

Oracle® Fusion Cloud EPM

Designing with Reports



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Oracle Fusion Cloud EPM Designing with Reports,

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1

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 EPM CoE 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 Oracle Fusion 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 EPM CoE, including customers who have already implemented EPM.

How Do I Get Started?

Click to get best practices, guidance, and strategies for your own EPM CoE: [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*.



2

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 Fusion Cloud EPM sources, Essbase Cloud, and ERP Cloud Financials. Reports is also embedded in the Oracle Fusion Cloud Enterprise Performance Management Platform business processes and applications: Enterprise Profitability and Cost Management, Planning and Planning Modules, Financial Consolidation and Close, Tax Reporting, and FreeForm (Cloud EPM 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 can also be used to generate Cloud EPM System Reports (Enterprise licenses only), specifically for the Cloud EPM business processes and components, such as Task Manager, Supplemental Data, and Enterprise Journals. You can embed Data Tables within Reports to include system data, as required. You can accomplish this by inserting a relational table into a report, connecting to a Cloud EPM business process schema, selecting members, and then generating a system report based on Cloud EPM relational system data. You can also use some of the grid features in tables, such as member selector, prompts and POV, formatting, sorting, drill to content, conditional formatting/suppression, formulas, and grouping. The other Report features that are available with relational tables are charts, text boxes, books, bursting, and Excel output (reports only).

Reports in Narrative Reporting deployments 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. Cloud EPM deployments do not include Notes.

Reports in Narrative Reporting deployments under the Enterprise subscription also contain the following features:

- Generative AI (GenAI) for generating narrative summaries and summarizing Notes.
- Inserting an Oracle Analytics Cloud dashboard into a report as a static, refreshable image (Analytics Image).

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.
- PDF files can be viewed inline using the built-in PDF viewer and downloaded in the Narrative Reporting Library.
- Fonts are uploaded and managed in the Narrative Reporting Library.
- Scheduling for bursting definitions is done via the Narrative Reporting Job Console.
- Migrate Financial Reporting (FR reports) to Reports via Library import of Financial Reporting (FR) report artifact exports.
- Utilize Generative AI (GenAI) for generating narrative summaries in a text box or text segment, as well as to summarize Notes.

In Cloud EPM deployments:

- Reports does not include Notes or Gen AI functionality.
- Reports are integrated with Narrative Reporting via **Remote Libraries**, however Reports in Cloud EPM 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 Cloud EPM instances. Data Sources are automatically created based on the Cloud EPM application cubes that are on the instance.
- Reports, security, and POV selections are managed by the Cloud EPM platform. Reports are stored in the Cloud EPM repository.
- Reports, books, and bursting definitions can be moved between environments using the Cloud EPM Lifecycle Management.

- Migrate Financial Reporting (FR reports) to Reports natively via the Financial Reporting card/tab.
- Fonts are uploaded and managed in Application Setting in Reporting Settings.
- Scheduling for bursting definitions is done via the Cloud EPM platform Job Scheduler.

Watch this overview video to understand the highlights of Reports.



-- [Reports in Cloud EPM Narrative Reporting.](#)



-- [Reporting in the new Cloud EPM Platform.](#)

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



-- [Creating Reports in Narrative Reporting Cloud.](#)



-- [Creating Reports in Cloud EPM.](#)

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 from a multi-dimensional data source, such as a cube from a Cloud EPM business process, Essbase, or Fusion ERP.
- **Table** — A report object in which you retrieve data from a Cloud EPM relational schema (Enterprise licenses only).
- **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.
- **Analytics Image** — For Narrative Reporting deployments, you can insert an Oracle Analytics Cloud dashboard canvas into a report as a static refreshable image.
- **Shared** — 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.

3

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 and tables 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](#)
Report objects include grids, tables, text boxes, images, and charts.
- [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 table, 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.

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 and tables connect to cloud data sources.

In Narrative Reporting Deployments:

Connections need to be defined by the *Service Administrator* with a native, and not SSO, user to connect Reports to the various supported data sources. A **data source** defines a specific cube, relational schema, or Oracle Analytics Cloud instance 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. When connected to a supported Cloud EPM business process for system reporting, the applicable relational schemas are displayed when setting up an inserted table.
- When users access a report in Narrative Reporting, their User ID is passed to the data source, so their cube access permissions (data and member security) are applied to the report results.

Connections also allow accessing reporting artifacts in Oracle Fusion Cloud Enterprise Performance Management 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 Cloud EPM Platform to Narrative Reporting.

Note

Remote Libraries should only be enabled when they are regularly used and accessed, where the credentials defined in **Connections** are always valid. When the **Library** and related cards (for example, **Reports**, **Books**, and so on) are accessed for the first time in a session, the system performs checks on all **Connections** with **Remote Libraries** enabled. If the remote connection cannot be accessed due to expired credentials or an unavailable instance, there may be significant performance degradation when accessing the **Library** and related cards.

It is recommended to only enable **Remote Libraries** for **Connections** where regular access to reporting artifacts is required. Also, keep the **Connection** credentials up to date and do not leave stale or unused **Connections** defined with **Enable Library** selected.

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:

- Oracle Fusion Enterprise Performance Management, used for:
 - Enterprise Profitability and Cost Management
 - FreeForm
 - Planning and Planning Modules
 - Financial Consolidation and Close
 - Tax Reporting
- Oracle Essbase
- Oracle Fusion Cloud EPM Profitability and Cost Management

- Oracle Fusion Cloud Essbase
- Oracle Essbase On-premises Deployment
- Oracle Analytics Cloud

Note

- The Oracle Analytic Views connection type is not currently supported. An announcement will be made in a future release when this support becomes available.
- For Oracle Essbase and Oracle Essbase On-premises Deployment data sources, self signed certificates are not supported.

Note

- 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**.
- Both the Narrative Reporting and **Connections Administrator ID** need to be **native** users and not **Single Sign-On (SSO)**. For more information, see Managing User Credentials for SSO-Enabled Cloud EPM and Oracle Enterprise Data Management Cloud Environments in *Getting Started Guide for Administrators*. In addition, Multi Factor Authentication (MFA) is not supported for the Administrator ID in a Connection.
- When connecting Narrative Reporting to Cloud EPM data sources, the release version of Narrative Reporting needs to be the same release version as the Cloud EPM data source. This is required for the **Remote Library** feature as well as compatibility between Narrative Reporting and the Cloud EPM Platform ADM driver, which is used for data and member queries against the Cloud EPM Platform cubes.
- When connecting Narrative Reporting to Oracle Analytics Cloud (OAC), only the current OAC version is supported to ensure compatibility with the latest tested OAC release for Narrative Reporting.

In Enterprise Performance Management Cloud deployments:

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

For Narrative Reporting Deployments:



-- [Working with Connections and Remote Libraries.](#)

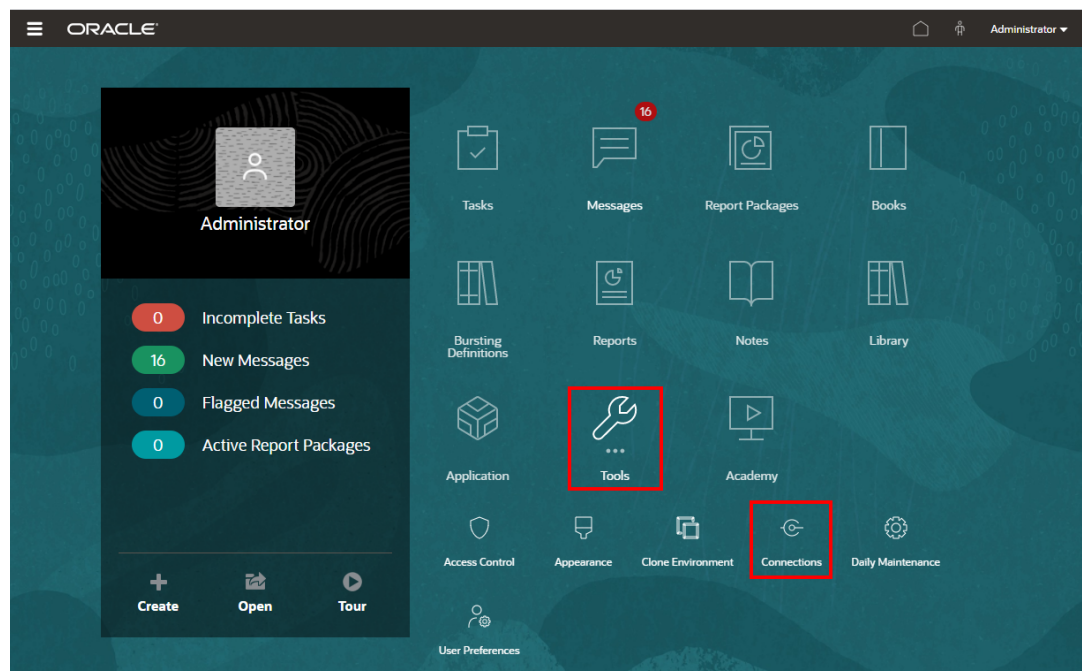
Creating and Editing Data Source Connections

To create a connection:

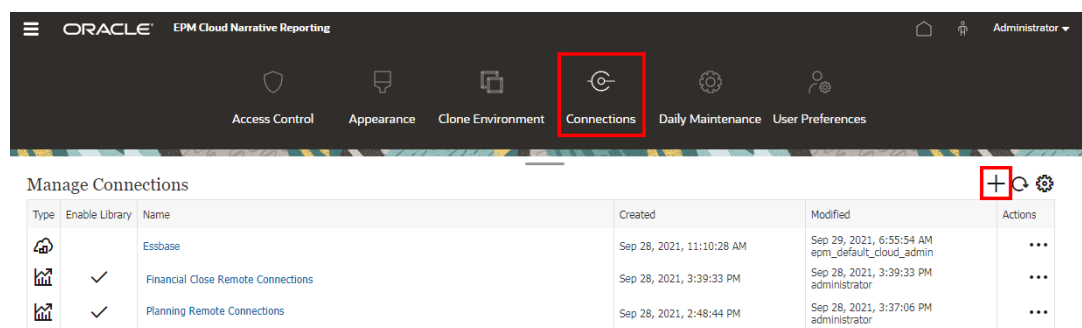
1. On the Narrative Reporting Home page, under the **Tools** icon, you can select **Connections**.

Note

- Only the Service Administrator role can create and maintain **Connections**.
- Both the Narrative Reporting and **Connections Administrator ID** need to be **native** users and not **Single Sign-On (SSO)**. For more information, see Managing User Credentials for SSO-Enabled Cloud EPM and Oracle Enterprise Data Management Cloud Environments in *Getting Started Guide for Administrators*.
- To create a connection to Oracle Analytics Cloud, or for more information, see [Creating a Connection to Oracle Analytics Cloud](#).



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 Fusion Enterprise Performance Management, used for:
 - Enterprise Profitability and Cost Management
 - FreeForm
 - Planning and Planning Modules
 - Financial Consolidation and Close
 - Tax Reporting
 - Oracle Essbase
 - Oracle Fusion Cloud EPM Profitability and Cost Management
 - Oracle Fusion Cloud Essbase
 - Oracle Essbase On-premises Deployment
 - Oracle Analytics Cloud

Note

- The Oracle Analytic Views connection type is not currently supported. An announcement will be made in a future release when this support becomes available.
- For Oracle Essbase and Oracle Essbase On-premises Deployment data sources, self signed certificates are not supported.

5. In **Server Name**, enter the data source server name with no protocol or URL. For example, for Oracle Fusion Cloud Enterprise Performance Management, if data source URL is: `https://<servername>/HyperionPlanning`, the server name is: `<servername>`.
6. (Oracle Fusion Cloud Essbase and Oracle Essbase On-premises Deployment 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.

Note

- Not required for Oracle Essbase, Oracle Fusion Cloud Essbase or Oracle Essbase On-premises Deployment.
- For Cloud EPM 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

- Both the Narrative Reporting and **Connections Administrator ID** need to be native users and not **Single Sign-On (SSO)**. For more information, see Managing User Credentials for SSO-Enabled Cloud EPM and Oracle Enterprise Data Management Cloud Environments in *Getting Started Guide for Administrators*.
- 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.

Connection 

* Name

Type

* Server Name

Identity Domain

* Administrator User ID

* Administrator Password

 Connection Successful!

☒ Enable Library

Manage Data Sources    

Data Source Name	Application Name	Cube Name
Vision	Vision	Plan1 

(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 Cloud EPM 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  **Add Data Sources** to add one or more cubes to connect Reports to.

- For each cube, enter a **Data Source Name**, select the **Application** and **Cube** names.

☒ Enable Library

Manage Data Sources    

Data Source Name	Application Name	Cube Name
Plan1	Vision ▼	Plan1 ▼

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.

