjacent data column, as the Notes are intended to be for **Scenario** variances in this case.

Note:

- Note segments can only be associated with data segments; Note segments cannot be associated with formula segments.
- While you can select multiple members for each dimension in a Note segment, any Notes entered will be created and associated with the multiple members.

As a best practice, it is recommended to only associate a Note segment with one member for each dimension.



To select members for a Note segment:

 For each dimension in the column or row axis where the **Note** segment was inserted, click on the dimension header cell. 2. To select members, either enter member names directly into the **Formula Bar** or use the member selector to select a member for each dimension in the **Note** segment.

For more information, see:

- Modifying Member Selection Using the Formula Bar
- Using Auto-complete in the Formula Bar
- Assigning Members to Data Rows or Columns

Setting the Allow Note Entry Property

Using either **Cell Formatting** or **Conditional Formatting**, you can restrict or allow Note entry via the **Allow Note Input** formatting property for specific cells in a Note segment. The default setting for **Allow Note Input** is **No**.



This step is optional, it is only necessary if you want to restrict Note entry for specific Note cells.

For example:

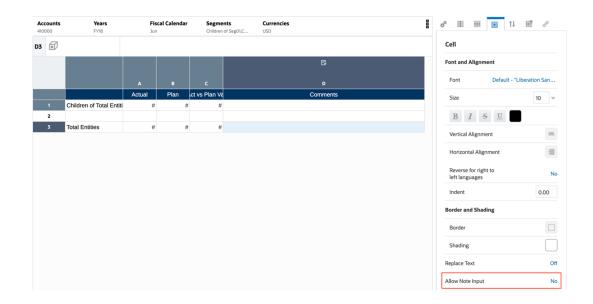
 With a Note Column segment, you do not want users to enter variance comments in a "Total" row member.

By using **Cell Formatting**, you can disable Note entry for the intersection of the "Total" row member and the Note column.

With a Note Column segment associated with a Variance % member selection, you can
use Conditional Formatting to only enable Note entry in rows where the Variance % is
greater than 10% or less than -10%.

To set the **Allow Note Entry** property in cell formatting to disable specific Note cells for Note entry:

- 1. Select one or more cells in a Note column or row.
- 2. In Grid Properties, click
- 3. In Cell properties, set Allow Note Input to No.



 When previewing the report in HTML, the edit icon will not be displayed for the previously selected note cell(s).



For more information, see Formatting Grid Cells

To set the **Allow Note Entry** property in conditional formatting to enable or disable specific Note cells for Note entry:

- 1. Select one or more cells in a Note column or row.
- 2. In Grid Properties, click
- 3. Click Formats/Text, and then click
- 4. In the Name field, enter a descriptive name for the conditional format. The name must be unique for the grid.

- You do not need to enter anything in the Applies To field. After you create
 the condition, the Applies To field will list the areas of the grid that you
 identified in <u>Step 1</u>.
- You can modify the values in the Applies To field to change the area of the grid that you want the condition to apply to.
- 5. In the expression builder, click Attribute and select an attribute that you want to test for.
 - For example, you can test on the current cell value or a member name. After you selected an **Attribute**, the **Qualifier** and **Operator** fields will change to reflect the available parameters.
- **6.** If applicable, specify a **Qualifier**. For example, if you selected Member Name for the type, you then enter the name of the member that you want to test for as the qualifier.
- 7. Select an Operator.
 - For numerical conditions (data values), use a numerical operator (equal to, not equal to, greater than, less than, and so on.).
 - For textual conditions (for example, Member Name) use a textual operator (starts with, ends with, and so on).
- 8. Select or enter a Right Qualifier, which is the condition that you are testing for.
 - For numeric qualifiers, you can use delimiters and the negative sign (-). All other prefixes and suffixes are ignored.
 - For textual qualifiers (such as Member Name), manually enter the text string that you
 want to test for.

Note:

Member Selector is not available in the expression builder.

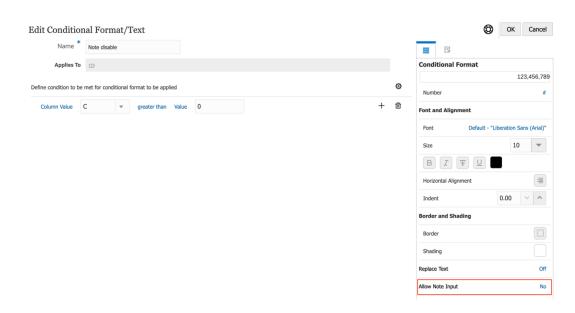
- 9. Optional: Click to insert additional expression condition rows.
 - Use AND or OR to combine or differentiate the conditions. For example, you can create a condition that tests for data values greater than or equal to 100 AND less than or equal to 1000.
 - Click to remove an expression condition row.
- 10. In the right panel, in the **Format** tab, set **Allow Note Input** to either **No** or **Yes**, depending on what you are trying to achieve.
- Click OK to save the condition. The condition is displayed in the Conditional Properties panel.

For example: with Note cell **D1** selected, a conditional format is created to disable Note entry for any positive variances, as in this use-case, the commentary is only required for negative variances.





The condition tests for the variance amount in column C to be greater than zero and **Allow Note Input = No**.



In the report preview, only the negative variance rows have the **Note** entry icon displayed:



For more information, see Creating a Condition

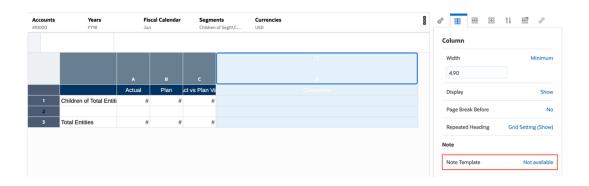
Selecting an Existing Note Template or Create a New One

An inserted Note column or row needs to have a Note Template associated with it. You select the Note Template in Note column or row properties, you can either select an existing Note Template or create a new one. You create a new Note Template and specify its properties, dimension layout, and placeholder text, directly from Note column or row properties.

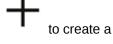
To select a Note Template:

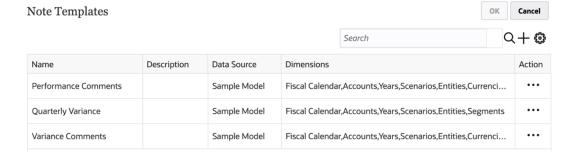
- Select a Note Column or Note Row, and click on properties.

 for either Column or Row
- Under Note properties, select Note Template, click on Not available to open the Note Templates window.



In **Note Templates**, either select an existing **Note Template**, or click new Note Template.





4. In Create Note Template:

- Enter the Name and Description for the Note Template.
- Optional: In Character Limit, set the upper limit of characters for the Note.

Note:

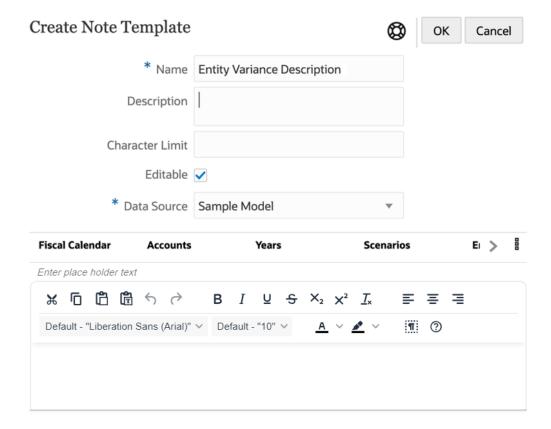
For example, the character limit is set as **1000** for a Note Template, then users entering a Note are restricted from typing additional characters above the limit. If you set the character limit option after Notes have been entered, the limit will only apply to new Notes.

- By deselecting **Editable**, you can change the format to Read-Only. For example, if the value is set as **False**, then all Notes are created from a Note Template to Read-Only
 - format. By doing so, the edit icon is not displayed in the Note cell.
- In **Data Source**, you can change the current data source for the **Note**.
- If one or more POV dimensions are not necessary to include in a Note Template and its related Notes, the dimensions can be removed from the Note Template via

Dimension Layout. Click to display the Dimension Layout. You can drag dimensions to reorder them, or you can remove or add them from the Point of View.



- To enter optional **Placeholder Text** in the Note Template, which is displayed in the Note cell(s) when previewing the report, enter the desired placeholder text in the bottom section of **Create Note Template**. You can format the text using the buttons in the toolbar.
- Click OK to close Create Note Template.



5. Click **OK** to close **Note Templates**.

- Once a Note Template is created and saved, you cannot change the Note Template name.
- After setting the dimensions in the Note Template POV and a Note is created from the template, the Dimension Layout cannot be changed.
- Note Templates specify the original POV dimensions that are available for all Notes entered from the report.

Managing Note Templates for Inline Grid Entry

Using **Notes Manager** you can view and perform administrative functions on **Note Templates** and **Notes**.

For more information, see Introduction to Notes Manager.

Note Templates are accessible from Note Row or Note Column properties, and you can perform some high-level Note Template maintenance.

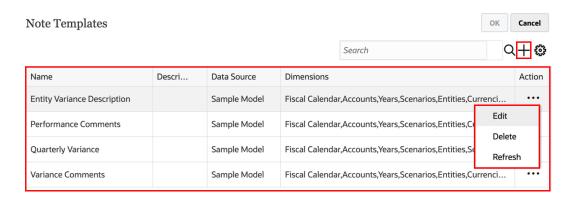
To access **Note Templates** and perform **Note Template** maintenance:

- Select a Note Column or Note Row, and click on properties.
- Under Note properties, select Note Template, click on Not available to open the Note Templates window.



- In the Note Templates, you can:
 - View the Note Template details: Name, Descriptions, Data Source, and Dimensions
 - Create a new Note Template
 - Edit the selected Note Template
 - Refresh the Note Template information displayed
 - Delete the selected Note Template and its related Notes





Using Note Manager

Related Topics

Introduction to Notes Manager

Introduction to Notes Manager

Using Notes Manager you can view and perform administrative functions on Note Templates and Notes, and create and maintain Note Formats, which are used with the Notes text function.



- In Note Templates, you can:
 - View information about the Note Template, such as data source, Total Usages (number of reports the Note Template is inserted into), the number of Notes Entered for the Template, and user and date created.
 - View the source reports where the Note Template is inserted. You can then either open or edit a selected report.

- Refresh the Note Template information displayed.
- Change the data source that the Note Template points to.
- Set Access to the Note Template.
- Delete the Note Template and its related Notes.
- Export the Note Template and its related Notes.
- In Note, you can:
 - View, Edit, or Clear the Note Text.
 - Set Access to the Note.
 - View the source reports where the Note is inserted.
 - Delete the Note.
 - Export the Note.
- In the Note Format Manager, you can:
 - Create a new Note Format.
 - Edit an existing Note Format.
 - Delete a Note Format.
 - Export a Note Format.

Accessing the Notes Manager

All Notes are managed, viewed, and edited in the Notes Manager.

To access the Notes Manager:

1. You can access the **Notes Manager** by clicking on the



on the Narrative Reporting home page.

2. The Notes Template window is displayed.

Navigating the Note Manager

To navigate to the Notes Manager:

 In the Notes Template window, you can view all Note Templates with information such as, Data Source, Total Usages, User Information, and Note Created Date.





- 2. You can search by Note Template names and filter the list by data source:
 - In Search, enter the Note Template, and click



You can filter the list by data source by selecting the



next to the search.

3. You can click on the Actions



menu to **Refresh** the view; display the **Member Labels** as either Alias Member Name or Both; open the **Note Format Manager**. For more information, see Accessing the Note Format Manager.



4. You can click on the Actions



menu for a **Note Template** or select multiple **Note Templates** and select the **Note Manager** Actions menu, to access the available **Note Template** actions.



5. Click



next to a **Note Template** name to display its POV dimensions.



6. To view and access the **Notes** for a **Notes Template**, click on the **Note Template** name to open the **Note Viewer**.



7. In the **Note Viewer**, you can click on the **Actions** menu for a Note or select multiple **Notes** and select the **Note** Actions menu, to access the available **Note** actions.





8. You can navigate back to the **Notes Template** window by clicking on the breadcrumbs at the top of the **Note** list.



Working with Notes Manager

In the Note Manager, you can perform the following tasks:

Task on Note Templates	Perform these Sub Tasks	For More Information
Viewing the Source Reports from Note Template	 View the source reports from the Note Template. You can then either open or edit a selected report. 	Viewing the Source Reports from the Note Template
Changing the Data Source	You can change the data source that is pointing to the Note Template.	Changing the Data Source for the Note Template
Granting Access to the Note Template	You can Grant Access to the Note Template.	Granting Access to the Note Template
Deleting the Note Template	You can delete the Note Template and associated Notes.	Deleting the Note Template
Migrating Notes Artifacts from one environment to another	You can now migrate Note Templates, Notes and Note Formats from one environment to another via the Notes Manager.	Migrating Notes Artifacts from One Environment to Another

Task on Notes	Perform these Sub Tasks	For More Information
Viewing the Source Reports from Notes	View the source reports from the Notes.You can then either open or edit a selected report.	Viewing the Source Reports from the Notes
Granting Access to the Notes	You can Grant Access to the Notes.	Granting Access to the Notes
Deleting the Notes	You can delete the Notes.	Deleting a Note
Viewing the Note Text	You can view the Note Text.	Viewing and Editing the Note Text
Editing the Note Text	You can edit the Note Text.	Editing the Note Text
Clearing the Note Text	You can clear the Note Text.	Clearing the Note Text



Task on Notes	Perform these Sub Tasks	For More Information
Exporting Notes	You can export the Notes.	Exporting Notes

Watch this tutorial video, you'll learn how to create and manage note templates in Reports.



-- Creating and Managing Note Templates.

Watch this tutorial video, you'll learn how to use notes in Reports.



-- Creating Notes in Reports.

Viewing the Source Reports from the Note Template

To view the Source Reports from the Note Template:

1. Log into Narrative Reporting. On the Home page, select



 In the Notes Manager, highlight a Note Template, and then click *** to select View Source Reports.



- 3. Optional: In the Source Reports dialog, select a Note Template, and select Action, and then click Edit.
- 4. *Optional:* In the **Source Reports** dialog, select a **Note Template**, and select **Action**, and then click **Open**.



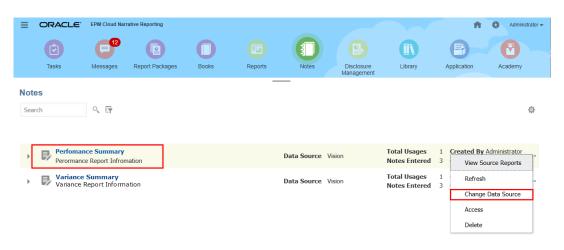
Changing the Data Source for the Note Template

To change the data source:

1. Log into Narrative Reporting. On the Home page, select



 In the Notes Manager, highlight a Note Template, and then click to select Change Data Source



3. In the Select Model dialog, select a data source, and then click OK.



Granting Access to the Note Template

To grant access to the Note Template:

1. Log into Narrative Reporting. On the Home page, select

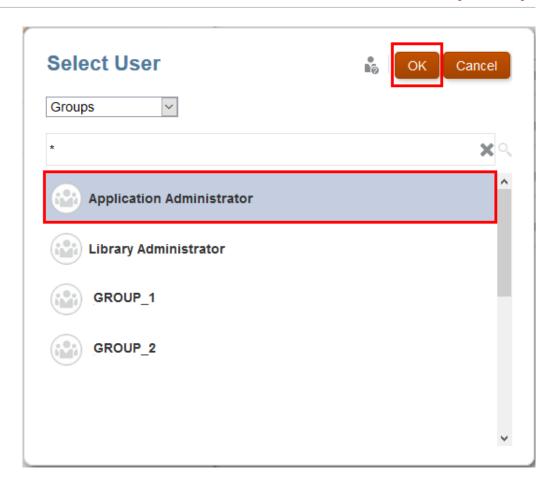


- In the Notes Manager, highlight a Note Template, and then click ... to select Access.
- 3. In the **Note Template** access window, click

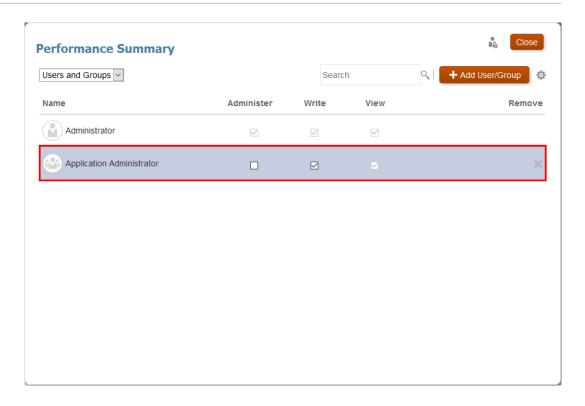
Add User/Group

and select the users to which you want to assign access, as follows:

- a. Select the user type:
 - Users
 - Groups
 - Users and Groups
- b. On the **Select User** dialog box, enter the first few letters for the user name in the text box, and then click Search to populate the list of names. To display all users and groups, enter an asterisk "*" as a wildcard in the Search field.
- c. Select the users and groups to which you want to assign access, and then click OK.



- 4. In the Note Template access window, assign the level of access for each user or group by clicking the check box under the appropriate columns, or select Grant Permission from User or Group Actions .
 - Select **Administer** to create a note, add, view, edit, delete user assignment for Notes Templates and Notes.
 - Select **Write** to create a note, delete, update, view note templates. All Notes created using a Note Template.
 - Select View to view Note Templates and Notes.
- **5. Optional:** Select **Remove** to delete the selected user or group from the list. Highlight the name, and then click **X** to remove the name and any associated permissions.



6. Click Close.

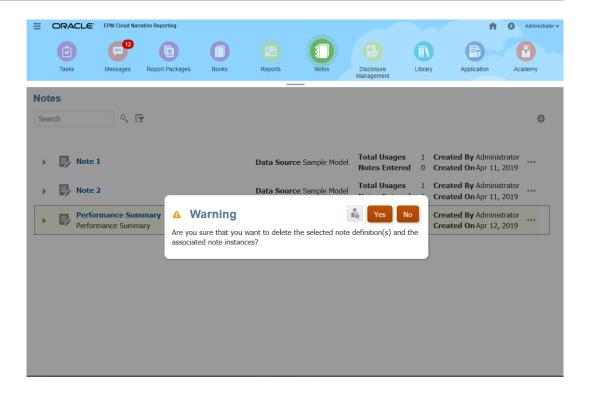
Deleting the Note Template

To delete the Note Template, perform these steps:

1. Log into Narrative Reporting. On the Home page, select



- 2. In the Notes Manager, highlight a Note Template, and then click ... to select Delete.
- In Warning dialog box, you will be prompted to confirm deleting the selected Note Definition and associated Note, click Yes.



Viewing the Source Reports from the Notes

To view the Source Reports from the Notes:

1. Log into Narrative Reporting. On the Home page, select



- In the Notes Manager, double-click on the Note Template, highlight a Note, and then clickto select View Source Reports.
- Optional: In the Source Reports dialog, select a Note Template, and select Action, and then click Edit.
- 4. *Optional:* In the Source Reports dialog, select a **Note Template**, and select **Action**, and then click **Open**.



Granting Access to the Notes

To grant access to the Notes:

1. Log into Narrative Reporting. On the Home page, select



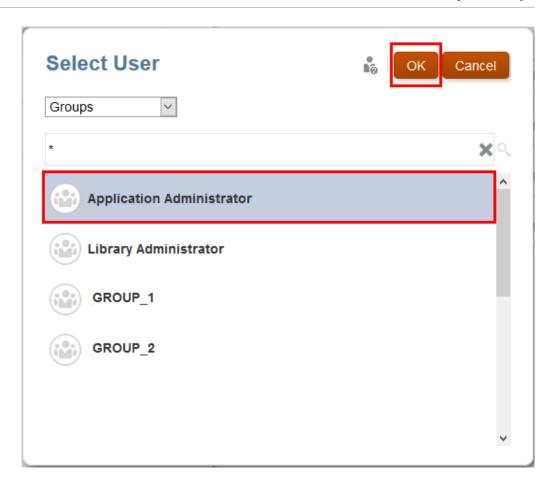
- In the Notes Manager, double-click on the Note Template, highlight a Note, and then clickto select Access.
- 3. In the Notes access window, click

Add User/Group

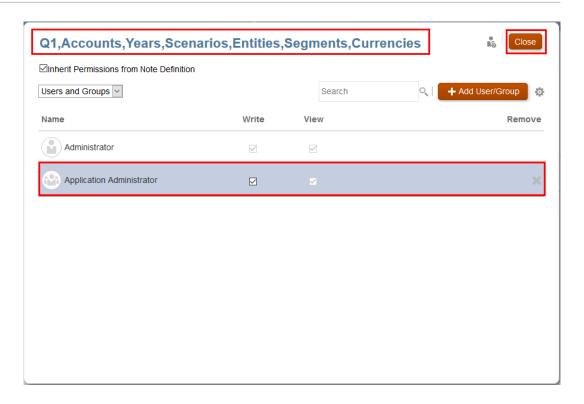
and select the users to which you want to assign access, as follows:

- **a.** Select the user type:
 - Users
 - Groups
 - Users and Groups
- b. On the **Select User** dialog box, enter the first few letters for the user name in the text box, and then click Search to populate the list of names. To display all users and groups, enter an asterisk "*" as a wildcard in the Search field.
- c. Select the users and groups to which you want to assign access, and then click OK.





- 4. In the Notes access window, assign the level of access for each user or group by clicking the check box under the appropriate columns, or select Grant Permission from User or Group Actions
 - Select **Write** to create a note, delete, update, view note templates. All Notes created using a Note Template.
 - Select View to view Note Templates and Notes.
- **5. Optional:** Select **Remove** to delete the selected user or group from the list. Highlight the name, and then click **X** to remove the name and any associated permissions.



Click Close.

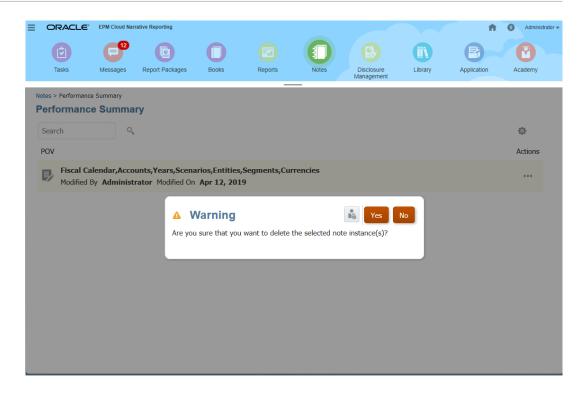
Deleting a Note

To delete a Note, perform these steps:

1. Log into Narrative Reporting. On the Home page, select



- In the Notes Manager, double-click on the Note Template, highlight a Note, and then clickto select Delete.
- In Warning dialog box, you will be prompted to confirm deleting the selected Notes, click Yes.



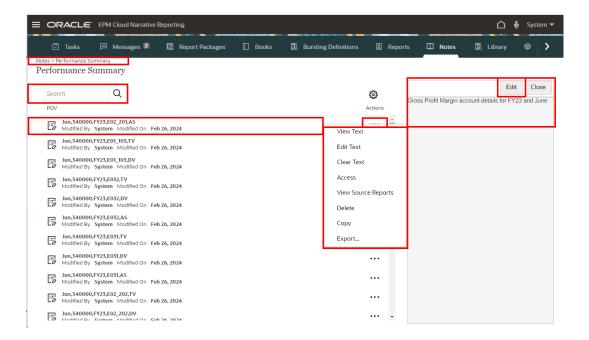
Viewing and Editing the Note Text

To view and edit the Note Text, perform these steps:

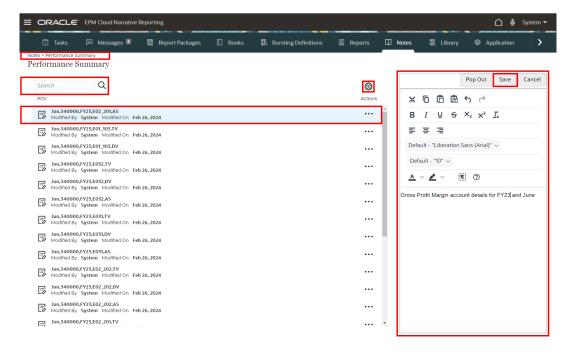
1. Log into Narrative Reporting. On the Home page, select



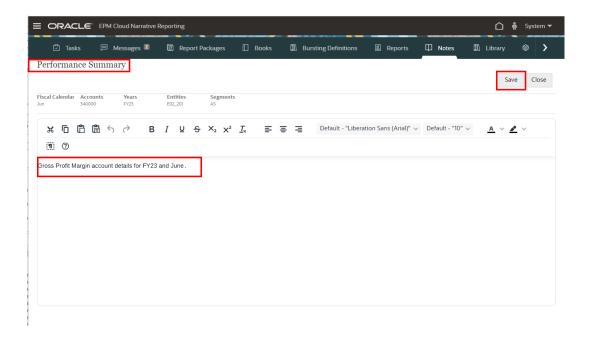
In the Notes Manager, double-click on the Note Template, highlight a Note, and then click
 to select View Text.



Click Edit to change the Note text, apply formatting, and then click Save.



4. Optional: Click Pop Out to view the Note text in the Note Template editor window.



5. Optional: In the Note Template editor, you can edit the Note text, and then click Save.

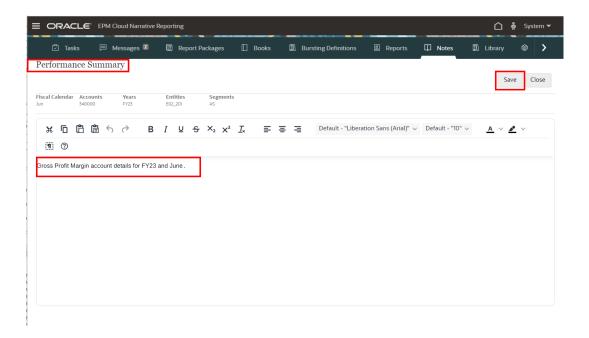
Editing the Note Text

To edit the Note Text, perform these steps:

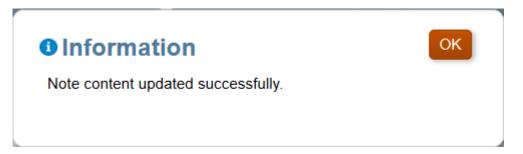
1. Log into Narrative Reporting. On the Home page, select



- In the Notes Manager, double-click on the Note Template, highlight a Note, and then click
 to select Edit Text.
- In the Note Template editor, you can view the Note text, and enter the desired Note text, apply formatting, and then click Save.



4. In **Information** dialog box, you will be prompted that the Note content is updated successfully, click **OK**.



Click Close.

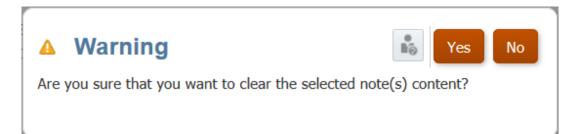
Clearing the Note Text

To clear the Note Text, perform these steps:

1. Log into Narrative Reporting. On the Home page, select



- In the Notes Manager, double-click on the Note Template, highlight a Note, and then click
 to select Clear Text.
- 3. In Warning dialog box, you will be prompted to clear the selected Note content, click Yes.



Copying Notes

In the **Notes Manager**, you can copy one or more Notes to another POV dimension selection.

For example, you can copy Notes created for all Departments in Q1 to Q2, to use as a starting point for entering Notes in Q2. You specify the destination POV selections for the copied Notes, you can select one or more members, Substitution and User variables, Lists, and member functions for each dimension in the destination POV.

To copy one or more Notes, perform these steps:

1. From the Narrative Reporting Home page, select



- 2. In the **Notes Manager**, select a **Note Template** to copy Notes for.
- 3. Either:
 - Select a single Note, then click ..., and then select Copy.
 - Select multiple Notes, then click , and then select Copy.
- 4. In **Copy Notes** dialog, check the **Source POV** to ensure that it reflects the correct Notes that you want to copy.
- 5. In the Target POV, click on the desired POV dimensions to open the Member Selector dialog to define a target POV. You can select one or more members, Substitution and User variables, Lists, and member functions. Click OK to copy the Notes from Source POV to the Target POV.



If there are already existing target POV for the selected Notes, then you may either select ${\bf Skip}$ or ${\bf Overwrite}$.

- If you select Skip, then you are ignoring the notes that are having a conflict.
- If you select Overwrite, then you are replacing the existing note with the latest.
- 6. Click **OK** to continue.

In the following example, the selected Notes will be copied from the selected and Source and Target POVs. The remaining dimension POVs remain fixed.

Table 11-2 Source and Target POVs

Dimension	Source POV	Target POV
Fiscal Calendar	Dec	Jan
Years	FY17	FY18
Entities	Total Entities	Children of Total Entities (Inclusive)

copy Notes (24 note(s) will be created/updated)			no OK Cancel	
ning 4 notes selected)			
Accounts IncomeStatement	Years FY17	Entities Total Entities	Segments *	
Accounts IncomeStatement	Years FY18	Entities Children of Total Ent	Segments *	
	Accounts Accounts Accounts	Accounts Years Accounts Years Accounts Years Accounts Years	Accounts Years Entities IncomeStatement FY17 Total Entities Accounts Years Entities Accounts Years Entities	Accounts Years Entities Segments Accounts Years Entities Segments Accounts Years Entities Segments

^{*} Dimensions cannot be set as the selected notes have different members

Migrating Notes Artifacts from One Environment to Another

You can migrate Note Templates, Notes, and Note Formats from one environment to another using the Notes Manager. You can export one or more Note Templates and optionally choose to include the Notes created from the template. You can also select one or more Notes to export, the related Note Template will also be exported with the selected Notes. Note Formats are exported from the Note Format Manager.

Related Topics:

- Exporting Note Templates
- Exporting Notes
- Exporting Note Formats
- Importing Notes

Exporting Note Templates

To export one or more Note Templates to a ZIP file:

- 1. From the Narrative Reporting Home page, select **Notes** to open the **Notes Manager**.
- 2. Do one of the following:
 - Select a single Note Template, then click the Actions icon, and then select Export.
 - Select multiple Note Templates, then click the Gear icon, and then select Export.
- 3. Choose a destination folder for the export file.
- 4. Optionally to include all **Notes** related to the **Note Template**, select **Include Notes** option
- 5. Click OK.

The export process will run in the background. Check Messages to view the notification once the export is complete.

The "Export Process Status <date/time>.txt" file, which is generated in the My Library folder after the export, lists the status for each Note Template and Note export.

For example:

The export process initiated by admin started on Jun 11, 2021 9:13:37 AM and was completed on Jun 11, 2021 9:13:38 AM.

The details are below.

Artifact Jan, 340000, FY18, Total Entities, TV of type Note was successfully exported.

Artifact Jan, 340000, FY18, Total Entities, DV of type Note was successfully exported.

Artifact Jan, 340000, FY18, Total Entities, AS of type Note was successfully exported.

Artifact Performance Summary of type Note Template was successfully exported.

Artifact Jan, 340000, FY18, Total Entities, TV of type Note was successfully exported.

Artifact Jan, 340000, FY18, Total Entities, DV of type Note was successfully exported.

Artifact Jan, 340000, FY18, Total Entities, AS of type Note was successfully exported.

Artifact Variance Summary of type Note Template was successfully exported.

6. Download the export file from the Library to your local file system by clicking on the export file name.

Exporting Notes

To export one or more Notes to a ZIP file:

- 1. From the Narrative Reporting Home page, select **Notes** to open the **Notes Manager**.
- 2. Click on a **Note Template** to view the related **Notes**.
- Do one of the following:
 - Select a single Note, then click the Actions icon, and then select Export.
 - Select multiple Notes, then click the Gear icon, and then select Export.
- 4. Choose a destination folder for the export file.
- 5. Click OK.

The export process will run in the background. Check Messages to view the notification once the export is complete.



The "Export Process Status <date/time>.txt" file, which is generated in the My Library folder after the export, lists the status for each **Note Template** and **Note** export.

For example:

The export process initiated by admin started on Jun 11, 2021 9:13:37 AM and was completed on Jun 11, 2021 9:13:38 AM.

The details are below.

Artifact Jan, 340000, FY18, Total Entities, TV of type Note was successfully exported.

Artifact Jan, 340000, FY18, Total Entities, DV of type Note was successfully exported.

Artifact Jan, 340000, FY18, Total Entities, AS of type Note was successfully exported.

Artifact Performance Summary of type Note Template was successfully exported.

Artifact Jan, 340000, FY18, Total Entities, TV of type Note was successfully exported.

Artifact Jan, 340000, FY18, Total Entities, DV of type Note was successfully exported.

Artifact Jan, 340000, FY18, Total Entities, AS of type Note was successfully exported.

Artifact Variance Summary of type Note Template was successfully exported.

6. Download the export file from the Library to your local file system by clicking on the export file name.

Exporting Note Formats

To export one or more Note Formats to a ZIP file:

- 1. Access the Note Format Manager. See Accessing the Note Format Manager
- Do one of the following:
 - Select a single Note Format, then click the Actions icon, and then select Export.
 - Select multiple Note Formats, then click the Gear icon, and then select Export.
- 3. Choose a destination folder for the export file.
- 4. Click OK.

The export process will run in the background. Check Messages to view the notification once the export is complete.



The "Export Process Status <date/time>.txt" file, which is generated in the My Library folder after the export, lists the status for each Note Format export.

For example:

The export process initiated by admin started on Jun 11, 2021 9:16:20 AM and was completed on Jun 11, 20219:16:20 AM. The details are below.Artifact Note Format 1 of type Note Format was successfully exported.

Download the export file from the Library to your local file system by clicking on the export file name.

Importing Notes

To import a Note Template or a Note Format using the Library:

- Select Library from the Narrative Reporting Home Page.
- 2. Select the menu in the upper right corner of the **Library** and then select **Import**.
- 3. In the **Import** dialog, select **Local** and browse to the export ZIP file that you want to import.
- Select Overwrite Existing Objects to replace any existing artifact with the new imported artifact.
- 5. Select **Include Access Permissions** to include the already defined access permissions on the imported artifact to the existing one.
- 6. Select OK.

The import process will run in the background. Check Messages to view the notification once the import is complete.

Note:

The "Import Process Status <date/time>.txt" file, which is generated in the My Library folder after the import, lists the status for each imported artifact.

For example:

The import process initiated by admin started on Jun 11, 2021 9:23:59 AM and was completed on Jun 11, 2021 9:24:00 AM.

The details are below.

Artifact Jan, 340000, FY18, Total Entities, TV of type Note was successfully imported.

Artifact Performance Summary of type Note Template was successfully imported.

Artifact Jan, 340000, FY18, Total Entities, DV of type Note was successfully imported.

Artifact Jan, 340000, FY18, Total Entities, AS of type Note was successfully imported.



Artifact Jan, 340000, FY18, Total Entities, TV of type Note was successfully imported.

Artifact Variance Summary of type Note Template was successfully imported.

Artifact Jan, 340000, FY18, Total Entities, DV of type Note was successfully imported.

Artifact Jan, 340000, FY18, Total Entities, AS of type Note was successfully imported.

Reviewing the Access Permission for Notes

Access Permission Group (APG) enables you to define the permission on Notes and Note Templates to Reporting users.

Four types of permissions can be defined:

- Note read
- Note write
- Note Template read
- Note Template write

APG can be locked by note administrators. If an APG is locked then the users with Note write permission will not be allowed to override the permissions defined in the APG.



- Note write succeeds Note read permission
- Note Template read succeeds Note write permission
- Note Template write succeeds Note Template read permission

Scenario 1

Table 11-3 Access Permission for Note and Note Template. The Read and Write operations with some examples.

Access Permission for Note and Note Template	Read and Write Operations	
Lock		
Note Read	Yes	
Note Write	No	
Enabled		
Note Template Read	No	
Note Template Write	No	

A user with the above permission can **Read** a note created by other users.

A user with the above permission may not be able to perform the following steps:

- Create a new note
- Edit a note



- View or reuse the note template
- Update the note template
- · Update permissions defined in the APG
- Override or Update permissions defined in the APG for note

Scenario 2

Table 11-4 Access Permission for Note and Note Template. The Read and Write operations with some examples.

Access Permission for Note and Note Template	Read and Write Operations
Lock	
Note Read	Yes
Note Write	Yes
Enabled	
Note Template Read	No
Note Template Write	No

A user with the above permission can perform these steps:

- Read a note
- Create a note
- Edit a note

A user with the above permission may not be able to perform the following steps:

- View or reuse the note template
- Update the note template
- Update permissions defined in the APG
- Override or Update permissions defined in the APG for note

Scenario 3

Table 11-5 Access Permission for Note and Note Template. The Read and Write operations with some examples.

Access Permission for Note and Note Template	Read and Write Operations
Lock	
Note Read	Yes
Note Write	No
Disabled	
Note Template Read	No
Note Template Write	No

A user with the above permission can **Read** a note created by other users.