Note

- 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.](#)

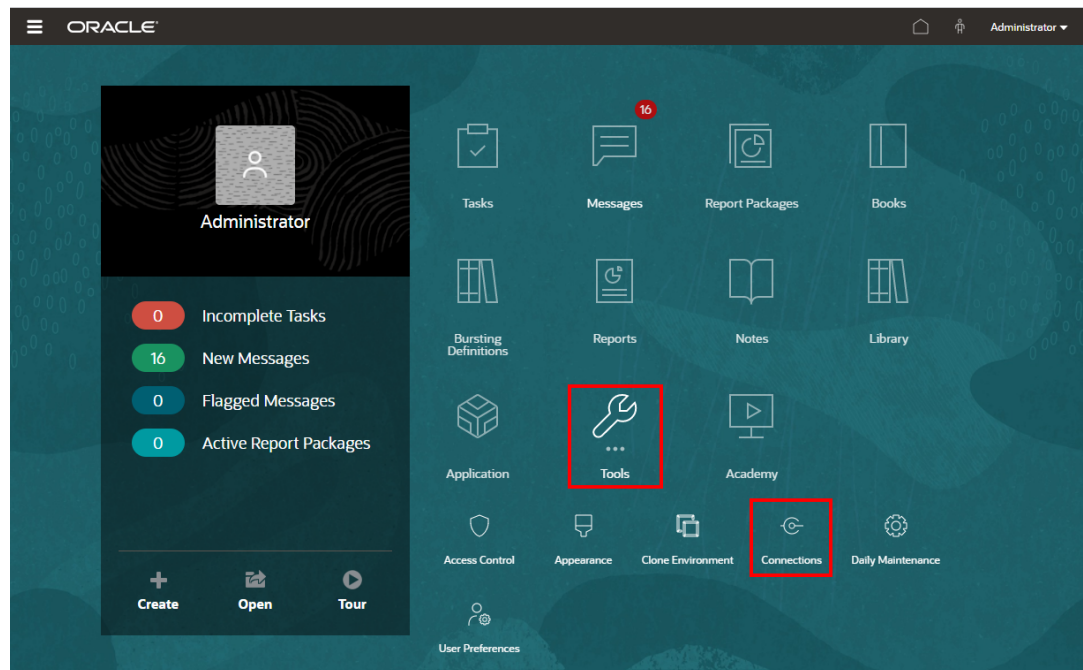
Creating a Connection to Oracle Analytics Cloud

To create a Connection to Oracle Analytics Cloud (OAC):

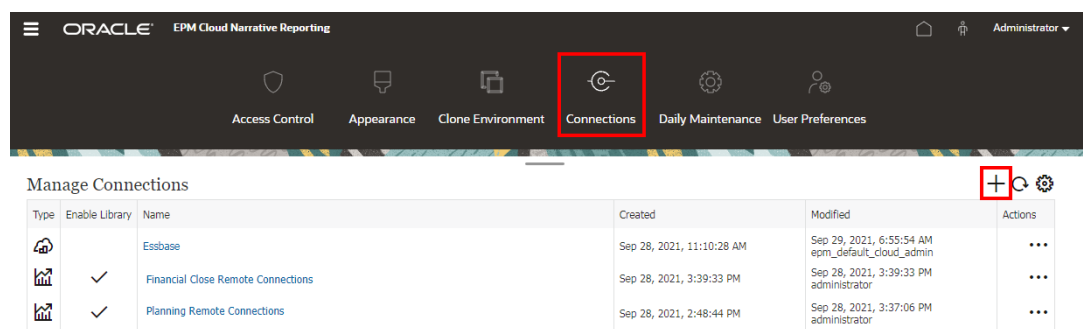
- On the Narrative Reporting Home page, under the **Tools** icon, you can select **Connections**.

Note

- Only the Service Administrator role can create and maintain **Connections**.
- Both the Narrative Reporting and **Connections Administrator ID** need to be **native** users and not **Single Sign-On (SSO)**. For more information, see Managing User Credentials for SSO-Enabled Cloud EPM and Oracle Enterprise Data Management Cloud Environments in *Getting Started Guide for Administrators*.



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 **Oracle Analytics Cloud**.
5. Enter values for the following fields:

- **Server Name** – Enter the server name of the OAC server.
 - **IDCS Token Endpoint URL** – Enter the server URL for the Oracle Identity Cloud Service (IDCS).
 - **Client ID** - Enter the Client ID for the IDCS instance. The Client ID is a unique identifier assigned to a client application during its registration with Oracle Identity Cloud Service (IDCS). It is used to identify the application when making authentication requests.
 - **Client Secret**
 - Enter the Client Secret for the IDCS instance. The Client Secret is a confidential string associated with the client application, serving as a password. It is used in conjunction with the Client ID to authenticate the application when requesting access tokens.
 - **Scope** – Enter the Scope for the OAC instance. The Scope defines the specific permissions or access levels that the client application is requesting. Scopes limit access for the OAuth token and do not grant any additional permissions beyond those the user already possesses.
 - **JWT Signing Key** – Enter the JWT Signing Key. The JWT Signing Key is a private key used to sign JSON Web Tokens (JWTs) to ensure their integrity and authenticity. In the context of OAC, this key is part of a public-private key pair used for secure communication and authentication.
 - **Certificate Alias** – Enter the Certificate Alias. The Certificate Alias is a label assigned to a certificate when it is uploaded to IDCS. This alias is used to reference the certificate within the system.
6. Click **Test Connection**.
 7. Click **OK** to add the Connection.
The connection will appear in the list under the **Manage Connections**.

To edit a connection for Oracle Analytics Cloud (OAC):

1. Under **Manage Connections**, select the **Connection**.
2. Select **Edit** from the Actions menu.

Note

When you edit a connection, you can change any or all of the connection information.

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](#)
The toolbar lets you do the following:
- [Report Properties](#)

- [Working with Print All Selections Sequence](#)
The **Print All Selections Sequence** controls how pages are grouped and ordered when generating the PDF output. This feature helps organize content from multiple sheets and print selections.

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:

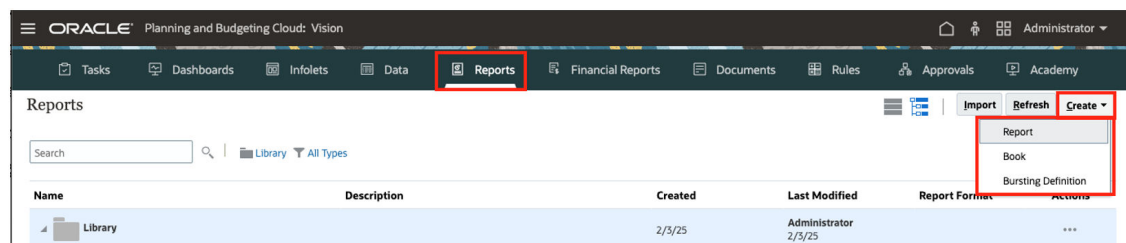
You access the report designer:

From an Oracle Fusion Cloud Enterprise Performance Management service, select



Report card (Library card in Tax Reporting).

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.



-- [Adding Objects to Reports.](#)

For Cloud EPM Deployments.



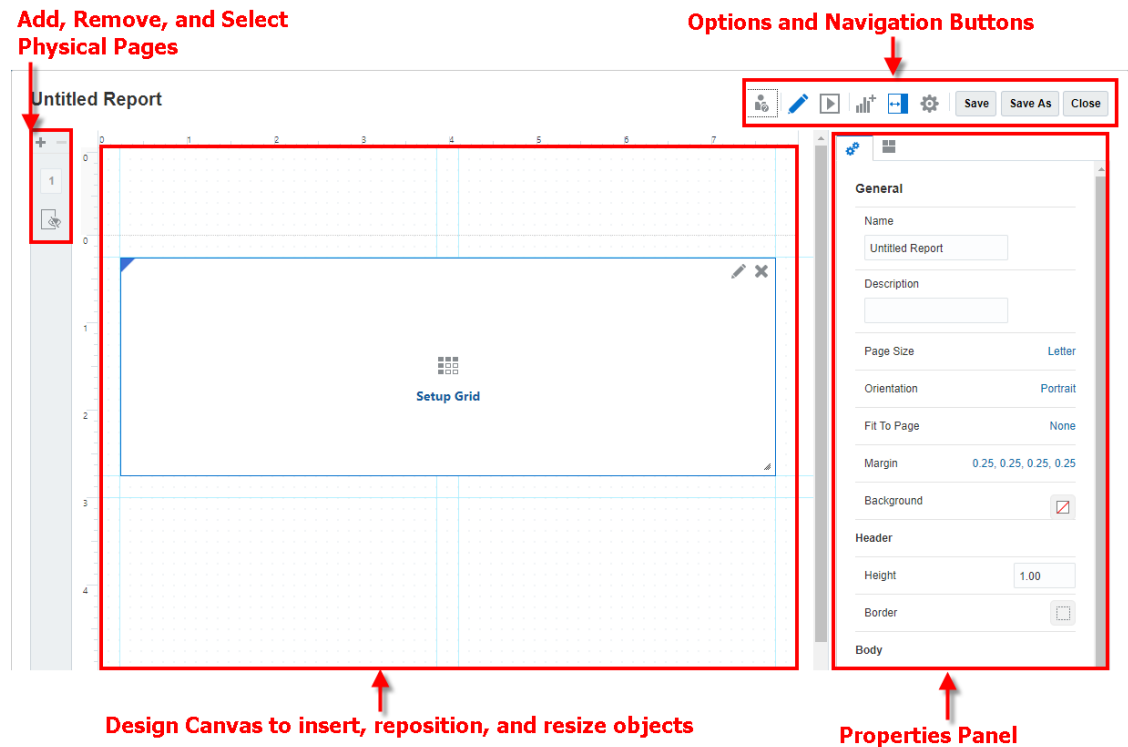
-- [Adding Report Objects in Cloud EPM.](#)

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](#).

Note

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.

Note

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:



Edit/Preview

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.

Income Statement - Act vs Plan

HSP_View Year Period Version Entity Product
BaseData FY20 Jan Working TD P_TF

Vision Corporation
Income Statement - Act vs Plan
Jan FY20
Report Run Date: Jan 12, 2022 4:58 AM

	Actual	% of Net Sales	Plan	% of Net Sales
Total Revenue	27,399,038	100%	28,994,776	100%
Total Cost of Sales and Service	17,587,132	64%	16,397,029	64%
Gross Profit	9,811,906	36%	12,597,747	36%
Total Employee Expenses	219,524	1%	223,434	1%
Total Operating Expenses	2,978,863	11%	4,279,013	11%
Total Depreciation & Amortization	612,238	2%	717,306	2%
Operating Expenses	3,810,624	14%	5,219,752	14%
Pretax Income from Operations	6,001,281	22%	7,377,995	22%
Total Other Income & Expense	4,966	0%	-	0%
Total Pretax Income	6,006,247	22%	7,377,995	22%
Net Income	6,006,247	22%	7,377,995	22%

Grid 1

Excel
HTML
PDF
Download as PDF
Download as Excel
Download as Excel Ad Hoc
Show POV
Refresh
Edit
Member Labels
Alias Table

Note

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 in *Working with Oracle Smart View for Office 25.100*.
- This feature is not available for hidden grids.

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.

Note

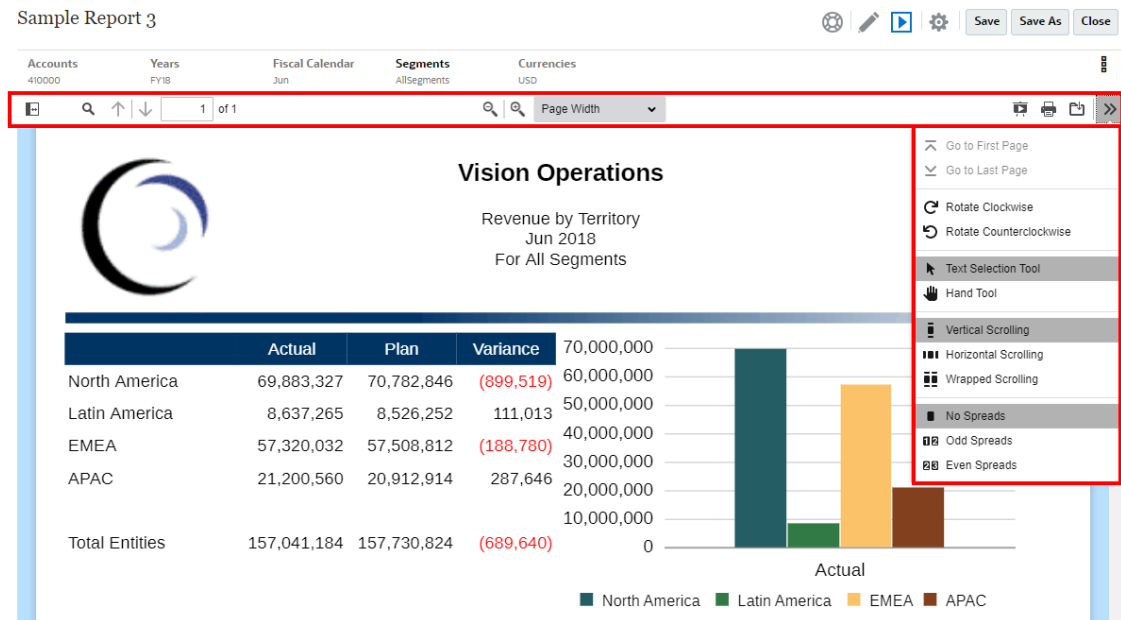
If the report results are too large to be rendered in the browser (HTML with a grid cell count limit of 180000 or PDF size limit of 10MB), you will be prompted to download the

report as a PDF where you can either select **OK** to download or **Cancel** to cancel the operation.

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

Sample Report 3



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

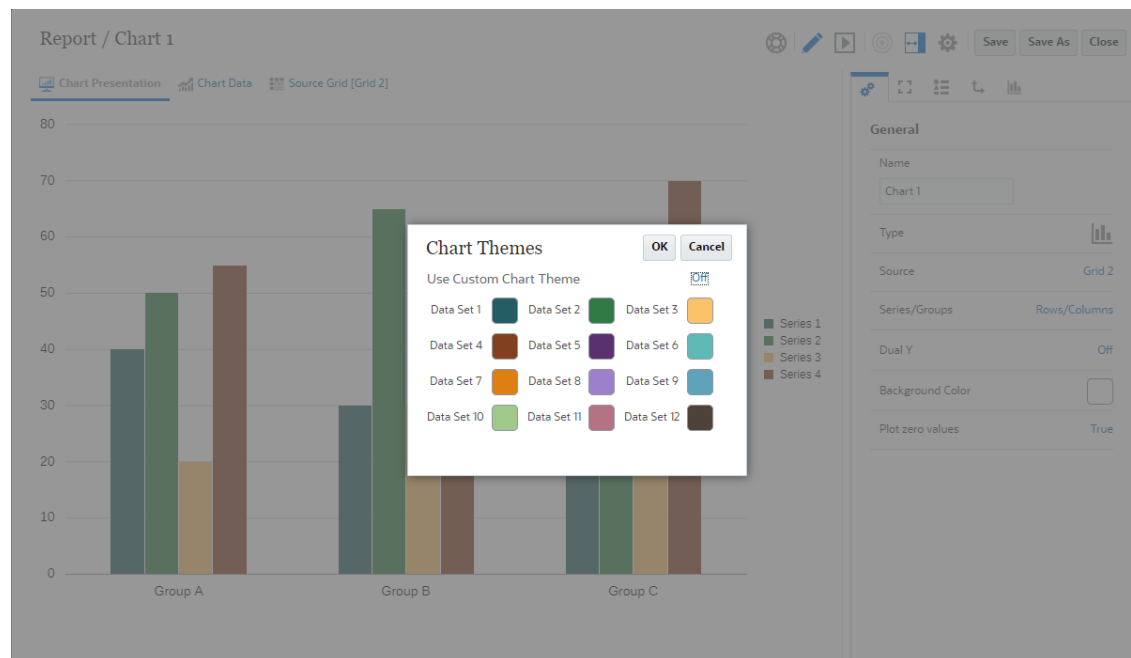
Service Administrators can also set the default chart color for the first 12 chart data sets for all charts by selecting **Set Default Chart Colors** and enabling a custom chart theme. This setting

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.

① Note

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.

When **Allow ad hoc analysis** is enabled, this option allows report previewers to zoom into any parent member on all grids in the report. For more information, see [Ad hoc Zooming](#).

The **Print All Selections Sequence** controls how pages are grouped and ordered when generating PDF output. For more information, see [Working with Print All Selections Sequence](#).

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=0ff`): The text object height will not increase or decrease. If the relevant text does not fit in the design time height, it will be truncated.
- **Fit** (equivalent to `AutoSize=0n`): 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.

Note

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 Print All Selections Sequence

The **Print All Selections Sequence** controls how pages are grouped and ordered when generating the PDF output. This feature helps organize content from multiple sheets and print selections.

The PDF output is generated using the selected sequencing method, allowing content to be grouped and ordered appropriately for improved readability and presentation. The available options for the Print All Selections are:

- **By Member (default):** Processes print selections across all sheets by interleaving content from different sheets. For each selection, all sheets are processed before moving to the next selection.

Example Flow: A report with two sheets, each containing one grid and Print All Selections is enabled.

Sheet 1 → Sheet2 (Selection 1)

Sheet 1 → Sheet2 (Selection 2)



vision
All Segments | January | 2026

Vision Corporation
Summary Revenue Performance
Run Date: 18-May-20 9:59:29 AM
By: System

	Actual	% of Net Sales	Plan	% of Net Sales
Net Revenue	\$ 125,018,551	100%	\$ 141,041,842	100%
Cost of Sales	81,013,465	65%	90,858,821	64%
Gross Profit	44,005,086	35%	50,183,021	36%
Operating Expenses	35,428,578	28%	34,564,452	25%
Pretax Income From Operations	13,575,508	11%	15,617,789	11%
Other Exp (Inc)	(2,745,366)	(2%)	(3,135,158)	(2%)
Total Pretax Income	10,829,641	9%	12,482,631	9%
Net Income	\$ 17,899,542	14%	\$ 8,253,572	6%

vision
Audio Systems | January | 2026

Vision Corporation
Summary Revenue Performance
Run Date: 18-May-20 9:59:29 AM
By: System

	Actual	% of Net Sales	Plan	% of Net Sales
Net Revenue	\$ 27,007,556	100%	\$ 31,647,244	100%
Cost of Sales	18,845,906	70%	21,863,279	69%
Gross Profit	8,161,650	30%	9,783,965	31%
Operating Expenses	6,854,864	25%	7,793,303	25%
Pretax Income From Operations	1,306,786	5%	2,004,663	7%
Other Exp (Inc)	(793,315)	(3%)	(925,214)	(3%)
Total Pretax Income	713,471	3%	1,079,449	4%
Net Income	\$ 10,989,669	41%	\$ 4,79,633	2%

- **By Sheet:** Processes all print selections for one sheet before moving to the next sheet.

Example Flow: Output is generated for a report with two sheets, each containing one grid and Print All Selections is enabled.

Sheet1 → Selection A, Selection B

Sheet2 → Selection A, Selection B



The image shows the Oracle Report Designer interface. On the left, there is a vertical stack of four report preview thumbnails. On the right, two full report preview pages are displayed. Both reports are for 'Vision Corporation' and show 'Summary Revenue Performance' for January 2026. The top report is for 'All Segments' and the bottom report is for 'Audio Systems'.

Report 1: All Segments | January | 2026

	Actual	% of Net Sales	Plan	% of Net Sales
Net Revenue	\$ 125,018,503	100%	\$ 143,543,842	100%
Cost of Sales	82,013,485	65%	90,899,825	64%
Gross Profit	44,905,018	36%	50,182,221	36%
Operating Expenses	30,428,076	24%	38,564,452	27%
Pretax Income From Operations	13,575,009	11%	15,617,769	11%
Other Exp (Inc)	(2,746,388)	(2%)	(3,136,133)	(2%)
Total Pretax Income	10,828,621	9%	12,481,636	9%
Net Income	\$ 17,899,542	14%	\$ 8,133,572	6%

Report 2: Audio Systems | January | 2026

	Actual	% of Net Sales	Plan	% of Net Sales
Net Revenue	\$ 27,087,056	100%	\$ 31,647,244	100%
Cost of Sales	18,045,909	70%	21,493,279	68%
Gross Profit	8,141,650	30%	9,985,965	32%
Operating Expenses	6,654,864	25%	7,783,303	25%
Pretax Income From Operations	1,506,786	6%	2,204,663	7%
Other Exp (Inc)	(793,315)	(3%)	(921,214)	(3%)
Total Pretax Income	713,471	3%	1,283,449	4%
Net Income	\$ 10,989,888	41%	\$ 479,893	2%

- **On Same Sheet:** Stacks multiple print selections on the same physical pages for each sheet. Content continues stacking until the page space is exhausted, then flows to the next page.

Example Flow: Multiple selections appear together vertically (stacked).

Sheet1 → Selection A + Selection B

Sheet2 → Selection A + Selection B

The image displays three variations of a financial report titled "Vision Corporation Summary Revenue Performance". The report is for "All Segments (January 1, 2020)".

Top-Left Screenshot: Shows the report with borders applied to the header, footer, and body. The data is organized into sections: "North America", "Latin America", "EMEA", and "APAC". Each section has a table with columns for "Actual", "Plan", and "Variance".

Top-Right Screenshot: Shows the report without borders. The data is organized into sections: "North America", "Latin America", "EMEA", and "APAC". Each section has a table with columns for "Actual", "Plan", and "Variance".

Bottom-Right Screenshot: Shows the report with borders and a different layout. The data is organized into sections: "North America", "Latin America", "EMEA", and "APAC". Each section has a table with columns for "Actual", "Plan", and "Variance".

Note

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 boundary line on the design canvas.

Configuring Print All Selections Sequence

To generate a PDF output, perform the following steps:

1. In the Report Designer, select a report object, and then click **Properties**.
2. For the **Print All Selections Sequence** option, select one of the following modes:
 - By Member (Default)
 - By Sheet
 - On Same Sheet
3. Click **Save**, and then generate the PDF output.

Note

Ensure that you enable **Print All Selections** for the required POV dimension.

Working with Report Objects

Report objects include grids, tables, text boxes, images, and charts.

In Narrative Reporting deployments, you can insert shared objects into a report, as well as **Notes**(Narrative Reporting only) for structured POV-based commentary entry.

When you add report objects to a report, you define their position in the report layout. For grids, tables, and charts, you select the data source 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 Fusion Cloud Enterprise Performance Management Deployments.



-- [Adding Report Objects in Cloud EPM.](#)

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.

Note

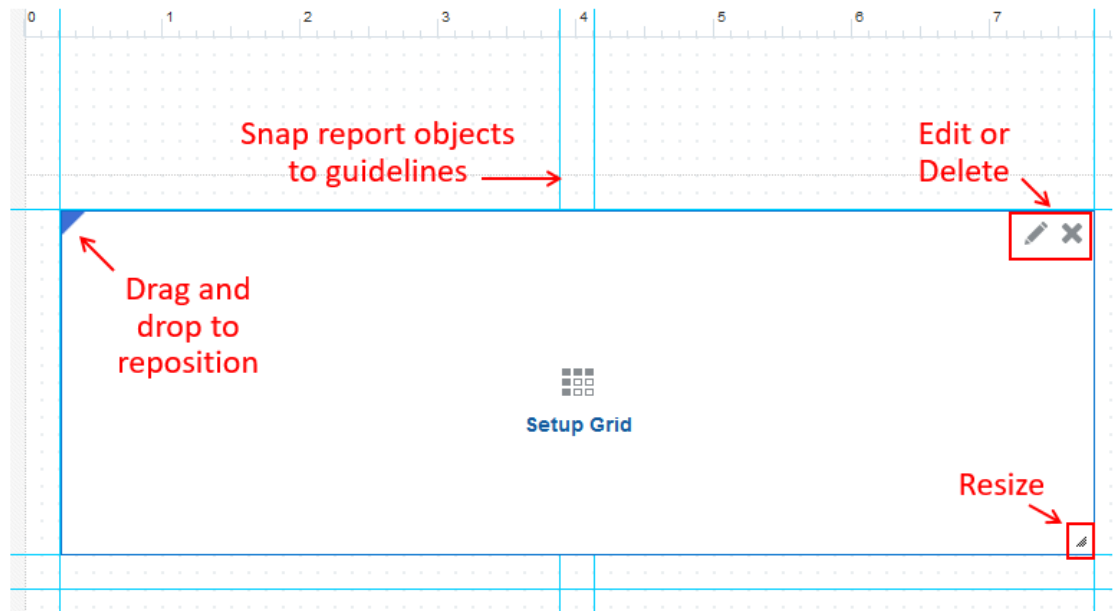
You can insert only text boxes and images in the report header and footer.

Note

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.

ⓘ **Note**

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 guideline.
- 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 guideline.

For more information about working with report objects, see:

- [Working with Grids](#)
- [Working with Tables](#)
- [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.

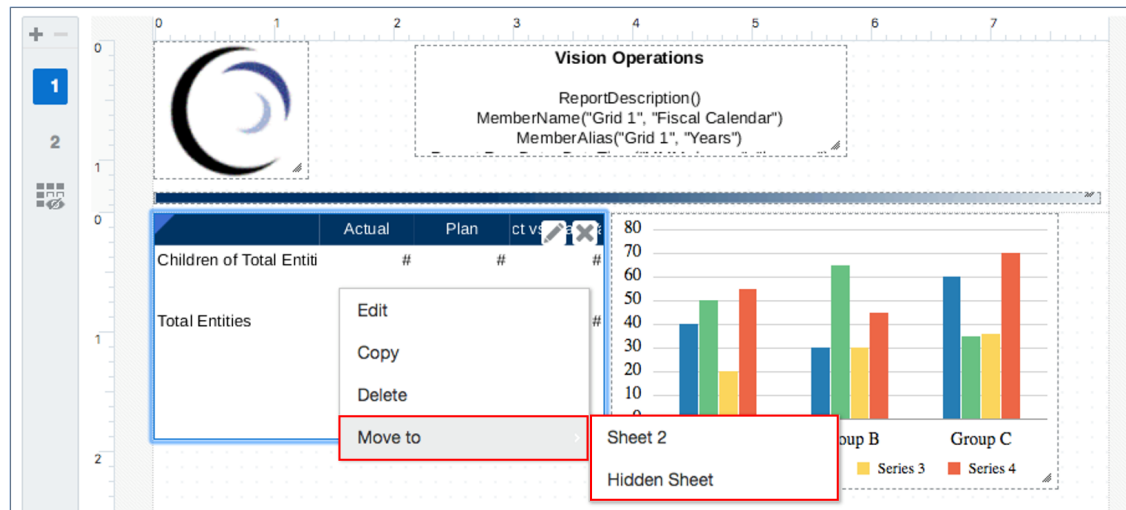
In addition, if you want to hide a grid or table from displaying in the report output, you can move it to the hidden sheet.

To copy or move a report object:

1. 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, right-click, 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](#).

Note

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](#)
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.
- [Global versus Local Point of View](#)
The Point of View (POV) determines the data to retrieve in a report.

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, tables, and charts in the report. Optionally, you can also define local POVs for each grid, table, 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

Point of View

Entities		Segments	Currencies	Years	Scenarios
Total Entities		Default	USD	FY15,FY14	Actual
A1					
		A	B	C	D
		Q1	Q2	Q3	Q4
1	Children of 500000	#	#	#	#
2	500000	#	#	#	#

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, tables 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.

Note

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

HSP_View BaseData	Year FY14	Scenario Actual	Version Working	Entity Total Entity	Product P_TP	Years FY15	Entities Total Entities	Segments Segments	Currencies USD
EPRCS Sample Model									
					Quarter1	Quarter2	Quarter3	Quarter4	
					-33,717,131	27,256,397	24,312,261	5,279,425	
PBCS Vision									
		Plan							
					Q1	Q2	Q3	Q4	
					0000: Net Income	19,772,999	22,876,514	26,960,258	27,693,189

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 table, 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 [Text Functions](#).

To use text functions to display information in a report:

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

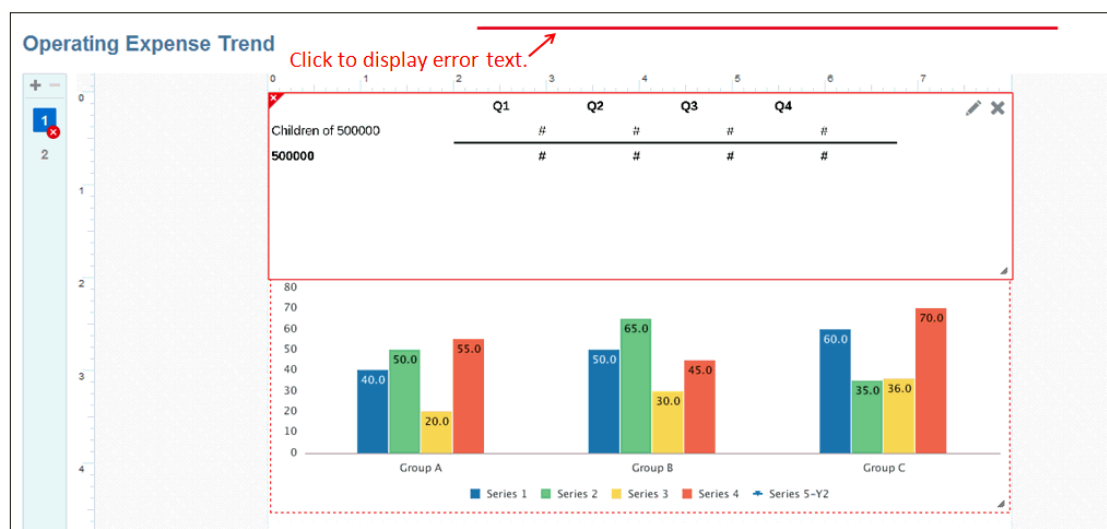
- In a formula cell in a grid or table, click , then select **Custom Heading**, and then click  ..
- 2. In the **Insert Function** dialog box, select a function, and then specify the parameters for the function. Then, click **Select** to insert the text function.