A user with the above permission may not be able to perform the following steps:

- Create a new note
- Edit a note



- View or reuse the note template
- Update the note template
- · Update permissions defined in the APG
- Override or Update permissions defined in the APG for note

Scenario 4

Table 11-6 Access Permission for Note and Note Template. The Read and Write operations with some examples.

Access Permission for Note and Note Template	Read and Write Operations
Lock	
Note Read	Yes
Note Write	Yes
Disabled	
Note Template Read	No
Note Template Write	No

A user with the above permission can perform these steps:

- Read a note
- Create a note
- Edit a note
- Override or Update permissions defined in the APG for note

A user with the above permission may not be able to perform the following steps:

- View or reuse the note template
- Update the note template
- Update permissions defined in the APG for note templates

Scenario 5

Table 11-7 Access Permission for Note and Note Template. The Read and Write operations with some examples.

Access Permission for Note and Note Template	Read and Write Operations
Lock	
Note Read	Yes
Note Write	Yes
Enabled	
Note Template Read	Yes
Note Template Write	No

A user with the above permission can perform these steps:

- Read a note
- Create a note
- Edit a note



View or reuse the note template

A user with the above permission may not be able to perform the following steps:

- Update the note template
- Update permissions defined in the APG

Scenario 6

Table 11-8 Access Permission for Note and Note Template. The Read and Write operations with some examples.

Access Permission for Note and Note Template	Read and Write Operations
Lock	
Note Read	Yes
Note Write	Yes
Disabled	
Note Template Read	Yes
Note Template Write	No

A user with the above permission can perform these steps:

- Read a note
- Create a note
- Edit a note
- View or reuse the note template
- Override or Update permissions defined in the APG for note

A user with the above permission may not be able to perform the following steps:

- Update the note template
- Update permissions defined in the APG for note templates

Scenario 7

Table 11-9 Access Permission for Note and Note Template. The Read and Write operations with some examples.

Access Permission for Note and Note Template	Read and Write Operations
Lock	
Note Read	Yes
Note Write	Yes
Enabled	
Note Template Read	Yes
Note Template Write	Yes

A user with the above permission can perform these steps:

- Read a note
- Create a note
- Edit a note



- View or reuse the note template
- Update the note template
- Update permissions defined in the APG

A user with the above permission may not be able to perform **Override** permissions defined in the APG for note.

Scenario 8

Table 11-10 Access Permission for Note and Note Template. The Read and Write operations with some examples.

Access Permission for Note and Note Template	Read and Write Operations
Lock	
Note Read	Yes
Note Write	Yes
Disabled	
Note Template Read	Yes
Note Template Write	Yes

A user with the above permission can perform these steps:

- Read a note
- Create a note
- Edit a note
- View or reuse the note template
- Update the note template
- Update permissions defined in the APG
- Override or Update permissions defined in the APG for note

Using the Notes Text Function

The Using Notes Text function, you can display Notes in the report in a data source-enabled text box. You can:

- Create a Note Format to define the output content, layout, and formatting. Note Formats
 can be used across multiple reports. For more information, see Working with Note
 Formats.
- Create a report and within the report, create a Named POV, which defines which
 dimensions and members to retrieve in the Notes text function, Report POV dimensions to
 drive the Notes retrieval, as well as dimensions to display with a secondary POV in the text
 box. The secondary POV can be displayed to refine the report POV selections to display
 the Children, Descendants, or Bottom level of a dimension's report POV selection, based
 on user selection.

Named POVs only apply to the report they were created in. For more information, see Working with Named POVs in a Report.

 Insert a text box in the report, set the text box to be data source-enabled, and select a data source. This provides POV control when using the Notes text function to aggregate and report on Notes. The report can contain the text box-only (with its own POV) or it can also include grids and charts.



A text box displaying Note text does not require a grid within the same report.

 Insert the Note text function into a text box or a grid row, column, or cell, and select the Note Format, Named POV, and which Notes to display. For more information, see Inserting the Notes text function in a Report.

Watch this tutorial video, you'll learn how to use the Notes text function.



-- Using the Notes Text Function.

You can use the Notes text function to display notes in a data source-enabled text box in a report. The process includes creating a Note Format to define the output content, layout, and formatting; creating a Named POV in a report, which defines the dimensions and members to retrieve in the notes text function; and inserting into a report a data source-enabled text box with the Notes text function.

Working with Note Formats

Related Topics

- Introduction to Note Formats
- Accessing the Note Format Manager
- Creating a Note Format
- Using Note Format Text Functions
- Limitations for Creating a Note Format
- Understanding the Note Format Text Functions

Introduction to Note Formats

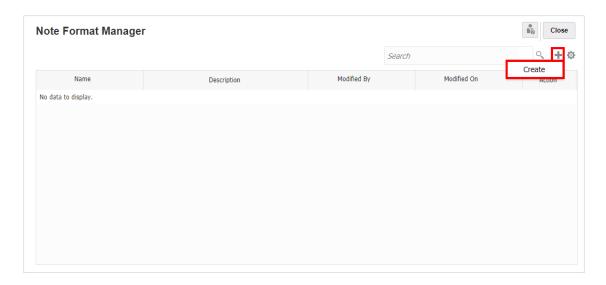
A Note Format defines the output content, layout, and format of the Notes text function. You can create and maintain Note Formats in the Note Manager and can use Note Formats across multiple reports.

In a Note Format, you can:

- Add Sections (rows) with text functions to display Note information and metadata above the note content.
- Define the text formatting applied to each function.
- Reorder and move Sections.
- Define indention levels for the output and at the Section level.

Create a Note Format in the Note Format Manager, which is Accessible via the Note Manager. See Accessing the Note Format Manager.





For example, this Note Format has multiple Sections with formatted text functions to return Note metadata before displaying the Note Content, as defined in the last section.



The result of using this Note Format in a text box with a Note Text function, where three Notes were entered in two Note templates. See the following image, you can preview the two Note Name such as Performance Summary and Variance Summary and then followed by the respective Note Author, Note POV Dimensions, and Note content.

Performance Summary

Administrator - 11/9/20

Segments: Audio Systems, Fiscal Calendar: January

Integer ac posuere nisi. Nam id egestas mauris, ac pellentesque mauris. Nulla volutpat libero quis vestibulum volutpat. Phasellus tempor nec magna id luctus. Suspendisse rutrum dignissim venenatis. Nunc turpis ligula, vehicula sit amet porta quis, fringilla non lorem. Maecenas maximus, turpis fringilla convallis vestibulum, dui augue ultrices lectus, sit amet tincidunt ante lectus ut elit. Integer finibus venenatis mollis.

Segments: Digital Video, Fiscal Calendar: January

Nullam non bibendum nisi, quis efficitur nisl. Phasellus luctus in augue sit amet euismod. Quisque hendrerit, purus at vestibulum eleifend, elit ligula pretium turpis, id commodo odio quam pretium sem. Aenean mollis gravida metus, eget sollicitudin felis consectetur non. Mauris id diam eget eros viverra tristique. Nam sem arcu, eleifend eu mollis id, lobortis in mauris. Mauris ultricies tincidunt rhoncus.

Segments: Televisions, Fiscal Calendar: January

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque sit amet nisi velit. Pellentesque blandit eleifend est a pulvinar. Integer rhoncus sodales leo, eu vestibulum arcu gravida et. Donec commodo faucibus lorem malesuada vehicula. Proin pulvinar mi vitae ultricies placerat. Donec gravida vestibulum nibh, venenatis faucibus enim convallis iaculis. Sed at turpis sapien. Duis venenatis lorem eget arcu interdum volutpat. Nullam rutrum euismod conque.

Variance Summary

Administrator - 11/9/20

Segments: Audio Systems, Fiscal Calendar: January

Aliquam facilisis tellus eros, non porta nisl tempor ut. Mauris egestas bibendum convallis. Maecenas nec mi justo. Donec et posuere nulla. Vivamus sed tortor elementum, eleifend ex id, luctus leo. In molestie nulla eu leo sollicitudin ullamcorper. Nullam finibus odio dui, in eleifend felis iaculis hendrerit. Fusce ipsum lacus, posuere sit amet diam in, tincidunt malesuada mi. Nunc ut mi sed mi vulputate varius at et quam. In a varius ante. Donec cursus a sem a vulputate.

Segments: Digital Video, Fiscal Calendar: January

Curabitur fermentum maximus libero, sed fermentum sapien faucibus vitae. Curabitur ac leo id lorem commodo bibendum. Duis ac rhoncus arcu. Donec ut accumsan arcu. Aliquam nec purus id ex efficitur facilisis. Integer nec rhoncus risus. Donec auctor, erat vitae bibendum dictum, ex magna tincidunt augue, sit amet euismod sapien arcu vel lorem. Nullam at luctus diam. Morbi interdum posuere tellus, vel aliquet arcu vulputate pellentesque. In ut sem sodales, eleifend lectus a, pulvinar nulla. Ut ultricies massa turpis, sit amet posuere lacus lobortis eu.

Segments: Televisions, Fiscal Calendar: January

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Fusce lacinia turpis eleifend, imperdiet lacus at, blandit eros. Maecenas id mauris dolor. Nulla mattis, risus ac commodo aliquam, nulla orci sollicitudin nisl, nec feugiat ipsum erat sit amet ex. Nam malesuada vitae massa rutrum volutpat. Aliquam vitae ipsum eros. Cras elementum lorem sit amet conque pretium.



- All Narrative Reporting users have view permission to all Note Formats.
- Users with the Report Administrator role can edit Note formats.

Accessing the Note Format Manager

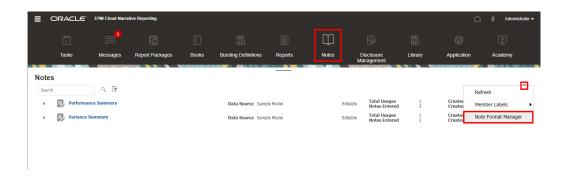
To access the **Note Format Manager**:

- 1. Do one of these steps:
 - In the Notes Manager Actions



menu, select Note Format Manager.

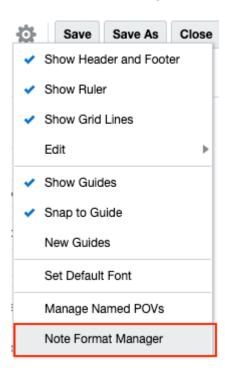




In the Report Designer while editing a report, select the



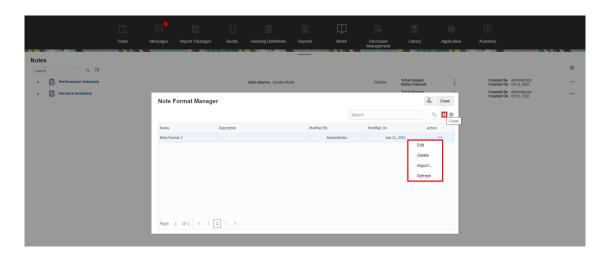
and **Note Format Manager**.



2. The **Note Format Manager** dialog box is displayed.

You can:

- Create a new Note Format.
- Edit an existing Note Format.
- Delete a selected Note Format.
- Refresh the Note Format view.
- Export a Note Format.

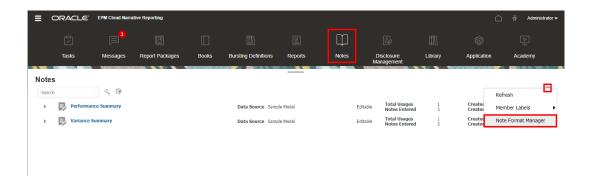


Creating a Note Format

To create a Note Format:



- 1. From the Narrative Reporting Home page, select Notes
- 2. In the Notes Manager Actions 🌣 menu, select Note Format Manager.

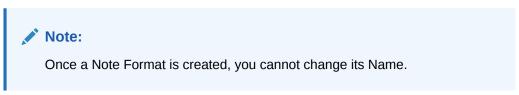


3. In the **Note Format Manager**, click to add a new format.

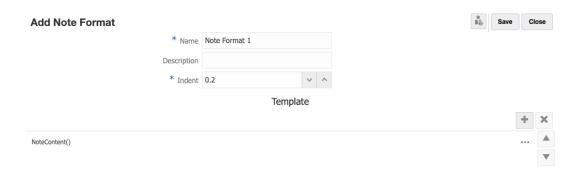


4. In Add Note Format:

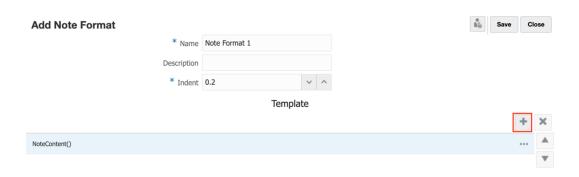
Enter a unique Name for the Note Format.



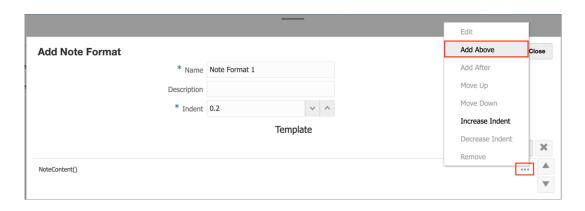
- Enter an optional Description.
- Select a size for **Indent**, which is used when indenting Sections in the Note Format.



5. Click to add a Section to the Note Format.



You can click the **Actions** menu for a Section and select **Add Above**, where applicable.

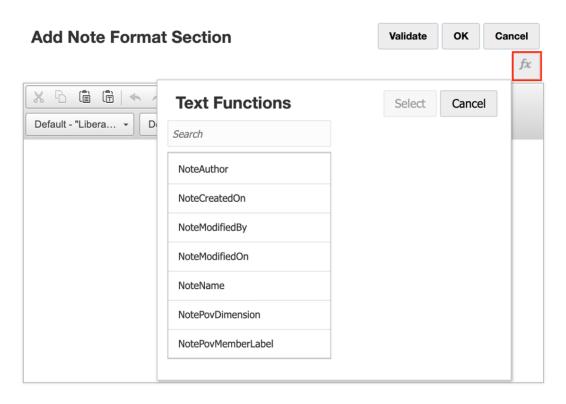


Note:

The default NoteContent() Section can only appear last in the **Note Format**, and you can only add a Section above it and not after it.

The Add Note Format Section editor is displayed.

6. In the **Add Note Format Section** editor, you can manually enter text and select text functions to include in the Section by clicking the fx button and selecting a text function. You can apply formatting to the selected text, such as font type, size, and color, and so on.



For more information on the available Text Functions for Note Format sections, see Using Note Format Text Functions.



Click Validate to check the text function syntax, and then click OK to close the Add Note Format Section dialog.



- 8. Select a Section, and you can:
 - Use Actions menu to Edit each Section.

- Click Move up or Move down buttons for shifting the Sections, or you can use **Actions** menu to perform the same operation.
- Click or you can use Actions menu to Remove each Section.
- Use Actions menu to perform the Increase Indent or Decrease Indent, where applicable.





9. Click Save, and then select Close to save the Note Format.

Example 11-1 Grouping and Sorting based on the Segment Member Name

By default, there is one Section in the Note Format with the <code>NoteContent()</code> text function, which returns each Note's text. You can insert additional Sections above the <code>NoteContent()</code> Section to display additional Note metadata.

In the report preview, the results of the Note Format's Sections are returned, grouped, and sorted based on the resulting Note output. The output for specific Sections are not repeated if the content is unique.

For example, let's take a look at the following images, where the timestamp is not included in the text function, hence then information is not repeated for each of the three Notes, because it applies to all.





All the Notes for the three segments are sorted alphabetically based on the Segment member name.

The Note name is "Performance Summary" and the user, date, and date stamp details are "Administrator on 11/09/20".

Performance Summary Administrator - 11/9/20

Segments: Audio Systems, Fiscal Calendar: January

Integer ac posuere nisi. Nam id egestas mauris, ac pellentesque mauris. Nulla volutpat libero quis vestibulum volutpat. Phasellus tempor nec magna id luctus. Suspendisse rutrum dignissim venenatis. Nunc turpis ligula, vehicula sit amet porta quis, fringilla non lorem. Maecenas maximus, turpis fringilla convallis vestibulum, dui augue ultrices lectus, sit amet tincidunt ante lectus ut elit. Integer finibus venenatis mollis.

Segments: Digital Video, Fiscal Calendar: January

Nullam non bibendum nisi, quis efficitur nisl. Phasellus luctus in augue sit amet euismod. Quisque hendrerit, purus at vestibulum eleifend, elit ligula pretium turpis, id commodo odio quam pretium sem. Aenean mollis gravida metus, eget sollicitudin felis consectetur non. Mauris id diam eget eros viverra tristique. Nam sem arcu, eleifend eu mollis id, lobortis in mauris. Mauris ultricies tincidunt rhoncus.

Segments: Televisions, Fiscal Calendar: January

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque sit amet nisi velit. Pellentesque blandit eleifend est a pulvinar. Integer rhoncus sodales leo, eu vestibulum arcu gravida et. Donec commodo faucibus lorem malesuada vehicula. Proin pulvinar mi vitae ultricies placerat. Donec gravida vestibulum nibh, venenatis faucibus enim convallis iaculis. Sed at turpis sapien. Duis venenatis lorem eget arcu interdum volutpat. Nullam rutrum euismod congue.

Example 11-2 Grouping and Sorting based on the Unique Timestamp

For example, let's take a look at the following images, where the timestamp is included in the text function, the user details, date, and timestamp are repeated, because the Notes were created at different times.





All the Notes for the three segments are sorted based on the unique timestamp and not sorted by the Segment member name.

The Note name is "<u>Performance Summary</u>" and the user, date, and timestamp details are "Administrator on 11/09/20 10:54 AM".

Performance Summary

Administrator - 11/9/20 10:54 AM

Segments: Digital Video, Fiscal Calendar: January

Nullam non bibendum nisi, quis efficitur nisl. Phasellus luctus in augue sit amet euismod. Quisque hendrerit, purus at vestibulum eleifend, elit ligula pretium turpis, id commodo odio quam pretium sem. Aenean mollis gravida metus, eget sollicitudin felis consectetur non. Mauris id diam eget eros viverra tristique. Nam sem arcu, eleifend eu mollis id, lobortis in mauris. Mauris ultricies tincidunt rhoncus.

Segments: Televisions, Fiscal Calendar: January

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque sit amet nisi velit. Pellentesque blandit eleifend est a pulvinar. Integer rhoncus sodales leo, eu vestibulum arcu gravida et. Donec commodo faucibus lorem malesuada vehicula. Proin pulvinar mi vitae ultricies placerat. Donec gravida vestibulum nibh, venenatis faucibus enim convallis iaculis. Sed at turpis sapien. Duis venenatis lorem eget arcu interdum volutoat. Nullam rutrum euismod conque.

Administrator - 11/9/20 10:55 AM

Segments: Audio Systems, Fiscal Calendar: January

Integer ac posuere nisi. Nam id egestas mauris, ac pellentesque mauris. Nulla volutpat libero quis vestibulum volutpat. Phasellus tempor nec magna id luctus. Suspendisse rutrum dignissim venenatis. Nunc turpis ligula, vehicula sit amet porta quis, fringilla non lorem. Maecenas maximus, turpis fringilla convallis vestibulum, dui augue ultrices lectus, sit amet tincidunt ante lectus ut elit. Integer finibus venenatis mollis.

Using Note Format Text Functions

This topic provides information on the usage and syntax of the available text functions in a Note Format.

Table 11-11 This table provides information on the usage and syntax of the available text functions in a Note Format.

Function	Parameters Needed	Description
NoteAuthor	N/A	Returns the user name of the Note creator.
NoteCreatedOn	Date Format and Time Format. Select the desired format for the Date and Time. You can also select "None" for either parameter, if required.	Returns the date and time for when the Note was created.
NoteModifiedBy	N/A	Returns the user name of user that most recently modified the Note.
NoteModifiedOn	Date Format and Time Format. Select the desired format for the Date and Time.	Returns the date and time for when the Note was last modified.
	You can also select "None" for either parameter, if required.	
NoteName	N/A	Returns the Note Template name.
NotePOVDimension	<i>Delimiter</i> – select a delimiter character to appear after the text function result.	Returns the specified dimension name for a Note, based on the position of the dimension in the report's Named POV.
	Note : You can also select a blank space, a NewLine or NewLineIndent.	
	Ordinal – select a number that represents the dimension position in a report's Named POV.	
NotePOVMemberLabel	<i>Delimiter</i> – select a delimiter character to appear after the text function result.	Returns the specified dimension's member label for a Note, based on the position of
	Note: You can also select a blank space, a NewLine or	the dimension in the report's Named POV.
	NewLineIndent. Ordinal – select a number that represents the dimension position in a report's Named POV.	The displayed label is dependent on the user's specified Member Labels preference (From the Report Actions menu), which determines if the Member Name, Alias or Both are displayed in the Note text function output.

Limitations for Creating a Note Format

Note the following limitations for Creating a Note Format:

- The NoteContent function cannot be used with any other functions within the same Section in a Note Format.
- The NotePOVDimension and NotePOVMemberLabel functions cannot be used with any other functions within the same Section in a Note Format.

You also cannot add any additional text or characters (other than spaces) to a Section where either of these functions are used.

You can select a Delimiter to separate the function results.

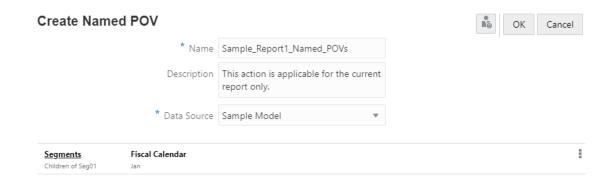
Understanding the Note Format Text Functions

In this topic, you'll understand the usage and corresponding results of some of the Note Format text functions.

There are two Note templates, "Performance Summary" and "Variance Summary", each with three Notes (one for each of the three Segments).

Example 11-3 Named POV Definition

The following Named POV was created in a report containing the Notes text function. Note that the two dimensions listed are **Segments** and **Fiscal Calendar**. Both dimensions contain member selections to filter which text functions are displayed. Since **Segments** is the first dimension listed, and **Fiscal Calendar** is the second dimension listed, the Ordinal parameter used in NotePOVDimension and NotePOVMemberLabel functions would be "1" for Segments and "2" for Fiscal Calendar, based on their order in the Named POV.



Example 11-4 Note Format Definition

The Note Format contains the following Sections and text functions, each Section with different font formatting applied. The last two Sections are indented.



A few things to note about the text function parameters:

• In the second Section, the Created by NoteAuthor() on NoteCreatedOn(short, none), if you see the NoteCreatedOn function has a short date parameter, which means for a US locale, the format is MM/DD/YY. The time parameter is none, which means the time will not be displayed.

- For the NotePOVDimension and NotePOVMemberLabel functions in the fourth Section:
 - Note the Ordinal parameter for each set of functions. The first set has an Ordinal parameter of "1", which is the first dimension (Segments) in the Named POV. The second set has an Ordinal parameter of "2", which is the second dimension (Fiscal Calendar) in the Named POV.
 - The Delimiter parameters specified for both sets of functions will result in the following display: Dimension1: Member1, Dimension2: Member2

Example 11-5 Previewing a Report with the Note Text Box

Using the examples of the Named POV and Note Format displayed in the above section, you can preview the report that contains a text box with the Note text function.

Performance Summary Administrator - 11/9/20

Segments: Audio Systems, Fiscal Calendar: January

Integer ac posuere nisi. Nam id egestas mauris, ac pellentesque mauris. Nulla volutpat libero quis vestibulum volutpat. Phasellus tempor nec magna id luctus. Suspendisse rutrum dignissim venenatis. Nunc turpis ligula, vehicula sit amet porta quis, fringilla non lorem. Maecenas maximus, turpis fringilla convallis vestibulum, dui augue ultrices lectus, sit amet tincidunt ante lectus ut elit. Integer finibus venenatis mollis.

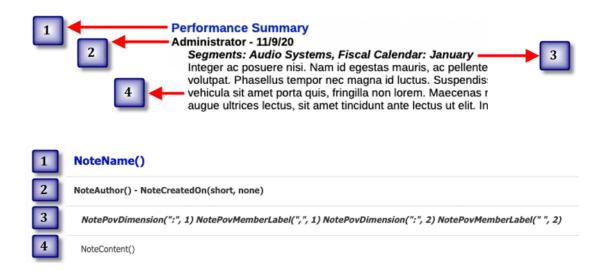
Segments: Digital Video, Fiscal Calendar: January

Nullam non bibendum nisi, quis efficitur nisl. Phasellus luctus in augue sit amet euismod. Quisque hendrerit, purus at vestibulum eleifend, elit ligula pretium turpis, id commodo odio quam pretium sem. Aenean mollis gravida metus, eget sollicitudin felis consectetur non. Mauris id diam eget eros viverra tristique. Nam sem arcu, eleifend eu mollis id, lobortis in mauris. Mauris ultricies tincidunt rhoncus.

Segments: Televisions, Fiscal Calendar: January

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque sit amet nisi velit. Pellentesque blandit eleifend est a pulvinar. Integer rhoncus sodales leo, eu vestibulum arcu gravida et. Donec commodo faucibus lorem malesuada vehicula. Proin pulvinar mi vitae ultricies placerat. Donec gravida vestibulum nibh, venenatis faucibus enim convallis iaculis. Sed at turpis sapien. Duis venenatis lorem eget arcu interdum volutpat. Nullam rutrum euismod conque.

You can see a portion of the text box output with the corresponding text functions in the Note Format:





Working with Named POVs in a Report

Related Topics

- Introduction to Named POVs
- Creating a Named POV
- Example: Using the Named POV and POV Dimension Options

Introduction to Named POVs

A Named POV defines which dimensions and members to retrieve in the Note text function in a report, Report POV dimensions to drive the Notes retrieval, as well as dimensions to display with a secondary POV in the text box. Named POVs are created and maintained in the Named POV Manager.



In the Report Designer, when you create a Named POV, it is limited to that particular report only. The Named POVs cannot be shared across reports.

Creating a Named POV

To create a Named POV:

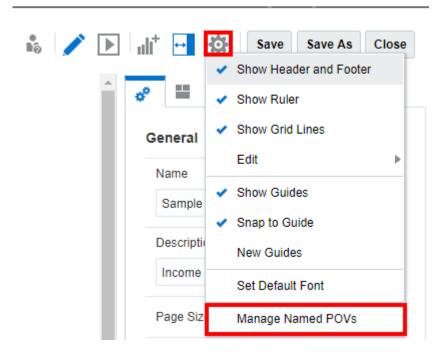
 Select an existing Report or create a new Report, if you want to insert the Notes text function.



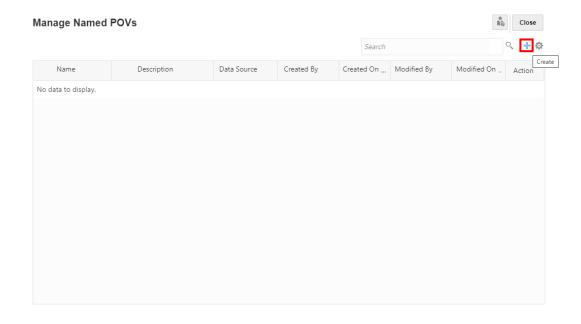
The report does not need to have a grid defined to create a Named POV.

2. In the Report Designer, click Actions 🍄 menu, and then select Manage Named POVs.



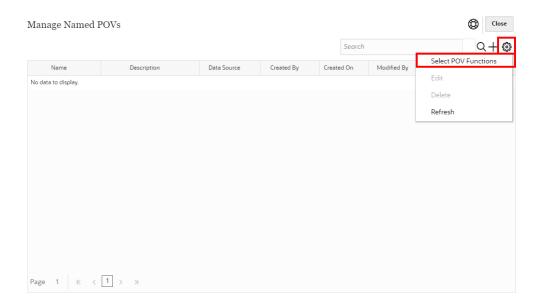


The Manage Named POVs dialog is displayed.

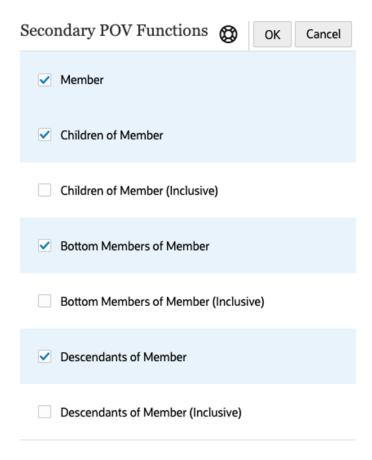


You can Create a new Named POV.

- 3. In the Manage Named POVs, under Actions menu, you can:
 - Select POV Functions to display these member selection functions in the Note text box secondary POV.



In the **Secondary POV Functions** dialog, you can select or deselect member selection functions.





These selections apply to all dimensions and all Named POVs in the report.

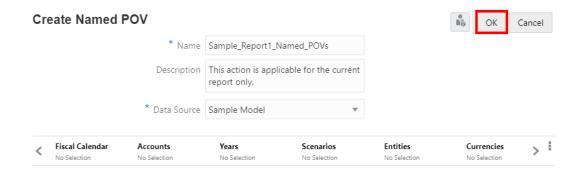
- Edit an existing Named POV.
- Delete a selected Named POV.
- Refresh the Manage Named POVs view.
- 4. In Manage Named POVs, click to add a new Named POV.
- 5. In Create Named POV:
 - Enter a Name for the Named POV.



Once a Named POV is created, you cannot change its **Name**.

- Enter an optional Description.
- Select a Data Source from the drop-down menu.

All defined Reports data sources are listed. The POV bar will be populated for all dimensions in the data source.





The data source selection is not dependent on grids or charts in the report.

6. All dimensions display No Selection, by default, which means that no members have been selected and all Notes for that dimension's members will be displayed. Click on a dimension label to open the member selector for that dimension.

In the **Select Members** dialog box, in the drop-down list, either select **Members**, **Recent**, **Substitution Variables**, **Functions** or **Lists** to assign members to the selected dimension.

Use the following conventions to select members.

- Click Expand > to drill into a parent member.
- Click Select to select and deselect a member.



A blue checkmark indicates that a member is currently selected. A gray checkmark when hovering over a member indicates that the member is not currently selected.

- Click Function ^{fx} next to a member to select the member using a function. See Assigning Members Using Functions.
- Click Actions in the Selector Pane to sort the members.
- Click OK.

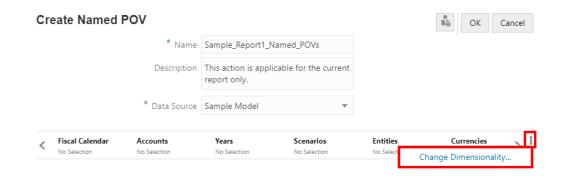


Repeat steps above for any additional dimensions.

For any dimensions that you do not want to filter members on, you can leave the selection at No Selection or remove the dimension from the Dimension Layout.

To remove dimensions:

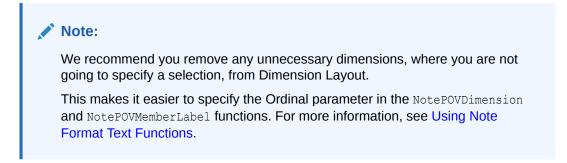
 In Create Named POV, click POV Actions menu, and then select Change Dimensionality.

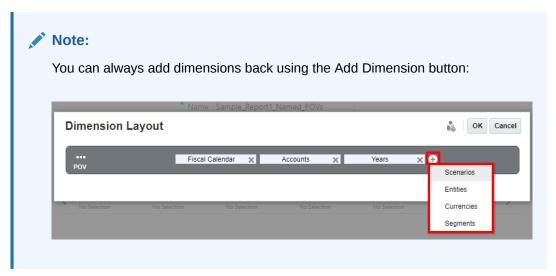


In **Dimension Layout**, click next to a dimension. Repeat for other dimensions, if needed.



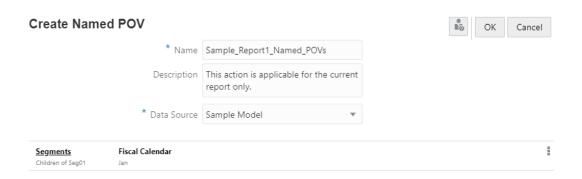
Click OK to close Dimension Layout, and to return to the Create Named POV.





8. You can also reorder dimensions to more easily refer to them when using the Ordinal parameter in the NotePOVDimension and NotePOVMemberLabel functions.

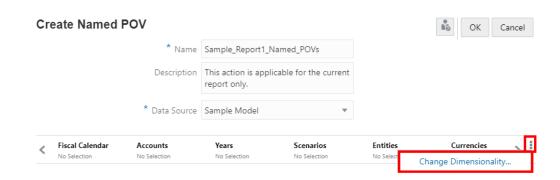
For example, in a Named POV, if **Segments** is the first dimension and **Fiscal Calendar** is the second dimension, and Ordinal parameter of "1" refers to the first dimension (Segments) and an Ordinal parameter of "2" refers to the second dimension (Fiscal Calendar).



For more information, see Using Note Format Text Functions.

To reorder dimensions for the Named POV:

 In Create Named POV, click POV Actions menu, and then select Change Dimensionality.

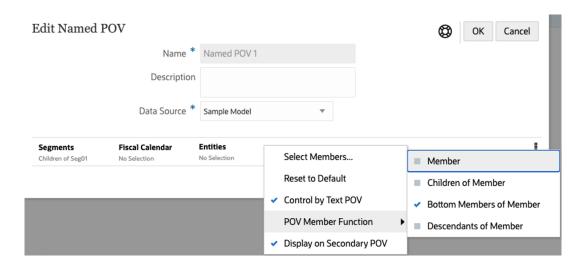


- In Dimension Layout, click on a dimension and drag and drop it to the desired location. Repeat for other dimensions, if needed.
- Click OK to close Dimension Layout, and to return to the Create Named POV.
- **9.** To specify one or more report POV dimensions to control the Notes text function display, optionally with a secondary POV in the text box:

Click on **POV Dimension Actions** for a dimension:

- Select Control by Text POV. This allows the report POV for the dimension to control
 the Notes text function display.
- To display the dimension on the text box's secondary POV, select Display on Secondary POV.
- To optionally set the default member selection option that appears when a user
 previews the report, select POV Member Function and choose one of the available
 member selection options. The other member selection options will still be available to
 users, depending on the selections made in the Secondary POV Functions dialog,
 and the default option is displayed when previewing the report.

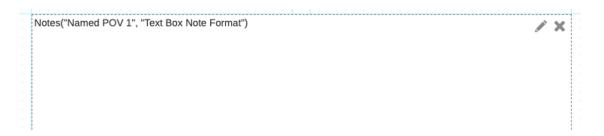




10. After you are finished defining the Named POV, click OK to save your changes.

Example: Using the Named POV and POV Dimension Options

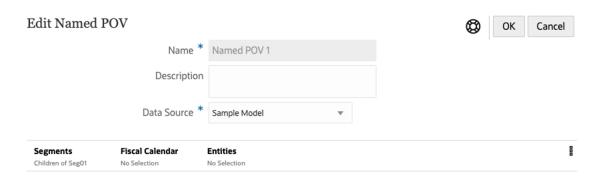
This example uses a report with a Data Source enabled **Text** box and the **Notes** text function inserted into it.



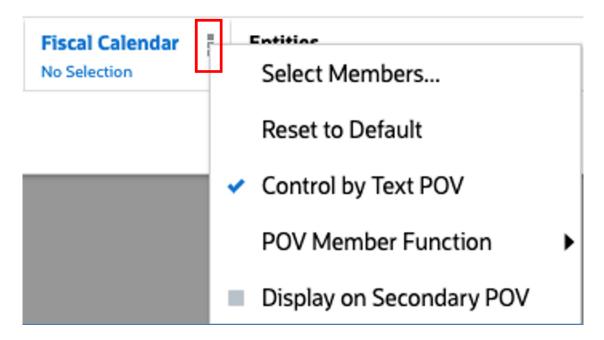
Design setup of the Named POV

With the following Named POV in the report:

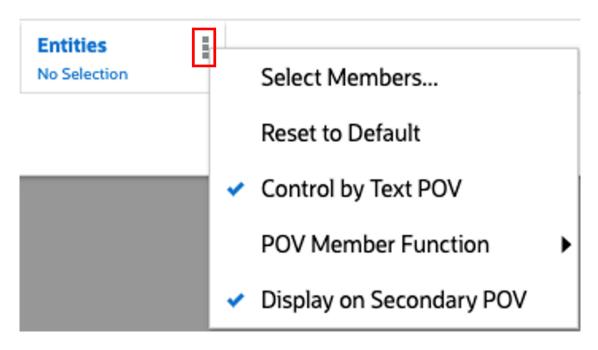
- The Segments dimension has a member selection of Children of Seg01, which means
 that the Notes displayed in the text box with the Notes text function will always include only
 the Segments members selected.
- The Fiscal Calendar dimension has no member selections defined (No Selection is displayed). In the dimension POV options, Control by Text POV is selected, which means that the Report POV selections for this dimension will control the Notes that are displayed in the text box.
- The **Entities** dimension has no member selections defined (**No Selection** is displayed). In the dimension POV options, **Control by Text POV** is selected, which means that the Report POV selections for this dimension will control the Notes that are displayed in the text box. In addition, when the POV option **Display on Secondary POV** is also enabled, a secondary POV will be displayed above the text box to control the **Notes** for **Entities**.
- The remaining dimensions were removed from the Named POV, as they were not used for filtering the Notes.