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

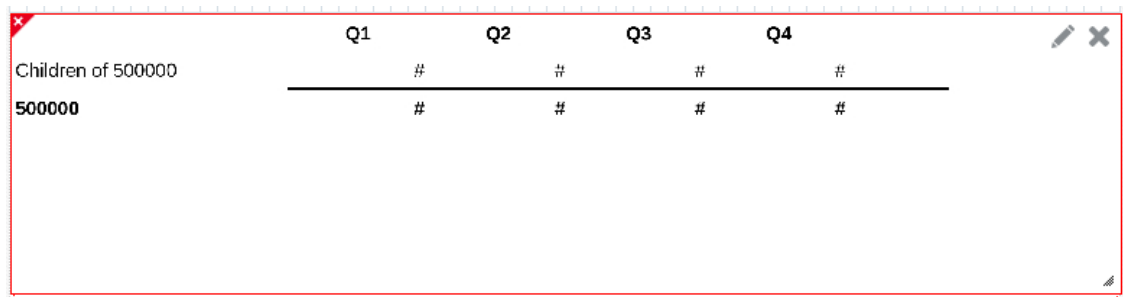


Report errors are indicated by a red bar above the report header. Click on the bar to display the error text.

Note

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

A screenshot of a report object in a design tool. The report has a title 'Children of 500000' and a value '500000'. It features a table with four columns labeled Q1, Q2, Q3, and Q4. Each column contains a single data point represented by a hash symbol (#). A red 'X' icon in the top-left corner of the report object indicates an error. In the top-right corner, there are icons for editing (a pencil) and deleting (an 'X').

	Q1	Q2	Q3	Q4
Children of 500000	#	#	#	#
500000	#	#	#	#

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](#)
A grids contains a row and column structure with data from 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

A grids contains a row and column structure with data from 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.

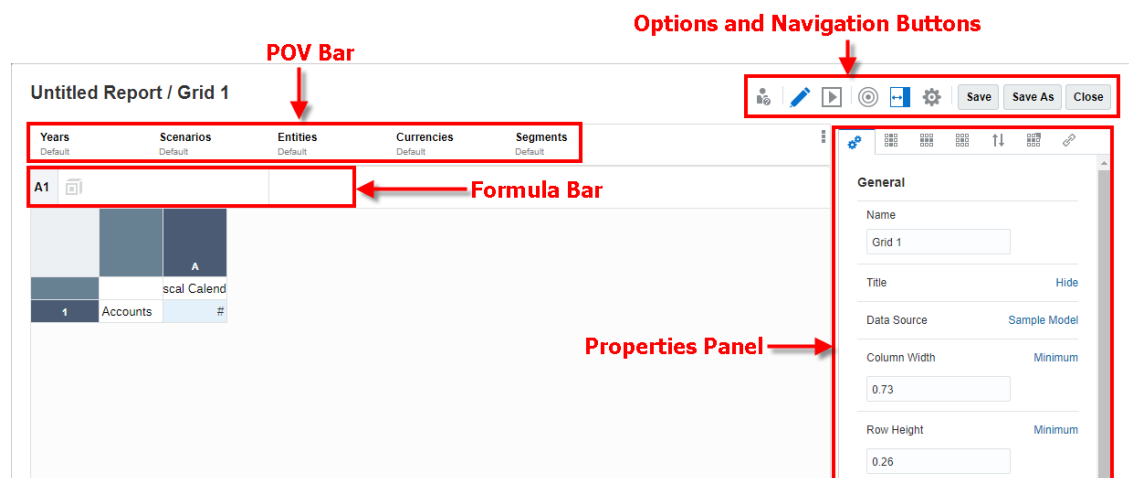
The grid is displayed in Grid Designer with a default dimension selection for the rows and columns. Typically, the **Time** dimension is placed in the columns and the **Account** dimension is placed in the rows.

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](#)
- [Cell Properties](#)
- [Sorting](#)

Overview of Grid Properties

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



General Properties

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, specify zoom and indent options, and apply repeated headings to individual rows or column header levels. You can also show or hide cell attachment links for selected cells in the grid that have attachments at the data source. See [Cell Properties](#).



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](#)



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.

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

Property Name	Descriptions
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 Cell Properties . 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 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 .
Zoom Before	Enable Zoom Before when performing a Zoom to display child members before ancestor members.
Zoom on Shared Members	Enable Zoom on Shared Members when Zoom is enabled in grid or cell properties to allow zooming on shared members. Zooming on shared members is equivalent to zooming on their corresponding base members.
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 .
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 .

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

Property Name	Descriptions
Drill Through to Source	To enable Drill Through to Source , where a file attached to a cell at the data source, such as an Oracle Fusion Cloud Enterprise Performance Management 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 .
Use Expense Variance	Select to allow the Variance and VariancePercent numeric formula functions to be based on the IsExpense account member property instead of the Account Type account member property.
Compare to Zero: Decimal Precision	The Compare to Zero: Decimal Precision property specifies how many decimal places are used to determine the suppression and text replacement for zero. By default, the property is "Off" and the comparison with zero is exact (for example: data value of 0.0000000001 is not zero). If the value is not "Off", Reports uses the specified number of decimals of precision when comparing against zero. For example: - Property setting of 1 means 0.1 is not zero; 0.01 is zero - Property setting of 2 means 0.01 is not zero; 0.001 is zero - Property setting of 5 means 0.00001 is not zero; 0.000001 is zero
Treat Missing as 0 in Formula	Select to treat #MISSING values as zero when evaluating grid formulas. When enabled, formula rows or columns that reference missing data are calculated using 0 instead of returning an error. This setting affects formula evaluation only and does not change the underlying data values or how missing data cells are displayed. The default setting is False.
Headings	

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

Property Name	Descriptions
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 - Zero Values	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.
Text character width	The property allows you to choose between more and less conservative sizing of text in a table text cell. The property can have a value of Large , Medium , or Small . By default, the property is set to Large .

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

Property Name	Descriptions
Suppression	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.
Zero Values	Suppress row and columns with data values of zero.

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

Property Name	Descriptions
No Data	Suppress rows and columns that contain only cells for which no data exists. NOTE: 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.
No Access	Suppress rows and columns that contain data that you do not have the security access to view.
Error	Suppress rows and columns that contain data in cells that cannot be retrieved or calculated because of errors.

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

Property Name	Descriptions
Missing Blocks	Suppress blocks of cells for which no data exists in the database. This can improve the efficiency of Suppress Missing Data. However, this option can degrade performance if no or few rows are suppressed. Note: - For Cloud EPM 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. Suppress Missing Blocks with Zoom enabled on column segments is not supported.
Native (Database)	Applies row suppression at the Oracle Essbase level instead of at the business process level, which reduces the amount of data on the business process side and eliminates the impact on query thresholds. Note: This option can degrade performance if no or few rows are suppressed. Test reports before and after using this setting to determine if performance is improved.

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

Property Name	Descriptions
Date Format	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 Padding - Horizontal - Vertical	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.
Grouping - Group Page Break - No 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
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
Page Break Before	Inserts a page break before a column
Repeated Heading	Use the Repeated Heading property to repeat selected text, separator, data, or formula with the column headings in HTML and PDF preview. 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
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	Use the Repeated Heading property to repeat selected text, separator, data, or formula with the column headings in HTML and PDF preview. 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.
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, Underscore 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. • You can specify only one trailing character for this property.

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

Property Name	Descriptions
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 - Zero Values - No Data - No Access - Error	Select whether you want to suppress zeroes, cells with no data, errors or no access for data cells in the row.

Cell Properties



Cell Properties

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

Table 4-4 Review the Cell Properties

Property Name	Descriptions
Number	
Positive Prefix/Suffix	Specify a prefix and suffix for positive numbers
Negative Prefix/Suffix	Specify a prefix and suffix for negative numbers.
Negative in Red	Displays negative values in red.
Align Prefix/Suffix	Aligns numeric data values in a column based on the prefixes and suffixes defined.
Use Default	Uses the thousands and decimal separators based on the locale specified in User Preferences.
Thousands/Decimal Separator	If Use default is not selected, define thousands and decimal separators for the selected cells.
Decimal Places	Specify the number of decimal places to apply to a number.
Scale Value By	Number to multiply values by for scaling purposes. You can also specify custom scaling.
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.

Table 4-4 (Cont.) Review the Cell Properties

Property Name	Descriptions
Font and Font Size	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)
Vertical/Horizontal Alignment	Select the desired vertical and horizontal alignment for the cell content.
Indent	Number of spaces to indent the heading and the associated text, data, and formula cells from the left margin.
Indent by	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 your level zero members are not at the same generation. Select None to remove the indent from the row or column.
Repeated Heading	Specify whether to suppress, show, or merge repeated row or column heading cells.

Table 4-4 (Cont.) Review the Cell Properties

Property Name	Descriptions
Zoom	Use Zoom to enable zooming on the parent member. See Zooming on Parent Members in Grids 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 in <i>Learning About Narrative Reporting</i>). 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.
Text Character Width	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.

Table 4-4 (Cont.) Review the Cell Properties

Property Name	Descriptions
Borders	 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. When specifying overlapping borders on adjacent cells via formatting or conditional formatting, where the border width is the same, for example, a cell with a dashed bottom border and the cell below it with a solid top border, Reports will use the same behavior that the browser does for overlapping cell borders. This behavior is as follows: • For vertically adjacent cells (top and bottom cells), the top cell's bottom border will take precedence over the bottom cell's top border. • For horizontally adjacent cells (left and right cells), the left cell's right border will take precedence over the right cell's left border.
Shading	 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.
Replace Text	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. 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.

Table 4-4 (Cont.) Review the Cell Properties

Property Name	Descriptions
Drill through to source	To enable Drill Through to Source , where a file attached to a cell at the data source, such as an Oracle Fusion Cloud Enterprise Performance Management 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 .
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

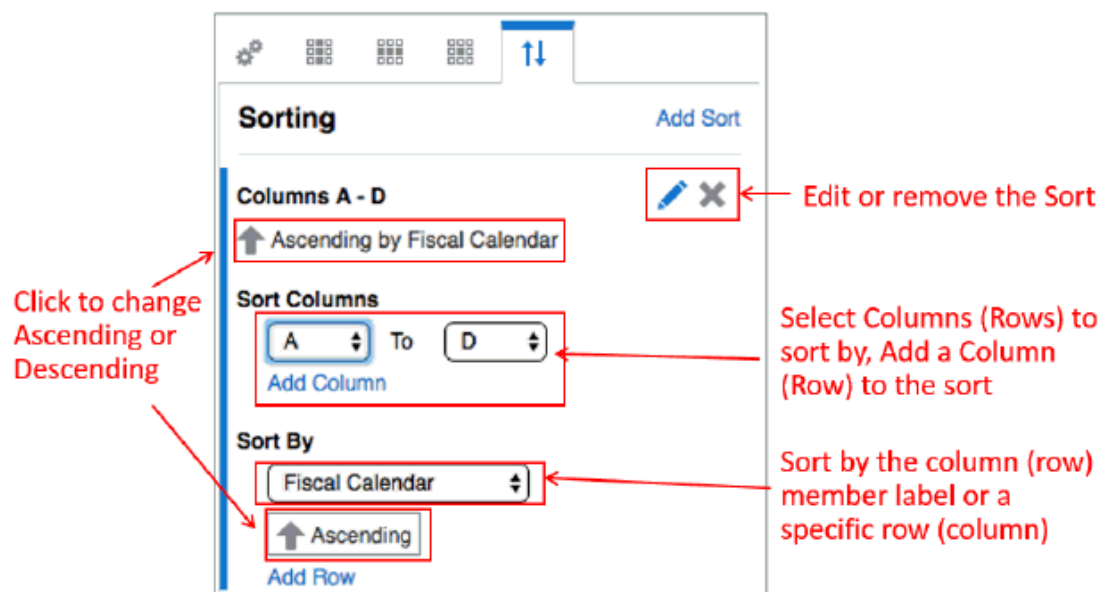
Click **Reset to Default** to set all cell formatting for the selected cells back to their default settings.

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

	Q1	Q4	Q2	Q3
Audio Systems	76,489,479	89,650,040	88,869,476	94,449,033
Digital Video	94,553,926	110,822,603	109,857,694	116,754,969
Televisions	72,228,447	84,655,867	83,918,786	89,187,520
Total Segments	357,162,574	387,799,106	399,403,041	412,017,208

[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:



Edit/Preview

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.

 Note

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.

**Report 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 all reports.
- Select default chart colors.
- Manage named POVs (Narrative Reporting only)
- Format Manager to view and perform administrative functions on Note Templates and Notes, and create and maintain Note Formats, which are used with the Notes text function (Narrative Reporting only).

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:

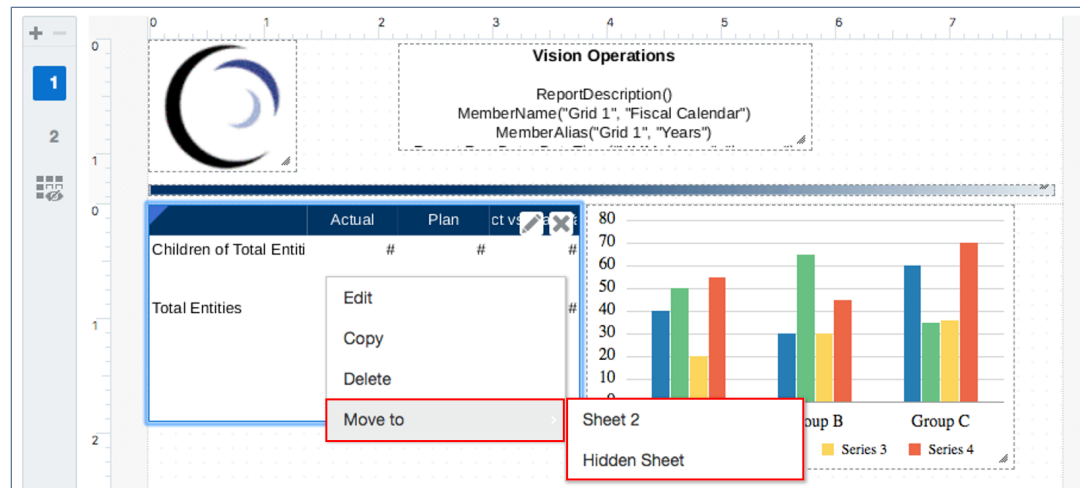


1. In the **Report Designer**, from the sheet panel, click
2. To add a grid to a report. See [Adding a Grid](#) topic to insert a new grid.