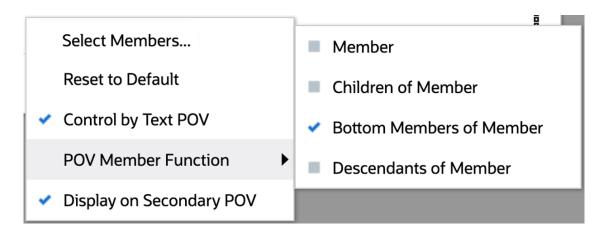
Fiscal Calendar POV dimension options



Entities POV dimension options



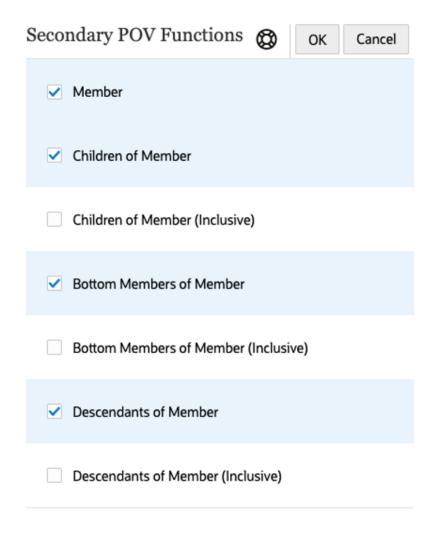
In the **Entities** POV dimension options, under **POV Member Function**, **Bottom Members of Member** is selected. This is the default selection for the secondary POV.



In **Manage Named POVs**, under **Actions** - menu, using the **Select POV Functions**, you can select which member selection functions are listed in the Note text box secondary POV.



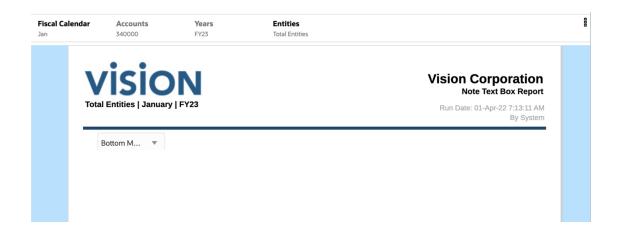
For example, we selected only four from the list of member selection functions that are displayed in the secondary POV.



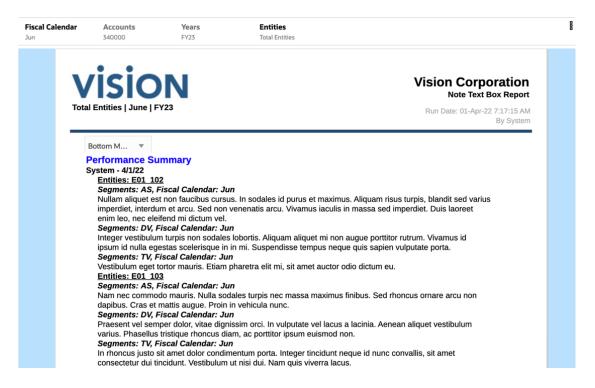
Report output of the text box with the Notes text function

Let's look at the report output with different POV selections. The Notes only exist for **June**; other months do not have Notes entered.

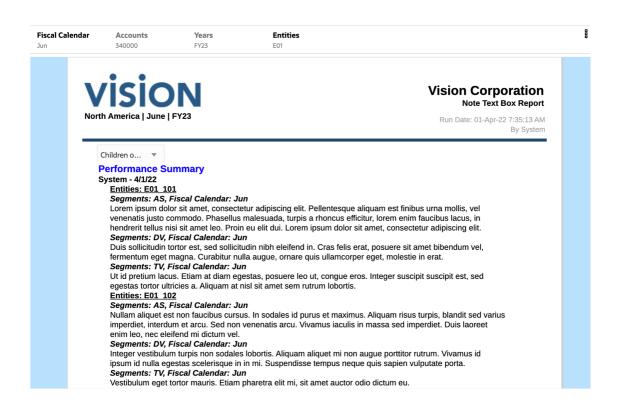
Initial report preview with **Jan** selected, Notes are not displayed in the text box:



Report preview with **June** selected in the report POV. Notes are displayed for **Bottom Member of Total Entities**, as **Total Entities** is selected in the report POV and **Bottom Members** is the default selection for the secondary POV.



Report preview with Entities **E01** selected in the report POV and **Children of Entities** selected in the secondary POV. Note that the partial results displayed to overlap with the above report preview example.



After you created a Note Format in Notes Manager, and created a Named POV in a report, you can also insert the Notes text function into a text box or text row, column or cell. You can also insert the Notes text function in a Conditional Text definition.

For more information on Note Formats and Named POVs, see Working with Note Formats and Working with Named POVs in a Report.

For more information on working with text boxes, grid text rows, columns, and cells, and conditional text, see the following links:

- Adding a Text Box
- Inserting Rows and Columns
- Working with Conditional Formatting, Text, and Suppression

To insert a Note text function:

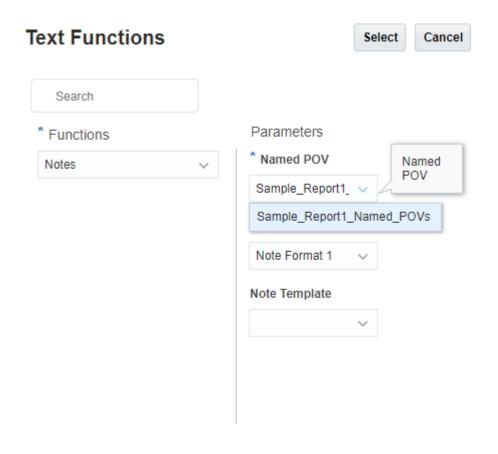
1. In either a text box, text cell, or conditional text definition, select



- In Text Functions, under the Functions drop-down menu, select Notes.
- 3. Select the required Named POV and Note Format, and then select the Note Template to use in the text function.

You can also leave the Note Template field blank to use all Note Templates.







- If there are no Note Formats listed, one will need to be created in the Note Format Manager in the Notes Manager. For more information, see Working with Note Formats
- If there are no Named POVs listed, one will need to be created in the Named POV Manager in the report. For more information, see Working with Named POVs in a Report
- To quickly access the Note Format Manager while editing a report, select the



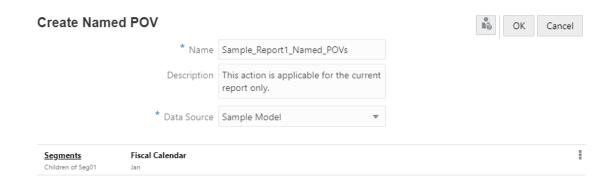
and Note Format Manager.

4. Click **Select** to insert the **Notes** text function.

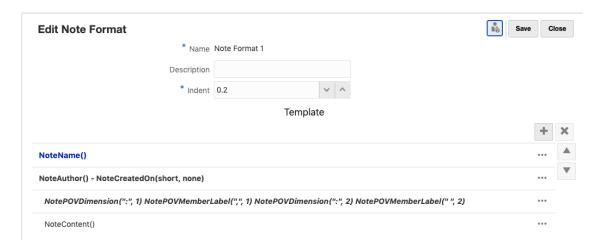
Example 11-6 Reviewing the Notes Text Function in the Text Box

The following example shows the Named POV, Note Format, and text function inserted into a text box in a report.

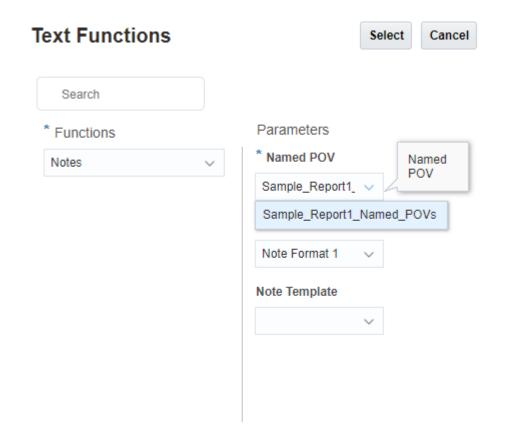
<u>Sample_Report1_Named_POVs</u> with the **Segments** and **Fiscal Calendar** dimensions, with their respective member selections. The remaining dimensions were removed from the dimension layout, because no selections are required for them.



Note Format 1 with the NotePOVDimension and NotePOVMemberLabel text functions that have Ordinal parameters "1" and "2", which refer to the **Segments** and **Fiscal Calendar** dimensions, respectively:



Text function selector with <u>Sample_Report1_Named_POVs</u>, <u>Sample Note Format 1</u> and the **Performance Summary** Note template selected:



Note text function inserted in the text box:

Notes ("Sample Report1 Named POVs", "Note Format 1", "Performance Summary")

Resulting report preview, with the user's **Member Label** preference set to **Alias**, so the NotePOVMemberLabel function returns the member aliases for the **Segments** and **Fiscal Calendar** members.

Performance Summary

Administrator - 11/9/20

Segments: Audio Systems, Fiscal Calendar: January

Integer ac posuere nisi. Nam id egestas mauris, ac pellentesque mauris. Nulla volutpat libero quis vestibulum volutpat. Phasellus tempor nec magna id luctus. Suspendisse rutrum dignissim venenatis. Nunc turpis ligula, vehicula sit amet porta quis, fringilla non lorem. Maecenas maximus, turpis fringilla convallis vestibulum, dui augue ultrices lectus, sit amet tincidunt ante lectus ut elit. Integer finibus venenatis mollis.

Segments: Digital Video, Fiscal Calendar: January

Nullam non bibendum nisi, quis efficitur nisl. Phasellus luctus in augue sit amet euismod. Quisque hendrerit, purus at vestibulum eleifend, elit ligula pretium turpis, id commodo odio quam pretium sem. Aenean mollis gravida metus, eget sollicitudin felis consectetur non. Mauris id diam eget eros viverra tristique. Nam sem arcu, eleifend eu mollis id, lobortis in mauris. Mauris ultricies tincidunt rhoncus.

Segments: Televisions, Fiscal Calendar: January

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque sit amet nisi velit. Pellentesque blandit eleifend est a pulvinar. Integer rhoncus sodales leo, eu vestibulum arcu gravida et. Donec commodo faucibus lorem malesuada vehicula. Proin pulvinar mi vitae ultricies placerat. Donec gravida vestibulum nibh, venenatis faucibus enim convallis iaculis. Sed at turpis sapien. Duis venenatis lorem eget arcu interdum volutpat. Nullam rutrum euismod congue.



Security - Roles and Access for Note Templates and Notes

In general, the system administrator role can see and maintain all Note Templates and Notes. Access permissions to Note Templates and Notes are set in the Note Manager. Based on the three types of permissions that can be assigned to Note Templates:

Table 11-12 Defining user roles and their task for Notes Templates

User Role	User Task
Administer	Create a Note
	 Delete, Update, and view Note Templates as well as all Notes created using a Note Template
	 Add, View, Edit, Delete user assignment for Notes Templates and Notes
	 By default, the creator of a Note Template has Administer permission on the Note Template
Write	Create a note
	 Delete, Update, View note templates as well as all Notes created using a Note Template
View	 View Note Templates
	• View Notes

Report Administrator or System Administrator roles can create a new Note Template in the report designer but cannot in the Notes Manager.

- A user role and report administer permission on a report cannot create a new Note Template, but can insert an existing Note Template that they created.
- A user that has the Report Administrator role while designing a report: with View
 permission to Note Template, can only view and insert it into a report. But if they have
 Administer or Write permissions to a Note Template, they can insert it and edit it.

Notes

There are two types of permissions that can be assigned to Notes:

Table 11-13 Defining user roles and their task for Notes

User Role	User Task
Write	can submit text to a Note. By default, the creator of the Note has write permission on the Note
View	can only view the text and not submit text to the Note

Notes are only visible in a report preview if the user has a minimum of View access on the Note. Users are allowed to update a Note only if they have Write access on the Note. In a Note, the **Inherit Permissions from Note Template** is set by default. Only a user with Write permission on the Note can change this setting.



Table 11-14 Defining user roles and their task for Inherit Permissions from Note Template

User Role	User Task
Enabled Inherit Permissions from Note Template	Permissions for a user on the template will also apply to the Note
Disabled Inherit Permissions from Note Template	Note will store permissions independently and is not linked to the Note Template permissions

Best Practices

Overall:

- Remember that the Note Template name cannot be changed once created.
- Use the Note template property "Editable" to lock down all Notes from a template for editing.

When using **Note Templates** with inserted **Notes** boxes in a report:

- To keep all note and other report object content on one page, set the Note Template size to Fixed and set a character limit.
- When should a separate Note Template be created?
 - Separate Note Templates should be created for different types of narrative displayed in a report, especially when separated by other report objects such as grids and charts.
 - You can reuse a Note Template in another report for narrative collection using a different POV, if possible.

POV usage:

- You can remove POV dimensions that won't be used for Note entry or reporting via the Note Template dimension layout.
- However, once a Note is created from the Note Template, the dimension layout cannot be modified.

When using **Note Templates** with inserted **Notes** boxes in a report:

- Use the POV selections to restrict or allow entry to specific time periods and other dimensions from period to period.
- Select multiple members for a dimension, where users can select a member and enter their respective Notes (For example: Entity or Department dimensions).
 - Use "Display Suggestions Only" in a POV dimension so the user cannot select members other than those listed.
 - Upon roll-forward, you can change the POV selections for Time-related dimensions, so users only enter Notes for the current reporting period



Working with Books

Related Topics

- About Books
- Limitations for Creating a Book
- Accessing the Book Creation Window
- Creating a Book
- Saving a Book Definition
 To keep a book's metadata intact, a book definition must be saved.
- About the Book Designer
- Setting the Book Point of View
- · Managing Documents in a Book
- Defining Report Prompt Selections
- · Working with Point of View Selection for Reports, Book, and Sections
- Displaying the Table of Contents in a Book
- · Working with Sections
- Working with Multiple Data Sources

About Books

Books provide the ability to group together one or more Reports, Books, and other documents, to generate a single PDF or Excel output. You can optionally include customized Table of Contents (TOC) using a Word document with a TOC definition inserted, common margins, page headers, and footers.

Reports can be run for multiple member selections. For example, you can run one or more reports for several **Departments** or **Entities**. You can insert **Sections** to loop through multiple reports and member selections. **Sections** can also be used to group reports at one level for TOC display.



Any reports with suppressed grids are not included in the book PDF or Excel output. The report needs to have suppression enabled for the entire grid with no other report objects such as text boxes or images in the body of the report.

High-level features include:

 In Narrative Reporting, you can insert Reports, other Books, Word and PDF documents into the Book. Word, and PDF documents need to be uploaded to the Library. In Oracle Enterprise Performance Management Cloud deployments, you can upload the document from the **Documents** tab, select the **Report** card (Library card in Tax Reporting).

- They cannot be inserted from a local file system.
- You can customize the Table of Contents formatting and layout, as well as the information displayed for each document in the Book.
- You can select Point of View (POV) members to cascade for each report or section.
- You can select the POV at the time of executing the Book.
- You can create multiple levels of Sections that cascade to organize hierarchy levels and dimension sections.
- You can use Page Setup to define page numbers, margins, and header and footer.
- When previewing a Book with multiple data sources, any common dimensions across data sources are combined so that a single POV dimension selection can affect the different data sources.

Watch this overview video, you'll learn more about books.



- Overview: Books in Narrative Reporting.

This video orients you with how to create and manage books. Use books to compile reports, other books, and documents into one Excel or PDF deliverable, such as a finance book for all divisional financial reports, to better organized and streamlined reporting and analysis.

Watch this tutorial video, you'll learn how to create books.



-- Creating Books in Narrative Reporting.

Books provide the ability to group together one or more reports, books, and other documents, to generate a single Excel or PDF output. In this video, you learn how to create books in Narrative Reporting.

Watch this tutorial video, you'll learn how to work with book sections.



-- Working with Book Sections in Narrative Reporting.

You can use sections in books to loop through multiple reports and member selections, and group reports at one level for your table of contents display. In this video, you learn how to work with book sections in Narrative Reporting.

Limitations for Creating a Book

In the current release, Books has these limitations:

- You must set the Prompts from the Book Designer. They cannot be responded to when running the Book.
- The maximum number of allowed nodes in the "tree" in the Book Designer is 50.



Note:

When adding a number of artifacts that exceeds the maximum number of allowed nodes, an error will be received, and some of the selected artifacts will still be added up to the maximum allowed amount.

The maximum number of Cascade Expansions allowed is 600. This represents the
maximum number of "items" (expansions) that are generated at the start of running a book.
It includes all of the Word, PDF, Reports, Books and Sections that are going to be
generated when the book cascades over all of the queries the customer has defined in the
design time.

For example, a Book with a Table of Contents (TOC) and a Section with two reports would be as follows: Note that since **Report#1** and **Report#2** are under **Section#1** and have **CurrentPOV** select for the **Period** dimension, both reports will be run for **Q1** and **Q2**.

- TOC
- Section#1 {Period: Q1, Q2}
 - * Report#1 {Period: CurrentPov}
 - * Report#2 {Period: CurrentPov}

Seven expansion items would be generated (one for the TOC, two for Section#1, two for Report#1, and two for Report#2).

The maximum number of CascadeExpansions that are executable (Report or Book)
allowed is 425. This represents the total number of expansion "items" (Reports or inserted
Books) that are needed to "execute" against the data source.

In the same example as above, there are **Seven** expansion items, but only four of them are "executable". As there is nothing to "execute" associated with a Word, PDF, or Section, they are "free" from this governor and are not considered.

Four executable expansion items would be generated (two for Report#1 and two for Report#2)

- The maximum document (Word or PDF) size allowed of 5 MB.
- When inserting one or more books (such as Book 1, Book 2, and so on) into another book (referred to as the "main book") results in the table of contents (TOC) for the "main book" not displaying the TOCs for the inserted books. Instead, the TOC for the "main book" lists each inserted book as a single TOC entry without displaying the details of the inserted books TOCs. However, when the book is run, the inserted books TOCs are not updated, and only the TOC of the "main book" is updated.

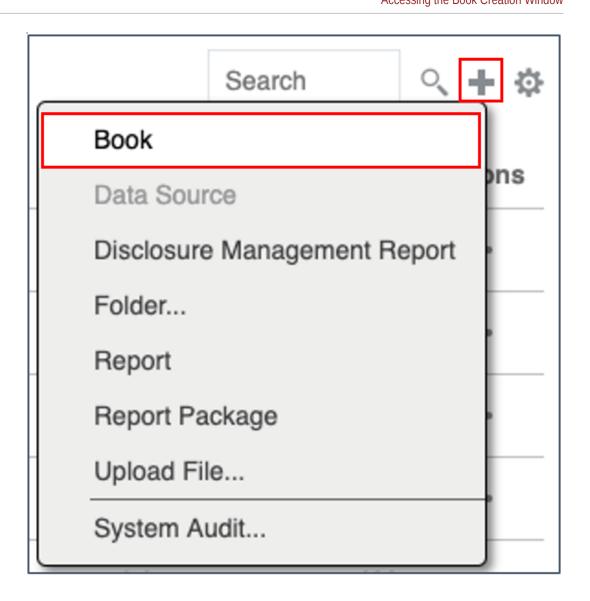
Accessing the Book Creation Window

For Narrative Reporting Deployments:

You access the Book Creation window in the following ways:

- 1. You can create Books from the Book system folder or any non-system folder, click Add
 - and select **Book** from the menu.

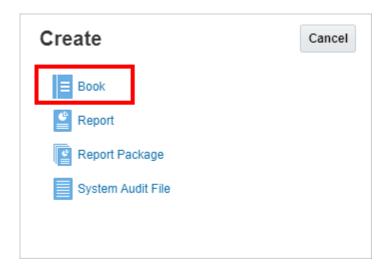




2. From the **Books** pane, click **Add** -



3. From the Home page, click **Create**, and select **Book**.





In the Books pane, you can filter the list of existing books on Recent, Favorites, and All.

For Enterprise Performance Management Cloud Deployments:

You access the Book Creation Window:

From an Oracle Enterprise Performance Management Cloud service, select

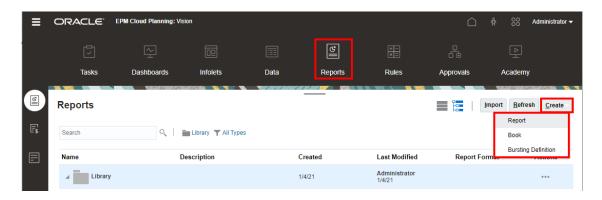


Report card (Library card in Tax Reporting).

In Enterprise Profitability and Cost Management, FreeForm, Planning, and Planning Modules, from the left pane select **Reports** icon.

In Financial Consolidation and Close, and Tax Reporting, select **Reports** from the horizontal tabs. Click the **Create** drop-down menu at the top of the content pane, and then click **Book** to launch the Book Creation Window.





For more information, see the following links:

Watch this overview video, you'll learn more about books.



This video orients you with how to create and use books. Use books to compile management reports, other books, and documents into one PDF deliverable, such as a finance book for all divisional financial reports, to better organized and streamlined reporting and analysis.

Watch this tutorial video, you'll learn how to create books.



Books provide the ability to group together one or more reports, books, and other documents, to generate a single PDF output. In this video, you learn how to create books in Narrative Reporting.

• Watch this tutorial video, you'll learn how to work with book sections.



You can use sections in books to loop through multiple reports and member selections, and group reports at one level for your table of contents display. In this video, you learn how to work with book sections in Narrative Reporting.

- About Books
- Creating a Book
- · About the Book Designer

Creating a Book

To create a Book, perform the following steps:

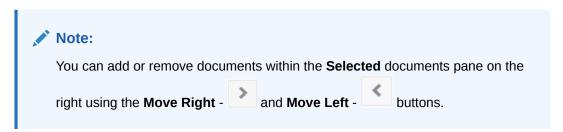
1. In **Create a Book**, under **Select a Folder**, select the desired **Library** folder, and then select the documents that are listed in the **Available** pane on the left.



Reports, other Books, Word, and PDF documents are supported.



Select one or more documents from the Available list in the left pane, and click the Move
 Right button - to move the desired documents to the Selected pane on the right.



- After performing initial selections of documents, you can add the same document again multiple times, if needed.
- The Data source section displays the data sources for the selected reports and Books.
- Optional: Under Section Details, select Create Default Section, and then enter a Name of the section to group all the selected documents.
- 4. Optional: To add POV dimensions to the data source, select the required data source from the Data source drop down, then click Select Dimensions to open the Dimension Layout, and then select the desired POV dimensions for the Section.



The dimensions available under **Select Dimensions** or **Dimension Layout** are based on the selection in the **Data source** drop down.

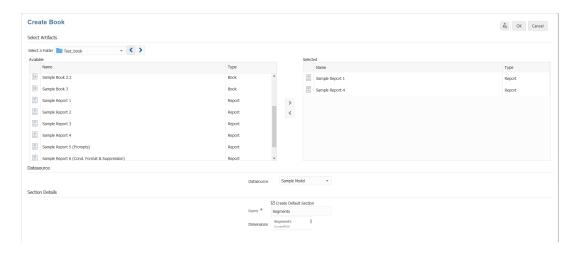
Sections can be used to group multiple documents under a common Table of Contents entry and run reports for a common Point of View.

- 5. Click **OK**. The page navigates to the **Book Designer** window.
 - Using the Book Designer, you can create more sections.
 - The POV for the **Default Section** can be defined later in the **Book Designer**.

Note:

If the Book contains multiple data sources, in the Book Designer you will need to manually add the additional data sources using the Actions menu and select Manage Data Source, otherwise you will get a validation error for any reports or Books with additional data sources stating "Data source <data source name> is not in the allowed data sources". See Managing Data Sources.

For example, in the following image, the documents **Sample Report 1** and **Sample Report 4** are selected and a default **Section** called **Segments** is defined in the user interface.



After selecting the reports, you can view the **Book Designer** window.

As a result, in the **Book Designer** layout displays two sample reports as child nodes, under the **Section** called **Segments**.

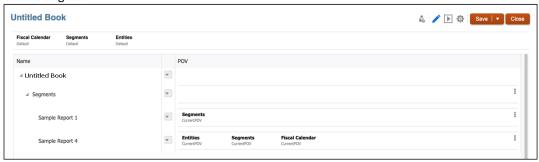
You can define the POV for the **Default Section** called **Segments** in the Book Designer.



When you add a document to a book, it references a link to the library. The actual document will not be copied to the book.

However, the TOC definition is copied to the book and is not linked to the source document in the Library.

Book Designer



Watch this tutorial video, you'll learn how to create books.



Books provide the ability to group together one or more reports, books, and other documents, to generate a single PDF output. In this video, you learn how to create books in Narrative Reporting.

Saving a Book Definition

To keep a book's metadata intact, a book definition must be saved.



To save the Book Definition:

- Click Save or Save As from the Book Designer Toolbar
- 2. In **Save Book**, enter a **Name**, and then click **Browse** to save the Book to the Library.



3. Click Save.

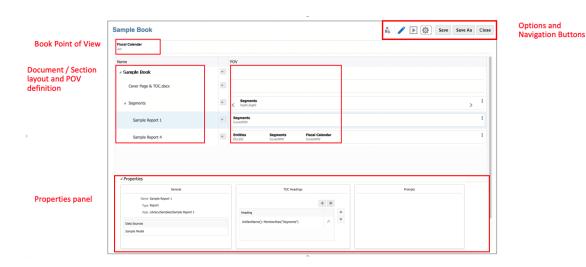
About the Book Designer

You can view the following in the Book Designer:

- Point of View (POV) bar. You can select members to run for the Book.
- The content pane. You can add, delete, and move documents, as well as define the POV for Sections and Reports.

You can insert the following document types into a Book: Reports, other Books, Microsoft Word, and PDF documents.

- The Book Designer toolbar enables you to switch between edit and preview modes, save the Book, open Page Setup, and Validate the Book's content.
- The Properties pane enables you to view the document or section information and set the TOC display for a document or section.





Navigating within the Book Designer window

The typical layout of the **Book Designer** window is described in the table below. The numbered elements of the screen correspond to the numbers in the Pointers in Image column.

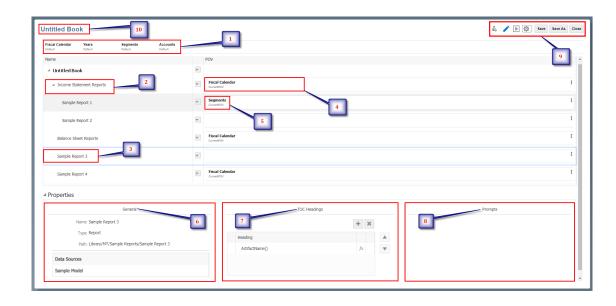


Table 12-1 Book Layout Information

Pointers in Image	Book Layout Information	Descriptions
1	Book Point of View	The Book Point of View (POV) specifies members for dimensions not defined on report grids, and in Book and Section POVs.
2	Sections within a Book	Sections can be used to group multiple documents under a common TOC entry and optionally run reports for a common POV.
3	Document within the section	You can add a document within the section. For example, <i>Sample Report 3</i> document is added.
4	Section's Point of View	You can view the POV dimensions for the Section
5	Document's Point of View	In <i>Sample Report 1</i> document, <i>Segments</i> POV of the document is displayed.
6	General Information within the Property Pane	You can view the selected report or book information.
7	Table of Contents within the Property Pane	You can set the TOC display for a document or section. You can use text functions to define one or more rows of headings to display for the selected document or section.
8	Prompts within the Property Pane	If the Book contains reports with prompts, set the responses to the prompts.



Table 12-1 (Cont.) Book Layout Information

Pointers in Image	Book Layout Information	Descriptions
9	Book Designer Toolbar	You can perform the following actions: Edit or Preview, Page Setup, Manage Data Sources, Validate, Save or Save As, and Close the book.
10	Book Name	Displays the Book name.

About the Book Designer Toolbar

In the **Book Designer** toolbar, you can perform the following:



Use **Edit** and **Preview** to toggle between the Book Designer and previewing the book output in **PDF** or **Excel** format.

While in preview mode, use - Actions menu to do the following:

- To switch your preview mode between Excel or PDF format.
- Download as PDF You can download a Book as PDF.
- Download as Excel You can download a Book as an Excel.

PDF preview of the Book provides the following functionality:

- Toggle thumbnail sidebar
- Find text within the document
- Go to the previous/next page
- Go to an entered page number
- Zoom in/out buttons
- Select a zoom level (For example: %s, Automatic, Page Width, and so on.)
- Switch to Presentation Mode
- Print the document
- Download the document
- Other Navigation and Viewing Tools

Actions -

Use **Actions** to do the following:

- You can access Page Setup to define page numbers, margins and header and footer.
- You can Validate the Book's content.
- You can Manage Data Source for a book.

Save / Save As -



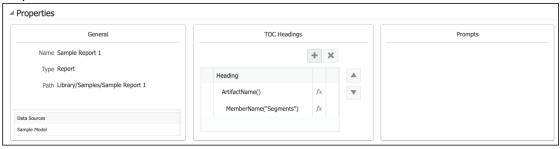
Save the Book definition to the Library.

About Book Properties

The Book Properties pane has the following three sections:

- General. You can view the document or section information, including the data source(s) in the report, Book or Section.
- TOC Headings. You can set the TOC display for a document or section. You can use text
 functions to define one or more rows of headings to display for the selected document or
 section.
- Prompts. If a Book contains reports with prompts, set the responses to the prompts.

Properties Pane



Working with the Book Designer

About Book Point of View

The Book Point of View (POV) specifies members for dimensions that are not defined on report grids, or in report, Book or Section POVs.

As a Book designer, you can set up the POV for the Book viewers by performing the following:

- You can define one or more POV members for each dimension for the Book viewer to select when running or executing the book.
- You can allow the Book viewer to select any member in the dimension.
- You can lock a dimension selection for Book viewers to a single member selection.
- You can hide one or more dimensions from the Book viewer.

When previewing the Book, you can change the POV and run the Book for a specific member selection.

Book Point of View Settings

Default Setting: The dimension's default state when no member selections or options have been set for a POV dimension.



Selecting Multiple Members: While you are in Book edit mode, you can select multiple members for a dimension. You can use functions to define a list of members for the Book viewer to select at the time of book execution. For example: Children of Total Entities.

Locking or Limiting User Selections: You can use the **Display Suggestions Only** or **Allow All Members** options to either lock the selections, so that a Book viewer cannot select any other members, or you can enable the Book viewers to select members other than the ones that are defined.

Hide Dimension: You can use this option to hide the POV from Book viewers. One member must be selected for each dimension.

Working with the Book Designer Action Menu

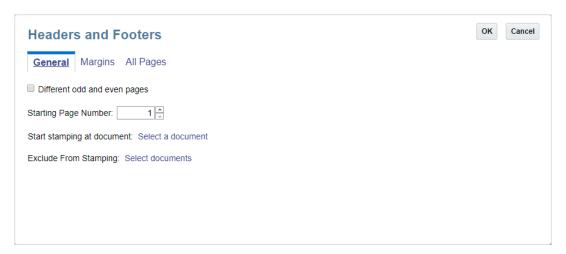
Use **Action** menu to do the following:

- You can access Page Setup to define page numbers, margins, and header and footer.
- You can Validate the Book's content.
- You can Manage Data Source for a book.

Book Page Setup

To open Book Page Setup:

1. In the Book Designer, click **Action** - and then select **Page Setup**.



2. Review the settings and make any necessary changes. When finished, click **OK**.

Before and After Stamping Header Information

Stamping may result in an overlay of text or page numbers. If the page sizes vary between the contents within the Book, the location of the header and footer content is laid out using offsets to the sides of the page, and the location is dynamically determined based on the content within the PDF, with some minimum offset to the edge.



Before Stamping:



Vision Operations

Income Statement Act vs Plan All Segments

Report Run Date: Jul 24, 2019 9:11 AM

After Stamping:



Vision Corporation: Segment Summary Vision Operations

Income Statement Act vs Plan Electronics

Report Run Date: Jul 24, 2019 9:09 AM

Specifying General Header and Footer Properties

To specify general properties for headers, footers, and margins:

- 1. In the Book Designer, click **Action** and then select **Page Setup**.
- By default, headers and footers are applied to all pages. Select the Different odd and even pages check box to apply separate headers and footers to display Even Pages and Odd Pages tabs.



Note:

When you select this check box, the **All Pages** tab is replaced by **Even Pages** and **Odd Pages** tabs.

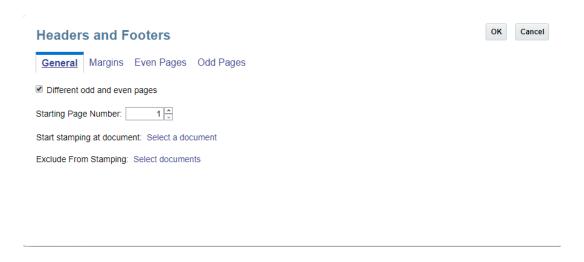
- 3. If you are adding page numbers to your header or footer, in **Starting Page Number**, enter the number that you want to start numbering your pages on.
- 4. In **Start Stamping at Document**, click **Select a Document** to select the document that you want to begin adding headers and footers to. For example, you can start stamping headers and footers after your table of contents.
- 5. In Exclude from Stamping, click Select Documents to select all of the documents that you do not want to add headers and footers to. For example, you can exclude your cover page from the headers and footers stamp.



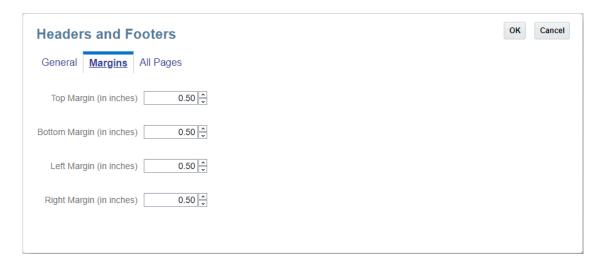
Note:

When you first create a book, there are no documents to select. After you add documents, edit the book properties to return to this dialog box and select the documents that you want to exclude from stamping.





Specifying Margin Sizes



To specify page margin sizes:

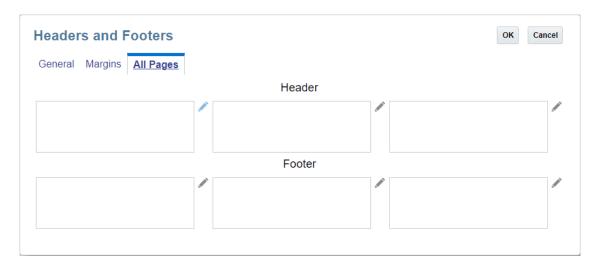
- Click Margins.
- Specify the Top, Bottom, Left, and Right margin sizes. By default, margin sizes are entered in inches. You can change this to centimeters in Define Options.



The Margin fields determine the margin sizes of the header and footer only. They do not change the margin sizes of the source PDF documents.

Entering Header and Footer Information

Use the **All Pages** tab or the **Even Pages** and **Odd Pages** tabs to enter the text and images that you want to display in your header and footer. You can enter text or images on the left, center, or right of your header and footer.



To enter text and images in your header and footer:

- 1. Click **Edit** next to the header or footer box that you want to add text to.
- Perform an action:
 - To add text, click Add Text and enter the text to display in the Edit Content dialog box. The rich text editor enables you to bold, underline, italicize, and change the font
 - and color of your text. You can also click the **Number** button to insert a text function that returns the current page number.
 - To add text, click **Add Text** and enter the text to display in the **Edit Content** dialog box. You can also click to insert a text function & [Page] of & [Pages] that returns current page number and the total number of pages.
 - To add an image, click Add Image and click Browse to select an image to upload. You
 must upload an image from your local computer. You cannot browse to cloud Narrative
 Reporting Library location.
- To add an additional line of text or an image below the first line or image, click Add Text or Add Image from the Edit Content dialog box and enter your additional line of text or an image.
- 4. When you are finished entering text and images, click **OK** to save your changes.
- 5. To delete text or an image after you have clicked OK to save, click **Delete** Next to the line that you want to delete.



Validating the Book Design

The Validate action validates that the reports and Books inserted in the Book exist in the Library, and that all POV selections in the Book are valid.

To perform a validation on the Book design:

1. In the Book Designer, click **Action** - and then select **Validate**.



2. Click **OK**, if validation is successful.

If any validation errors occur, then the system will display all validation errors in a red line dialog box at the top of the **Book Designer**.





You must resolve all validation errors and ensure that the book is valid before executing it.

Managing Data Sources

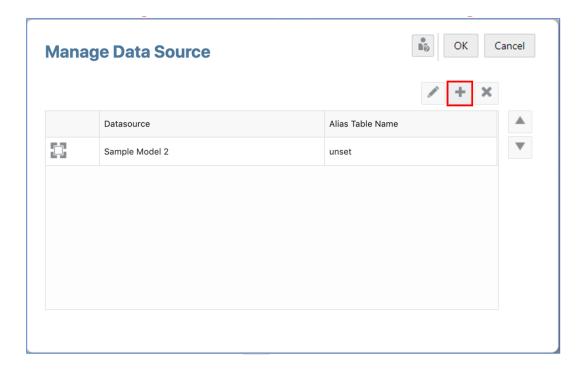
Manage Data Source enables you to add data sources to the Book, manage the Alias tables used in the Book, change a data source used in the book to another one, or set the priority of data sources used to display in the POV for common dimensions. For more information, see the following links:

- Adding a Data Source
- Reordering the Data Source
- Changing the Data Source
- Managing Alias tables in the Book

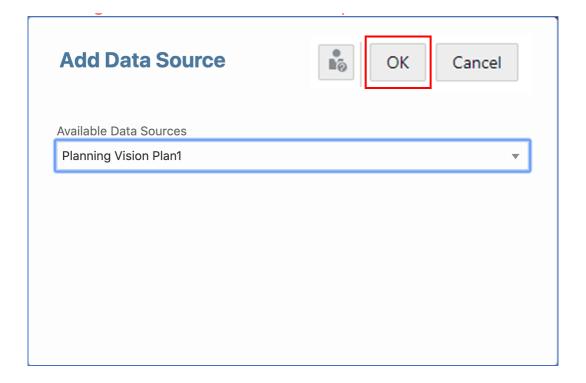
Adding a Data Source

To add a data source to a Book, when you insert Reports or Books that utilizes additional data sources, perform an action:

1. In the Book Designer, click **Action** - and then select **Manage Data Source**.

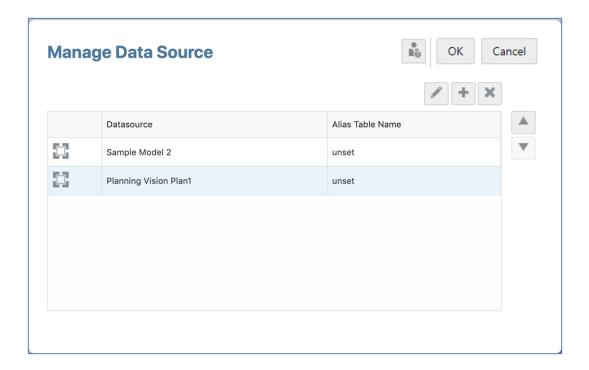


2. In Manage Data Source, click to open the Add Data Source dialog.



3. In **Add Data Source**, select the desired data source from the list of available data sources.

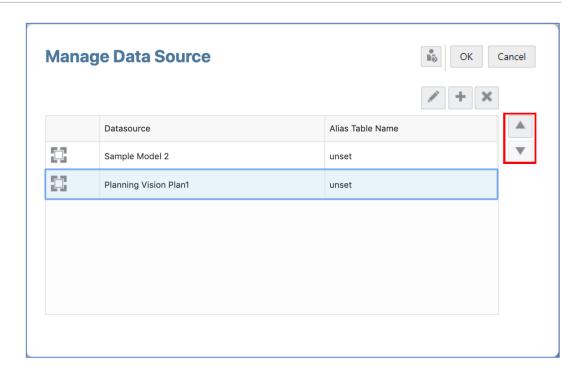
 Click OK to close the Add Data Source dialog. The added data source will appear in the Manage Data Source dialog. Click OK.



Reordering the Data Source

You can change the order that data sources are evaluated in the Book. The data source order affects the default data source for POV dimensions with the same name, to display in the combined POV member selector for the Book, Report, inserted Book or Section.

- 1. In the Book Designer, click **Action** and then select **Manage Data Source**.
- 2. In Manage Data Source, select the desired data source to reorder.



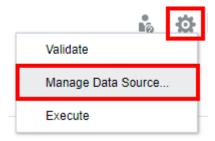
3. Click or to reorder the data source. Click ok.

Changing the Data Source

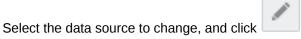
You can change a data source in the Book to point to another data source.

To change a data source in the Book, perform an action:

1. From the Bursting Definition, click Action - and then select Manage Data Source.

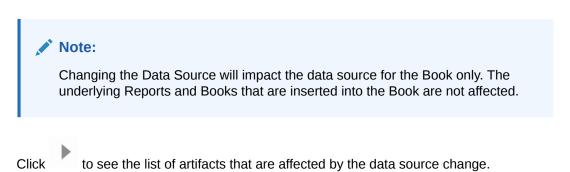


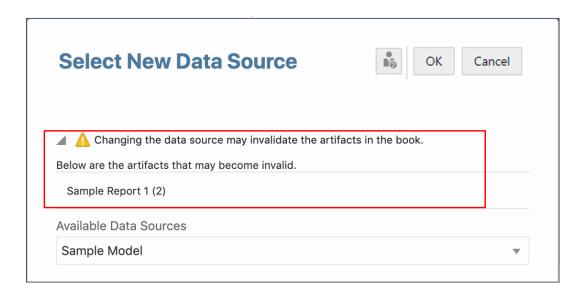




3. In Select New Data Source, select the desired data source from the list, and click OK.





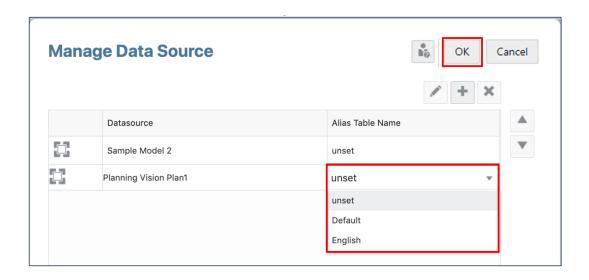


Managing Alias tables in the Book

You can change the alias table used in the MemberAlias text functions for the Book and any containing Report or Book which does not have a hard-coded alias table.

To manage the alias tables used in the Book, perform an action:

- 1. In the Book Designer, click **Action** and then select **Manage Data Source**.
- 2. In **Manage Data Source** dialog box, double click on the **Alias Table Name** for a data source, and then select the desired alias table from the drop-down.



3. Click **OK** to save your changes and close the dialog box.

Setting the Book Point of View

The Book Point of View (POV) specifies members for dimensions that are not defined on report grids, or in report, Book or Section POVs. If a Book has multiple data sources, any common

dimensions across data sources are combined so that a single POV selection can affect the different data sources. For more information, see Working with the Book Designer

To set the Book Point of View:

- Open a Book in edit mode of Book Designer.
- 2. In the POV bar at the top of the Book Designer, click on a dimension label to open the member selector for that dimension.
- 3. In the member selector, select one or more members for the dimension by clicking the check mark next to a member name. You can select individual members, or you can use lists or member selection functions to select multiple members.
- 4. To set POV options for a dimension, click **Action** next to a POV dimension, and then select from the following:
 - Hide Dimension—Hides the dimension in Preview mode. This is available only if multiple selections are not defined for the dimension.
 - Toggle between Allow All Selections and Display Suggestions Only Allows or restricts Book viewers to selecting only from the members that you specify in the POV. Book viewers are not able to select other members for this dimension.
- Continue selecting members and setting POV options for the remaining POV dimensions as needed.

Managing Documents in a Book

Table 12-2 Managing Documents and Sections within a Book

Task on Managing Documents	Perform these Sub Tasks	For More Information
Adding a Section	To add a section, perform an action: You can add a section to the Book via Create Book window. You can add multiple sections to the Book Via Book Designer window.	Adding a Section to the Book
Moving sections within the Book	You can re-arrange the sections within the Book.	Moving a Section within a Book
Adding a Document	 To add a document, perform an action: You can add a document to the Book via Create Book window. You can add a document to the Book Via Book Designer window. You can add a TOC document within a Book. 	Adding a Document Below the Book Node Adding a Document Above or Below the Current Selection



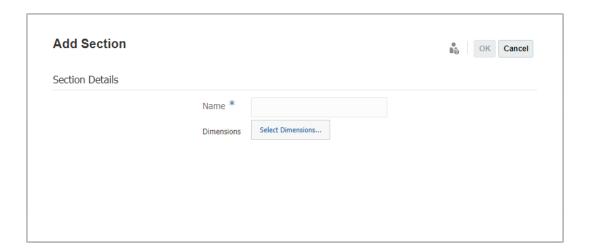
Table 12-2 (Cont.) Managing Documents and Sections within a Book

Task on Managing Documents	Perform these Sub Tasks	For More Information
Adding Multiple Documents	To add multiple documents, perform an action: You can add multiple documents to the Book via Create Book window. You can add multiple documents to the Book Via Book Designer window.	Adding Multiple Documents to the Book
Moving a Document	You can move a document within the Book.	Moving a Document within a Book
Deleting Section, or Document, or TOC document within the Book	You can delete: Section, Document, and TOC document within a Book. Note: Deleting a Section will delete all reports and Books under it.	Deleting a Section

Adding a Section to the Book

To add a section to the Book:

- 1. In the Book Designer, either:
 - Select the top book node, and click and select **Add Child**, and then select **Section**.
 - Select an existing artifact or section, and and select either Add Above or Add Below and then select Section.



2. In Add Section dialog box, provide a Name of the section.



Optional: To set a POV for the Section, click Select Dimensions.... In Dimension
 Layout, under POV bar, click Add - , and select the required dimension from the dropdown list, and then click OK.

If a Section contains reports with multiple data sources, you need to add the data source in the Section's Actions menu and select Manage Data Source. The available dimensions in Dimension Layout are based on the first data source appearing in the Manage Data Source dialog.

4. Click **OK** to add the section to the Book.

Moving a Section within a Book

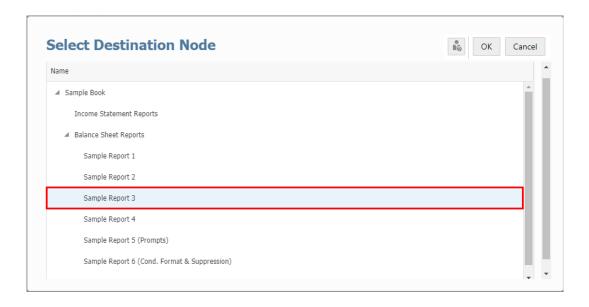
To move a section within a Book:

Sample Book

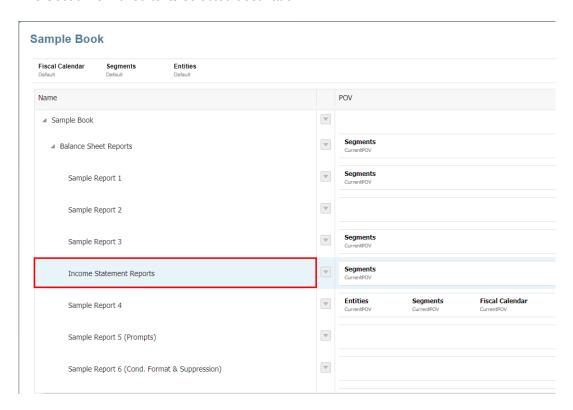
1. In the Book Designer, select a Section, and click and select Move, and then select either Above, Below or As Child.

Fiscal Calendar Entities Seaments POV Name $\overline{\psi}$ ■ Sample Book Segments Income Statement Reports Add Above w ■ Balance Sheet Reports Add Below Add Child Sample Report 1 Delete Move Above... Sample Report 2 Below... Segments As Child... Sample Report 3

In the Select Destination Node dialog box, select a destination Document or Section, and then click OK.



3. The Section is moved to its selected destination.





You can only move a Section as a child of another Section, you cannot add a Section as a child of another Document.

Deleting a Section

To delete a section:

- 1. In the **Book Designer**, select a section that you want to delete.
- 2. Click and then select **Delete**.



If you delete a section, then all reports and Books under it will be deleted. You cannot retrieve back.

Adding a Document Below the Book Node

To add a document below the Book node:

- 1. In the Book Designer, select the Untitled Book node, and click and select Add Child, and then select Artifact.
- 2. Click **OK** to add a document to the Book.



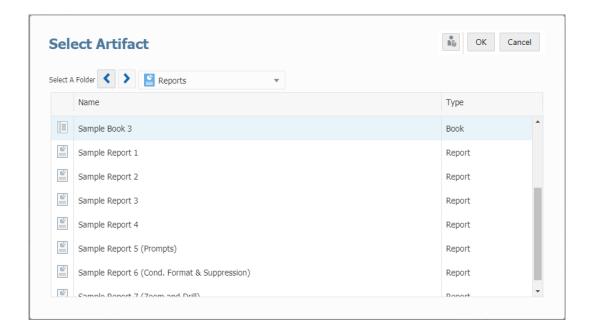
When inserting third party documents such as Word, PDF or a Word-based Table of Contents, the documents need to be uploaded to the repository. In Narrative Reporting deployments, upload the document from the Narrative Reporting Library. In EPM Cloud deployments, upload the document from the **Documents** tab in the **Reports** card (Library card in Tax Reporting).

Adding a Document Above or Below the Current Selection

To add a document above or below the current selection:

1. In the Book Designer, select a Document, and click and select either Add Above or Add Below, and then select Artifact.





2. Click **OK** to add a document to the Book.

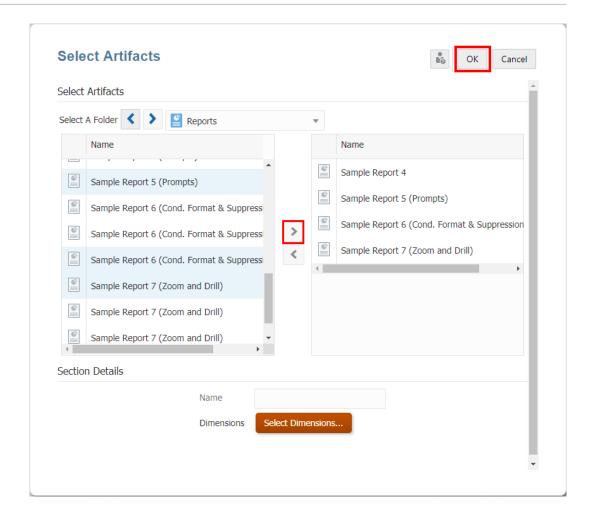


When inserting third party documents such as Word, PDF or a Word-based Table of Contents, the documents need to be uploaded to the repository. In Narrative Reporting deployments, upload the document from the Narrative Reporting Library. In EPM Cloud deployments, upload the document from the **Documents** tab in the **Reports** card (Library card in Tax Reporting).

Adding Multiple Documents to the Book

To add multiple documents to the book:

1. In the Book Designer, select a Document or Section, and click and select Multiple, and then select Artifact.



2. In **Select Artifacts** dialog box, select one or more documents from **Available** list in the left pane, and click buttons to move the desired documents to **Selected** documents pane in the right.



The maximum number of documents and sections you can add to a book is 50.

The maximum size of an added Word or PDF document is 5 MB.

- Optional: Under Section Details, select Create Default Section, and then enter a Name of the section to group all the selected documents.
- Optional: Click Select Dimensions to open the Dimension Layout, and then select the desired POV dimensions for the Section.
 - If a Book contains multiple data sources, the available dimensions in **Dimension Layout** are based on the first data source appearing in the Book's **Manage Data Source** dialog.
 - Sections can be used to group multiple documents under a common Table of Contents entry and run reports for a common POV.
- 5. Click **OK** to add multiple documents to the Book.



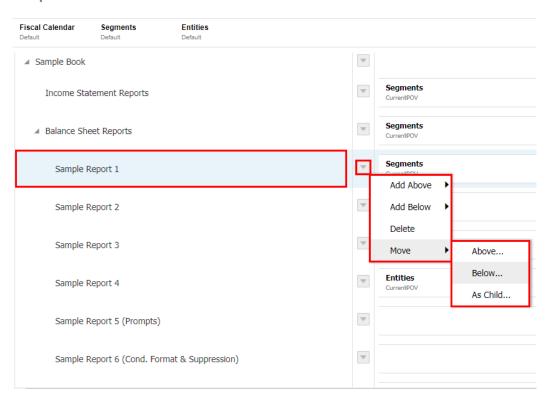
When inserting third party documents such as Word, PDF or a Word-based Table of Contents, the documents need to be uploaded to the repository. In Narrative Reporting deployments, upload the document from the Narrative Reporting Library. In EPM Cloud deployments, upload the document from the **Documents** tab in the **Reports** card (Library card in Tax Reporting).

Moving a Document within a Book

To move a document within a Book:

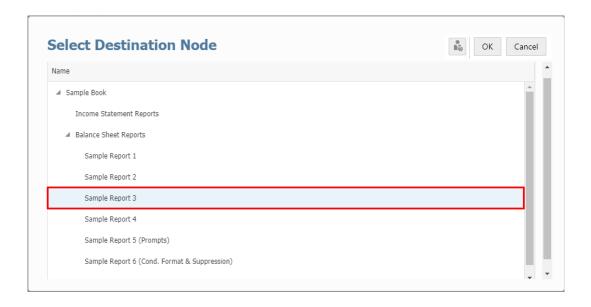
1. In the Book Designer, select a Document, and click and select Move, and then select either Above, Below or As Child.

Sample Book



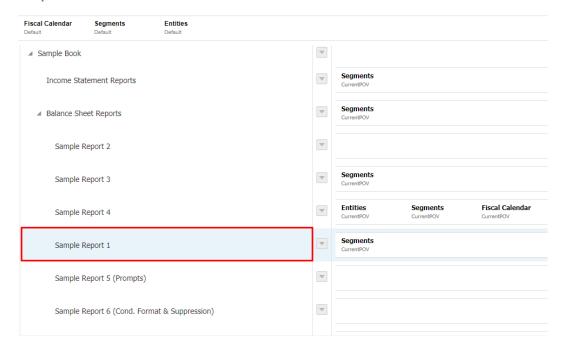
2. In the **Select Destination Node** dialog box, select a destination Document or Section, and then click **OK**.





3. The Document is moved to its selected destination.

Sample Book



Deleting a Document

To delete a Document:

- 1. In the **Book Designer**, select a Document that you want to delete.
- 2. Click and then select **Delete**.



Note:

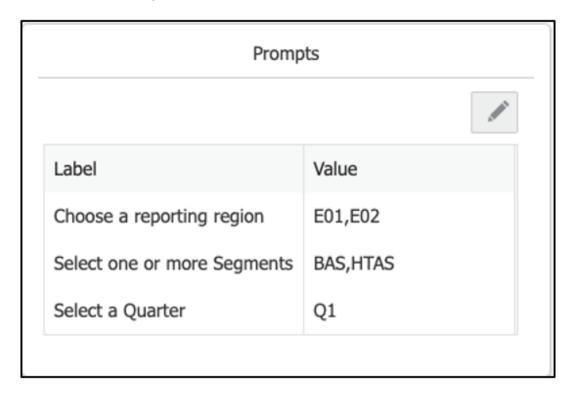
Once you delete a document, you cannot restore it back into the Book.

Defining Report Prompt Selections

If a report contains Prompts for member selections, then you need to define the Prompt selections in the Book Designer.

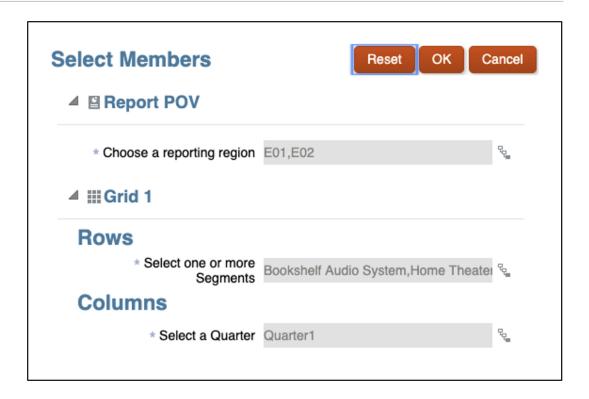
To define the Prompt selections:

- Open a Book in the Edit mode of Book Designer, select the report for which you need to define Prompts.
- 2. For the selected report, you will find the list of prompt selections displayed in the **Prompts** section, under the **Properties** Pane.



3. Click **Edit Prompts** - to open the **Select Members** dialog box for the Prompt.





4. After selecting the required members for the dialog box, click **OK**.

For more information, see Assigning Members Using Prompts.

Working with Point of View Selection for Reports, Book, and Sections

You can set the POV for a report, Book, or Section. You can define a list of members on which a report, Book, or Section can be executed.

When previewing a Book with multiple data sources, any common dimensions across data sources are combined so that a single POV dimension selection can affect the different data sources. However, the list of available members to select from a common dimension need to be defined by the Book Designer for the Book POV, report, inserted Book or Section POV. The members displayed in the **Member Selector** for a common POV dimension are for the first data source appearing in the Book, report, inserted Book or Section's **Manage Data Source** dialog.

- For Reports and Books: The dimensions listed in the Book POV are the POV dimensions that are in the underlying reports and Books.
 - For example, if the only available POV dimensions in a report are **Periods**, **Years**, and **Entities** (the rest of the dimensions are either in the grid, are hidden, or are locked in the report POV), then only these three dimensions are exposed for that report in the Book Designer.
- For Sections: You can select the available POV dimensions from the data source for the Book. While all data source dimensions are listed, the selected dimensions need to be available POV dimensions in the report or Book within the section (the rest of the dimensions are either not in the grid, or are hidden, or are locked in the Section POV).

Note:

Only the Section POV must be defined if you are grouping multiple reports with the same member selection.

Note:

- When using substitution and user variables as selections for the Book Point of View, the Variable values are retrieved when the system first connects to the data source. The member selector and/or POV will display the Variable's value. When running a Book, the latest Variable value will be retrieved for the Reports in the Book. However, if a Variable value changes during a user's session, the change will not be reflected in the Variable value displayed in the Book's member selector or POV, until the user reconnects to a new session by logging out and logging in again.
- For more information about using Variables in the member selector and POV, see Working with Substitution Variables and User Variables.

Let's consider two examples, one with a Section POV and another with a Section without a POV.

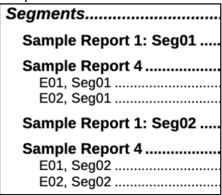
Example: Section with a POV member section. The section has **Segments** dimension member selections of **Seg01** and **Seg02**, and reports contains **Current POV** for **Segments** dimension member.



Book Designer View



Output of Table of Contents



Example: Section without a POV member section. The section does not have any POV member selections, reports have their own POV selections for the **Segments dimension**.



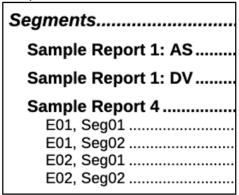
If the reports do not use the Section's POV, then the reports will be executed for each report's specific POV selection.



Book Designer View



Output of Table of Contents



Setting the Point of View for a Report or Book

To set up the POV for a report or Book:

1. In the **Edit** mode of the **Book Designer**, select a report or Book, and then click on a dimension label to open the **Member Selector** for that dimension.



If the report or Book has multiple data sources, the members displayed in the **Member Selector** for a common POV dimension are for the first data source appearing in the report or Book's **Manage Data Source** dialog, which is accessible from the report or Book's **Action** menu.

2. In the **Select Members** dialog box, in the drop-down list either select **Members**, **Recent**, **Substitution Variables**, or **Functions** to assign to the selected report or Book.

Use the following conventions to select members.

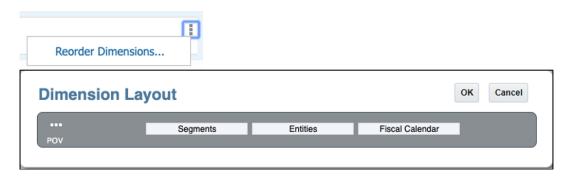
- Click Expand > to drill into a parent member.
- Click Select * to select and deselect a member.





A blue check indicates that a member is currently selected. A gray check when hovering over a member indicates that the member is not currently selected.

- Click **Function** fix next to a member to select the member using a function. See Assigning Members Using Functions.
- Click **Actions** in the Selector Pane to sort the members.
- 3. Click **OK** to close the member selector dialog.
- You can continue selecting members and setting POV options for the remaining POV dimensions as needed.
- 5. To reorder the dimensions in the report or Book POV. Select a report or Book POV, and click Action , and then select Reorder Dimensions.



6. Click OK.

Note:

The order of the POV dimensions affects how the report members are grouped when the Book is previewed.

Let's consider two examples, one with Section POV and another with Section without POV.

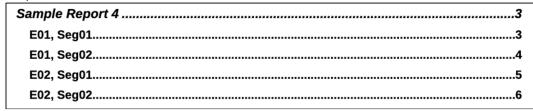
Example 1: **Entities** POV dimension appears before the **Segments** POV dimension, where the results in the output are grouped by **Entities**.



Book Designer View



Output of Table of Contents

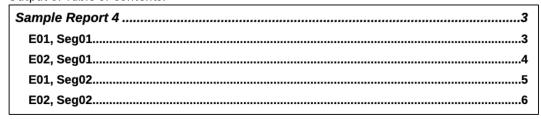


Example 2: **Segments** POV dimension appears before the **Entities** POV dimension, where the results in the output are grouped by **Segments**.

Book Designer View



Output of Table of Contents:



Note:

The TOC definition for the report displays **Entities** before **Segments**; however, the report is executed for **Seg01** first, using **E01** and **E02**, and then **Seg02** and **E01** and **E02**.



Setting the Point of View for Sections

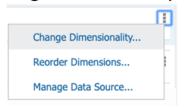
Sections can be used to group multiple documents under a common TOC entry and optionally run reports for a common POV.

The selected POV dimensions for a section can loop through multiple reports and member selections. For example, you can execute all reports under the section for selected members in the **Entity** dimension.

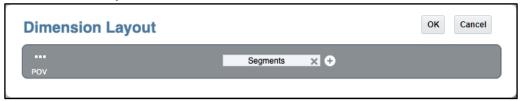
To set up the POV for a Section:

- In the Edit mode of the Book Designer, select a Section.
- 2. To add or change POV dimensions for the **Section**, click the POV, and select **Action** and then select **Change Dimensionality**.

Change Dimensionality and Reorder Dimensions Options



Dimension Layout View

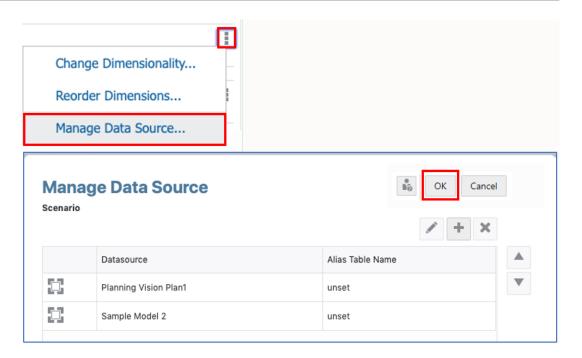


- 3. To reorder POV dimensions for the **Section**, click the POV, and select **Action** then select **Reorder Dimensions**.
- 4. To add a POV dimension for the Section, in Dimension Layout, under POV bar, click Add
 , select the required dimension from the drop-down list, and then click OK.



If the Section has multiple data sources, the members displayed in the **Member Selector** for a common POV dimension are data source for the first data source appearing in Section's **Manage Data Source** dialog, which is accessible from the Section **Action** menu.





- 5. In **Book Designer**, you can click on a dimension label to open the **Member Selector** for that dimension.
- 6. In the **Select Members** dialog box, in the drop-down list either select **Members**, **Recent**, **Substitution Variables**, or **Functions** to assign to the selected section.

Use the following conventions to select members.

- Click Expand > to drill into a parent member.
- Click Select * to select and deselect a member.

Note:

A blue check indicates that a member is currently selected. A gray check when hovering over a member indicates that the member is not currently selected.

- Click Function fx next to a member to select the member using a function. See Assigning Members Using Functions.
- Click Actions in the Selector pane to sort the members.
- 7. Optional: To change the order of a selected member in the Selections list, select a member and drag it to the desired location, or right-click and select Move Up or Move Down. To remove a member from the Selections list, right-click the member and select Delete. You can also right-click and select Show in Hierarchy to expand the parent members of that member and show it in the member hierarchy.



8. Optional: To edit the parameters of a selected member function, select the member function in the Selections list and click . For example, select Inclusive in a member function to include that member in the function.

Click OK to close the member selector dialog.

Segments - **Sections** with POV selections is displayed.



Displaying the Table of Contents in a Book

You can customize the TOC formatting and layout, as well as the information displayed for each document in the Book.

- You can use a Microsoft Word document with an inserted TOC to define the formatting and layout.
- In the Book Designer, you can select a report, Section, or Book, and then under the TOC
 Headings section within the Properties pane, you can define the TOC with the help of text
 functions and/or hard coded text.

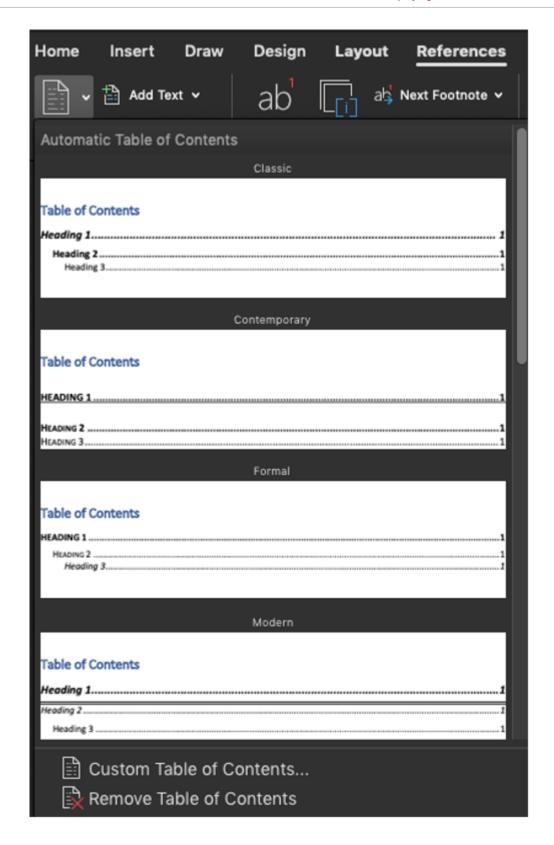
Using text functions, you can define and structure the TOC that will be displayed for each report, Book and Section.

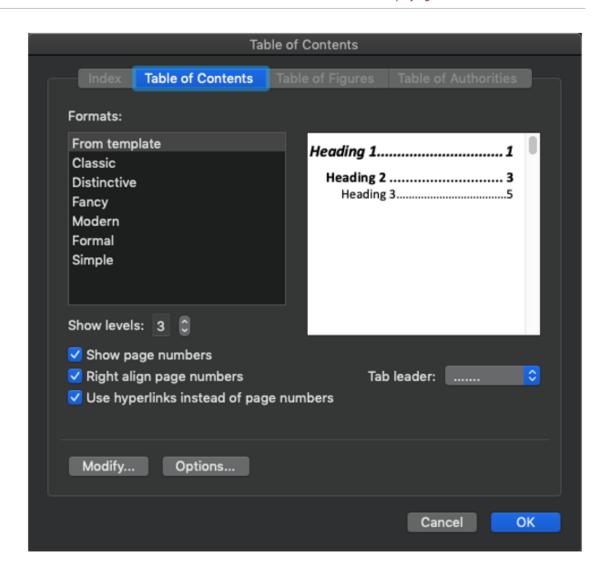
Setting up the Word Table of Contents Template

You can insert a Microsoft Word document with a table of contents defined to reflect the required formatting and layout for the Book TOC. The Word document can also contain additional pages with content, such as a cover page and blank pages before or after TOC.

In the Word References ribbon, you can select a TOC format to use. You can also click **Custom Table of Contents** to customize the TOC further. For information on inserting a TOC Word document into a Book, see Setting the Table of Contents Display for a Document or Section.







Note:

You can adjust the number of heading levels in the TOC by changing the number for the **Show levels** option.

For example: If you insert a TOC from Word, that has three levels defined (such as, **Headings 1**, **Headings 2**, and **Headings 3**).

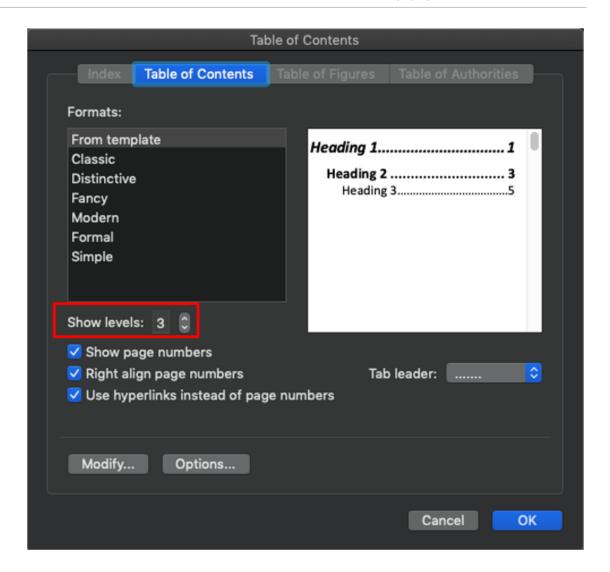
Then the levels in the Book also display three levels of indention.

Table of Contents	
Heading 1	1
Heading 2	1
Heading 3	1

Table of Contents

Segments	1
Sample Report 1: Electronics	1
Sample Report 4	2
North America, Electronics	2
Latin America, Electronics	3
Sample Report 1: Services	4
Sample Report 4	5
North America, Services	5
Latin America, Services	6

For a book that has additional levels, for example, a book includes a nested **Section**, the additional content is not displayed in the TOC unless it is defined to show additional levels. Increase the value in the **Show levels** option to display additional TOC content.



Setting the Table of Contents Display for a Document or Section

You can modify and refine the TOC display for a report, Section, or Book. In Book Designer, select a report, Section, or Book and then under the TOC Headings tab within the Properties pane, you can use text functions to define the TOC.

In the TOC Headings section, you can select functions to include in each table of contents heading row and add additional rows. The text functions for TOC Headings include the following:

ArtifactName() Returns the name of the Document or Section.

MemberName (<dimension>) Returns the member name for the current POV member selection for the specified dimension.

MemberAlias (<dimension>) Returns the member alias for the current POV member selection for the specified dimension.

Setting the Table of Contents for a report, Section, or Book

To set the TOC headings for a report, Section, or Book:

- 1. In the Book Designer, select a report, Section, or Book.
- Under TOC Headings within the Properties pane, you can view the default TOC heading for the selection.

Default TOC headings include the following:

- For **Section**: ArtifactName() returns the Section name. In a Section, you cannot retrieve the name of a report or Book, only the Section name is returned.
- For **Report** or **Book**: ArtifactName(); MemberName()... returns the report or Book name, followed by the member names for all dimensions in the report or Book POV, based on their initially defined order.

For example, see the Sample Report information.



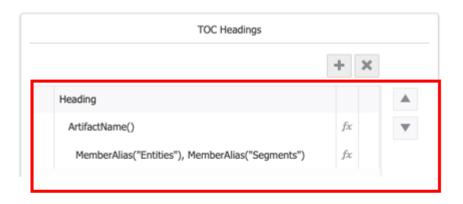
The default TOC header for the Sample Report in the preceding image include the following text functions: ArtifactName(); MemberName("Entities"); MemberName("Segments"); MemberName("Fiscal Calendar")

To edit the existing text function, you can double-click on the text field and manually enter the text function.

The text box displays a black border, similar to the following image:

```
; MemberName("Segments") ; MemberName("Fiscal Calendar")
```

- 4. You can manually enter a text or text functions into the field. You can also click on **Function** to insert the available or supported text functions.
- 5. After entering the text function, you can press the **Enter** key to exit the edit mode and accept all the updates.
- 6. You can add TOC header rows by clicking **Add** to define hierarchical TOC headers. For example, displaying the report name first, followed by POV members.

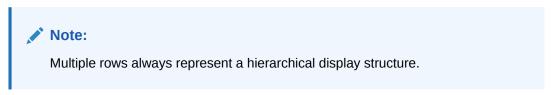


Output of Table of Contents



Optional: If multiple TOC Header rows exist, you can move the selected row up or down by clicking on the Move Up or Down buttons.





8. Optional: To delete a selected row, click Delete - .

Working with Sections

You can insert a Section into a Book for the following scenarios:



- For a group of reports with common member selections across one or more Point of View (POV) dimensions. For example, you need to run 3 reports for 100 different Departments.
- Specify heading text to appear in the TOC.
- For a group of reports at the same level for TOC display.

Section 1	3
Sample Report 4	3
E01; AS	3
E01; Seg01	
E01; Seg02	
E02 ; AS	6
E02; Seg01	7
E02; Seg02	
Sample Report 1	9
HA	
AG	
Section 2	11
Sample Report 4	11
E03 ; HA	11
E03 ; AG	12
E04 ; HA	13
E04 ; AG	14

Note:

Multiple Sections can be nested to run different reports across a POV dimension hierarchy or across multiple dimensions.