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:
 1. 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](#)

Note

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.

Note

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 [Displaying the Printable Page Member](#).

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.

 Note

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.

 Note

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**.

Note

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 .
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

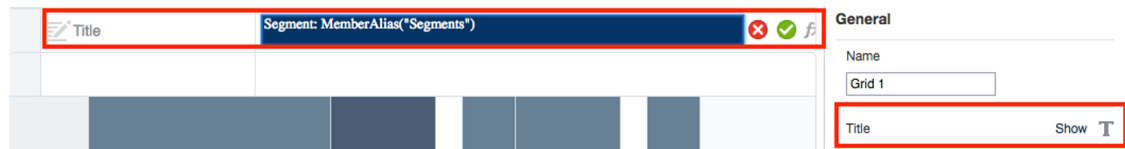


Figure 4-4 Displaying the Results of the Formula in the Header

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

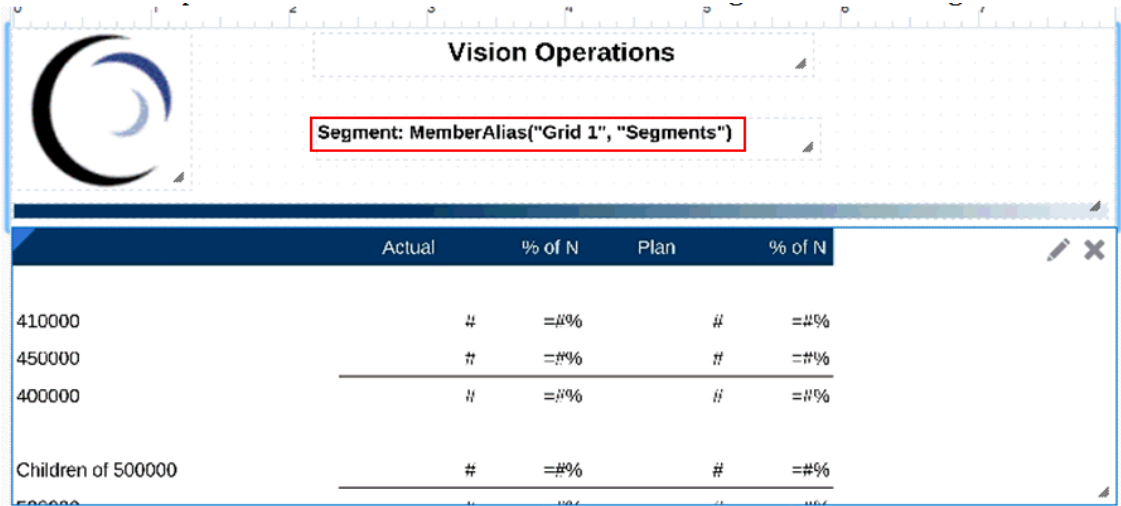
To insert a text function to display the POV selection in the header:

1. 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 .
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.

- 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 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



The screenshot shows a report design interface. At the top, there is a header section with a logo on the left and the text "Vision Operations" in the center. Below the logo, a formula is displayed in a red-bordered box: "Segment: MemberAlias('Grid 1', 'Segments')". Below the header, there is a table with four columns: "Actual", "% of N", "Plan", and "% of N". The table contains several rows of data, including numerical values and text labels like "Children of 500000".

	Actual	% of N	Plan	% of N
410000	#	=#%	#	=#%
450000	#	=#%	#	=#%
400000	#	=#%	#	=#%
Children of 500000	#	=#%	#	=#%

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

 Vision Operations 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%

 Vision Operations 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 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 .
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.
6. **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

The screenshot shows a report grid with a header row and a data row. The header row has columns labeled A, B, C, D, E, and F. The data row has columns labeled Actual, % of Net Sales, Plan, and % of Net Sales. A red box highlights the top left cell, and a red arrow points to the formula bar above it, which contains the text: Segment: MemberAlias("Segments").

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%

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%

Attribute Dimensions and the Point of View

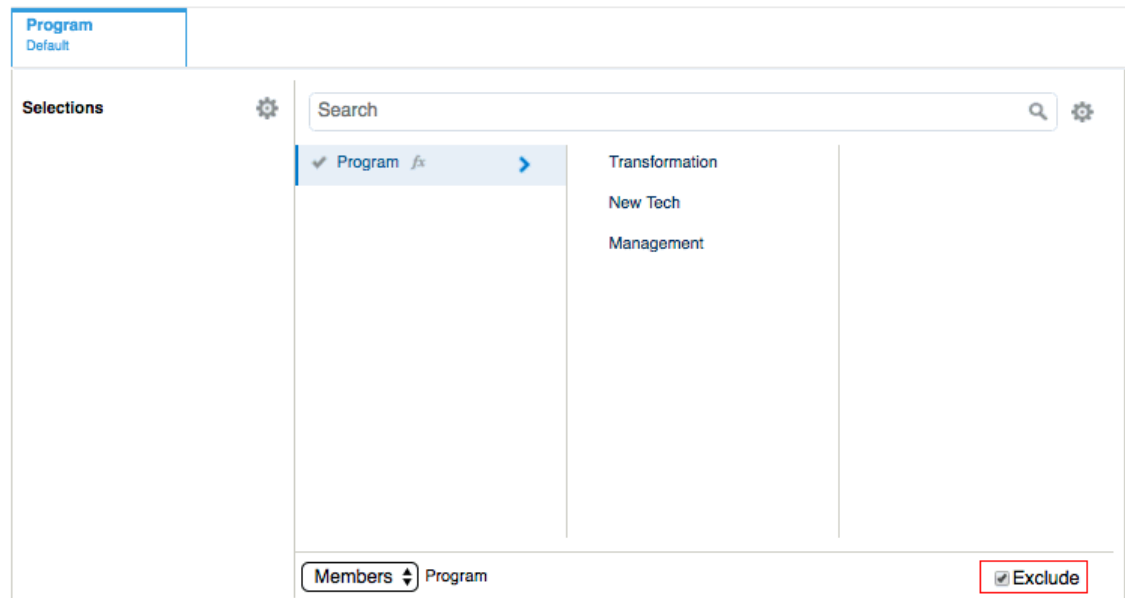
Attribute dimensions are dimensions that are associated with standard dimensions, typically used to display calculated values. Since they are dynamically calculated at retrieval time, they can add processing time to a report retrieval. When an attribute dimension is in the POV, report designers can choose 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](#).

4. **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

Grid (1)				
Entities	Segments	Currencies	Years	Scenarios
Total Entities	Default	USD	FY15, FY14	Actual

[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

Grid (1)				
Entities	Segments	Currencies	Years	Scenarios
Total Entities	Segments	USD	FY15	Actual
Q S ☒ FY15 ☒ FY14				

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

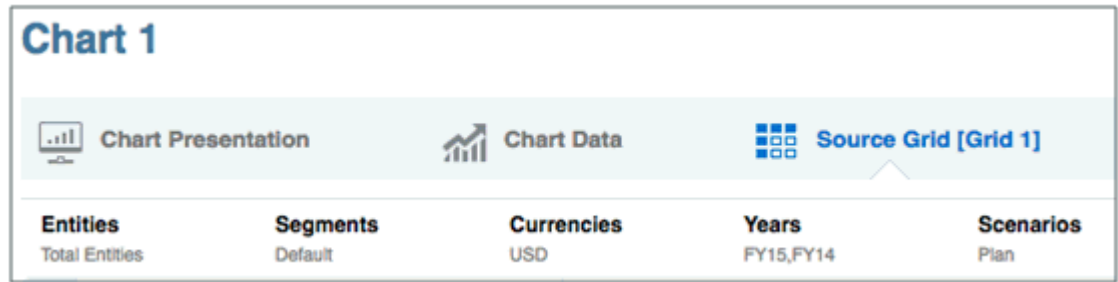


Figure 4 shows Chart 1 in design mode. Note the following:

- *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.

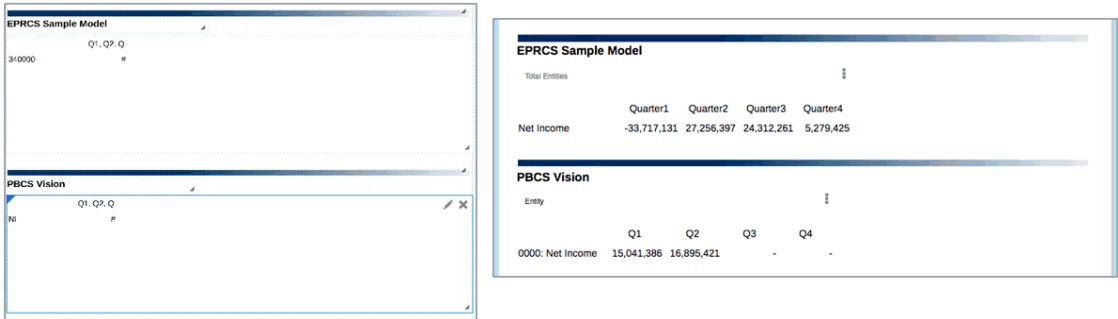
Figure 4-14 Example 1, Chart 1: Preview Mode



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

Grid 1				
Years	Segments	Currencies	Scenario	Entity
Default	Default	Default	Actual, Plan	Total Entities

[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

Years

FY15

☒ FY15

☒ FY14

 All Members...

Segments

Segments

☒ Actual

☒ Plan

[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

Grid 2					
HSP_View	Year	Scenario	Version	Entity	Product
BaseData	FY14	Actual, Plan	Working	Total Entity, TD	P_TP

[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

HSP_View	Year	Scenario	Version	Entity	Product
BaseData	FY14	Actual	Working	Entity	P_TP

[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

HSP_View	Year	Scenario	Version	Product	Years	Segments	Currencies
BaseData	FY14	Actual	Working	P_TP	FY15	Segments	Currencies
EPRCS Sample Model							
Total Entities							
Quarter1 Quarter2 Quarter3 Quarter4							
Net Income -33,717,131 27,256,397 24,312,261 5,279,425							
PBCS Vision							
Total Entity							
Q1 Q2 Q3 Q4							
0000: Net Income 15,041,386 16,895,421 - -							

[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

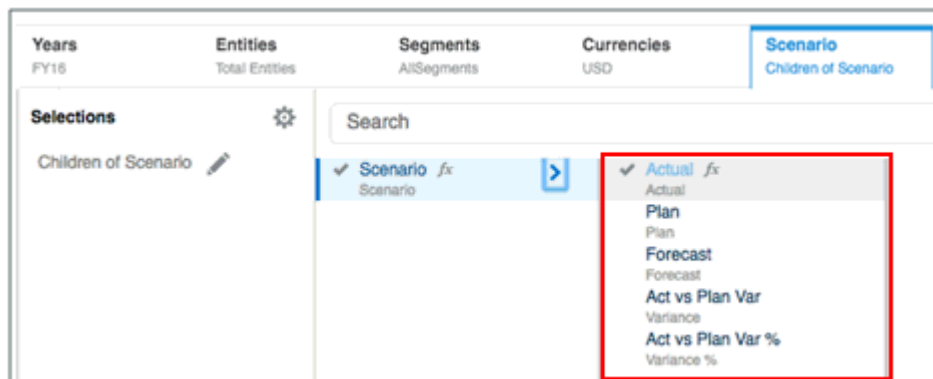
EPRCS Sample Model				
	Q1, Q2, Q3			
3/0000				

PBCS Vision				
	Q1	Q2	Q3	Q4
0000: Net Income	15,041,386	16,895,421	-	-

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.

Note

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

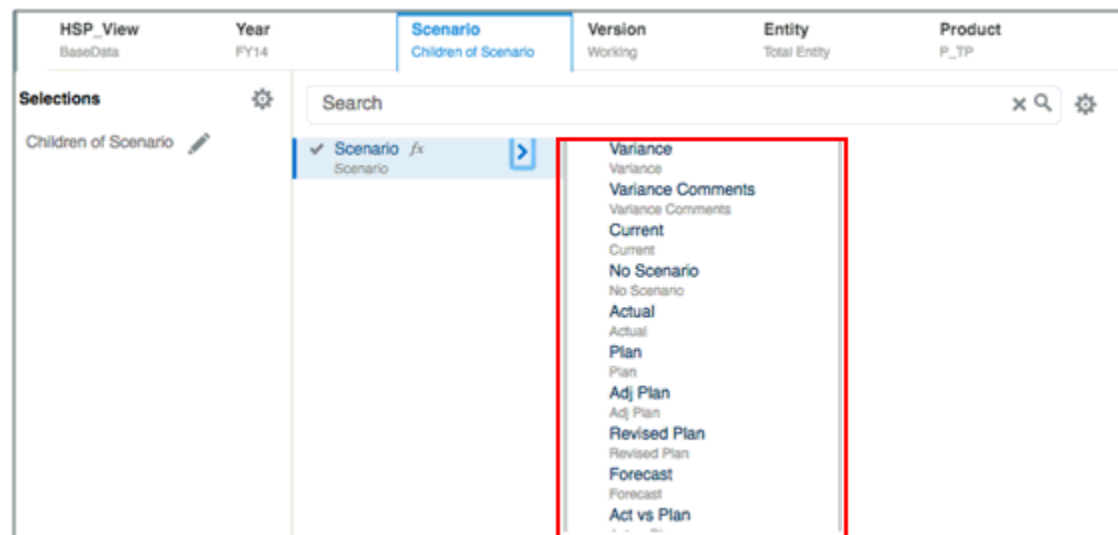


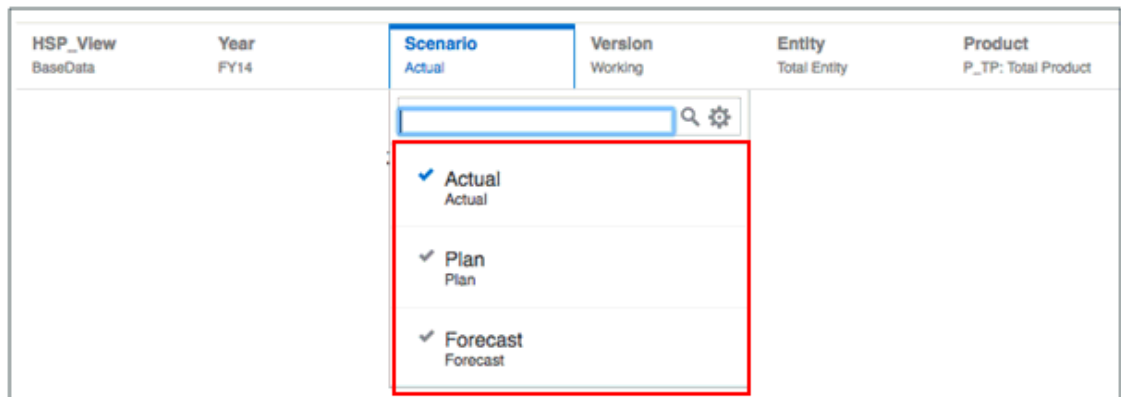
Figure 15 shows grid two in design mode. Note the following:

- *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.