Watch this tutorial video, you'll learn how to work with book sections.



You can use sections in books to loop through multiple reports and member selections, and group reports at one level for your table of contents display. In this video, you learn how to work with book sections in Narrative Reporting.

Working with Sections:

- To insert a Section, see Managing Documents in a Book.
- To set a Point of View for a Section, see To set up the POV for a Section.
- For examples of using Sections, see Book Examples.

Working with Multiple Data Sources

For reports, Books and Sections with multiple data sources, any common dimensions across data sources are combined so that a single POV selection can affect the different data sources.

You can use **Manage Data Source** in the Book Actions menu, to add data sources to the Book, change a data source used in the book to another one, or set the priority of data sources used to display in the POV for common dimensions.

You can use **Manage Data Source** in the Section, report or inserted Book's Actions menu, to add data sources, change a data source used to another one, or set the priority of data sources used to display in the POV for common dimensions.

Let's look at a few examples of using multiple data sources in a Book with a common POV dimension. The data sources used in these examples are as follows:

 <u>Sample Model 2:</u> A modified Narrative Reporting Sample Model, with two dimensions (Scenario and Entity) renamed to match dimension names in the Planning Vision Plan1 application/cube.



The Narrative Reporting Sample Application or Model is no longer available to new EPM Cloud Narrative Reporting customers as of July 2020.

Planning Vision Plan1: The Planning business process sample Application and Cube.

The reports used in the following examples are as follows. All three reports have the "Scenario" and "Entity" dimensions in the POV. The "Scenario" dimension selections are Actual and Plan, the "Entity" dimension selection is Total Entity. The POV selections for both dimensions are valid for both data sources.

- Sample Report 1 (Model 2) uses the "Sample Model 2" data source
- Sample Planning uses the "Planning Vision Plan1" data source
- Sample Multi Source Report has two grids, one using the "Sample Model 2" data source and one using the "Planning Vision Plan1" data source.

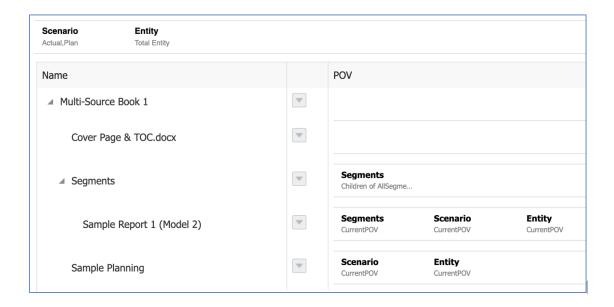
Example 1

This Book contains the Sample Report 1 (Model 2) and Sample Planning report. Sample Report 1 (Model 2) is part of a Section (Segments).

Note the following points:

- The Scenario and Entity dimensions are both in the Book POV.
- The POV dimension selections for both reports are all set to **Current POV**, which means that they will be run for either the Book or Section POV selections, where applicable.
- The cascading POV selection for the Segments Section is Children of AllSegments, Inclusive. Sample Report 1 (Model 2) will be run for each of the Segment members in the Section POV, and for the Scenario, and Entity selections in the Book POV.
- The Sample Planning report will be run for the Scenario and Entity. selections in the Book POV.

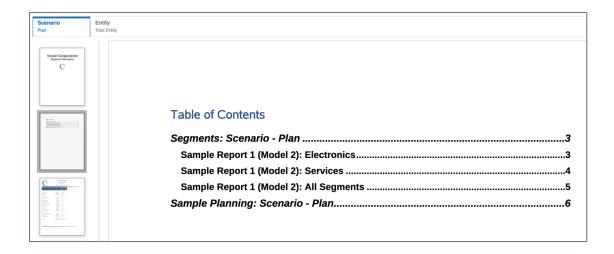




Note:

In the Book preview, both reports are run for "Plan" which is selected in the Book POV.

The TOC headings for the **Section** and **Sample Planning** report were customized to display the Scenario POV selection.



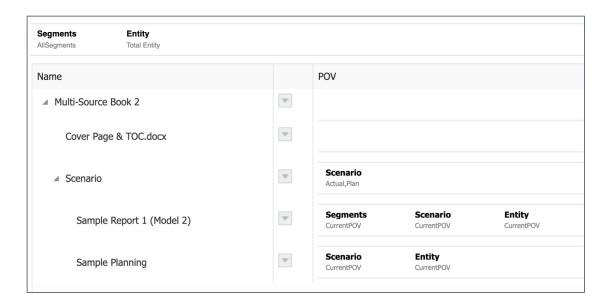
Example 2

This Book contains the **Sample Report 1 (Model 2)** and **Sample Planning** reports. Both reports are part of a Section (Scenario).

Note the following points:

 The Segments and Entity dimensions are both in the Book POV, both are hard-coded for a single selection.

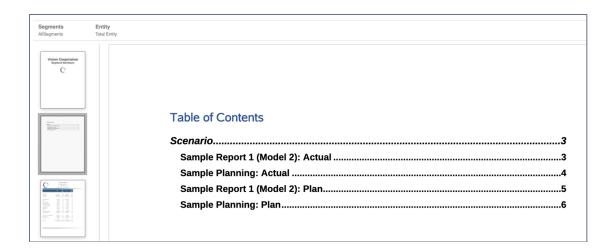
- The POV dimension selections for both reports are all set to **Current POV**, which means that they will be run for either the Book or Section POV selections, where applicable.
- The cascading POV selection for the Scenario Section is "Actual" and "Plan". Both reports
 will be run for each of the Scenario members in the Section POV, and for the Segments
 (Sample Report 1 Model 2 only) and Entity selections in the Book POV.





In the Book preview, both reports are run for "Actual" and "Plan" which are defined in the Section.

The TOC headings for both reports were customized to display the Scenario POV selection.

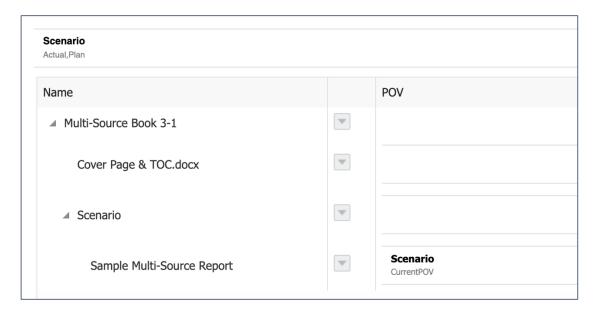


Example 3

This Book contains the **Sample Multi-Source** report, which is part of a Section (Scenario).

Note the following points:

- The Scenario dimension is in the Book POV, with "Actual" and "Plan" selected.
- The POV dimension selection for the report is set to **Current POV**, which means that the report will be run for the Book POV selections, as a Section POV is not defined.



The following image displays the Book run with a Book POV of "Actual" selected.





Working with Bursting

Related Topics

- About Bursting
- Prerequisites
- Simple Steps for Creating a Bursting Definition
- Creating a new Bursting Definition
- Working with the Bursting Definition Actions Menu
- Limitations for Creating a Bursting Definition
- Using Prompts with a Bursting Definition
- Using a Bursting Definition with Multiple Data Sources
- Setting Access Permissions for a Bursting Definition

About Bursting

Using Bursting you run a single report or book for more than one member of a single dimension for one data source, and publish output for each member.

When bursting a report or book, you can publish to either **PDF** or static (not refreshable in Smart View) **Excel** workbooks

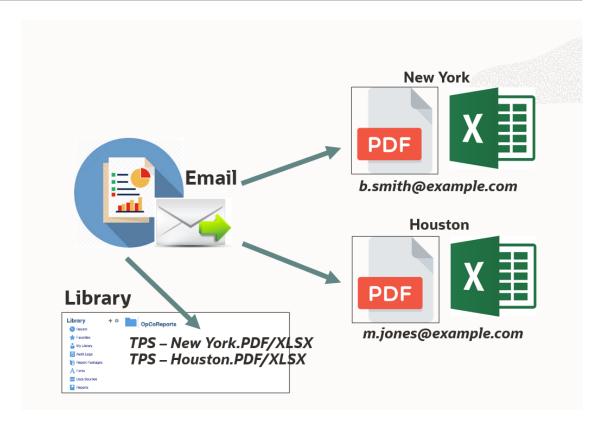
Using Bursting, you can send an email with the published output files attached to a specified recipient list. You can also save the published output files to the Library. You can also both email and save the published output files to the Library.

In Narrative Reporting deployments, the **Scheduling** feature is not supported via the Narrative Reporting Web User Interface; however, you can perform scheduling tasks via EPM Automate commands.

In Oracle Enterprise Performance Management Cloud deployments, scheduling for bursting definitions is done via the EPM Cloud Platform Job Scheduler.

Let's consider an example of how **Bursting** can run a **Report** or **Book** for two entities, such as **New York** and **Houston**, publishing to output.

- You want to send the output file for the **New York** location to the specific email recipient b.smith@example.com.
- Similarly, you want to send the output file for the **Houston** location to the specific email recipient m.jones@example.com.
- You can save the generated output files into the Library, and based on the user permissions, you can view or access the published output documents.



You can configure success and failure notification emails to send details of the bursting execution status.

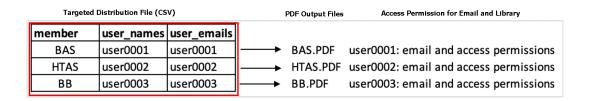
You can use a **Targeted Distribution File**, which is a Comma Separated Value (CSV) file that defines the list of members to burst on, along with corresponding email addresses and users or groups for Library permissions.

Using the Targeted Distribution File, you can do any of the following:

- Send the output files to system users and groups, as well as external email addresses.
- Set the Library access permissions for the system users and groups.

You can generate the Bursting output in three ways:

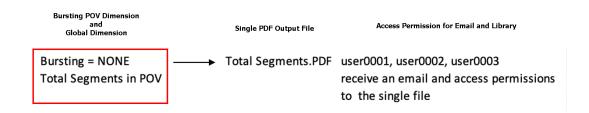
 You can use a Targeted Distribution File (CSV) to send separate emails and Library access permissions for each member's output file.



 You can select the Send all generated reports in a single email option from the Email channel, and the Targeted Distribution File is not used.



You can define the **Bursting POV Dimension** to **None**. This will enable you to send a single output file to email to specified users, and publish the output file to the Library.



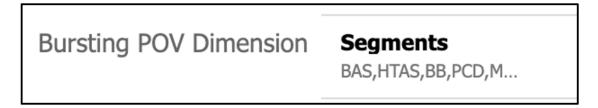
Using a Targeted Distribution File with Email Channel Enabled

Let's consider the first use-case, after selecting the **Targeted Distribution File**, and choosing the **Email** only.

The following image is the Targeted Distribution file.

member	user_names	group_names	external_emails	user_emails	group_emails
BAS	user0001		jane.q.public@company.com	user0001	
HTAS	user0002		jane.q.public@company.com	user0002	
ВВ	user0003		jane.q.public@company.com	user0003	
PCD	user0004		zachary.smith@company.com	user0004	
MP3	user0005		zachary.smith@company.com	user0005	

The Bursting POV Dimension has members selected.



A separate Email is sent for each member output.

Subject: Reports are here...

▼ Sent By 🎎 no.reply@epm.oraclecloud.com On: June 3, 2020 8:49 AM

To: jane.q.public@company.com

Attachments: Income Statemen... - Boom Box.pdf (50.6 KB, download)

Using a Targeted Distribution File with Library Channel Enabled

Let's consider the second use-case, after selecting the **Targeted Distribution File**, and choosing the **Library** only.

The following image is the Targeted Distribution file.

member	user_names	group_names	external_emails	user_emails	group_emails
BAS	user0001		jane.q.public@company.com	user0001	
HTAS	user0002		jane.q.public@company.com	user0002	
ВВ	user0003		jane.q.public@company.com	user0003	
PCD	user0004		zachary.smith@company.com	user0004	
МР3	user0005		zachary.smith@company.com	user0005	

The following image shows the Bursting POV Dimension has members selected.

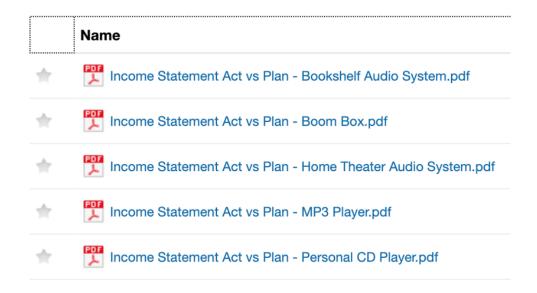
Bursting POV Dimension

Segments

BAS,HTAS,BB,PCD,M...

The following image shows the output files in Narrative Reporting Library.





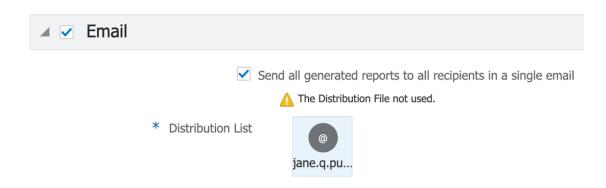
Using a Targeted Distribution File with Both Email and Library Channel Enabled

Let's consider the last use-case, after selecting the **Targeted Distribution File**, and choosing both the **Email** and **Library** options.

Note: If both Email and Library channels are selected, you can select both Send all generated reports in a single email, and Assign permissions to the generated reports with Distribution List and User List defined, and vice versa.

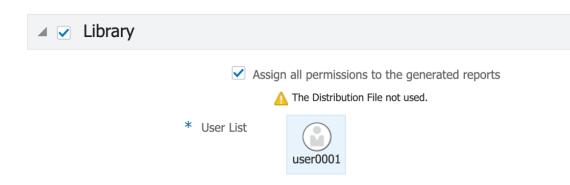
<u>Option 1</u>: Select both options: **Send all generated reports in a single email**, and **Assign permissions to the generated reports** with **Distribution List** and **User List** defined.

In Email, select the Send all generated reports in a single email option.

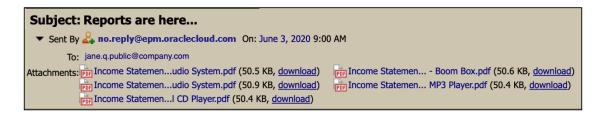


In **Library**, select the **Assign permissions to the generated reports** option.

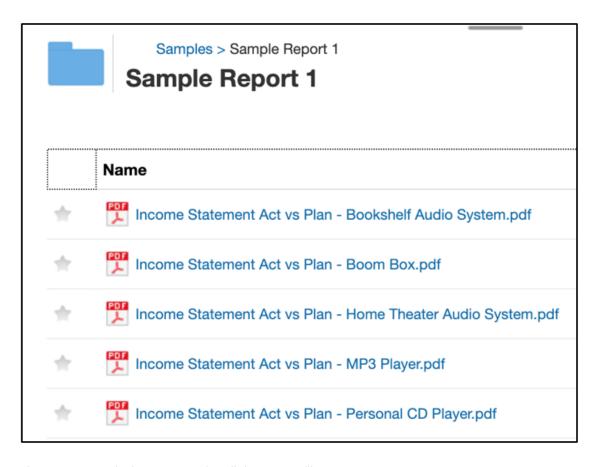




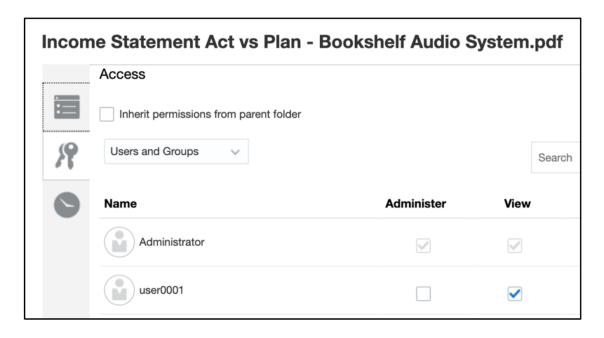
A single email is sent for all members.



The output reports are located in the Narrative Reporting Library.

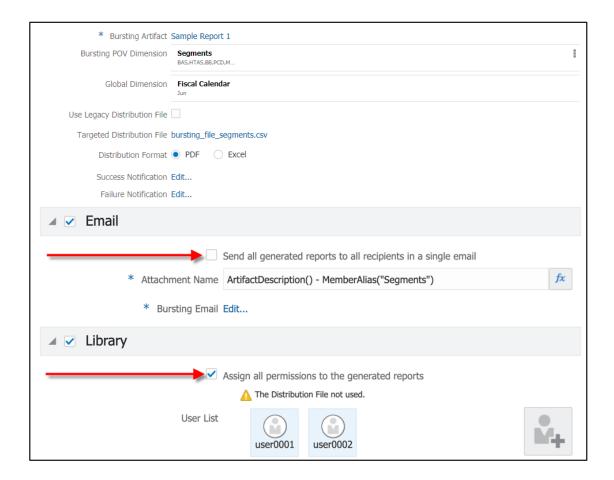


The user's permissions are set for all the output files.



<u>Option 2</u>: Select the <u>Assign permissions to the generated reports</u> from the <u>Library</u> channel with <u>Distribution List</u> and <u>User List</u> defined.

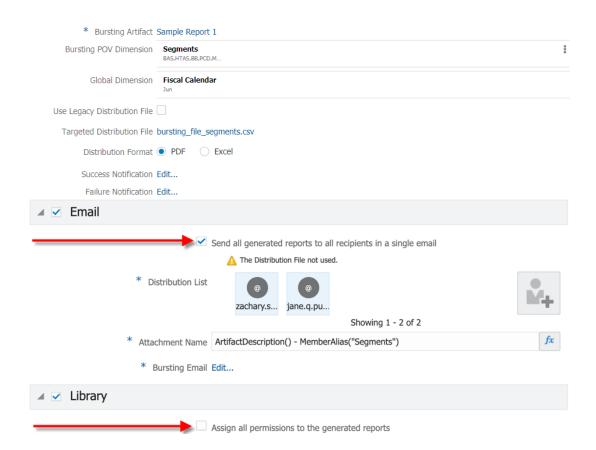
You don't select the **Send all generated reports in a single email** from the **Email** channel, but you define all other options such as **Attachment Name** and **Bursting Email**.





<u>Option 3</u>: Select **Send all the generated reports to all recipients in a single email** from the **Email** channel, and you define the **Distribution** lists.

You don't select the **Assign permissions to the generated reports** from the **Library** channel, and you define all other options such as **Artifact Name**, **Root Folder**, and **Users List**.



For more information, see the following videos and tutorials.

Watch this overview video, you'll learn more about the Bursting.



This video orients you with bursting, a new capability enabling you to quickly run financial or management report or book for multiple members in the same dimension, publish the output for each member as a PDF, and distribute the PDF to different recipients by email or publication in the library.

Watch this tutorial video, you'll learn how to create a Bursting Definition.



You learn how to create bursting definitions, which define all the required selections and settings to generate and distribute PDF output of a report or book with the desired POV member selections.

Prerequisites

Before you start using the **Bursting** feature, you must review the following:

- You must ensure the report or book used in the bursting definition has a POV Dimension exposed (changeable) that can be used as a bursting POV dimension, if required.
- Create a Targeted Distribution File, if needed. In Narrative Reporting deployments, a
 sample bursting file, bursting_file_empty.csv, is available within the Reports Samples.
 For more information, see Installing Samples. In EPM Cloud deployments, create a
 bursting file using the format outlined in Using a Targeted Distribution File.

Simple Steps for Creating a Bursting Definition

Table 13-1 How to create a Bursting Definition

Tasks	Perform these Sub Tasks	For More Information
Creating a new Bursting Definition	You can create a new Bursting Definition in three ways: Log into Narrative Reporting. From the Library, in any non-system folder, click Add and select Bursting from the menu. From the Narrative Reporting Home page, click Bursting From the Narrative Reporting Welcome Panel, click Create, and then select Bursting.	Creating a new Bursting Definition
Selecting a Bursting Artifact	You can select either a Report or Book.	Selecting a Bursting Artifact
Setting the Bursting Point of View	 You can set the Bursting POV Dimension for a Report or Book. To set the Bursting POV: The Bursting POV Dimension, where you can select a POV dimension and the required members to run the bursting operation. The Global Point of View (POV) allows selecting members for dimensions that are defined within a Report or Book. 	Setting the Bursting Point of View



Table 13-1 (Cont.) How to create a Bursting Definition

Tasks	Perform these Sub Tasks	For More Information
Using the Targeted Distribution File	 The Targeted Distribution File is a Comma Separated Value (CSV) file that defines the list of members to burst on, along with corresponding Email addresses and users or groups for Library permissions. Using the Targeted Distribution File, you can do any of the following: Send an Email with the PDF output files to external users, system users, and groups. Set the Library access permissions for the system users and groups. Upload a CSV file from Local file system. Use the Targeted Distribution file in the Samples, as a starting point to create your own Targeted Distribution File. You can upload a CSV file from the Library. You have an option to save the Targeted Distribution CSV file along with the Bursting Definition, otherwise it is linked to the Library file. 	Selecting the Targeted Distribution File
Using the Legacy Distribution File	Using the Legacy Distribution CSV file, you can utilize a Legacy bursting CSV file that was previously used in the Financial Reporting. From the Use Legacy Distribution File in the bursting definition, you can upload a Legacy CSV file from Local file system.	Setting the Legacy Distribution File For more information on the Financial Reporting bursting CSV file, refer to the Hyperion Financial Reporting User's Guide.
Selecting a Distribution Format	When bursting a report, you can publish to PDF or static (not refreshable in Smart View) Excel workbooks. You specify a Distribution Format of either Excel or PDF.	Selecting a Distribution Format
Defining Success Notifications	 You can use the Success Notification to notify specific recipients of the successful execution of the Bursting Definition. You can send an Email to the system users and groups. You can send external Emails to the specified recipients. 	Defining Success Notifications
Defining Failure Notifications	 You can use the Failure Notification to notify specific recipients of the execution failure of the Bursting Definition. You can send an Email to the system users and groups. You can send external Emails to the specified recipients. 	Defining Failure Notifications



Table 13-1 (Cont.) How to create a Bursting Definition

Tasks	Perform these Sub Tasks	For More Information
Configuring the Email Channel for Bursting Definition	 To Email the generated output files, perform these steps: Create a Distribution List, if you are not using the Targeted Distribution File. Provide a unique Attachment Name for sending an Email with the output file attached. Compose an Email with Subject and Message body to the specified recipients. Optionally, Consolidate Attachments for a recipient into one email and ZIP Attachments. Note: You can send the generated report files to an external Email address. 	Configuring the Email Channel
Configuring the Library Channel for Bursting Definition	 To publish the output file to the Library, perform these steps: Create a system User List, if you are not using the Targeted Distribution File. Provide an Artifact Name for publishing the output file to the Library. Select a Root Folder in the Library. Set the Path Hierarchy information where the published output will be stored. 	Configuring the Library Channel
Managing Users	In the following configuration settings, you can add or remove the system users, and groups: Success Notification Failure Notification Email Channel Library Channel Note: For Library channel, you cannot provide an external email address.	Managing Users
Saving the Bursting Definition	Review all settings, make any necessary changes, and then click Save .	Saving the Bursting Definition
Working with Bursting Definition Action Menus	Validating the Bursting DefinitionManaging the Data SourcesExecuting the Bursting Definition	Working with the Bursting Definition Actions Menu
Using Prompts with a Bursting Definition	You can use a Report or Book that contains prompts.	Using Prompts with a Bursting Definition
Using a Bursting Definition with Multiple Data Sources	You can create a Bursting Definition for a Report or Book that contains multiple data sources. Any common dimensions across data sources are combined so that a single POV selection can affect the different data sources.	Using a Bursting Definition with Multiple Data Sources
Reviewing the Sample Bursting Definition Files	Use the samples as a guideline to create your own Bursting Definition Files.	Reviewing the Sample Bursting Definition Files



Table 13-1 (Cont.) How to create a Bursting Definition

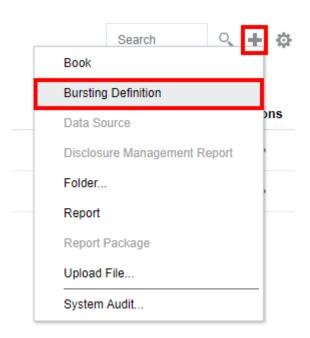
Tasks	Perform these Sub Tasks	For More Information
Set Access Permissions for Bursting Definition	You can set roles and access for the Bursting Definition.	Setting Access Permissions for a Bursting Definition

Creating a new Bursting Definition

For Narrative Reporting Deployments:

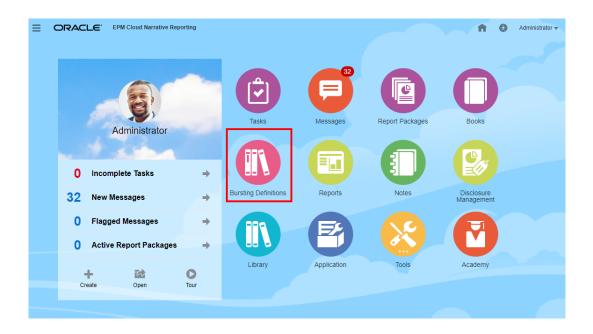
You can create a new **Bursting Definition** in the following ways:

 To create a new Bursting Definition from the Narrative Reporting system folder or in any non-system folder, click Add and select Bursting Definition from the menu.

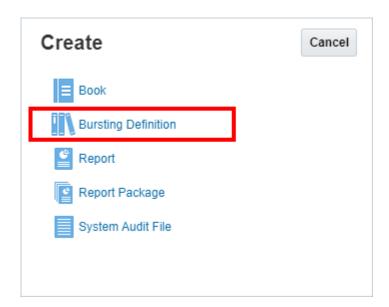


2. From the Home page, click **Bursting Definition**.

From the **Bursting Definition** pane, click **Add**



3. From the Home page, click Create, and select Bursting Definition.



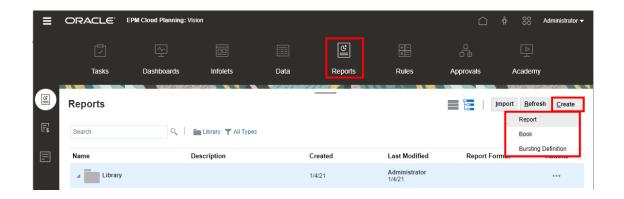
For Enterprise Performance Management Cloud Deployments:

You access the Bursting Definition:

From an Oracle Enterprise Performance Management Cloud service, select



Report card, and from the left pane select **Reports** icon, and click **Create** drop-down menu at the top of the content pane, and then click **Bursting** to launch the Bursting Definition Window.





For Tax Reporting Cloud Services, you need to navigate to the **Library**, and then select the **Reports** tab.

Related Topics:

- Selecting a Bursting Artifact
- Setting the Bursting Point of View
- Setting the Legacy Distribution File
- Defining Success Notifications
- Defining Failure Notifications
- Configuring the Email Channel
- Configuring the Library Channel
- Managing Users
- Saving the Bursting Definition
- Working with the Bursting Definition Actions Menu

For more information, see the following videos and tutorials.

Watch this tutorial video, you'll learn how to create a Bursting Definition.



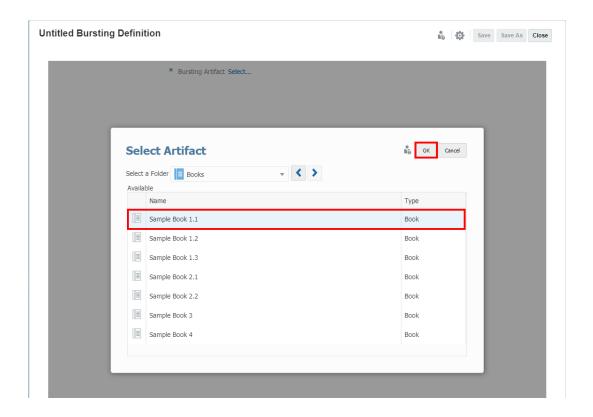
-- Creating Bursting Definitions.

You learn how to create bursting definitions, which define all the required selections and settings to generate and distribute PDF output of a report or book with the desired POV member selections.

Selecting a Bursting Artifact

To select a Bursting Artifact, perform the following steps:

- 1. In the Bursting Designer page, select a Bursting Artifact.
- 2. Click Select..., and then select the desired Books or Reports folder.
- From the Available pane, select a document (book or report), and then click OK.



Related Topics:

- Creating a new Bursting Definition
- Selecting a Bursting Artifact
- Setting the Bursting Point of View
- Setting the Legacy Distribution File
- Selecting the Targeted Distribution File
- Selecting a Distribution Format
- Defining Success Notifications
- Defining Failure Notifications
- Configuring the Email Channel
- Configuring the Library Channel
- Managing Users
- Saving the Bursting Definition
- Working with the Bursting Definition Actions Menu

Setting the Bursting Point of View

You can select a POV dimension and the required members to run the bursting operation in the Bursting POV Dimension.

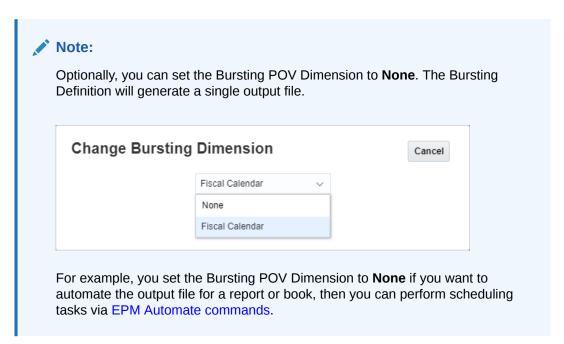
The Global Point of View (POV) displays all the members for dimensions that are defined within a report or Book.

To change the Bursting POV Dimension:

1. In the POV bar, click **Actions** - and then select **Change Bursting Dimension**.



2. In the **Change Bursting Dimension** dialog box, select a dimension from the drop-down list.



To select members for the Bursting POV Dimension:

- 1. Create a new **Bursting Definition** or select an existing **Bursting Definition** in edit mode.
- 2. In the **Bursting POV Dimension**, click on a dimension label to open the member selector for that dimension.
- 3. In the **Select Members** dialog box, in the drop-down list, either select **Members**, **Recent**, or **Functions** to assign to the selected report or Book.

Use the following conventions to select members.

- Click Expand > to drill into a parent member.
- Click Select

 to select and deselect a member.



Note:

A blue check mark indicates that a member is currently selected. A gray check mark when hovering over a member indicates that the member is not currently selected.

- Click **Function** fix next to a member to select the member using a function. See Assigning Members Using Functions.
- Click **Actions** in the Selector Pane to sort the members.

Note:

The following member selection functions are available for the Bursting POV dimension's member selections:

- Ancestors
- Bottom
- Children
- Descendants
- Except
- Intersect
- Match
- Parent
- Range
- RelativeMembers
- SameGeneration
- SameLevel
- Siblings
- Substitution Variables

Note:

The following member selection functions are not available for the Bursting POV dimension's member selections:

- Lists
- Generation
- Level

To select members for each Global Dimension:

1. Create a new **Bursting Definition** or select an existing **Bursting Definition** in edit mode.

- In the Global Dimension, click on a dimension label to open the Member Selector for that dimension.
- In the Select Members dialog box, in the drop-down list, either select Members or Recent to assign to the selected report or Book.

Use the following conventions to select members.

- Click Expand > to drill into a parent member.
- Click Select to select and deselect a member.

Note:

A blue check mark indicates that a member is currently selected. A gray check mark when hovering over a member indicates that the member is not currently selected.

4. Click OK.

Note:

Repeat steps above for any additional Global Dimensions.

Note:

- When using substitution and user variables as selections for the Bursting Point of View, Variable values are retrieved when the system first connects to the data source. The member selector and/or POV will display the Variable's value. When executing a Bursting Definition, the latest Variable value will be retrieved for the Reports in the Bursting Definition. If a Variable is used in the Bursting or Global POV and if the Variable value changes during a user's session, the change will not be reflected in the Variable value displayed in the member selector or POV, until the user reconnects to a new session by logging out and logging in again.
- For more information about using Variables in the member selector and POV, see Working with Substitution Variables and User Variables.

About Bursting Point of View Settings

The **Default Setting** is the dimension's default state when no member selections or options have been set for a POV dimension.

Selecting Multiple Members: You can select multiple members for a Bursting POV Dimension. You can use functions to define a list of members for the Bursting POV Dimension. For example, Children of Segments.

Related Topics:

- Creating a new Bursting Definition
- Selecting a Bursting Artifact



- Setting the Bursting Point of View
- Setting the Legacy Distribution File
- Selecting the Targeted Distribution File
- Selecting a Distribution Format
- Defining Success Notifications
- Defining Failure Notifications
- Configuring the Email Channel
- Configuring the Library Channel
- Managing Users
- Saving the Bursting Definition
- Working with the Bursting Definition Actions Menu

Selecting the Targeted Distribution File

The **Targeted Distribution** is a CSV file that defines the list of members to burst on, along with corresponding email addresses and users or groups for Library permissions.

To enable the **Targeted Distribution File**, perform the following:

- Create a new Bursting Definition or select an existing Bursting Definition in edit mode.
- 2. In Targeted Distribution File, click Select...

Note:

In Narrative Reporting deployments, the following Sample Targeted Distribution files are included with the Sample Management Reports:

- bursting file segments.csv
- bursting file empty.csv

In EPM Cloud deployments, create a bursting file using the format outlined in Using a Targeted Distribution File.

For more information, see Reviewing the Sample Bursting Definition Files

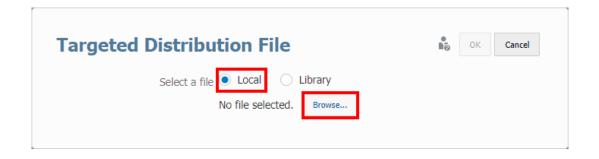
Note:

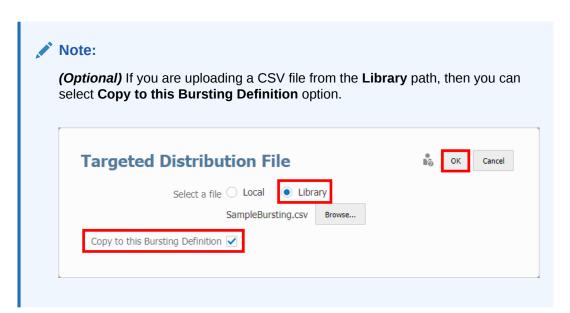
If you edit an existing **Bursting Definition** that contains a CSV file already, then the link will be displayed with the *File Name*.

If you want to change the CSV file, click on the *File Name*, click **Browse** to upload a different CSV file, either from **Local** or **Library**, and then click **OK**.

3. In **Targeted Distribution File**, click **Browse** to upload a CSV file, either from **Local** or **Library**, and then click **OK**.







Related Topics:

- Creating a new Bursting Definition
- Selecting a Bursting Artifact
- Setting the Bursting Point of View
- Setting the Legacy Distribution File
- Selecting the Targeted Distribution File
- Selecting a Distribution Format
- Defining Success Notifications
- Defining Failure Notifications
- Configuring the Email Channel
- Configuring the Library Channel
- Managing Users
- Saving the Bursting Definition
- Working with the Bursting Definition Actions Menu

Using a Targeted Distribution File

The following is an example of the Sample Targeted Distribution (CSV) file, which contains $level\ 0$ members from the **Segments** dimension and some fictitious (not real) user IDs and email addresses.

member	user_names	group_names	external_emails	user_emails	group_emails
BAS	user0001		jane.q.public@company.com	user0001	
HTAS	user0002		jane.q.public@company.com	user0002	
ВВ	user0003		jane.q.public@company.com	user0003	
PCD	user0004		zachary.smith@company.com	user0004	
MP3	user0005		zachary.smith@company.com	user0005	
DV1000					
DV2000					
DV3000					
DV4000					
DV5000					

Let's take a look at the column headings in the Target Distribution file.

Table 13-2 The Targeted Distribution CSV File

Column Heading	Description
member	Member name
user_names	User IDs with library permission
group_names	Group IDs with library permission
external_emails	External email addresses for the mailing list
user_emails	User IDs for the mailing list
group_emails	Group IDs for the mailing list

To include multiple user or group names or email addresses in a single field, use a comma to separate the multiple names or email addresses and surround them in double quotes.

For example:

Excel view:

Table 13-3 Review the Excel File with the Column Header information

member	user_names	group_names	external_emails	user_emails	group_emails
Seg01	user1		user1@company.com, user2@company.com	user1	
Seg02	user2		user4@company.com	user2	

CSV view:



member, user_names, group_names, external_emails, user_emails, group_emails
Seg01, user1,, "user1@company.com, user2@company.com ", user1,
Seg02, user2,, user4@company.com, user2,



When you edit the above data in **Excel** and save it as **CSV**, **Excel** automatically surrounds the cells containing the comma character within a single cell with double-quotes.

You can use the **Targeted Distribution Files** in three ways. You can either send an Email or Publish output files to the Library. You can perform both **Email** and **Library** options.