Note

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.

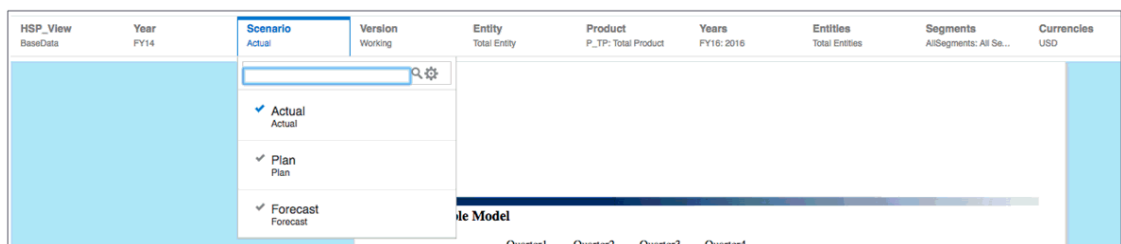
Figure 4-25 Example 3, Grid 2: Preview Mode



[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.

Note

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  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.
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 **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**.
3. Optionally select another segment and continue performing a **Paste Members** operation, as needed.

Note

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.

Note

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**.

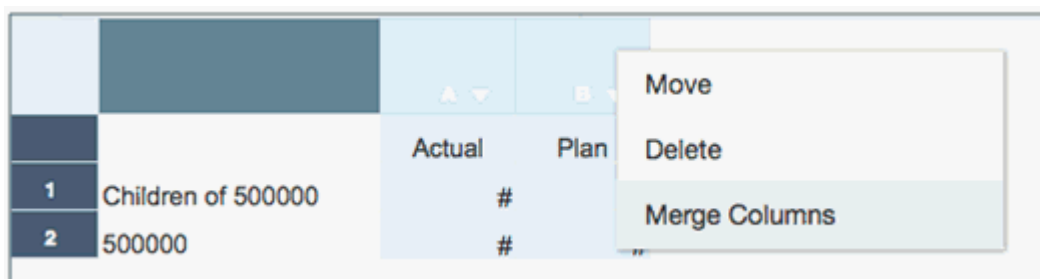
Merging and Separating Rows or Columns

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


		Actual	Plan
1	Children of 500000	#	#
2	500000	#	#

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

Figure 4-28 After Merging

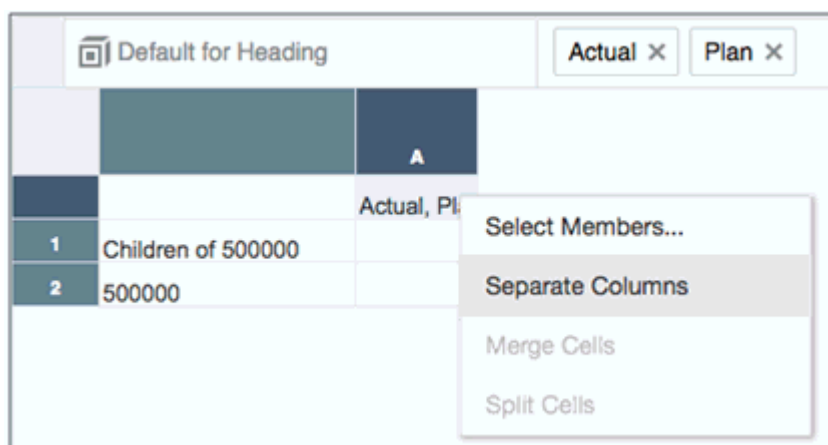

		Actual, Plan
1	Children of 500000	#
2	500000	#

[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


	Default for Heading	Actual	Plan
		A	
		Actual, Plan	
1	Children of 500000		
2	500000		

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

Figure 4-30 After Separating

	Default for Heading	Actual X	
		A	B
		Actual	Plan
1	Children of 500000	#	#
2	500000	#	#

[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:

1. 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:

1. 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 4-31](#) 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

		A	B	C	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:

1. 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  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:

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

See [Using Functions](#).

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

Scenarios	Entities	Currencies	Accounts	Years
Default	Default	Default	Default	Default
	+ Formula for Heading		AVERAGE(Cell [A,1])	
		A	B	C
		Jan, Feb, Mar, Apr, May, Jun, Jul,	Sum(Cell [A,1])	AVERAGE(Cell [A,1])
1	Segments	#	=#	=#

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".
4. 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.

Note

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 be 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.

Note

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

The following functions are supported with auto-complete:

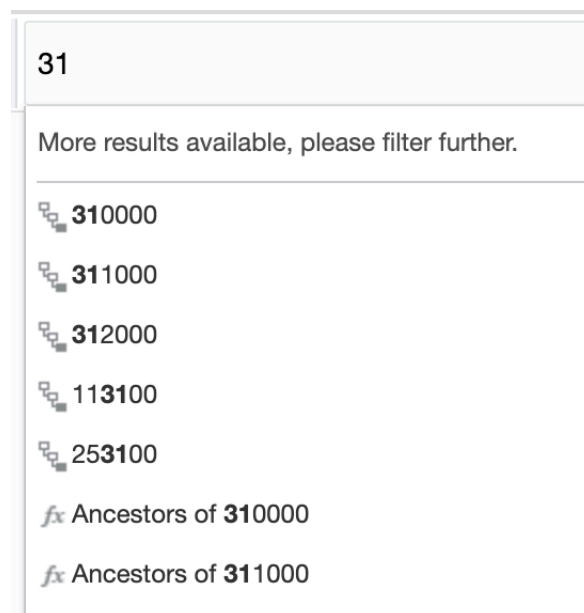
- Ancestors
- Bottom
- Children
- CurrentPOV

- 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.
<i>fx</i> Children of Entities
<i>fx</i> Children of Total Entities
<i>fx</i> Children of E01
<i>fx</i> Children of E01_101
<i>fx</i> Children of E01_101_1000
<i>fx</i> Children of E01_101_1100
<i>fx</i> Children of E01_101_1200

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.

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.

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.](#)

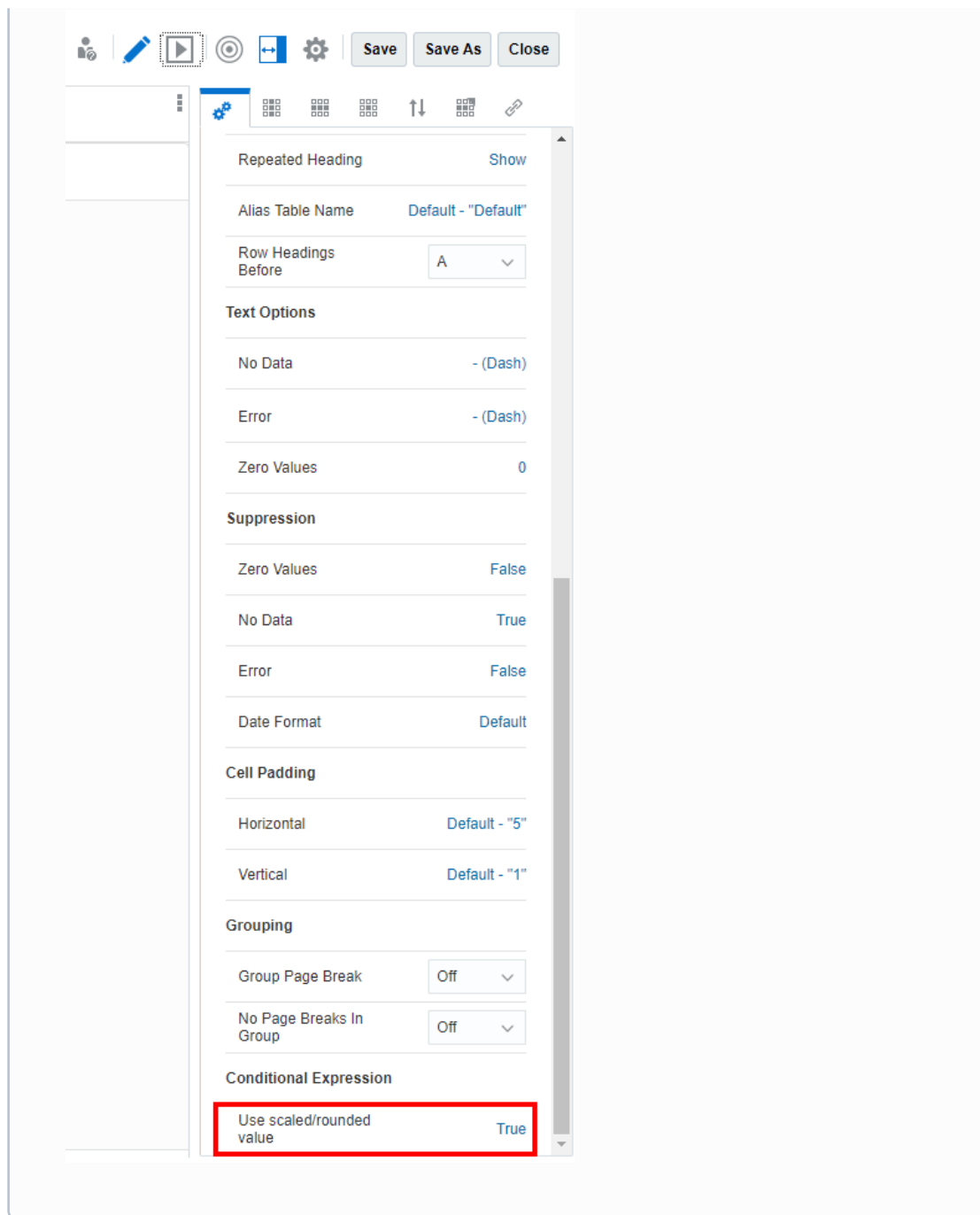
Creating a Condition

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**).

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.

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. **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 [Cell Properties](#).

Note

- 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.
- To set a Prefix or Suffix property to an empty value as part of a Conditional Format, first enter a non-empty value for the property and tab out of the field. Then, change the property back to an empty value and tab out again. This will set the property's value to empty.

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 ConditionalText 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 ConditionalText 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



to group, remove, duplicate, or move them up or down.

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.

Note

- If the same conditional format definition is created multiple times, the duplicate conditional formats will be merged into single conditional formats when the report is saved and reopened. All cell references for the duplicate formats will be adjusted.
- Upon editing the saved report, a warning message will be displayed:
Removed duplicate formatting rules from "Grid 1". Cell references for the duplicate formats have been adjusted.

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](#).

		A	B	C
		Actual	Plan	t vs Plan Var
1	Intersect([Descendant	#	#	###

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

Name *	Green
Applies To	1C
Current Cell Value	greater than Value 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

Name *	Yellow		
Applies To	1C		
Current Cell Value	less than	Value	0
AND			
Current Cell Value	greater than	Value	-10

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

Name *	Red		
Applies To	1C		
Current Cell Value	less than	Value	-10

[Figure 2](#) shows the final grid with all three conditions applied to the Variance % column.

Figure 4-34 Grid with Traffic Lighting Conditions Applied

	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)

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](#).

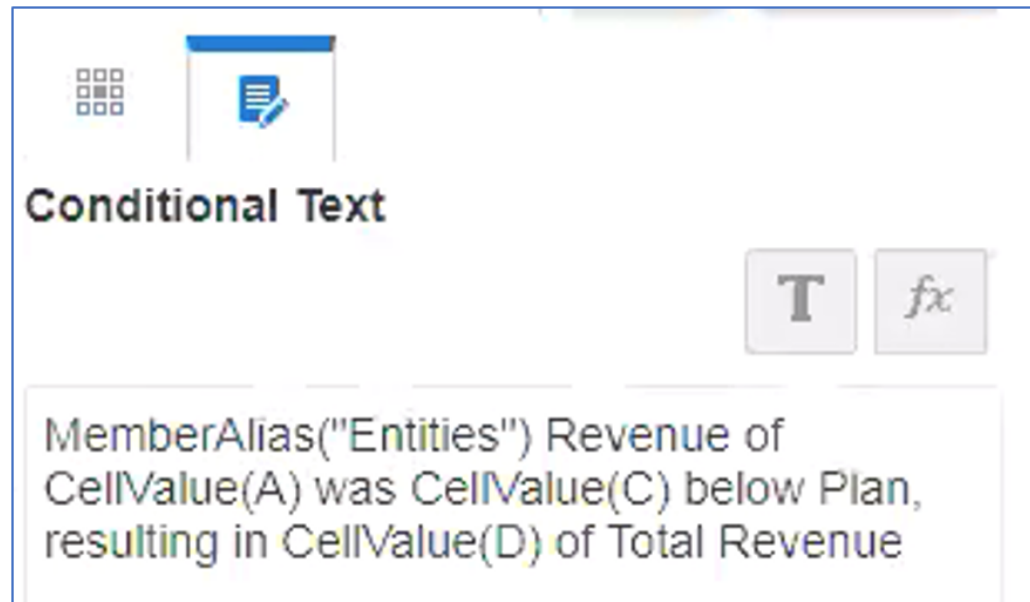
		A	B	C	D
		Actual	Plan	t vs Plan Var	% of Total
1	Children of Total Entiti	#	#	##.##%	=#.##%

2. Set the condition, as below:

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

Name *	Green
Applies To	1C
Current Cell Value	greater than Value 0

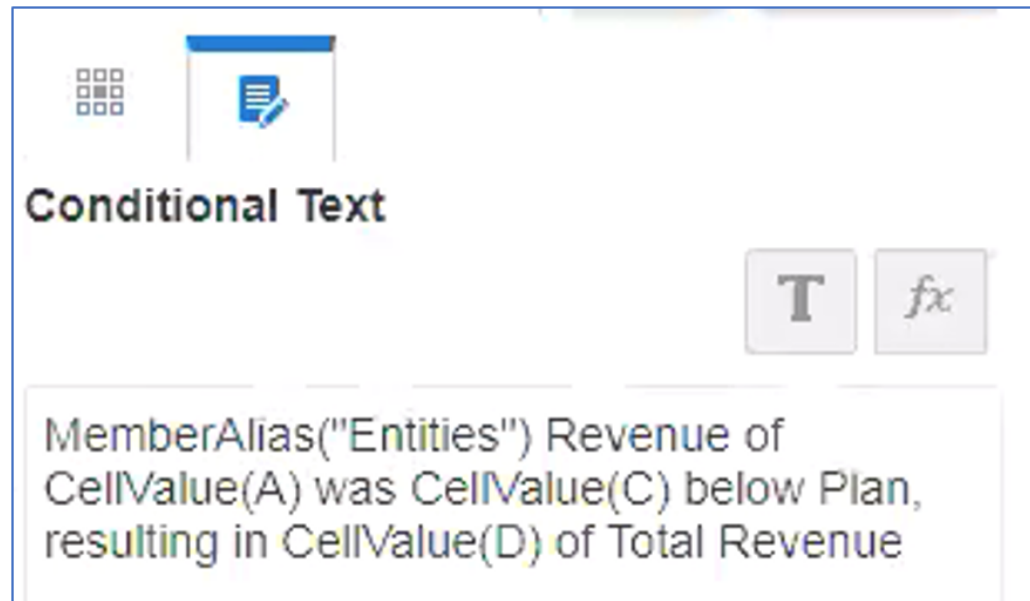
- In the Conditional Text tab, use the *fx* to select the required functions and manually enter the static text:



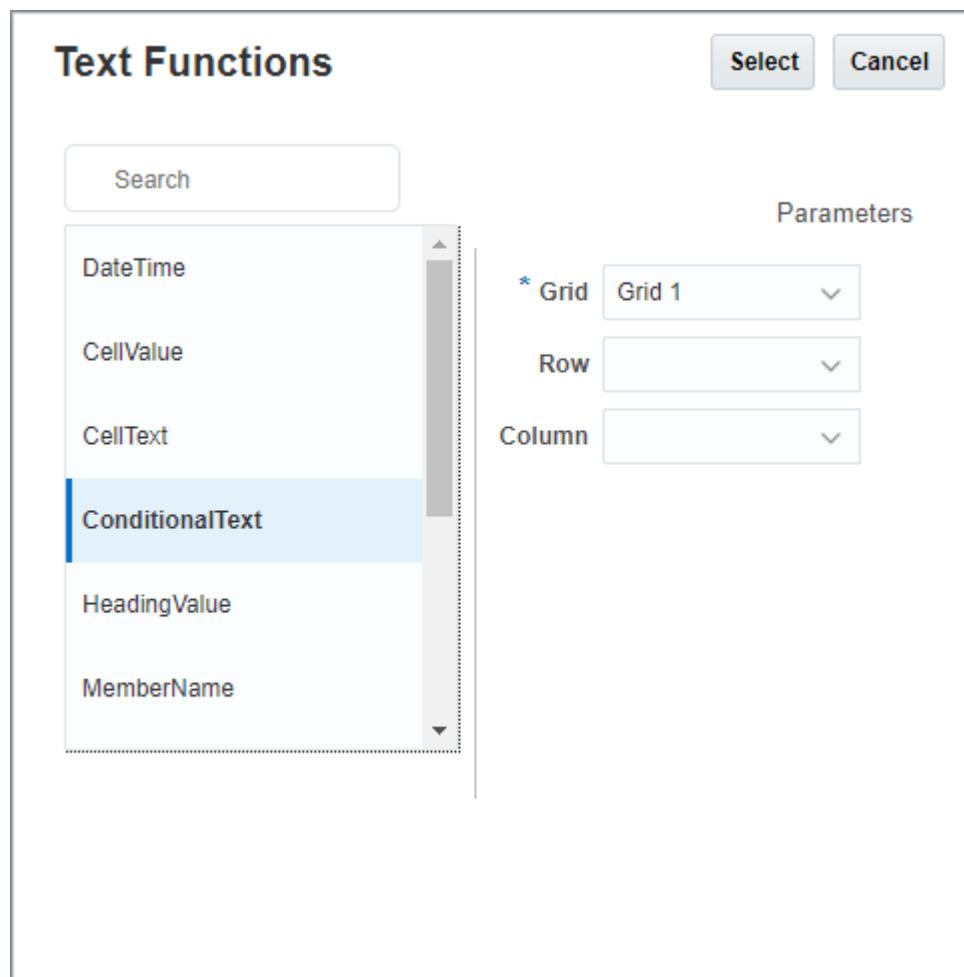
3. Set the condition, as below:
 - For the **Red** condition, create a conditional format where the Current Cell Value is less than 0:

Name *	Red		
Applies To	1C		
Current Cell Value	less than	Value	0

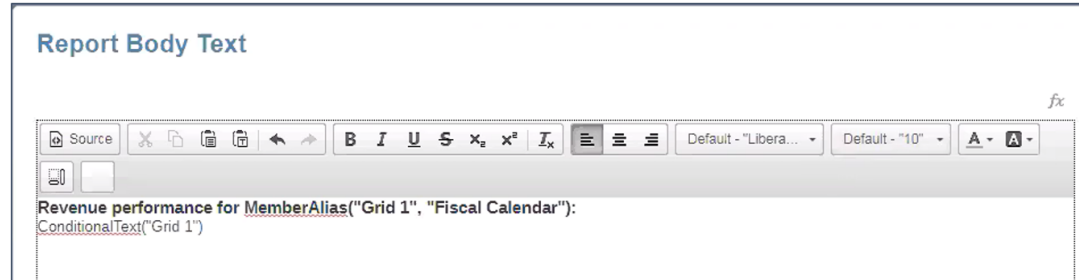
- In the Conditional Text tab, use the *fx* to select the required functions and manually enter the static text:



4. Edit an existing text box in the report and insert the ConditionalText 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.



Vision Operations
Revenue Variance by Territory
Mar 2018

	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%)

Revenue performance for March:
 North America Revenue of 61,705,569 was (2.4%) below Plan, resulting in 44.5% of Total Revenue
 Latin America Revenue of 7,550,266 was (1.6%) below Plan, resulting in 5.4% of Total Revenue
 EMEA Revenue of 50,612,433 was (1.5%) below Plan, resulting in 36.5% of Total Revenue
 APAC Revenue of 18,719,667 was 0.2% above Plan, resulting in 13.5% of Total Revenue

Displaying Conditional Text in the Grid

An alternate example for displaying the ConditionalText 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.

Note

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.

		A	B	C	D	E
		Actual	Plan	t vs Plan Var	% of Total	
1	Children of Total Entiti	#	#	##%	=##%	ConditionalText(C)
2						
3	Total Entities	#	#	##%	=##%	

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](#).

		A	B	C
		Actual	Plan	t vs Plan Var
1	Intersect([Descendant	#	#	##

[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

Name *	Lower Sales Regions		
Applies To	Row 1		
Data Values in Column	A	less than	Value 1,000,000

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.

		A	B	C
		Actual	Plan	t vs Plan Var
1	Intersect([Descendant	#	#	#.##

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.

		A	B	C
		Actual	Plan	t vs Plan Var
1	Intersect([Descendant	#	#	#.##
2				
3	Total Entities	#	#	#.##

Green
Yellow
Red

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.

Note

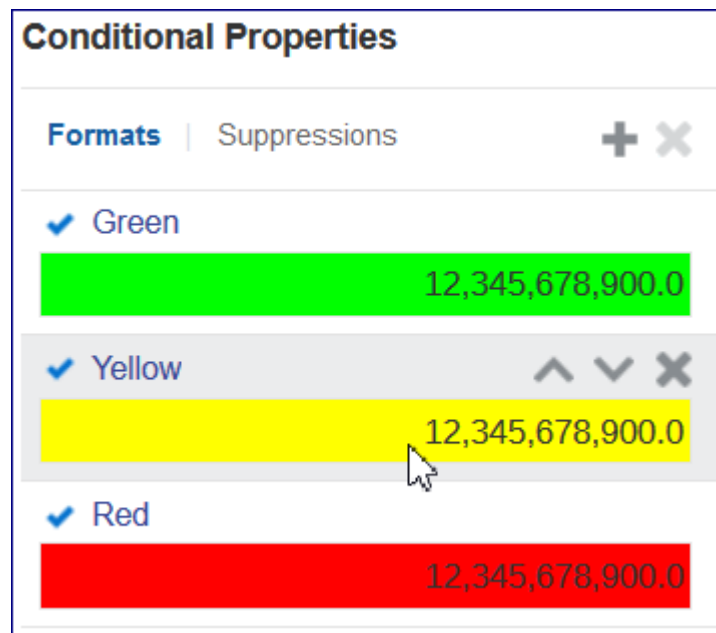
You can apply multiple conditional formats and/or text to a region of a grid, but only one suppression condition per row or column. See [Applying Multiple Formats/Text to a Region](#).

- 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 .

Conditional Formatting, Text and Suppression Considerations

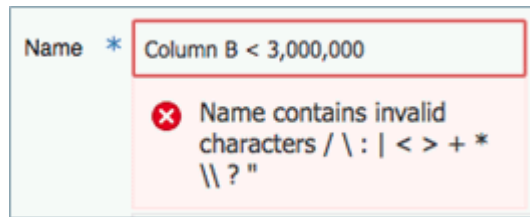
Performance Considerations

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:



Basic Suppression and Conditional Suppression

Reports processes basic suppression (zero, no data, no access, and error) first, and independent, of conditional suppression. If a row or column is not suppressed using basic suppression, then any conditional suppression is evaluated.

If you want to suppress a row or column if the values in the row are EITHER no data or a certain value (or within a range of certain values), you need to specify both conditions in the conditional suppression and apply the appropriate operators (AND/OR) and grouping of the conditional expressions.

For example, to suppress a row if data values are between -1 and 1, or no data, the conditional suppression would have two grouped expressions:

- Suppress if data values in current row > -1 AND suppress if data values in current row < 1)
- OR
- Suppress if data values in row equals no data

Edit Conditional Suppression

OK

Cancel

Name *

Suppress Row

Applies To

All Rows

Define condition to be met for conditional suppression to be applied

Data Values in Row

1

greater than

Value

-1

+

AND

Data Values in Row

1

less than

Value

1

+

AND

Data Values in Row

1

equals

No Data

+

The grouping of expressions is necessary to create logical groups of multiple expressions. For more information on grouping conditional expressions, see [Working with Advanced Conditions](#)

Conditional Formatting, Text and Suppression Criteria and Parameters

Conditional Formatting/Text Criteria and Parameters

Type	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 For textual types: • 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 data value) • Cell Value (enter cell value: column, row) • Row Value (select row number) • Column Value (select column number) • Zero • No Data • Error • Suppressed

Type	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 For textual types: • 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 data value) • Cell Value (enter cell value: column, row) • Row Value (select row number) • Column Value (select column number) • Zero • No Data • Error • Suppressed
Column Value	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 For textual types: • 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 data value) • Cell Value (enter cell value: column, row) • Row Value (select row number) • Column Value (select column number) • Zero • No Data • Error • Suppressed
Current Cell Value	Data value in the current cell	Not applicable	For numeric and date types: • equals • not equals • greater than • less than • greater than or equal to • less than or equal to For textual types: • 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 data value) • Cell Value (enter cell value: column, row) • Row Value (select row number) • Column Value (select column number) • Zero • No Data • Error • Suppressed

Type	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 alias
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 attribute dimension member name
Member Attribute	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
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
Level Number	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

Type	Definition	Reference Value	Operator	Comparison Options
Relative Generation	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
Relative 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.

Type	Definition	Reference Value	Operator	Comparison Options
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 Oracle Fusion Cloud EPM: • Revenue • Expense • Asset • Liability • Equity • Non-Expense For Essbase, Profitability and Cost Management, and Narrative Reporting: • Expense • Non-Expense
Position Within	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

Type	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 For textual types: - 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 For textual types: - 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

Type	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 For textual types: • 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 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 • greater than or equal to • less than or equal to For textual types: • 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

Type	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	• 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
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

Type	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 Oracle Fusion Cloud Enterprise Performance Management: • Revenue • Expense • Asset • 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.

Add Conditional Format/Text

Name: Format Text 1

Applies To: 1A

Define condition to be met for conditional format to be applied

attribute Qualifier 1 Qualifier 2 Operator Right Qualifier

Select an attribute to begin.
Selection will determine the options that follow in the expression.

Conditional Text

☒ Enable Analytics

MemberAlias("Entities") Revenue of CellValue(A) was CellValue(C) above Plan, resulting in CellValue(D) of Total Revenue

- 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.

	Actual	Plan	Variance %
▶ USA	65,172,091	66,014,146	(127.6%)
Zoom in	3,140,824	3,220,978	USA Revenue of 65,172,091 was (127.6%) below Plan, resulting in 41.5% of Total Revenue
Brazil	3,140,824	3,066,455	242.9%
▶ Europe	54,179,208	54,343,071	(30.2%)
China	6,281,647	6,150,091	213.9%
Hong Kong	4,711,236	4,668,667	91.2%
Japan	3,140,824	3,078,852	201.3%
▶ Total Entities	157,041,184	157,730,824	(43.7%)

- 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.