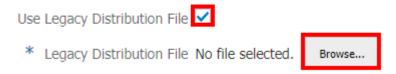
For more information, see About Bursting

Setting the Legacy Distribution File

You can utilize a Legacy bursting CSV file that was previously used in Financial Reporting (FR) by selecting the **Use Legacy Distribution File** in the bursting definition.

To enable the **Legacy Distribution File**, perform the following:

- 1. Create a new **Bursting Definition** or select an existing **Bursting Definition** in edit mode.
- 2. Select the Use Legacy Distribution File option.



3. In **Legacy Distribution File**, click **Browse** to upload the Financial Reporting Bursting CSV file from the **Local Drive**, and then click **OK**.



Related Topics:

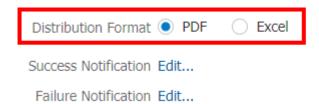
- Creating a new Bursting Definition
- Selecting a Bursting Artifact
- Setting the Bursting Point of View
- Setting the Legacy Distribution File
- Selecting the Targeted Distribution File
- Selecting a Distribution Format
- Defining Success Notifications

- Defining Failure Notifications
- Configuring the Email Channel
- Configuring the Library Channel
- Managing Users
- Saving the Bursting Definition
- Working with the Bursting Definition Actions Menu

Selecting a Distribution Format

To choose the **Distribution Format** for Reports, perform the following:

- 1. Create a new Bursting Definition or select an existing Bursting Definition in edit mode.
- 2. In Distribution Format, select either PDF or Excel.



Related Topics:

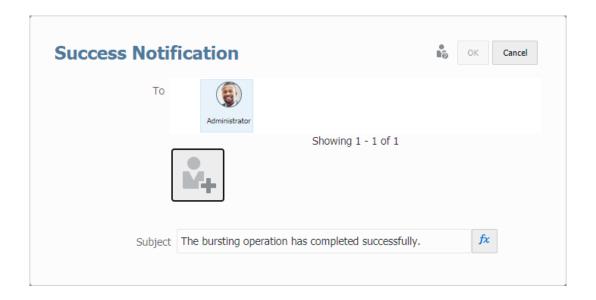
- Creating a new Bursting Definition
- Selecting a Bursting Artifact
- Setting the Bursting Point of View
- Setting the Legacy Distribution File
- Selecting the Targeted Distribution File
- Selecting a Distribution Format
- Defining Success Notifications
- Defining Failure Notifications
- Configuring the Email Channel
- Configuring the Library Channel
- Managing Users
- Saving the Bursting Definition
- Working with the Bursting Definition Actions Menu

Defining Success Notifications

Use Success Notifications to send defined recipients email notifications of bursting execution status.

To define Success Notifications, perform the following steps:

- 1. Create a new **Bursting Definition** or select an existing **Bursting Definition** in edit mode.
- In Success Notification, click Edit....



3. In the Success Notification dialog box, click to launch the Manage Users dialog box.

See the Managing Users topic for more information on defining system users, groups, and external email addresses.

4. (Optional) In the Subject, you can modify the text and add a text function.

The Subject field supports only these functions: ${\tt DateTime}$, ${\tt ArtifactName}$, and ${\tt ArtifactDescription}$.

5. Click **OK** to close the Success Notification dialog box.



Related Topics:

- Creating a new Bursting Definition
- Selecting a Bursting Artifact
- Setting the Bursting Point of View
- Setting the Legacy Distribution File
- Selecting the Targeted Distribution File
- Selecting a Distribution Format
- Defining Success Notifications



- Defining Failure Notifications
- Configuring the Email Channel
- Configuring the Library Channel
- Managing Users
- Saving the Bursting Definition
- Working with the Bursting Definition Actions Menu

Defining Failure Notifications

Use Failure Notifications to send defined recipients email notifications of bursting execution status.

To define Failure Notifications, perform the following steps:

- 1. Create a new Bursting Definition or select an existing Bursting Definition in edit mode.
- 2. In Failure Notification, click Edit....
- 3. In the **Failure Notification** dialog box, click to launch the **Manage Users** dialog box.

See the Managing Users topic for more information on defining system users, groups, and external email addresses.

4. Optional: In the Subject, you can modify the text and add a text function.

The Subject field supports only these functions: DateTime, ArtifactName, and ArtifactDescription.

5. Click **OK** to close the Failure Notification dialog box.



Related Topics:

- Creating a new Bursting Definition
- Selecting a Bursting Artifact
- Setting the Bursting Point of View
- Setting the Legacy Distribution File
- Selecting the Targeted Distribution File
- Selecting a Distribution Format
- Defining Success Notifications



- Defining Failure Notifications
- Configuring the Email Channel
- Configuring the Library Channel
- Managing Users
- Saving the Bursting Definition
- Working with the Bursting Definition Actions Menu

Configuring the Email Channel

Using the **Email** channel, you can define the attachment (file) name, the bursting email, and optionally choose to send all the output files to selected users, groups, and email addresses.

To set the **Email** options, perform these steps:

- 1. Create a new **Bursting Definition** or select an existing **Bursting Definition** in edit mode.
- 2. Select the **Email** channel checkbox.
- 3. You can optionally select Send all generated reports to all recipients in a single email to forego using the Targeted Distribution File and send all the output files to selected users, groups, and email addresses.
- 4. In **Distribution List**, click to launch the **Manage Users** dialog box.

See the Managing Users topic for more information on defining system users, groups, and external email addresses.

- To define the Attachment Name, you can use a combination of hard coded text and text functions.
 - To insert a text function. Click to The following text functions are supported:
 - DateTime
 - MemberName
 - MemberAlias
 - ArtifactName
 - ArtifactDescription

In between text functions, you can enter special characters such as **Underscore** or **Hyphen** as a separator.

For example, you can consider the following:

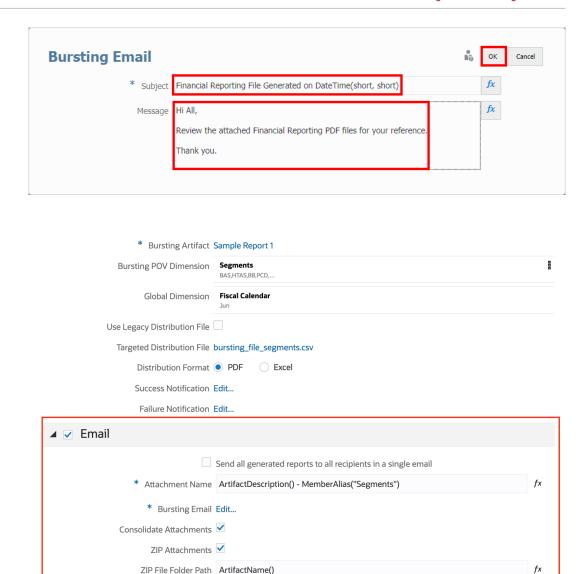
ArtifactDescription()_MemberAlias("Fiscal Calendar").

- Click Select to close the Text Functions dialog box.
- In Bursting Email, select Edit....
- In the Bursting Email dialog, enter the Subject and the Message body in the respective fields, and then click OK.

(Optional) You can select the text functions for the Subject and the Message body.

The following text functions are supported: DateTime, ArtifactName, and ArtifactDescription.





 Optionally, you can select Consolidate Attachments, which will consolidate all bursting output email attachments for a single user into one email. For newly created bursting definitions, Consolidate Attachments are enabled by default and will not be visible.

In addition, you can optionally select **ZIP Attachments** to consolidate bursting output email attachments into a ZIP file. You can also specify a **ZIP File Folder Path** to create folders within the ZIP file.

You can refer to step 5 above for information on specifying text and text functions for the ZIP File Folder Path.



Any bursting output of duplicate file names is exported to a ZIP file for emailing, the file names will be appended with a numbered suffix, for example, (1), (2), (3),... and so on. This differs from the **Library** channel behavior, where duplicate member names are overwritten when the **Overwrite** option is enabled.

Related Topics:

- Creating a new Bursting Definition
- Selecting a Bursting Artifact
- Setting the Bursting Point of View
- Setting the Legacy Distribution File
- Selecting the Targeted Distribution File
- Selecting a Distribution Format
- Defining Success Notifications
- Defining Failure Notifications
- Configuring the Email Channel
- Configuring the Library Channel
- Managing Users
- Saving the Bursting Definition
- · Working with the Bursting Definition Actions Menu

Configuring the Library Channel

Using the **Library Configuration**, you can define the artifact (file) name, select the Library root folder and path hierarchy (folder path) and optionally choose to assign all permissions to the output file to selected users and groups.

To set the **Library** options, perform these steps:

- 1. Create a new Bursting Definition or select an existing Bursting Definition in edit mode.
- 2. Select the **Library** channel checkbox.
- 3. You can optionally select **Assign all permissions to the generated reports** to forego using the Targeted Distribution File and assign the Library access to all the output files to selected users and groups.
- 4. In **User List**, click to launch the **Manage Users** dialog box.

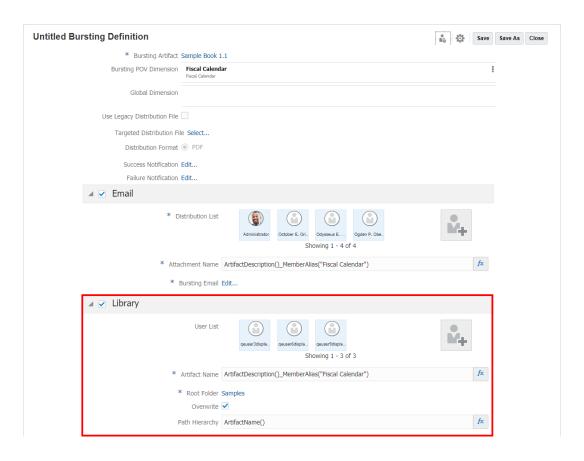
See the Managing Users topic for more information on defining system users, and groups. You cannot provide an external email address.

- 5. To define the **Attachment Name**, and **Path Hierarchy**, you can use a combination of hard coded text and text functions.
 - To insert a text function. Click f . The following text functions are supported:
 - DateTime
 - MemberName
 - MemberAlias
 - ArtifactName
 - ArtifactDescription

For example:



- For the Attachment Name: ArtifactDescription() MemberAlias("Fiscal Calendar") will return the report description and alias for each Segment member, such as: Income Statement Act vs Plan Boom Box.pdf
- For the Path Hierarchy: Report/ArtifactName() will create a folder structure with Report as subfolder under the Root Folder, and the report name as a subfolder under it: Report/Sample Report 1
- Click Select to close the Text Functions dialog box.
- 6. In Root Folder, select a folder, and then click OK.
- 7. Select the **Overwrite** option to replace the existing output files in the Library.



Related Topics:

- Creating a new Bursting Definition
- Selecting a Bursting Artifact
- Setting the Bursting Point of View
- Setting the Legacy Distribution File
- Selecting the Targeted Distribution File
- Selecting a Distribution Format
- Defining Success Notifications
- Defining Failure Notifications
- Configuring the Email Channel
- Configuring the Library Channel



- Managing Users
- Saving the Bursting Definition
- Working with the Bursting Definition Actions Menu

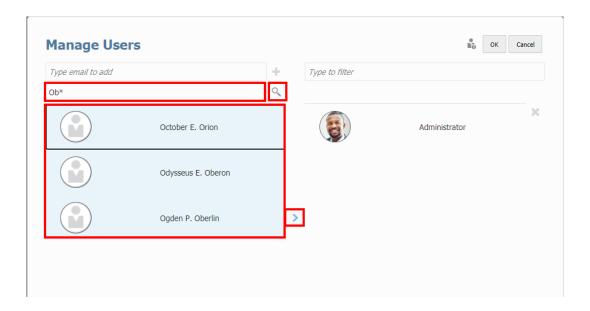
Managing Users

Search Options:

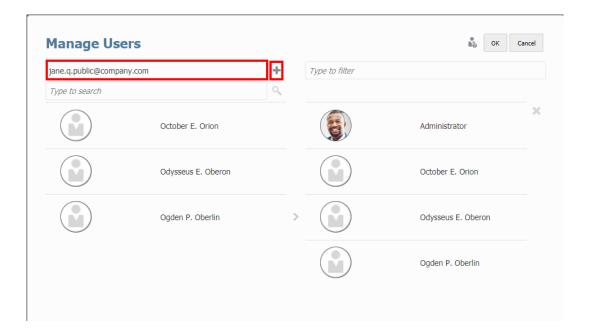
- You can search for system users or groups.
- You must provide at least one character to search for relevant users or groups.
- You can use an asterisk (*) to perform a wildcard search. For example, in the **Search** field, you can type these three characters: Ob* to locate all users whose name contains Ob.
- You cannot provide an external email address from the Library channel.

To add users to the list, perform these steps:

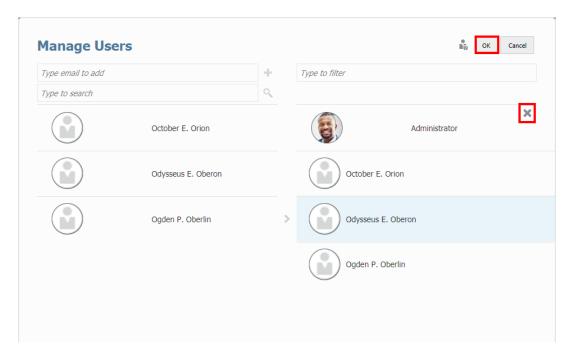
- Click to launch the Manage Users dialog box.
- 2. In **Manage Users**, select one or more users from the **Available** list in the left pane, and click the **Move Right** button to move the desired users or groups to the **Selected** pane on the right.



3. You can provide an external email address from the **Email** channel.



4. (Optional) To remove a user, select the user, and then click imes.

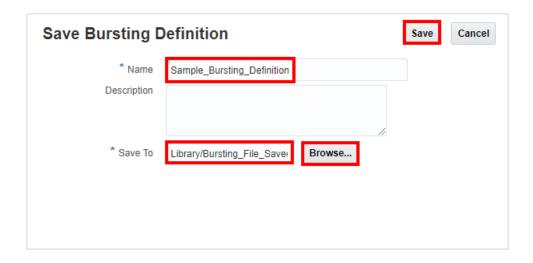


5. Click **OK** to close the Manage Users dialog box.

Saving the Bursting Definition

To save the Bursting Definition:

- Click Save or Save As from the Bursting Editor.
- 2. In **Save Bursting Definition**, enter a **Name**, and then click **Browse** to save the Bursting Definition to the Library.



Click Save.

Working with the Bursting Definition Actions Menu

You can use Actions menu to do the following:

- Validate the Bursting Definition Configuration settings.
- Manage Data Source for a Bursting Definition.
- Execute the Bursting Definition.

Validating the Bursting Definition

This action validates that the bursting definition configuration settings are valid.

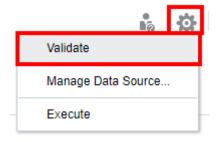
For example, the validation rule verifies the following:

- The report or Book in the Bursting Definition exists in the Library.
- All the POV selections in the Bursting Definition are valid.
- All the Email and Library channel configuration settings are correct.

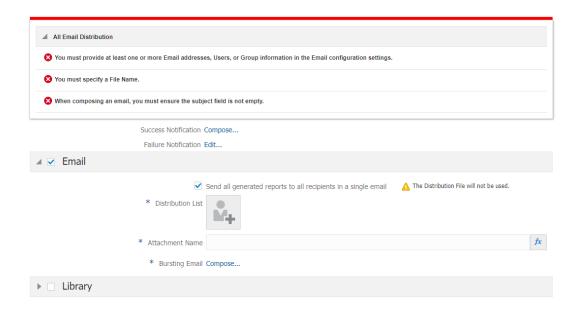
To perform a validation on the Bursting:







If any validation errors occur, then the system will display all validation errors in a red line dialog box at the top of the **Bursting Definition**.





You must resolve all validation errors and ensure that the Bursting Definition is valid before executing it.

Managing Data Sources

Manage Data Source enables you to perform these tasks:

- Reorder the data sources in the Bursting Definition. If the report or book has multiple data sources, the first data source is used for Bursting and Global POV member selection, in the case where there are matching dimensions between the data sources.
- Manage the Alias tables used in the Bursting Definition. If an Alias table is not selected, the
 default Alias table for the user executing the bursting definition will be used.

For more information, see the following links:

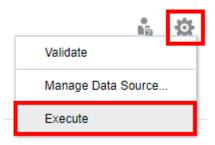
- Reordering the Data Source
- Managing Alias tables in the Bursting Definition

Executing the Bursting Definition

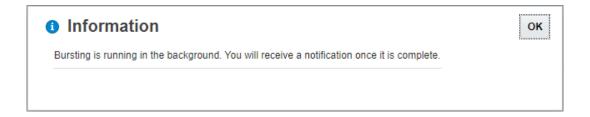
To run the Bursting Definition:

1. From the **Bursting Definition** page, click **Actions** - and then select **Execute**.





2. In Information dialog box, click OK.



3. After executing the **Bursting Definition**, check for a **Success** or **Failure** email notification.

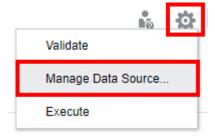
Reordering the Data Source

You can change the order in which data sources are evaluated in Bursting. The data source order affects the default data source for POV dimensions with the same name, to display in the combined POV member selector for the selected bursting artifact.

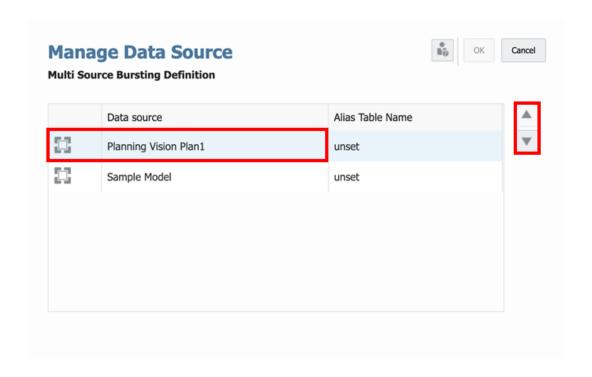
You can set the order of data sources used to display in the POV for common dimensions.

You can reorder the data sources.

 From the Bursting Definition page, click Actions - and then select Manage Data Source.



2. In Manage Data Source, select the desired data source to reorder.



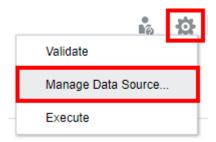
3. Click or to reorder the data source. Click ok.

Managing Alias tables in the Bursting Definition

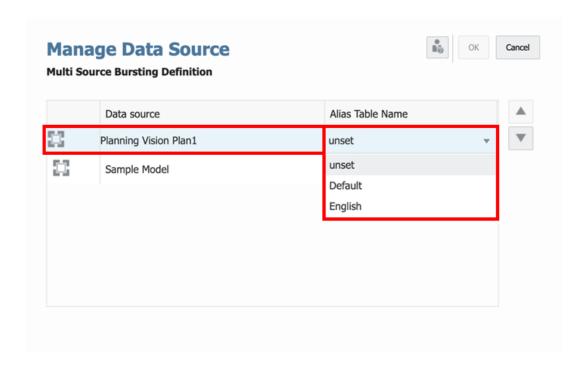
You can change the alias table used in the MemberAlias text functions for Bursting and any containing Report or Book which does not have a hard-coded alias table.

To manage the alias tables used in the Bursting Definition, perform an action:

 From the Bursting Definition page, click Actions - and then select Manage Data Source.



2. In the Manage Data Source dialog box, double click on the Alias Table Name for a data source, and then select the desired alias table from the drop-down list.



3. Click **OK** to save your changes and close the dialog box.

Limitations for Creating a Bursting Definition

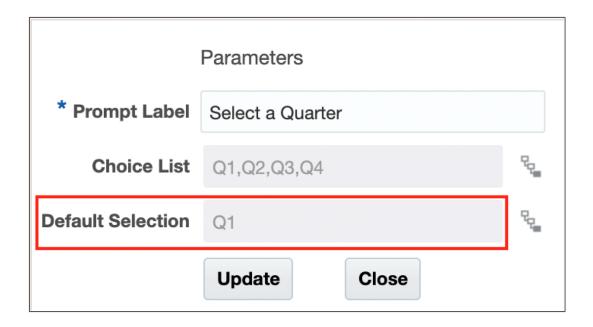
Note the following limitations for creating a bursting definition:

- Only one Report or Book is supported in a bursting definition.
- For sending emails there is a 10 MB file attachment limit for each email.
- There currently is a maximum limit of 1000 members in a bursting dimension query.
- Migration from Financial Reporting batches or scheduled batches is not supported, due to differences in functionality and underlying architecture.

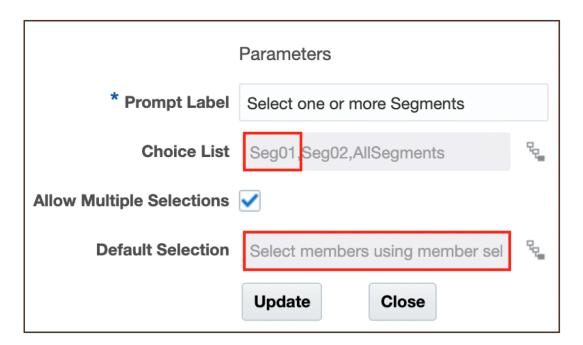
Using Prompts with a Bursting Definition

If a Report or Book contains prompts, then the Bursting Definition will run a Report or Book using the members selected in the prompt definition.

• If the Default Selection is defined in the prompt, the selection in the Default Selection is used to execute the prompt.



• If the prompt does not have a Default Selection defined, the first member in the Choice List is used to execute the prompt.



The output of the report prompt is displayed.



If either the **Default Selection** or **Choices List** are not defined, the dimension parent member is used to execute the prompt.

Using a Bursting Definition with Multiple Data Sources

You can create a Bursting Definition for a Report or Book that contains multiple data sources. Any common dimensions across data sources are combined so that a single POV selection can affect the different data sources.

- A common dimension with common members in the Bursting POV Dimension will apply the burst to the multiple data sources across the common dimension and members.
- Common dimensions with common member selections in the Global Dimensions will have the common POV dimension member selections applied to the multiple data sources.

Let's look at the example of using multiple data sources in a Report with a common POV dimension, publishing to output. The data sources used in the example are as follows:

- <u>Sample Model 2:</u> A modified Narrative Reporting Sample Model, with three dimensions renamed to match dimension names in the Planning Vision Plan1 application or cube.
- Planning The Planning business process sample Application and Cube.

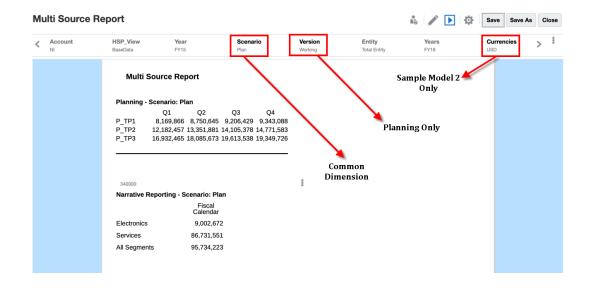
The following three common dimensions are:

- <u>Scenario</u>: Actual and Plan members are common. The Scenario dimension is used for the Bursting POV Dimension.
- <u>Entity</u>: Total Entity is the only common member between the data sources. It is selected
 with Display Selections Only enabled; therefore, it is not a selectable POV dimension in
 the report or the Bursting POV Dimension.
- <u>Account</u>: Account does not have common members. NI (Planning) is selected in the report's global POV, 340000 is selected for the local POV for the Sample Model 2 grid.

Let's consider a report named Multi_Source_Report.

The report used in the following example is as follows:

- Grid Narrative Report uses the "Sample Model 2" data source
- Grid Planning Report uses the "Planning" data source
- Sample Multi Source Report has two grids, one using the "Sample Model 2" data source and one using the "Planning" data source.





- The Bursting POV Dimension will run the report for each of the Scenario members for both data sources.
- The **Global Dimension** defines the member selection for the remaining POV dimensions for both data sources.



Note the following points:

- The Bursting POV Dimension selection is set to Scenario, where the Scenario POV will run for Actual, and Plan.
- The Currencies and Version dimensions are both in the Global POV Dimension.

The Bursting Definition Outputs are displayed:

The following image shows the consolidated output file for Scenario: Actual



Multi Source Report

Planning - Scenario: Actual

Q1 Q2 Q3 Q4
P_TP1 #MISSING #MISSING #MISSING #MISSING
P_TP2 #MISSING #MISSING #MISSING #MISSING
P_TP3 #MISSING #MISSING #MISSING #MISSING

Narrative Reporting - Scenario: Actual

Fiscal

Calendar

Electronics 5,127,399

Services 56,514,185

All Segments 61,641,584

• The following image shows another consolidated output for **Scenario**: Plan



Multi Source Report

Planning - Scenario: Plan

Q1 Q2 Q3 Q4
P_TP1 8,169,866 8,750,645 9,206,429 9,343,088
P_TP2 12,182,457 13,351,881 14,105,378 14,771,583
P_TP3 16,932,465 18,085,673 19,613,538 19,349,726

Narrative Reporting - Scenario: Plan

Fiscal

Calendar

Electronics 9,002,672

Services 86,731,551

All Segments 95,734,223

Setting Access Permissions for a Bursting Definition

The system administrator role can view and maintain all Bursting Definitions. There are three types of permissions that can be assigned to users:

Table 13-4 Defining user roles and their tasks for Bursting

User Role	User Task	
System or Service Administer	 Create a Bursting Definition Import, Export, Delete, Update, and View a Bursting Definition Add, View, Edit, and Delete user assignment for a Bursting Definition The creator of a Bursting Definition has Administer permission 	
Report Administrator Viewer	 Create a Bursting Definition Delete, Update, and View the Report View the published output files in the Narrative Reporting Library 	

The Report Administrator and System Administrator roles can create a new Bursting Definition in the Reports.

Access Permission Group (APG) enables you to define the permission on the Bursting Definition to manage Reporting users.

Two types of permissions can be defined:

- Read
- Write



A

Best Practices and Troubleshooting Topics

Related Topics

- Reports Design Considerations
- Best Practices for Designing Reports
 This table provides links to the best practices topics mentioned in this guide.
- FAQs and Troubleshooting Topics
 This table provides you with guidance on how to troubleshoot specific issues you may encounter while working with Enterprise Performance Management (EPM).

Reports Design Considerations

As you design your report, here are some elements to consider.

Reports and Grid Data Limit

The EPM Cloud data sources have a maximum number of cells that can be returned by a grid, this maximum also applies to forms and ad-hoc grids. The maximum number of cells may vary depending on the EPM Cloud business process. If this limit is reached when previewing the grid or report, you will receive this error: "Error executing query. The number of cells exceeds the maximum of <maximum amount>."

If the report results are too large to be rendered in the browser (HTML with a grid cell count limit of **180000** or PDF size limit of **10MB**), users will be prompted to download the report as a PDF where you can either select **OK** to download or **Cancel** to exit the operation.

Chart Object's Data Set Limit

The maximum chart data set limit is 50 rows by 25 columns, or 1,250 values.

Using Expanded Versus Single Data Segments in Queries

A data segment is a row or column that retrieves data from a database. An expanded data segment is a row or column that can expand, so that the resulting grid expands to two or more rows or columns when viewed. Often, expanded data segments use functions such as *Children Of or Descendants Of.* A single data segment is a row or column that remains a single row or column when shown in the viewer.

While it is generally valid to use expanded and single data segments in the same grid, when designing a grid with large amounts of data, consider using expanded data segments rather than single data segments. Expanded data segments provide some performance advantages over single data segments; however, to produce detailed formatting on different data rows or columns, use single data segments.

Suppressing Missing Blocks

Note:

The ability to suppress missing blocks is available for EPM Cloud products only.

You can suppress missing blocks to improve performance when rows or columns contain sparse dimensions. When you suppress missing blocks, you can place large sparse dimensions in rows, while providing good response time if the density of the query is low. Only blocks with data are retrieved. For example, if you place an employee dimension consisting of thousands of members in rows, and place the entity in the page or POV, then only employees of the selected entity are retrieved.

Suppressing missing blocks aids in suppressing missing data when a large number of rows, such as 90% or more, is suppressed. However, choosing to suppress missing blocks when few or no rows contain missing blocks that would be suppressed can degrade performance. Also, certain suppressed blocks may ignore dynamic calculation members.

Renaming Dimensions and Members

If you rename the dimensions or members in a data source, you must manually update each report in Reports to reflect the changes.

Performance Considerations

- Try to avoid writing relational-type reports
 - A good indication of relational-type report is one with multiple row dimensions that are expanded using member selection functions such as Descendants or Bottom Level which return a large number of members.
 - Large reports may take a significant amount of time to execute. A report is considered big when the number of cells starts getting into the tens of thousands.
 - Reports should not be used as a large-scale data extraction tool.
- While dynamic calculation storage on sparse dimension parents in BSO cube data sources
 will improve calculation and aggregation performance, it can adversely affect retrieval
 performance, especially when used with multiple dimensions. If you have these storage
 settings implemented at the data source level and you are experiencing slower report
 retrieval times, it is recommended to revisit your usage of these storage settings.

Other Design Considerations

When designing reports:

- Use expanded data segments for optimal performance:
 - Use functions on expanded data segments that are not placed on separate rows or columns.
 - Use multiple member selections on expanded data segments that are not placed in separate rows or columns.
 - Use single data segments only when required for formatting or calculations.
- Write efficient formulas:
 - Use row or column formulas rather than cell formulas, when possible.



- Use reference properties.
- Use a cell reference instead of cross-axis references.
- Remove unnecessary parenthesis from formulas.
- Do not limit your report to the Grid object:
 - Add functions in text boxes that highlight specific areas.
 - Hide a grid of data in a report to highlight just the graphics.

Alias Table Names and Reserved Words

In Oracle Enterprise Performance Management Cloud Platform data sources, if an alias table name is the same name as an internally used member property reserved word, such as "Name", "Custom", or "DESCRIPTION", aliases will not be returned in the **Reports** grid result. To resolve this issue, rename the **Alias** to something more unique.

Rounding and Footing in a Report

Overview

When displaying data values in a Report grid, where the data values are displayed as scaled (For example, 173, 545, 723 scaled in "thousands" is rounded and displayed as 173, 546), may result in the scaled balance detail not footing to rounded subtotals and totals within the report. The grid design can be modified to correct any footing differences caused by the rounded values by using a row or column formula to determine the difference and include it in a "plug" amount.

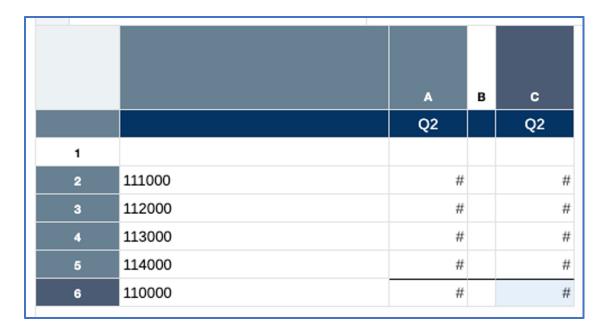
This topic provides an example of the updates needed to a simple grid displaying scaled and rounded *Current Assets* rolling into a *Total Current Assets* member. The example uses the Narrative Reporting Sample Application.

Problems in Reports

Note the following grid design, where the individual *Current Assets* and *Total Current Assets* are selected in separate rows.

- The first column has the original, or unscaled data values for Q2.
- The second column is scaled by "thousands" in cell formatting for Q2.





Here is the grid preview, note the scaled values in the second column. Also, note that the second column values sum to 904,569, which results in a scaled variance of "1" from the scaled total displayed of 904,570.

	Q2	Q2
Cash and Cash Equivalents Accounts Receivable - Net	173,545,723 384,188,475	173,546 384,188
Total Inventory	222,629,253	222,629
Prepaid Expenses	124,206,194	124,206
Current Assets	904,569,645	904,570

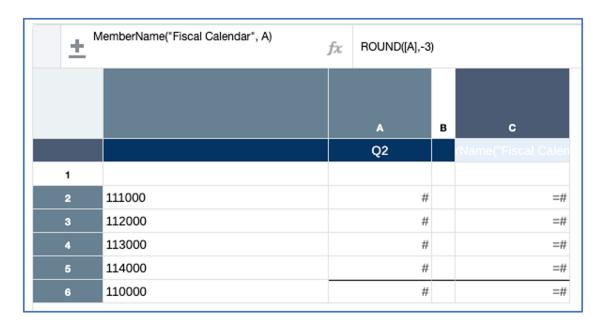
Solution for Reports

The solution is to create a formula row in the grid to calculate the variance and apply the variance as a "plug" amount to one of the existing accounts in the rows (*Prepaid Expenses* in our example). A row formula for the plug amount will replace the *Prepaid Expenses* data row, which will be hidden from the display.

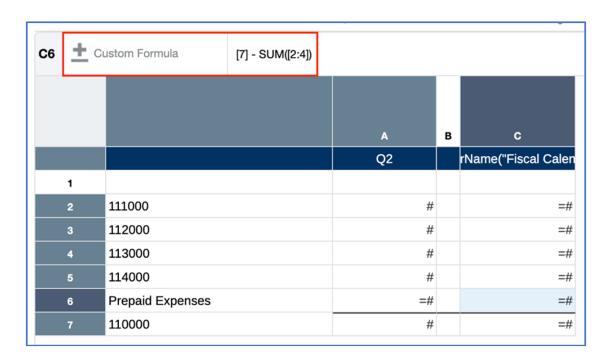
The Report grid formulas utilize the underlying unscaled data values, and not the displayed scaled values (for example, 173,545,723 unscaled in the first cell vs 173,546 scaled by thousands), the data values will need to have rounding applied via a formula column before applying the row formula for the plug amount. The original data column will be hidden from the display.

Note that in the modified design below, where the first column still contains the unscaled data values, the second column is a formula column that rounds the values in the data column by

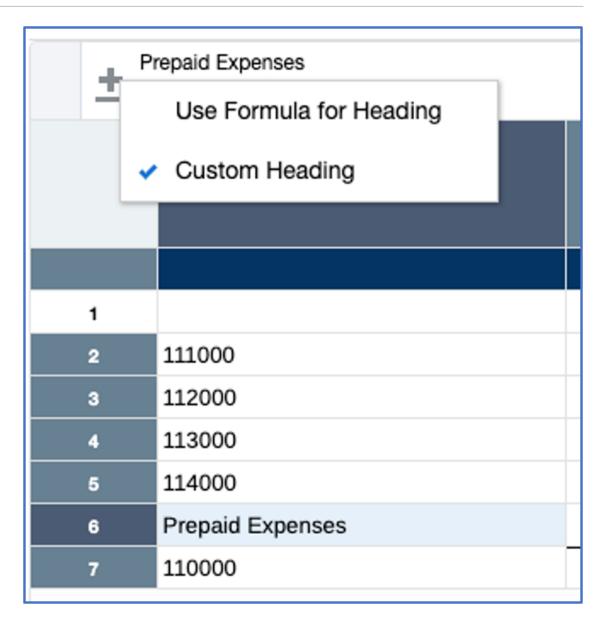
three digits using the following column formula: ROUND([A], -3). Also, note that a text function is used in the formula column to display the member name from the first data column.



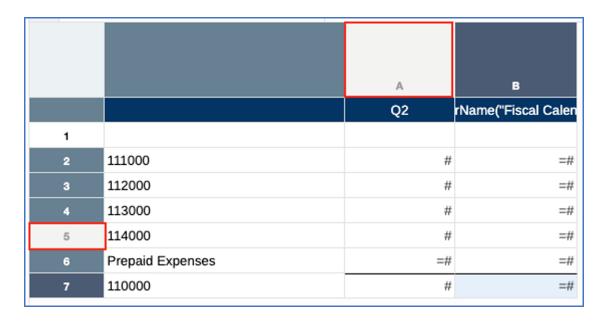
A formula row was inserted right below the *Prepaid Expenses* data row (member name 114000) which takes the difference between the *Total Current Assets* member (110000) and the sum of the *Current Assets* accounts, except for the *Prepaid Expenses* data value in row 5: [7] – SUM([2:4]). A "Custom" formula was used, which applies the formula only to the selected cell, not an entire column or row.



Also, a Custom Heading of "Prepaid Expenses" was specified for the formula row header:



Next, **Column A** and row 5 are hidden from display:



In the grid preview, note that the original variance of "1" is plugged into the original *Prepaid Expenses* value of 124,569, resulting in the value of 124,570, which now correctly foots into the *Total Current Assets* amount:

Q2	
Cash and Cash Equivalents	173,546
Accounts Receivable - Net	384,188
Total Inventory	222,629
Prepaid Expenses	124,207
Current Assets	904,570

Best Practices for Designing Reports

This table provides links to the best practices topics mentioned in this guide.

Review the following best practices topics mentioned in this guide.



Best Practices Topics For	Review these Sections and Videos		
Notes and Note Template (Narrative Reporting Only)	Best Practices for Notes and Note Template (Narrative Reporting Only)		
	Working with Note Templates		
	Creating and Managing Note Templates.		
	Setting up the Inline Grid Entry of Notes		
	Setting Up the Inline Grid Entry of Notes		
	Working with Notes Manager		
	Creating and Managing Note Templates.		
	Creating Notes in Reports.		
Books	 Creating a Book Managing Documents in a Book Working with Sections Overview: Books in Narrative Reporting. Creating Books in Narrative Reporting. Working with Book Sections in Narrative Reporting. 		
Bursting Definition	Simple Steps for Creating a Bursting Definition Overview: Bursting in Narrative Reporting for Targeted Reporting and Distribution. Creating Bursting Definitions.		
Sample Report Content	 Working with Sample Report Content (Narrative Reporting Only) Reviewing the Sample Reports Reviewing the Sample Books Reviewing the Sample Bursting Definition Files 		

FAQs and Troubleshooting Topics

This table provides you with guidance on how to troubleshoot specific issues you may encounter while working with Enterprise Performance Management (EPM).

Review the following troubleshooting techniques.

Category	Troubleshooting Topics For	See this Section
Login	Resolving Login Issues	Resolving Login Issues
Unrespo nsive server	Managing the Environment When the Server is Down	Dealing with Down Environments
Clone Environ ment	Cloning Issues	Resolving Clone Environment Issues



Category	Troubleshooting Topics For	See this Section
EPM Automat e	Fixing EPM Automate Issues	Resolving EPM Automate Issues
REST API	Identifying REST API Problems	Diagnosing REST API Issues
Access Control	Fixing Problems with User, Role, and Group Management	Resolving User, Role, and Group Management Issues
Reports Performa nce Issues	Performance Issues with Reports	Troubleshooting Reports Issues
Smart View	Fixing Problems with Smart View	Fixing Smart View Issues

Frequently Asked Questions about EPM Cloud

This FAQ provides links to resources for frequently asked questions about administrative tasks in Oracle Enterprise Performance Management Cloud

Frequently Asked Questions (FAQs) in EPM Cloud in *Getting Started with Oracle Enterprise* Performance Management Cloud for Administrators



B

Migrating Reports from Financial Reporting

You can migrate reports created in Financial Reporting to Reports. Please note when migrating, the system will convert as many elements of the original report into the Reports equivalent as possible. However, there are differences between the two solutions, and not all elements exist in both solutions. You may have to modify certain elements after the report has been migrated to produce a report that is equivalent to the original report. See Differences between Financial Reporting and Reports

Note:

- Books and bursting definitions in Reports were architected differently and have different features than Financial Reporting books, batches, and scheduled batches; therefore, they cannot be migrated to Reports. In Reports, both Books, and Bursting Definitions need to be recreated.
- Excel workbooks that contain imported or exported fully formatted Financial Reporting reports cannot be connected to Reports and refreshed. Users will need to migrate their Financial Reporting reports to Reports and either import or export the Reports to Excel to use going forward.

In Narrative Reporting deployments, you export reports from Financial Reporting and then import them into Reports.

You can also migrate saved objects (Grids, Text boxes, and Images) from Financial Reporting to Reports. Financial Reporting Chart objects do not contain the chart definition or related grid information; therefore, they are not supported for migration to Reports. Each migrated Financial Reporting object will be migrated to a shared report.

In EPM Cloud deployments, you can migrate either with in-place migration where you can migrate all or individual reports, or by importing Financial Reporting report files that were exported locally from the Explore Repository.

Migrating Financial Reporting in Narrative Reporting

You can migrate reports and saved objects created in Financial Reporting to Reports by exporting them from Financial Reporting and then importing them into Reports. When the reports and objects are imported into Reports, the system converts the Financial Reporting elements to the Reports equivalents where available. See Differences between Financial Reporting and Reports.



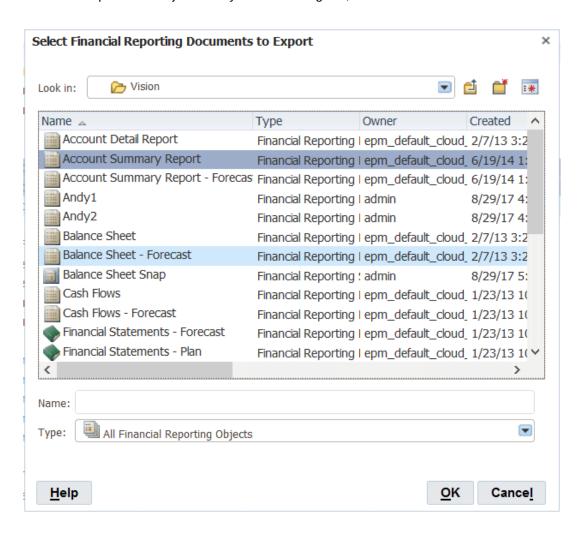
You can migrate reports and objects that were created in Financial Reporting EPM Cloud, and on-premises version 11.1.2.4 and later.

Exporting Reports

You can export reports and saved objects from Financial Reporting one at a time, or in bulk. When you export a single report, the report is extracted to a DES (for a report) or RPT (for a snapshot) file. When you export a single saved object, the object is exported to its native file format: ROG (grids), ROI (image) or ROT (text box). When you extract multiple reports and/or saved objects, they are extracted to a Reports.ZIP file. Financial Reporting Chart objects do not contain the chart definition or related grid information, therefore they are not supported for migration to Reports.

To export reports and objects from Financial Reporting:

- Perform an action:
 - From an Enterprise Performance Management cloud service that supports Financial Reporting (for example, Planning Modules), select Navigator, and then Explore Repository to view the Financial Reporting reports and objects that are available to be migrated.
 - From an on-premises Enterprise Performance Management Workspace instance, navigate to the **Explore** module to browse the Financial Reporting reports and objects that are available to be migrated
- 2. From the repository, select **File**, then **Export**.
- 3. Select the reports and objects that you want to migrate, and then click **OK**.





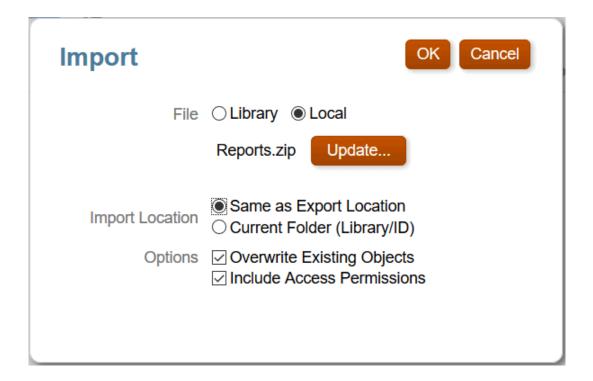
- 4. Select Save File, and then click OK.
- 5. Browse to a location to save the file, and then click **OK**.

The reports are saved in a DES (for reports) or RPT (for snapshots) file, the objects are saved to their native file format of either ROG, ROI, ROT, or Reports.ZIP for multiple reports and objects.

Importing Reports

To import Financial Reporting reports and objects into Reports:

- In Narrative Reporting, navigate to the Library.
- 2. In the Library folder, click , and then select **Import**.
- 3. In the Import dialog box, perform the following actions:
 - a. In File, select Local.
 - b. Click **Browse**, and locate the previously exported file on your local machine.
 - c. Select the location to import the file to.
 - d. Click OK.



- 4. Click **OK** on the message that the import is running.
- To see the results of the import, click , and then select Refresh.
 The migrated reports are displayed. Click the name of a report to open it in Reports.



Note:

- Reports restricts report names to 80 characters. Any report names longer are truncated.
- Financial Reporting saved objects are migrated to shared reports in Reports.
- When migrating Financial Reporting reports that have inserted shared objects, you should import the source shared objects first, then import the reports that utilize the saved objects.
- Importing Financial Reporting chart objects currently results in empty chart object in Reports due to a Financial Reporting bug that doesn't not include the chart definition in the chart object export file.

Migrating Financial Reporting in EPM Cloud

You can migrate either with in-place migration where you can migrate all or individual reports, or by importing Financial Reporting report files that were exported locally from the Explore Repository.



In-place migration simply migrates one or more Financial Reports to Reports. The migrated Financial Reports will still remain in their respective repository.

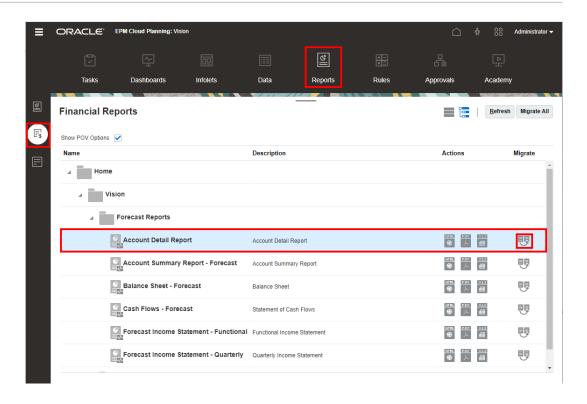
Note:

The Service Administrator role is required to migrate Financial Reporting reports to Reports. The Power User role does not have migration access.

To perform in-place migration from Financial Reporting:

 From an Oracle Enterprise Performance Management Cloud service, select the Report card (Library card in Tax Reporting). In Enterprise Profitability and Cost Management, FreeForm, Planning, and Planning Modules, from the left pane select the Financial Reports icon. In Financial Consolidation and Close, and Tax Reporting, select Financial Reports from the horizontal tabs.





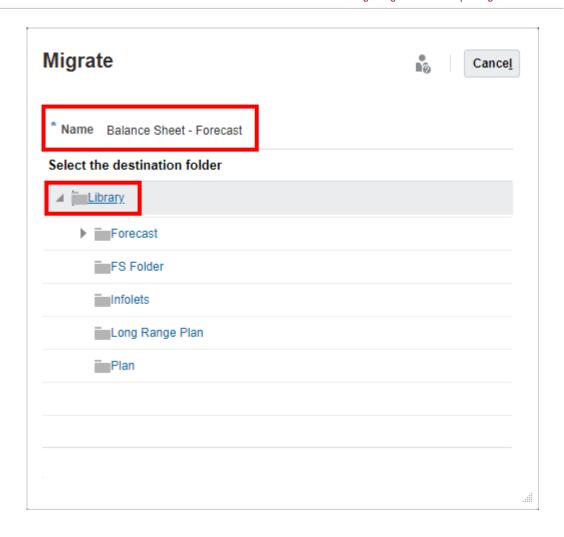
2. To migrate individual reports, from the repository, select the report that you want to migrate

and then click

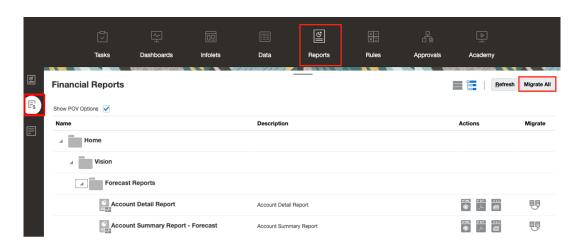


From the **Migrate** dialog, optionally enter a file name, and then select the destination folder to migrate the report.

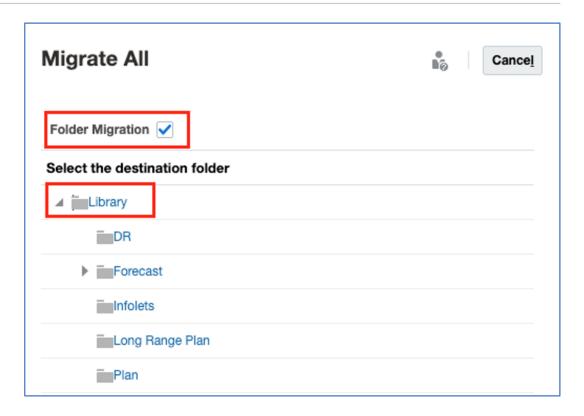




3. To migrate all reports, in the top right of the panel, click on Migrate All.



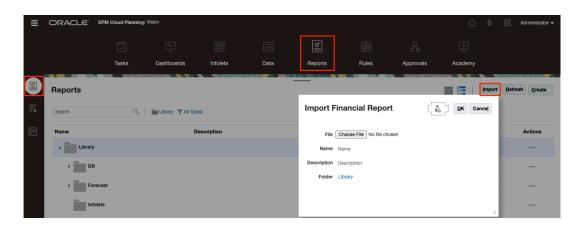
From the **Migrate All** dialog, optionally select **Folder Migration** to also migrate the folder structure, then select the destination folder to migrate the reports.



4. The migrated reports are saved in the respective location.

To import Financial Reporting report files that were exported locally from the Explore Repository:

- From an Oracle Enterprise Performance Management Cloud service, select the Report
 card (Library card in Tax Reporting). In Enterprise Profitability and Cost Management,
 FreeForm, Planning, and Planning Modules, from the left pane select the Reports icon. In
 Financial Consolidation and Close, and Tax Reporting, select Reports from the horizontal
 tabs.
- In the top right, select Import. In Import Financial Report, click Choose File to select a previously exported DES file from your local file system.



3. Optionally, enter a file name and Description, and then select the destination folder to migrate the report.





Currently, you can only import single DES files and not ZIP files which contain multiple reports.

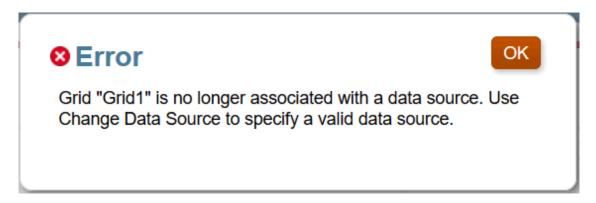
4. Click OK.

Resolving Migration Validation Errors

When you open a report that has been migrated, the system will display any errors that occurred during the migration process. Note that these errors will not prevent the report from being migrated; however, you will have to resolve them in order for your report to display properly.

Resolving Errors with data sources in Narrative Reporting:

The most common validation error in Narrative Reporting is when the data source name in Reports is different from the data source name in Financial Reporting. When you open the migrated report, the system will display the following error:



If you do not have a data source in Reports with the same name as the one in Financial Reporting, you must create a connection to the data source in Reports, and then edit the report to use that data source. See Creating and Editing Data Source Connections. You can change the data source for multiple reports at the same time in the Library.

To change the data source for reports:



- 1. From the Library, select the reports that you want to change the data source for.
- 2. Right-click, and select Change Data Source.
- 3. Select the data source, and click **OK**.

Because of the differences between the Financial Reporting and Reports products, there are many other conversion elements that will cause the system to display a validation error. For assistance in understanding these errors, see Differences between Financial Reporting and Reports.

Resolving Errors with Missing Fonts:

If you receive validation errors about missing fonts, or not properly rendering like #(pound sign) in PDF preview without any error, after migrating Financial Reporting reports, this means that the fonts originally defined in the Financial Reporting reports do not exist on the EPM Cloud Server Library, which stores its fonts differently than Financial Reporting. You will need to upload the missing fonts to resolve the validation errors.

- To upload fonts in Narrative Reporting, see Uploading Additional Fonts in Administering Narrative Reporting.
- To upload fonts in the EPM Cloud Platform:
 - Uploading Fonts in Working with Planning
 - Uploading Fonts in Administering Financial Consolidation and Close
 - Uploading Fonts in Administering Tax Reporting

Resolving Errors with Drill Through Content

If you migrate a Financial Reporting report that contains links to related content to Reports, the related content target file must exist in the specified location. If the related content target file (either a report or a third-party file) that is referenced in the original Financial Reporting report does not exist in the same folder path in the Narrative Reporting library, when the report is migrated the system will display a validation error, and users previewing the report will not see the drill though link in the report. To resolve the validation error, ensure that the target document exists in the correct Narrative Reporting library folder path.

Resolving Errors with Object Sizing and Positioning

Financial Reporting does not perform validation on object sizing and positioning compared to the page and margin sizes. Reports performs layout-related validations. If you receive a validation error regarding an object overlapping or not fitting after opening an imported Financial Reporting report in Reports, manually resize or move the object to remove the error.

Resolving Member Not found Errors

If you receive "Member not Found" validation errors it is because the member no longer exists in the source cube.

To resolve the errors, edit the grid design and remove the offending members from the grid.

If you receive a validation error regarding a shared member reference, it is because of the following:

 The Financial Reporting (FR) reports that were migrated to Reports must have been originally defined where the members did not have shared members (member selection referred to the base member without a fully qualified member prefix).



- The shared members for these members were added after the report was defined. The
 Financial Reporting (FR) reports can run without errors since it does not validate for shared
 members.
- Reports have an extra layer of validation that results in a "member not found" error because the report definition was looking for the original member and not the fully qualified members, which exists now due to the shared members.
- Reports don't assume which shared instance of the member to select to fix the validation error automatically, as customers might want a specific instance of that member.
- While users can continue to run the report without validation errors, the report designer still needs to address the shared member validation errors. They can either right-click on the member on the left panel of member selector and select **Show in Hierarchy** and reports will show the match (after showing a "member not found" error, but it will still display the member after clicking through the message), where it can be re-selected, or perform a search for the member in the member selector dialog and select the appropriate shared instance.

Differences between Financial Reporting and Reports

When you migrate a report artifact from Financial Reporting to Reports, the system will convert as many elements of the original report artifact into the Reports equivalent as possible. However, there are differences between Financial Reporting and Reports, and not all elements exist in both. You should consider the migrated report artifact as a starting point for converting a Financial Reporting to Reports, but it is likely that you will have to modify certain elements after the report artifact has been migrated in order to produce a report that is equivalent to the original report artifact. This topic will help you understand the differences between Financial Reporting and Reports so that you can modify the migrated report artifact as necessary.

Financial Reporting Functions and their Reports Equivalents

The following section describes the functions that are available in Financial Reporting and their Reports equivalents where available.



The syntax for text functions differs between the two products. Financial Reporting requires << and >> brackets around functions (for example, <<MemberName () >>). Reports does not require the brackets.

Table B-1 Financial Reporting Functions and Reports Equivalents

Financial Reporting Function	Reports Equivalent
Annotation	
CalcStatus	
CellText	CellText
Data source	
Date	DateTime
GetCell	CellValue
GetHeading	HeadingValue
GridDimension	



Table B-1 (Cont.) Financial Reporting Functions and Reports Equivalents

Financial Reporting Function	Reports Equivalent
HFMCurrency	
LabeledCellText	
ListOfCellDocuments	
MemberName	MemberName
MemberAlias	MemberAlias
MemberDescription	MemberProperty
MemberProperty	MemberProperty
MemberQualifiedName	MemberName
Page	PageNumber
PageIndex	PageNumber
PageCount	PageCount
PlanningAnnotations	
ProcessManagementStatus	
ReportAuthor	ReportAuthor
ReportCreated	ReportCreateOn
ReportDesc	ReportDescription
ReportFolder	ReportLocation
ReportModified	ReportModifiedOn
ReportModifiedBy	ReportModifiedBy
ReportName	ReportName
ReportRunBy	ReportRunBy

Note:

The Reports text function "DateTime" has two parameters, one for date and one for time, the Financial Reporting "Date" function only has one parameter format string. When migrating Financial Reporting reports using the "Date" function, where the time is also specified, the migrated function in Reports needs to be modified to include an extra parameter of "none", otherwise the time result is repeated. For example, a migrated text function as follows: DateTime("dd-MMM-yy h:mm:ss a") needs to be manually modified to the following: DateTime("dd-MMM-yy h:mm:ss a", none)

In Financial Reporting, the text functions allowed for the use of cur, curr or current to indicate the current row, column, or grid. Reports does not support curr. Instead, the functions allow for optional parameters where curr was used.

For example, in the Financial Reporting function <<MemberName("curr", "curr", "Product", "curr")>>, where the "curr" elements stand for grid name, row, column, or page, the "curr" elements are not necessary in Reports. The Reports equivalent would be MemberName("Product"). The "grid" defaults to the grid that contains the function (or the only grid if the text function was in a text object and there was a single grid). If there are more than one grid, and the text function occurs in a text object, then the gridname parameter is required.

Differences in the Point of View (POV)

There are differences between the way that Financial Reporting and Reports manage the POV:

- In Financial Reporting, by default a grid POV has a value of "User Point of View". In Reports, the default value is "Default".
- In Financial Reporting, both the grid and user POV are able to have choice lists. In Reports, the list is called a "Suggested List". See Setting Up the Point of View.
- In Financial Reporting, a report designer can select an initial member to be used on the Grid POV. If a dimension on the Grid POV has a selection, this acts as the initial member for that dimension on the Grid POV every time the report is run. In Reports, a report designer cannot select an initial member to be used in the Local POV when the report is run. If a Suggested List is defined, the local POV uses the last selected Global POV member for the dimension as an initial member when the report is run. However, if the suggested list is defined as a single member selection, then the POV Dimension uses that member as the initial member when the report is run, even when display suggestions only option is not selected.
- Financial Reporting Grid POV dimensions that have "User Point of View" selected will be migrated to use the Global POV in Reports. If the report has multiple data sources, only the first data source's dimension will be migrated to the Global POV. All other Financial Reporting Grid POV dimensions will be migrated to the Local POV in Reports.
- In Financial Reporting, grids can have page axes. In Reports, the page axis functionality is supported through the 'Print All Selections' option on a dimension in the POV. If the member selection contains a Prompt it will be migrated as a Global POV dimension in Reports.
- In Financial Reporting, in the grid editor a user sees the values of the user POV for dimensions on the grid POV. In Reports, the user sees only 'Default', or the 'Suggested List' members.

Grid Object Differences

When working with grid objects, consider the following:

- · In Reports grid headers are frozen by default.
- The heading type 'Entity Short Name' is not supported in Reports.
- Reports does not have a Hide Grid property; all hidden grids are managed in the Hidden Sheet. Hidden grids in Financial Reporting are moved to the Hidden Sheet in Reports, where they can be edited and managed. Any grids that are in the Hidden Sheet will not be displayed in the report output.
- The Row/Column property for 'Page Break Before = Position at Top' is not supported in Reports. Row/Column page breaks will always appear in the same position on the following page.
- In Financial Reporting, the 'Show Supporting Detail' unary operator is set at the row level.
 In Reports, it is set at the grid level. If the Financial Reporting report contains different property values for 'Show Supporting Detail' for different rows, the system displays a migration error.
- If the grid object has a page axis member selection set to 'Current Point of View', the
 system will replace the selection with the dimension-name-member. This condition is not
 valid in Reports, since the page axis member selection is migrated to a suggested list on a
 grid POV dimension. In the log for the migration, the system will display:" In grid object
 'Grid1', the page axis member selection has a 'Current-Point-of-View' reference, which is
 not valid."
- If the Financial Reporting page axis member selection contains multiple prompts, the member selection will be migrated to a single prompt in Reports.



- A single grid cannot reference multiple data sources in Reports. If a Financial Reporting grid references multiple data sources, the system displays a migration error.
- Since a Reports grid does not have a page axis, if a Financial Reporting grid contains sorting on the page axis, the system displays a migration error in the migration log.
- For migrated Financial Reporting reports where the cell shading is set to white (FFFFFF) by
 default, you must set the report cell shading to "Transparent" in order to use the grid
 property for row banding. Otherwise, the system will recognize the cell shading as having
 an existing format applied and row banding will not be applied.
- In Reports the Financial Reporting Conditional Format of Format Cells then Alignment then Indent Increases For Each Generation By: is not supported. Indent by Generation can be applied as a cell property after import.
- If a user has merged heading and data cells in Financial Reporting and imports the report
 to Reports, the import splits the merged cells into merged heading cells and merged data
 cells. This will change how the report looks and works and the user will need to modify the
 report.
- Reports does not support empty formula rows or columns in a grid, when importing
 Financial Reporting (FR) reports with empty formula rows or columns, a warning message
 is displayed. The report designer will need to edit the Reports grid formula to either set up
 a formula and enter "0" or replace the formula row or column with a separator row or
 column, if nothing is needed to display.
- The floating heading cell values into adjacent heading cell is not supported. All the manual
 adjustments such as merging cells, may be required for the look and feel from the
 Financial Reporting report's point of view.
- In Financial Reporting, the grid-level property sheet allowed a user to enabled "Suppress Missing/Error/Zero". However, enabling this property at the grid level just enabled the property for every row and column in the grid.
 - The enabling of the property did not get applied to the grid, it was just a short-cut to selecting all the rows and enabling the property and then selecting all the columns and enabling the property.
- In Reports, the grid-level property allows a user to enable "Suppress NoData/Error/Zero" properties, and these properties are set and stored at the grid level. You can also select one or more rows/columns and enable/disable the suppression properties for those rows/columns instead of defaulting to the grid-level settings. This is why at the row/column level, the Suppression properties have three options: "Grid Setting", True, and False. The Grid Setting property value will defer to the property setting at the grid level. Financial Reporting did not have this ability.

Because of these differences, when an Financial Reporting (FR) report is migrated to Reports, only the row and column level properties of the Financial Reporting (FR) report are migrated to Reports, unless every row and column in the Financial Reporting (FR) report has the given Suppression property enabled. The grid level properties remain at their default (False), if all the rows and columns do not have the same Suppression property enabled.

In addition, Financial Reporting (FR) always uses the rounded/scaled value for basic and conditional suppression, Reports does not by default. There is a **Grid General** property, under **Conditional Expression**, **Use rounded/scaled value**, which by default is set to **False**. If you are seeing differences in suppression applied between Financial Reporting (FR) and Reports, then you can set this property to **True**.

 In Financial Reporting, the "Indent by relative generation" was calculated on a segment-bysegment basis, so that the relative generation would be for all member combinations resulting from a single design time row. In Reports, the "Indent by relative generation" is calculated on an entire axis basis, meaning that the relative generations of all row member combinations is used when calculating the relative indent.

To achieve the results in **Reports** that were previously available in Financial Reporting, you can set up conditional formatting expressions for a specific generation (e.g. Generation 3), and the formatting is to indent by a certain amount amount; then define a different conditional format for another specific generation (e.g. Generation 4), and the formatting is to indent by a different amount.

- In Reports, the Repeated Heading grid, row and column property, when set to Hide, any adjacent row or column cells which have the same value are considered for repeated values. In Financial Reporting, the inner-most layer in the row and column headings is not considered with regards to repeated values. This will result in different processing and rendering of repeated values between Reports and Financial Reporting for the inner-most layer in rows and columns.
- Financial Reporting, by default, displays light gray cell borders in the HTML preview, unless other border formatting is specified by the report designer. This is a default border style that is not part of the report formatting or the report definition, which are not, in turn, migrated to Reports. Therefore, upon migration to Reports, the default light gray cell borders in HTML preview are not rendered.

Image Object Differences

Financial Reporting supports a stretch option for images. Reports does not support stretching or cropping; instead, the image will be sized to the correct aspect ratio.

Text Object Differences

In Financial Reporting, the text object has an 'AutoSize' property. In Reports, the size options for height are:

- Fixed (equivalent to AutoSize=Off)
- Fit (equivalent to AutoSize=On)
- Minimum

Chart Object Differences

The following Financial Reporting chart properties are not supported in Reports charts:



After importing a Financial Reporting report with Combo charts, the chart line colors in Reports do not match the colors in Financial Reporting.

- Font Angles: Font angles for all font settings for text in the Format Chart dialog box
- Format Chart:
 - Appearance:
 - Title Box Color
 - * Title Box Border Color, Type, and Width
 - * Grid Depth
 - Legend:



- Suppress Repeating Labels
- * Background Border Type and Width
- Axes:
 - * X-axis Background Color
 - * X-axis Border Color, Type, and Width
 - * Y-axis Background Color
 - * Y-axis Border Color, Type, and Width
 - * Y-axis Override Number Format
 - Y2-axis Title Box
 - * Y2-axis Override Number Format
- Pie Options:
 - * Pie Label Position
 - Pie Slice Angle

Alignment and Layout Differences

- In Financial Reporting, an object can be top/left/bottom and left/right/center aligned. However, the object is aligned with the appropriate edge of the page (taking into account the margins and header/footer height). In Reports, the same alignment options are supported. However, the object can be aligned a certain distance from the appropriate edge. This is supported via the 'Indent' alignment property.
- Financial Reporting does not perform validation on object sizing and positioning compared
 to the page and margin sizes. Reports performs layout-related validations. If you receive a
 validation error, regarding an object overlapping or not fitting after opening an imported
 Financial Reporting report in Reports, manually resize or move the object to remove the
 error.

Member Selection Differences

When working with grid objects, consider the following:

- Duplicate members in the same segment are not allowed and are removed.
- The Financial Reporting advanced member selection operators such as AND, UNION, OR and NOT are converted to the Reports member selection functions Intersect (which combines multiple members and functions, previously the AND operator in Financial Reporting) and Except (excludes a member or function from another function, previously the NOT operator in Financial Reporting). The Financial Reporting OR and UNION operators performed the same operation and are the default for any member selections, therefore there is no need to specify anything additional in Reports for these two operators. There are two migration differences for the NOT operator:
 - Reports member selections do not support migrating nested 'Not' statements. For example, "member-selection1 and not member-selection2" is migrated, while "member-selection1 and not not member-selection2" is not.
 - Reports member selections do not support migrating a 'Not' statement on the first member selection. For example, "member-selection1 and not member-selection2" is migrated, while "not member-selection1 and member-selection2" is not.



- In Financial Reporting, member selection supports SuppressSharedMembers. In Reports, suppress shared members is supported as an option on an existing member selection (added via a member selection menu).
- Reports does not support creating a user-defined member list in the member selector, which can be reused across multiple reports, as Financial Reporting previously did with onpremises Oracle Essbase.
- The following Financial Reporting member selection functions are not supported in Reports:
 - MatchEX
 - TopOfHierarchy
 - LSiblings
 - RSiblings
 - Top
 - AllMembers
- In Financial Reporting, a system-member-list is either a named level or a named generation. The underlying data source provides these names, which take the form of 'Lev<n>,<dimension name>' or 'Gen<n>,<dimension name>' by default. However, a data source administrator can also give a user-specified name to a level or generation (for example, SKU or Country). If the system-member-list is one of the default names, it gets converted to the 'LevelMembers' or 'GenerationMembers' member selection functions. If the system-member-list has a non-default name, the system cannot determine what the available list of names is without connecting to the data source. Therefore, the system displays a migration error and the member selection is converted to the dimension parent member.
- When migrating members, any member name in Financial Reporting that is prefixed with a
 "\$" (meaning it is a substitution variable) is converted to a substitution variable and
 prefixed with an "&" in Reports.
- In Financial Reporting Web Studio, duplicate prompt labels in a grid are permitted. In Reports, duplicate prompt labels are not permitted. If the reuse of prompt definitions in multiple locations is required, a Saved Selection should be created for the prompt and select the Saved Selection from the multiple locations. If the Financial Reporting Web Studio report contains duplicate prompt labels, where one prompt definition allows selection of multiple members and another prompt definition, with the same label, is used as a single selection in a member selection function (for example, Children (Prompt), upon migration to Reports, the report designer will need to manually adjust the duplicate prompt labels where validation errors occur.
- In Financial Reporting Web Studio, the Property member selection function works with member names and aliases, attribute members as well as UDAs. In Reports, the use of member names and aliases is not supported
- In Reports, the Dynamic Time Series member selection only supports selecting a single member or CurrentPOV. Member selection functions are not supported as parameters for the Dynamic Time Series function. Financial Reporting supported the RelativeMember function with Dynamic Time Series.

Conditional Format and Suppression Differences

In Financial Reporting Web Studio, conditional formatting and suppression conditions evaluate #missing data values as if they were zero.



For example, with the conditional expression 'value == 0' this would be true for both a zero value and a #missing value.

In Reports, conditions evaluate #missing data values as no data only.

For example, with a conditional expression 'value == 0' this would be true for only a zero value and NOT a #missing value.

Therefore, in Reports, separate conditions would need to define when checking for either zero or **#missing**.

Grouping and Auto Calculation Differences

Auto Calculations (Auto-Calcs) in Financial Reporting will be migrated to the equivalent report grouping, with the following considerations and differences:

- In Financial Reporting, the Auto-Calc formulas were fixed and defined in a dialog box. We migrate them to equivalent formula rows or columns.
- In Financial Reporting, the dimension layer on which an Auto-Calc was specified is different than the Reports grouping the dimension layer.
 - Layer 0 in Financial Reporting was considered a "Grand Total" type of calculation. This
 adds no real value since it is simply the summation of all the Auto-Calc dimension
 combinations. In Reports, this would be equivalent to a non-grouped formula rows/
 column referencing the grouped row or column. This is how a layer 0 Auto-Calc is
 migrated.
 - Layer 1+ Auto-Calcs are migrated to a grouping on Financial Reporting Layer 1 in Reports. So an Auto-Calc on layer 1 will be a grouping layer 0, and so on.
- In Financial Reporting, the Allow Page Break After Auto Calculation property is
 migrated to a grid-level Group Page Break property on the appropriate dimension.
 However, in Financial Reporting, this property could be specified on each Auto-Calc and
 change within a grid. This is a grid-level property in Reports and applies to all the
 groupings on the given dimension in a grid.
- In Financial Reporting, the Allow Page Breaks Within property is migrated to a grid-level No Page Breaks in Group property. This is also a grid-level property in Reports and applies to all the groupings on a given dimension in a grid.
- In Financial Reporting, formatting on non-data segments in an Auto-Calc was done via conditional formatting. This is not necessary in Reports since the non-data segment in a group are part of a grid and can be formatted directly. The conditional formatting in the Financial Reporting report is migrated to the equivalent segment in Reports.

Features Not Available in Reports

The following Financial Reporting features are not supported in Reports:

- Planning Unit Annotations
- Annotations

The Notes feature in Narrative Reporting utilizes a different underlying framework and features than Financial Reporting Annotations, therefore Annotations are not migrated to Narrative Reporting Notes.

- Row/Column templates
- Microsoft Word documents in Books Using FRExecute to Embed Financial Reporting Reports into Microsoft Word



Font Differences

The following default fonts from Financial Reporting will be converted to the equivalent Reports fonts, unless the Financial Reporting fonts have been uploaded as custom fonts.

Table B-2 Financial Reporting Fonts and Reports Equivalents

Default Financial Reporting Fonts	Equivalent Reports Fonts
Microsoft Sans Serif	Liberation Serif
Arial	Liberation Sans
Times New Roman	Liberation Serif
Courier	Liberation Mono



Financial Reporting Web Studio will contain additional locale-specific fonts that were not exposed in Reports.

To upload fonts in Narrative Reporting, see Uploading Additional Fonts in *Administering Narrative Reporting*.

To upload fonts in the EPM Cloud Platform:

- Uploading Fonts in Working with Planning
- Uploading Fonts in Administering Financial Consolidation and Close
- Uploading Fonts in Administering Tax Reporting

Other Differences

Keep in mind the following considerations when migrating reports:

- Drill to content cannot be used to drill to a cell file attachment sourced from an Essbase Linked Reporting Object or Narrative Reporting cell file attachment.
- Linked and local objects, which are report objects such as grids or charts, that are saved to
 the repository and inserted in the report, are not supported in Reports. If a linked object is
 found in a Financial Reporting report that is being migrated, the system will display a
 migration error.
- If you migrate an EPM Cloud report (for example, Planning Modules) with conditional formatting or suppression by Account Type (for example, suppressing rows with an account type of Revenue), you may have to update the conditional expression in order for it to be applied correctly. This is because in Financial Reporting, the conditional expressions for Account Type check only if the type is Expense or NonExpense, while in Reports, the expression checks if the account type is an Asset, Liability, Equity, Revenue, Expense, or NonExpense type. As a result, you should update the conditional expression to check for the true account type. For example, expressions that suppress a Revenue account type (which is considered NonExpense in Financial Reporting) must be updated to suppress the true account type of Revenue after the report is migrated.
- Reports does not support a 'Custom' paper format size. The migration will convert this size to 'Letter'.



- Reports does not support a Super A3 paper format size. The migration will convert this size to 'Letter'.
- In Financial Reporting users can add MemberOverride to the CellText function. In Reports this is not currently supported.
- Related content links to library folders in Financial Reporting are removed during import to Reports
- In Financial Reporting, if a report has two grids (For example Grid1 and Grid2): where Grid1 has a Page dimension to print the grid on different pages and Grid2 does not have a Page dimension with printable pages:
 - Financial Reporting generates the output in PDF as: Page1...Page n for Grid1 with POV members on separate pages, followed by Grid2.
 - Reports generate the output for the same scenario (with Grid1 in the POV with Print All Selections enabled) to PDF as Page1: Grid1 (1st POV member), Page2: Grid2, Page3: Grid1 (2nd POV member), Page4: Grid2, and so on.
- The Inheritance feature for Financial Reporting grid formatting is not supported or migrated in Reports. For any formatting defined using inheritance in Financial Reporting, the migrated report will need to be manually adjusted.



C

Differences between Reports and Reports Imported in Excel

This topic will help you understand the differences between Reports and Reports exported to, or imported into, Excel.

 Report Designer enables you to define border formatting Styles using a combination of Border Style and Border Width properties. Border Style can be Solid, Dotted, Dashed, and Double. Border Width may take value 1 to 5. When imported in Excel, border styles are mapped as follows as Excel does not support different width settings:

Reports	Excel
Solid, Width_1	Thin
Solid, Width_2	Medium
Solid, Width_3, Width_4, Width_5	Thick
Dotted, any width	Dotted
Dashed, Width_1	Dashed
Dashed, Width2, Width3, Width_4, Width5	Medium_Dashed
Double, any width	Double

- If a cell is defined with font color = Transparent, it cannot be supported in Excel. A workaround in Reports would be to use the 'Replace Text' property and set the replace text to an empty value.
- Row banding is not supported when a report is imported to Excel.
- Prefix/Suffix Alignment: % should not be combined with other characters or space. Such
 formatting may result in the numeric value appearing incorrect in Excel. When Prefix is
 aligned, Excel places the prefix character at the leftmost edge of the cell. Extra space may
 appear after positive numbers if a negative suffix is provided, the positive suffix is not
 provided, and align suffix is set.
- If there are multiple grids in a report stacked vertically, with different column widths, then
 the column widths in Excel for the exported report are based on the column widths in the
 topmost grid in the report. As a result, the remaining grids may not line up the same or may
 have different column widths when compared to the report in the web. This is because, in
 Excel, column widths remain constant for all rows in a spreadsheet.
 - Similarly, if there are multiple grids in a report arranged horizontally, with different row heights, then the row heights in Excel for the exported report are based on the row heights in the leftmost grid in the report. As a result, the remaining grids may not line up the same or may have different row heights when compared to the report on the web. This is because, in Excel, row heights remain constant for all columns in a spreadsheet.
- When indention is specified in Cell Properties, the size of the indent is defined by the report designer in inches or centimeters, depending on the formatting user preference that is set (for example: "0.25" will indent "inch"). When the report is downloaded to Excel, the equivalent indent is attempted to be created in Excel. The indent in Excel is accomplished by calculating the width of a space character in the "standard font and font size"

For more information, see Microsoft Troubleshooting page.

The different ways of calculating the amount to indent may not be identical between Reports and Excel. This may result in the text in a cell wrapping in the Excel document when it was not wrapping in report preview (PDF or HTML). It may also result in the column width of the Excel document not being wide enough to display the values in the cells in that column, for example: Excel may show "#" for the cell values because the cell value is too large to display in the cell.



Working with Sample Report Content

Related Topics

- Reviewing the Sample Reports
- Reviewing the Sample Books
- Reviewing the Sample Bursting Definition Files

Reviewing the Sample Reports



This section applies to Narrative Reporting Deployments only.

After a service administrator installs the sample files and you can review the sample reports (see Installing Samples), the following sample reports are available to work with:

Table D-1 List of all the Sample Reports

Report Names	Descriptions
Sample Report 0 (Executive Summary)	Contains two hidden grids that drive a bar and a donut chart, as well as a text box's text functions which return summarized data points for a few accounts. Static narrative is displayed in a text box as an example, Notes can also be used for this purpose.
Sample Report 1	Contains a grid with income statement accounts in the rows and Scenarios in the columns, with two formula columns to display the "% of Net Sales" for each account in the row.
Sample Report 2a (Basic Charts)	Contains pie, bar, and line charts that are driven by hidden grids.
Sample Report 2b (Advanced Charts)	Contains waterfall, bubble, treemap and sunburst charts that are driven by hidden grids.
Sample Report 2c	Contains nine gauge charts driven by a hidden grid with a single data cell.
(Gauge Charts)	The report displays all three gauge chart types (Circular , Horizontal , and Vertical gauge) and all three Threshold types (Thresholds , Reference Lines , and None).
Sample Report 3	Contains a grid and a chart, where the grid has Entities in the rows and Scenarios in the columns. The chart is driven by the displayed grid.

Table D-1 (Cont.) List of all the Sample Reports

Report Names

Descriptions

Sample Report 4a (RelativeMember)

Contains a grid with income statement accounts in the rows, Scenarios and Fiscal Calendar dimensions in the columns. The grid displays a rolling report, across Scenarios, using a combination of the Range and RelativeMember member selection functions with:

- January to the currently selected month in the POV (June by default) for Actual data in FY17.
- The Current POV + 1 (July by default) to December for Plan data in FY18.
- You can change the POV to select a different month. The columns use a combination of the Current POV, Range and Relative Member selection functions.
- To account for displaying only Actual data when December is selected for the POV, there is a third hidden data column (C) which is used for conditional suppression definitions on columns B and C, so that Plan data is suppressed when the POV selection is December.

Sample Report 4b (PeriodOffset)

Contains a grid with balance sheet accounts in the rows, Years and Fiscal Calendar dimensions in the columns. The grid displays a rolling report for 12 months across Years, using a combination of the Range and PeriodOffset member selection function with:

- Years based on the Current POV.
- Fiscal Calendar based on the Range function starting at "PeriodOffset of CurrentPOV – 5" and ending at "PeriodOffset of CurrentPOV – 6."

Sample Report 5 (Prompts)

Contains a grid with prompts for:

- One or more Segments in the rows.
- Children of the select Quarter in the columns.
- One or more Entities in the POV with Printable Pages enabled.

Sample Report 6 (Cond. Format & Suppression)

Contains a grid with Entities in the rows and Scenarios in the columns with the following applied:

- Conditional formatting on the "Act vs. Plan Var" column that colors the cell background red, green or yellow, depending on the cell value.
- Conditional text based on the conditional formats for red and green above, to return member names and data values, along with directional words, based on the positive or negative data values being evaluated.
- Conditional suppression on the Entity row to suppress all rows where the value is less than 1,000,000.

Sample Report 7 (Zoom and Drill)

Contains a grid with Accounts in the rows and Scenarios in the columns with the following Zoom and Drill definitions:

- Zoom to Children for "Gross Profit" and "Net Income."
- Drill to URL for the "Gross Profit" and "Net Income" row headers with links to corresponding Wikipedia pages.
- Drill to "Sample Report 3" for the "Gross Profit" and "Net Income" data cells in the "Actual" column. The POV for the Account is passed to the target report.

Note: The drill definitions to "Sample Report 3" require that this report exists in the "Samples\Reports" folder. If the sample reports are moved to a different folder, the drill definitions must be updated to the new location in order for the drill links to function properly.



Table D-1 (Cont.) List of all the Sample Reports

Report Names Descriptions Sample Report 8 Contains a grid with Accounts, Entities, and Segments in the rows and (Grouping) Scenarios in the columns: Groupings are defined for the **Accounts** and **Entities** dimensions. There are additional **Text**, **Formula**, and Separator rows within the groups to display group headings and totals or subtotals. For more information, see Grouping Example with Multiple Groupings, which utilizes a simplified version of this report with details and procedures on the report design. Sample Report 9a Contains a simple grid and chart with two Note templates inserted: (Note Box Input) Performance Summary and Variance Summary. The Entities and **Segments** dimensions are changeable in the POV and some sample notes have been entered for both Note templates. The purpose of this report is to provide an example of Note templates/boxes used for Note entry in a report for different POV selections. Contains a simple grid and a data source enabled text box with a Notes text Sample Report 9b (Note Text Box) function. The text function uses a Named POV (Named POV 1) that has the Entities dimension set to Control by Text POV, and a Note Format (Text Box Note Format). The Entities dimension is changeable in the POV and has a secondary POV in the text box that allows: Selecting an **Entities** member in the report's Global POV. Selecting a member selection function (e.g. Bottom of, Children of, etc.) to apply to the Entities member selected in the report's Global POV. The purpose of this report is to provide an example of displaying and aggregating Notes based on a POV selection. Sample Report 9c Contains a simple grid with a Note column segment which uses the Entity (Inline Grid Note Variance Description Note template. The Segments dimension is Entry) changeable in the POV. Some sample notes have been entered for the Note template. The purpose of this report is to show how Notes can be entered inline in a grid by end users. Sample Report 9d Contains a simple grid with a text column with the GridNotes text function. The (GridNotes Text text function refers to Notes attached in Column A. it uses a Note Format (Grid Function) Cell Note Format) and it returns Notes for the Performance Summary Note template. The **Entities** dimension is changeable in the POV. Sample Report 10 Contains a grid with Accounts in the rows and Fiscal Calendar in the columns. (Butterfly Report) The Row Headings Before grid property is set to column C, where the Accounts row labels appear between columns B and C, resulting in a Butterfly Report. The Accounts member labels are also center justified for display purposes. Sample Report 11 Contains two grids with the Fiscal Calendar dimension in the columns, where (Saved Selections) the member selection is driven by a Saved Selection. The Saved Selection contains a prompt for the month. In the first grid, there are columns for the month, QTD for the month, and YTD for the month. In the second grid, there are three columns for Scenario selections of Actual, Plan, and Variance. All three columns are driven by the Fiscal Calendar month selection. Sample Report 12a Contains two grids and a chart, spread across two sheets, as well as three text (Shared Report) boxes and one image object in the header. The report is saved as a Shared Report. All the objects in the shared report are available to insert into other reports. The sample reports 12b and 12c have shared objects from this report

inserted into them.



Table D-1 (Cont.) List of all the Sample Reports

Report Names	Descriptions
Sample Report 12b (Subscribing Report 1)	Contains all shared header objects and one shared grid from Sample Report 12a . Any changes made to the objects in the source shared report will also be reflected in the inserted shared objects in this subscribing report.
Sample Report 12c (Subscribing Report 2)	Contains all shared header objects, one shared grid, and one shared chart from Sample Report 12a . Any changes made to the objects in the source shared report will also be reflected in the inserted shared objects in this subscribing report.

Reviewing the Sample Books

Note: This section applies to Narrative Reporting Deployments only.

Book samples are provided for you to practice working with reports, sections, page setup, and to examine various TOC definitions for the reports and sections. This section describes the samples as well as the Book output process.

After the service administrator deploys the Sample Content, you can review the sample books. For more information, see Installing Samples.

Use the samples as a guideline to create your own Book and report structure.

Overview of Cover Page and Table of Contents

When you add a document to a book, it references a link to the library. The actual document will not be copied to the book. The Word document has a static cover page for the fictitious example Vision Corporation. The TOC is inserted in the Word Template as a TOC definition. The inserted TOC definition initially displays blank in the document, but is populated when book output is executed or when the book is previewed.

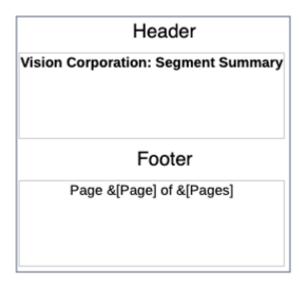
About Page Setup Options

All of the Book samples contain common page setup definitions, such as Header and Footer.

The header and footer stamps are defined to start on the first page of the report and will appear on each report in the Book.

You can use the **Page Setup** options to change the header and footer definition.





Sample Books 1.1, 1.2 and 1.3

Sample Books 1.1, 1.2 and 1.3 contain the same reports with the same POV settings, however each report is displayed differently by using a **Section** or different TOC header definitions for each report in the book.

About Sample Book 1.1

This book contains a **Section**: **Segment Reports**, and includes following reports: **Sample Report 1**, **Sample Report 3**, and **Sample Report 4**.

Sample Report 1:

POV: Segments: Seg01 and Seg02 are selected.

TOC Header: ArtifactName(): MemberAlias("Segments")

Displays report name, followed by the member alias for the Segment POV.

Sample Report 3:

POV: Segments: Children of Seg01 and Children of Seg02 are selected.

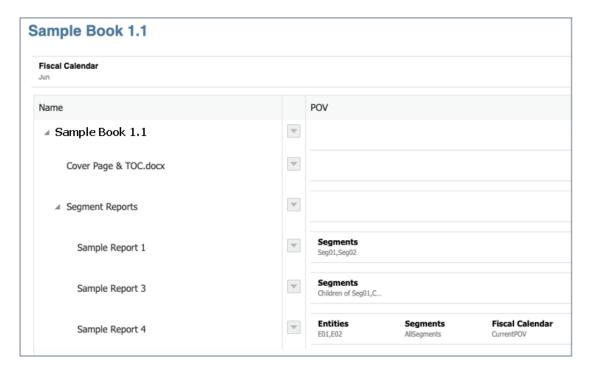
TOC Header: ArtifactName(): MemberAlias("Segments")

Sample Report 4:

POV: **Entities**: **E01** and **E02**, and the **Segment**: **AllSegments** are selected. The **Fiscal Calendar** dimension has **Current POV** selected, which means it is defined by the Book POV.

TOC Header: ArtifactName(): MemberAlias("Entities"), MemberAlias("Segments")

Book Designer View



TOC Preview

About Sample Book 1.2

This Book contains the following reports: **Sample Report 1**, **Sample Report 3** and **Sample Report 4**. This Book is similar to **Sample Book 1.1**, but does not contain the **Section**.

Sample Report 1:

POV: Segments: Seg01 and Seg02 are selected.

TOC Header: ArtifactName(): MemberAlias("Segments")

Displays report name, followed by the member alias for the Segment POV.

Sample Report 3:

POV: Segments: Children of Seg01 and Children of Seg02 are selected.

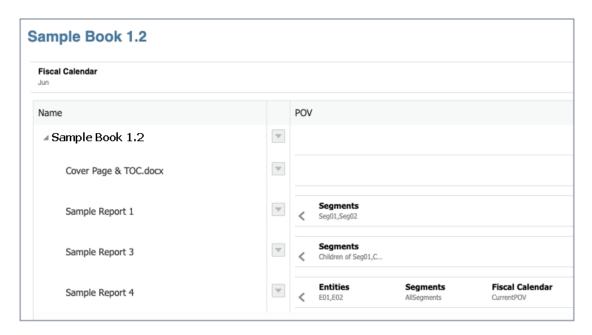
TOC Header: ArtifactName(): MemberAlias("Segments")

Sample Report 4:

POV: **Entities**: **E01** and **E02**, and the **Segment**: **AllSegments** is selected. The **Fiscal Calendar** dimension has **Current POV** selected, which means it is defined by the Book POV.

TOC Header: ArtifactName(): MemberAlias("Entities"), MemberAlias("Segments")

Book Designer View





TOC Preview

About Sample Book 1.3

This Book contains the following reports: **Sample Report 1**, **Sample Report 3**, and **Sample Report 4**. This Book is similar to **Sample Book 1.2**, but also contains multiple TOC header definition levels for displaying the report name, followed by the POV selections.

Sample Report 1:

POV: Segments: Seg01 and Seg02 are selected.

TOC Header:

```
ArtifactName():
MemberAlias("Segments")
```

Displays report name, followed by the member alias for the Segment POV.

Sample Report 3:

POV: Segments: Children of Seg01 and Children of Seg02 are selected.

TOC Header:

```
ArtifactName():
MemberAlias("Segments")
```

Sample Report 4:

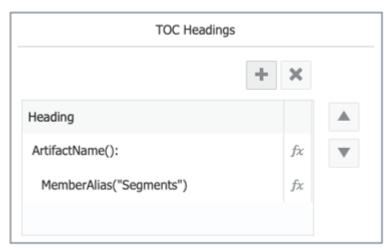
POV: **Entities**: **E01** and **E02**, and the **Segment**: **AllSegments** is selected. The **Fiscal Calendar** dimension has **Current POV** selected, which means it is defined by the Book POV.

TOC Header:

```
ArtifactName():
MemberAlias("Entities"), MemberAlias("Segments")
```



Example of TOC Headings for Sample Report 1 and Sample Report 3



TOC Preview

Table of Contents
Sample Report 1:1
Electronics1
Services2
Sample Report 3:3
Audio Systems3
Digital Video4
Televisions5
Installation6
Service Contracts7
Repair8
Sample Report 4:9
North America, All Segments9
Latin America, All Segments10

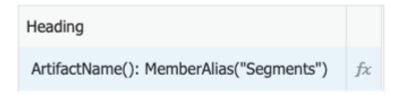
About Sample Book 2.1

This Book contains a Section called Segments with Sample Report 1, and Sample Report 4.

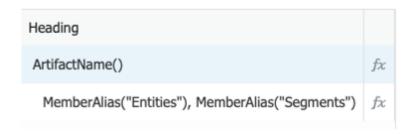
The **Section** contains the Segments POV definition of **Seg01** and **Seg02**, while the two reports, Segment POV selection is **Current POV**. This means that the **Section POV** defined in the POV for both reports, essentially cascading on each **Segment** member and running each report for it.

Sample Report 4 has the POV with Entities: E01, and E02, and the Fiscal Calendar dimension has Current POV selected.

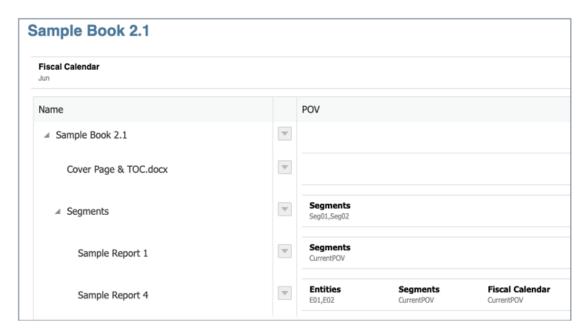
Sample Report 1



Sample Report 4



Book Designer View





TOC Preview

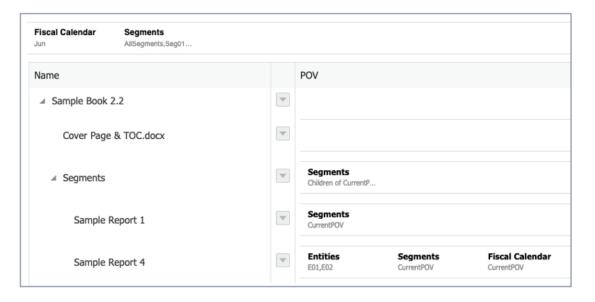
Table of Contents	
Segments	1
Sample Report 1: Electronics	1
Sample Report 4:	2
Sample Report 4: North America, Electronics Latin America, Electronics	2
Latin America, Electronics	3
Sample Report 1: Services	
Sample Report 4:	5
Sample Report 4: North America, Services	5
Latin America, Services	6

About Sample Book 2.2

This Book is similar to **Sample Book 2.1**, but the **Section** POV is set to **Children of Current POV**, and includes the **Sample Report 1**, and **Sample Report 4**. The Book POV selections are set to some of the **Segments** dimension parent members.

This Book sample illustrates how the Book POV selection drives the cascading of the reports.

Book Designer View





TOC Preview with AllSegments selected in the Book POV

Table of Contents	
Segments	L
Sample Report 1: Electronics	L
Sample Report 4:	2
Sample Report 1: Services	ļ
Sample Report 4:	5
Sample Report 1: All Segments	7
Sample Report 4:	3

About Sample Book 3

This Book contains three nested **Sections**, named **Segments**, **SKU**, and **Item**.

The TOC headers for the reports are as follows:

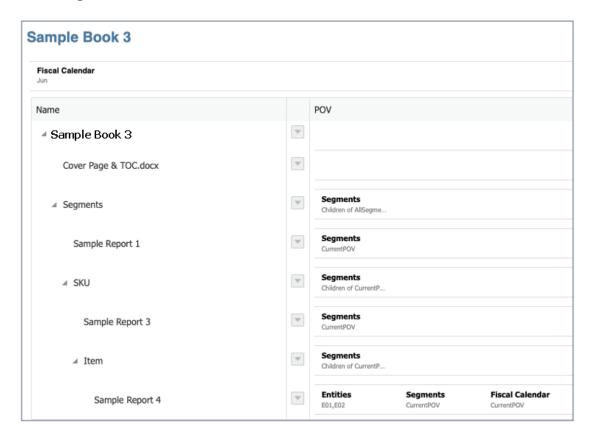
Sample Report 1: ArtifactName(): MemberAlias("Segments")

Sample Report 3: ArtifactName(): MemberAlias("Segments")

Sample Report 4: ArtifactName(): MemberAlias("Entities"), MemberAlias("Segments")



Book Designer View





TOC Preview

able of Contents	
egments	1
Sample Report 1: Electronics	1
SKU	2
Sample Report 3: Audio Systems	2
ltem	3
Sample Report 4: North America, Home Audio	3
Sample Report 4: Latin America, Home Audio	4
Sample Report 4: North America, Audio on the Go	
Sample Report 4: Latin America, Audio on the Go	
Sample Report 3: Digital Video	7
Item	8
Sample Report 4: North America, DVD Player	
Sample Report 4: Latin America, DVD Player	
Sample Report 4: North America, DVD Recorder	
Sample Report 4: Latin America, DVD Recorder	
Sample Report 4: North America, Portable DVD	
Sample Report 4: Latin America, Portable DVD	
Sample Report 4: North America, DVD/VCR Combo	
Sample Report 4: Latin America, DVD/VCR Combo	
Sample Report 4: North America, Smart Set-Top box	
Sample Report 4: Latin America, Smart Set-Top box	
Sample Report 3: Televisions	
Item	
Sample Report 4: North America, High Definition TV	
Sample Report 4: Latin America, High Definition TV	
Sample Report 4: North America, Smart TV	
Sample Report 4: Latin America, Smart TV	
Sample Report 4: North America, Projection TV	
Sample Report 4: Latin America, Projection TV	
Sample Report 4: North America, Plasma TV	25
Sample Report 4: Latin America, Plasma TV	
Sample Report 1: Services	27
SKU	28
Sample Report 3: Installation	28
Sample Report 3: Service Contracts	
Sample Report 3: Repair	30

About Sample Book 4

This Book contains two **Sections**, named **Segment Summary**, and **Summary and Closing comments**.

The TOC headers for the report, and Book are as follows:

Sample Report 1: ArtifactName()

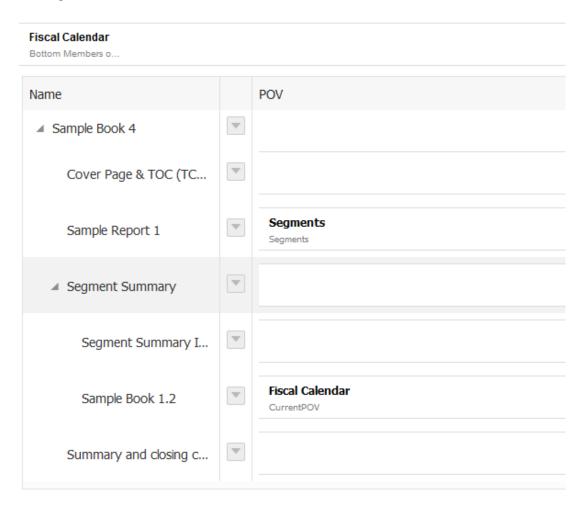
Segment Summary Introduction: ArtifactName()

Sample Book 1.2: ArtifactName()

Book Designer View:



Sample Book 4



TOC View:

Table of Contents

Total Company Summary	1
Segment Summary	
Introduction	
Segment Summary Financials	
•	
Summary and Closing Comments	±3

About Sample Book 5

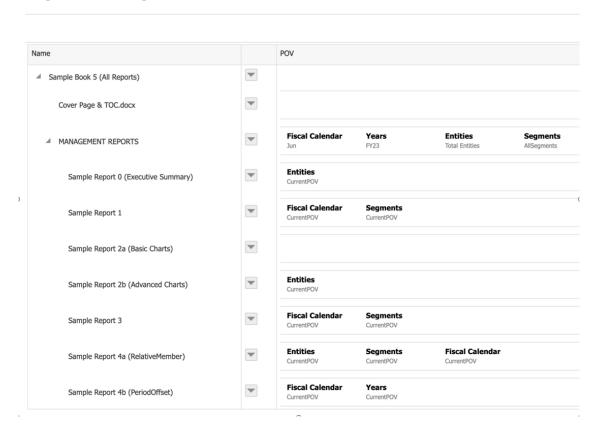
This Book contains all sample reports in one book. It includes two **Sections** to group the two different types of sample reports, **Reports**, and **Notes Reports**.



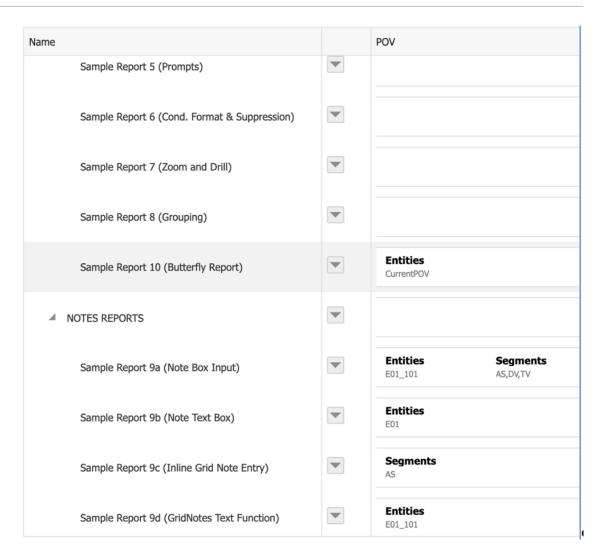
The TOC headers for the reports mainly display the report name, via the ArtifactName() function. Some of the reports also display member aliases for one or two of the report dimensions.

Book Designer View:

Sample Book 5 (All Reports)







TOC View:

Table of Contents

И	ANAGEMENT REPORTS	3
	Sample Report 0 (Executive Summary)	3
	Sample Report 1	4
	Sample Report 2a (Basic Charts)	5
	Sample Report 2b (Advanced Charts)	6
	Sample Report 3	9
	Sample Report 4a (RelativeMember)	.10
	Sample Report 4b (PeriodOffset)	.11
	Sample Report 5 (Prompts)	.12
	Sample Report 6 (Cond. Format & Suppression)	.14
	Sample Report 7 (Zoom and Drill)	.15
	Sample Report 8 (Grouping)	.16
	Sample Report 10 (Butterfly Report) ; Total Entities	.19
۷	OTES REPORTS	.20
	Sample Report 9a (Note Box Input): USA, Audio Systems	.20
	Sample Report 9a (Note Box Input): USA, Digital Video	.21
	Sample Report 9a (Note Box Input): USA, Televisions	
	Sample Report 9b (Note Text Box): North America	
	Sample Report 9c (Inline Grid Note Entry): Audio Systems	.24
	Sample Report 9d (GridNotes Text Function): USA	

Reviewing the Sample Bursting Definition Files

Note: In this section, any reference to the sample bursting CSV file is available for Narrative Reporting Deployments only.

After the service administrator deploys the Sample Content, you can review the sample bursting definitions. For more information, see <u>Installing Samples</u>.

Use the samples as a guideline to create your own bursting definitions.

The sample bursting files include the following:

- Sample Targeted Distribution files:
 - bursting file segments.csv

This Targeted Distribution CSV file that is used in the **Sample Bursting Definition 1**, which contains level 0 members from the **Segments** dimension and some fictitious (not real) user IDs and email addresses for the first five members.



member	user_names	group_names	external_emails	user_emails	group_emails
BAS	user0001		jane.q.public@company.com	user0001	
HTAS	user0002		jane.q.public@company.com	user0002	
ВВ	user0003		jane.q.public@company.com	user0003	
PCD	user0004		zachary.smith@company.com	user0004	
MP3	user0005		zachary.smith@company.com	user0005	
DV1000					
DV2000					
DV3000					
DV4000					
DV5000					
TVHDTV					
SmartTV					
ProjTV					
PLTV					
IN					
sc					
RP					
NoSegment					

bursting_file_empty.csv

This Targeted Distribution CSV file contains only the column headings so that you can use it as a starting point for creating a new **Targeted Distribution** file.

- · Sample Bursting Definition files:
 - Sample Bursting Definition 1
 - Sample Bursting Definition 2
 - Sample Bursting Definition 3

Sample Bursting Definitions

These sample bursting definitions use some fictitious (not real) email addresses for **Success** and **Failure** notifications and utilize the **Samples** folder as a **Root Folder** for all the output file published to the Library.

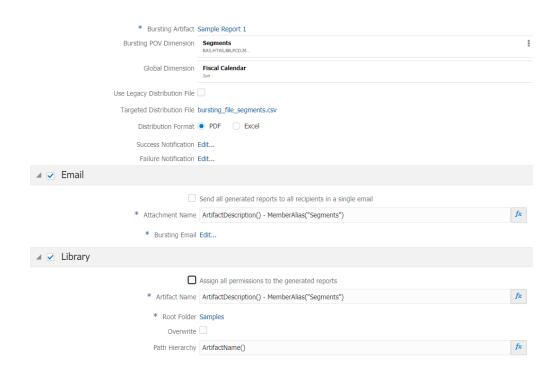
All Sample Bursting Definition files use the text function called ArtifactName() for the folder path, which is created under the **Root Folder** and contains all the output file.

Sample Bursting Definition 1

The **Sample Bursting Definition 1** contains a **Targeted Distribution File** to burst output of a report across the **Segments** dimension, both emailing the output files to respective users and publishing the output files to the Library.

This Bursting Definition uses **Sample Report 1** as the bursting artifact and utilizes the bursting_file_segments.csv file as a **Targeted Distribution** file, with five of the **Segment** members selected in the **Bursting POV Dimension**.

Review the following image, which shows the Sample Bursting Definition 1 selections:



Let's review the following example:

- The Fiscal Calendar dimension is a Global Dimension, with June selected
- Both Email and Library channels are selected with the following information:
 - Under Email, in the Attachment Name field displays the following text:
 ArtifactDescription() MemberAlias("Segments").
 - Under Library, in the Artifact Name field displays the following text:
 ArtifactDescription() MemberAlias("Segments").
- The resulting PDF file names are displayed based on the Report Description and the Segment Member Name. For example, Income Statement Act vs Plan - Bookshelf Audio System.pdf

After executing the Sample Bursting Definition:

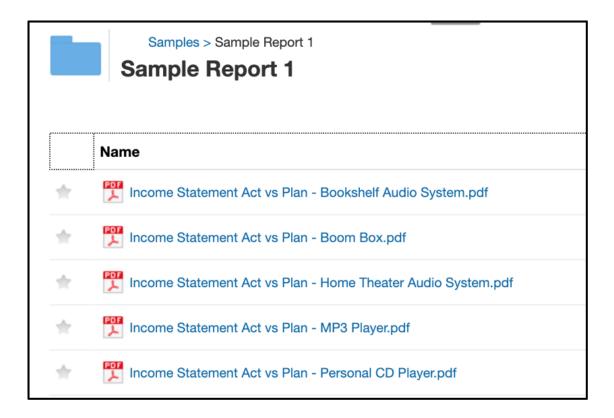
- The output file is generated for the five Segments selected in the Bursting POV Dimension.
- For the **Email** channel, the email addresses in the distribution file listed for each member, in both the <code>external_emails</code> and <code>user_emails</code> columns, the respective users will be emailed their corresponding output file.
 - For example, for the BAS member, jane.q.public@example.com and user0001 will be emailed the resulting output, and so on.



 For the Library channel, all five output files will be published to the Library under the Root Folder - Samples, under the subfolder of "Sample Report 1" (As the result of text function used in the ArtifactName, and Path Hierarchy).

The Library access permissions will be granted for each output based on the distribution file in the user_names column. For example, for the BAS member, user0001 will be granted access to the resulting output, and so on.

 The email address specified in the Success Notification, jaime.sommers@example.com, will be sent an email with the successful execution information for the bursting definition.

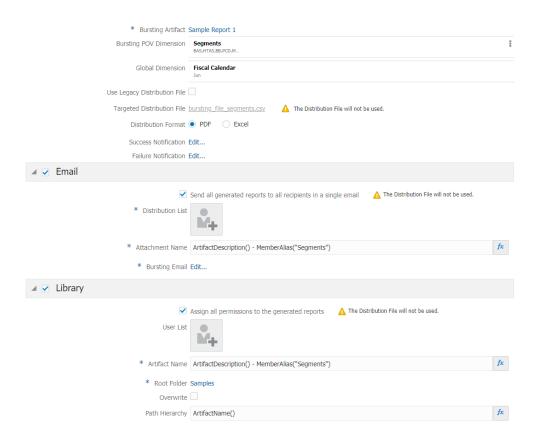


Sample Bursting Definition 2

This Sample Bursting Definition generates a output of a report across the **Segments** dimension without a **Targeted Distribution** file, both emailing all the output files to specified users and publishing the output files to the Library.

This Bursting Definition uses **Sample Report 1** as the bursting artifact, with 5 of the **Segment** members selected in the **Bursting POV Dimension**.

Review the following image, which shows the Sample Bursting Definition 2 selections:



Let's review the following example:

- The Fiscal Calendar dimension is a Global Dimension, with June selected
- Both Email and Library channels are selected with the following information:
 - Under Email, the Attachment Name field displays the following text: ArtifactDescription() - MemberAlias("Segments").
 - Under Library, the Artifact Name field displays the following text:
 ArtifactDescription() MemberAlias("Segments").
- The resulting output file names are displayed based on the Report Description and the Segment Member Name. For example, Income Statement Act vs Plan - Bookshelf Audio System.pdf

After executing the Sample Bursting Definition:

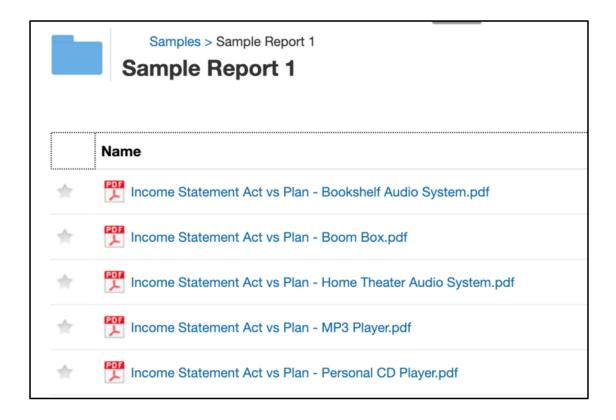
- The output file is generated for the five Segments selected in the Bursting POV Dimension.
- For the Email channel, the Send all generated reports to all recipients in a single email option is selected and the Distribution File is not used, the two user emails specified in the Distribution List, both zachary.smith@example.com, and jane.q.public@example.com will get an email with all the five output files attached.
- For the Library channel, the Assign all permissions to the generated reports option is selected and the Distribution File is not used. Only users specified in the User List will be granted permissions to the resulting output files.



This is a sample Bursting File and every customer will have different users in their system, so there are no system users in the **User List**.

All five output files will be published to the Library under the **Root Folder - Samples**, under the subfolder of "**Sample Report 1**" (As the result of the text function used in the **ArtifactName** and **Path Hierarchy**).

• The email address specified in the **Success Notification**, jaime.sommers@example.com, will be sent an email with the successful execution information for the bursting definition.

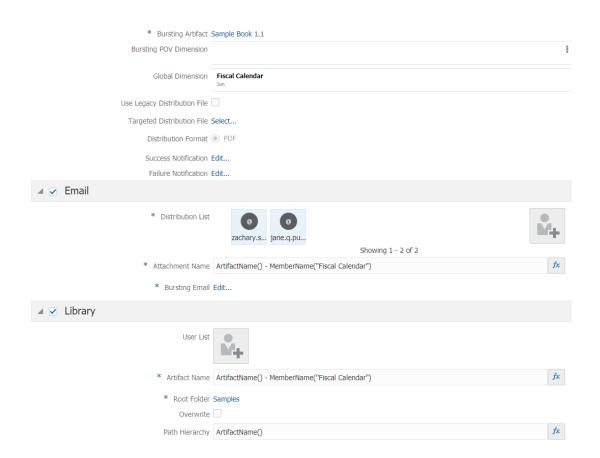


Sample Bursting Definition 3

This Sample Bursting Definition generates a single output of a Book, with no bursting across a dimension, and the outcome of the output file will be sent through email to the specified users, and publish the output file to the Library.

This Bursting Definition uses **Sample Book 1.1** as the bursting artifact, with the Bursting POV dimension set to **None**, therefore only one output file will be generated, and the *Targeted Distribution file is not used*.

Review the following image, which shows the Sample Bursting Definition 3 selections:



Let's review the following example:

- The Fiscal Calendar dimension is a Global Dimension, with June selected
- Both Email and Library channels are selected with the following information:
 - Under Email, the Attachment Name field displays the following text: ArtifactName()
 MemberName ("Fiscal Calendar").
 - Under Library, the Artifact Name field displays the following text: ArtifactName() MemberName("Fiscal Calendar").
- The resulting output file names are displayed based on the **Book Name** and the **Fiscal Calendar Member Name**. For example, Sample Book 1.1 June.pdf

After executing the Sample Bursting Definition:

- One output file is generated because the Bursting POV Dimension is set to None and bursting across multiple members is not available.
- For the Email channel, as the Distribution File is not used, the two user emails specified in the Distribution List, both zachary.smith@example.com, and jane.q.public@example.com will get an email with only one output file attached.
- For the **Library** channel, the **Distribution File** is not used and only users specified in the **User List** will be granted permissions to the resulting output file.





This is a sample Bursting File. Every customer will have different users in their system, so there are no system users in the **User List**.

The output file will be published to the **Library** under the **Root Folder** - **Samples**, under the subfolder of "**Sample Book 1.1**" (As the result of the text function used in the **ArtifactName** and **Path Hierarchy**).

• The email address specified in the **Success Notification**, jaime.sommers@example.com, will be sent an email with the successful execution information for the bursting definition.