Vision Operations

Revenue Variance by Territory
Jun 2018
Report Run Date: Feb 11, 2020 3:06 AM

	Actual	Plan	Variance %
USA	65,172,091	66,014,146	(127.6%)
Canada	3,140,824	3,220,978	(248.9%)
Brazil	3,140,824	3,066,455	242.5%
Europe	54,179,208	54,343,071	(30.2%)
China	6,281,647	6,150,091	213.9%
Hong Kong	4,711,236	4,668,667	91.2%
Japan	3,140,824	3,078,852	201.3%
Total Entities	157,041,184	157,730,824	(43.7%)

Revenue Performance for June:

USA Revenue of 65,172,091 was (127.6%) below Plan, resulting in 41.5% of Total Revenue
 Canada Revenue of 3,140,824 was (248.9%) below Plan, resulting in 2.0% of Total Revenue
 Brazil Revenue of 3,140,824 was 242.5% above Plan, resulting in 2.0% of Total Revenue
 Europe Revenue of 54,179,208 was (30.2%) below Plan, resulting in 34.5% of Total Revenue
 China Revenue of 6,281,647 was 213.9% above Plan, resulting in 4.0% of Total Revenue
 Hong Kong Revenue of 4,711,236 was 91.2% above Plan, resulting in 3.0% of Total Revenue
 Japan Revenue of 3,140,824 was 201.3% above Plan, resulting in 2.0% of Total Revenue

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

Analytics - Sample Report 6 (Cond. Format & Suppression) - Grid 1 - 0_0

Accounts	Years	Fiscal Calendar	Segments	Currencies
410000	FY18	Jun	All Segments	USD

	Actual	Plan	Variance %
USA	65,172,091	66,014,146	(127.6%)
USA Sales	65,172,091	66,014,146	
East Sales	30,623,031	30,946,729	
MA	10,992,883	11,311,895	(282.0%)
NY	17,274,530	17,252,195	12.9%
PA	2,355,618	2,382,639	(113.4%)
West Sales	22,770,972	23,145,230	(161.7%)
North Sales	6,281,647	6,431,556	(233.1%)
South Sales	5,496,441	5,490,630	10.6%
Canada	3,140,824	3,220,978	(240.9%)
Brazil	3,140,824	3,066,455	242.5%
Europe	54,179,208	54,343,071	(30.2%)
China	6,281,647	6,150,091	213.9%
Hong Kong	4,711,236	4,668,667	91.2%
Japan	3,140,824	3,078,852	201.3%
Total Entities	157,041,184	157,730,824	(43.7%)

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.

- 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**.

Add Conditional Suppression

Name

Suppression 1

Applies To

All Rows

Define condition to be met for conditional suppression to be applied

Member Name

Segments

equals

AS

AND

Member Name

Entities

equals

E01

Remove

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**.

Add Conditional Suppression

Name: Suppression 1

Applies To: All Rows

Define condition to be met for conditional suppression to be applied

Member Name Segments equals AS

AND

Member Name Entities equals E01

OR

Actions menu: Duplicate, Remove, Move Up, Move Down, **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.

			A
			scal Calend
1	AS, DV, TV	E01, E02, E03	#

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.

Add Conditional Suppression

Name * Suppression 1

Applies To All Rows

Define condition to be met for conditional suppression to be applied

Member Name Segments equals AS

AND

Member Name Entities equals E01

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**.

Add Conditional Suppression

Name * Suppression 1

Applies To All Rows

Define condition to be met for conditional suppression to be applied

Member Name Segments equals AS

AND

Member Name Entities equals E01

OR

Member Name Segments equals DV

AND

Member Name Entities equals E02

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.

Add Conditional Suppression

Name * Suppression 1

Applies To All Rows

Define condition to be met for conditional suppression to be applied

Member Name Segments equals AS

AND

Member Name Entities equals E01

OR

Member Name Segments equals DV

AND

Member Name Entities equals E02

Remove

Group expressions

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

Edit Conditional Suppression

Name:

Applies To:

Define condition to be met for conditional suppression to be applied

Member Name Segments equals AS

AND

Member Name Entities equals E01

OR

Member Name Segments equals DV

AND

Member Name Entities equals E02

OK Cancel

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.

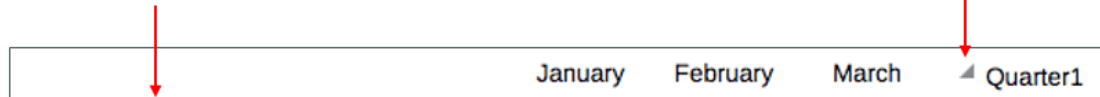
When you design a grid, you can enable three types of zoom for end-users:

- 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
▶ Gross Profit	44,003,086	39,614,955	50,269,215	133,887,256
▶ Operating Expenses	30,428,078	27,371,016	33,761,234	91,560,328
◀ Pretax Income From Operations	13,575,009	12,243,939	16,507,981	42,326,928
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
◀ Net Income	6,927,716	6,361,005	9,463,965	22,752,687

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**

The screenshot shows the 'General' tab of the Oracle APEX Grid Properties dialog. The 'Name' field is 'Grid 1'. The 'Data Source' is 'Sample Model'. The 'Column Width' is 'Minimum' with a value of '0.73'. The 'Row Height' is 'Minimum' with a value of '0.26'. The 'Row Banding' is 'Hide'. The 'Zoom' dropdown is open, showing the following options: Off, Zoom Before, Zoom to Children, Zoom to Bottom, and Zoom to Descendants. The 'Zoom Before' option is highlighted.

Property	Value
Name	Grid 1
Data Source	Sample Model
Column Width	Minimum (0.73)
Row Height	Minimum (0.26)
Row Banding	Hide
Zoom	Off
Zoom Before	Off
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

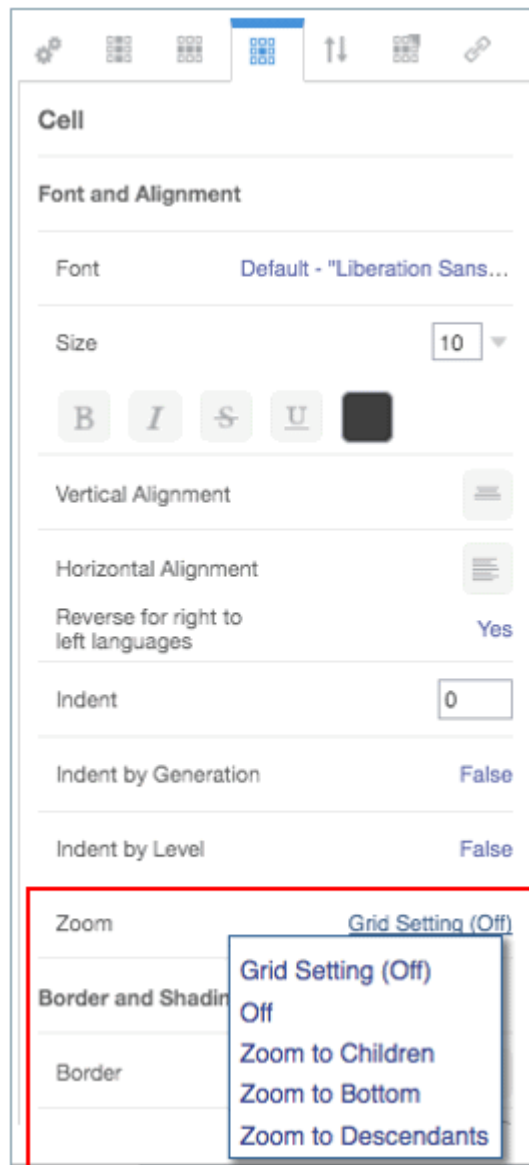
You can set zoom on individual row and column segments. This gives users the ability zoom on only the parent members in specific rows and column segments.

Note

The zoomed members are displayed either before or after the parent member, depending on the **Zoom Before** grid-level property. See [Grid-level Zooming](#).

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.

Note

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.



General

Name	Sample Report 7 (Zoo)
Description	Income Statement Su
Page Size	Letter
Orientation	Portrait
Fit To Page	None
Margin	0.25, 0.25, 0.25, 0.25
Background	

Header

Height	1.44
Border	

Body

Border	
--------	---

Footer

Height	1.56
Border	

Allow XML Export	False
Allow ad hoc analysis	False

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.

		Quarter1	Quarter2	Quarter3	Quarter4
Entity region group header (text row)	North America				
	Audio Systems	36,246,004	41,923,007	44,423,003	42,661,428
	Digital Video	45,726,617	52,888,515	56,042,417	53,820,079
Segment selections	Televisions	33,644,616	38,914,179	41,234,749	39,599,603
	Installation	30,164,587	13,293,194	21,192,048	18,715,925
	Service Contracts	14,023,729	16,220,185	17,187,443	16,505,883
	Repair	10,010,433	26,117,520	14,397,437	13,891,077
Entity region subtotal (formula row)	Total North America	169,815,985	189,356,600	194,477,098	185,193,996
Space after subtotal (separator row)					
	Latin America				
	Audio Systems	4,479,843	5,181,495	5,490,484	5,272,761
	Digital Video	5,651,604	6,536,783	6,926,591	6,651,920
	Televisions	4,158,323	4,809,618	5,096,430	4,894,333
	Installation	3,728,207	1,642,979	2,619,242	2,313,204
	Service Contracts	1,733,270	2,004,742	2,124,291	2,040,053
	Repair	1,237,244	3,228,008	1,779,459	1,716,875
	Total Latin America	20,988,493	23,403,625	24,036,495	22,889,146

Here is the grid design:

The screenshot shows a Tableau table with the following components and annotations:

- Hidden column:** Points to the first column, which is hidden.
- Segment dimension selections:** Points to the second column, which is a segment dimension.
- Entity dimension selections:** Points to the third column, which is an entity dimension.
- Text row:** Points to the first row, which contains the text "MemberAlias('Entities', :".
- Data row segment:** Points to the second row, which contains the text "Children of Seg01, Childre".
- Formula row summing row 2:** Points to the third row, which contains the text "Total MemberAlias('Entit".
- Separator row:** Points to the fourth row, which contains the text "Total Entities".
- Grouping indicator:** Points to the fifth row, which contains the text "Total Entities".
- Text function to retrieve current Entity alias:** Points to the text "MemberAlias('Entities', :" in the first row.

The table structure is as follows:

	Default for Heading	Entities	Children of Total Entities X			
			A	B	C	D
			Q1	Q2	Q3	Q4
1		MemberAlias("Entities", :				
2	Children of	Children of Seg01, Childre	#	#	#	#
3		Total MemberAlias("Entit	=#	=#	=#	=#
4		Total Entities				
5		Total Entities	=#	=#	=#	=#

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).

+ Column Formula		VARIANCEPERCENT([A],[B])				
				A	B	C
				Actual	Plan	Var %
1						
2			MemberAlias("Accounts"			
3			MemberAlias("Entities",			
4	410000, 34	Children of	Children of Seg01, Childre	#	#	=#.##%
5			Total MemberAlias("Entit	=#	=#	=#.##%
6						

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.

Note

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.

			A	B	C	D
			Q1	Q2	Q3	Q4
1		MemberAlias("Entities", :				
2	Children of	Children of Seg01, Childre	#	#	#	#
3		Total MemberAlias("Entit	=#	=#	=#	=#
		s	=#	=#	=#	=#

Copy
Move
Copy Formatting
Delete
Group on...
Remove Grouping

Entities

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.

			A	B	C	D
			Q1	Q2	Q3	Q4
1		MemberAlias("Entities", :				
2	Children of	Children of Seg01, Childre	#	#	#	#
3		Total MemberAlias("Entit	=#	=#	=#	=#
4						
5		Total Entities	=#	=#	=#	=#

Group on Entities for rows 1, 2, 3, 4

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.

Note

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.

			A	B	C	D
			Q1	Q2	Q3	Q4
1		MemberAlias("Entities", :				
2	Children of	Children of Seg01, Childre	#	#	#	#
3		Total MemberAlias("Entit	=#	=#	=#	=#
			=#	=#	=#	=#

Copy
Move
Copy Formatting
Delete
Group on...
Remove Grouping

Entities

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.

Default for Heading			Segments	Children of Seg01 ✕		
				A	B	C
				Actual	Plan	Var %
1						
2	410000, 34 E01, E02	Children of Seg01		#	#	=#.##%

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.

	Total MemberAlias("Entities", 3)			fx	SUM([3])	
				A	B	C
				Actual	Plan	Var %
1						
2			MemberAlias("Entities", :			
3	410000, 34	E01, E02	Children of Seg01	#	#	=#.##%
4			Total MemberAlias("Entit	=#	=#	=#.##%
5						

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**.

				A	B	C
				Actual	Plan	Var %
1						
			MemberAlias("Entities", :			
			Children of Seg01	#	#	=#.##%
			Total MemberAlias("Entit	=#	=#	=#.##%

Copy
Move
Copy Formatting
Delete
Group on...
Remove Grouping
Accounts
Entities

The grouping indicator displays for the Entities grouping.

				Actual	Plan	Var %
1						
2			MemberAlias("Entities", :			
3	410000, 34 E01, E02	Children of Seg01		#	#	=#.##%
4		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.

	Total MemberAlias("Accounts", 4)			fx	SUM([4])	
				A	B	C
				Actual	Plan	Var %
1						
2			MemberAlias("Accounts",			
3			MemberAlias("Entities",			
4	410000, 34	E01, E02	Children of Seg01	#	#	=#.##%
5			Total MemberAlias("Entit	=#	=#	=#.##%
6						
7			Total MemberAlias("Acco	=#	=#	=#.##%
8						

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

				Actual	Plan	Var %
1						
			MemberAlias("Accounts",			
			MemberAlias("Entities",			
			Children of Seg01	#	#	=#.##%
			total MemberAlias("Entit	=#	=#	=#.##%
			total MemberAlias("Acco	=#	=#	=#.##%

Copy
Move
Copy Formatting
Delete
Group on...
Remove Grouping

Accounts

The grouping indicator displays for the Accounts grouping.

				Actual	Plan	Var %
1						
2			MemberAlias("Accounts"			
3			MemberAlias("Entities",			
4	410000, 34	E01, E02	Children of Seg01	#	#	=#.###%
5			Total MemberAlias("Entit	=#	=#	=#.###%
6						
7			Total MemberAlias("Acco	=#	=#	=#.###%
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%
		Total Net Income	-1,841,058	-988,677	-86.21%

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	-1.77%
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	74.61%
Digital Video	417,539	323,020	29.26%
Televisions	-335,971	-400,308	16.07%
Total Latin America	57,351	-172,679	133.21%
Total Net Income	-1,841,058	-988,677	-86.21%

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/seperator 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	B	C
					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:

SortingAdd Sort

Rows 2 - 4

Ascending by A

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).

Total MemberAlias("Entities", 2)			fx	SUM([2])			
			A	B	C	D	
			Q1	Q2	Q3	Q4	
1		MemberAlias("Entities", 2)					
2	Children of	Children of Seg01	#	#	#	#	
3		Total MemberAlias("Entities", 2)	=#	=#	=#	=#	
4							
5		Total Entities	=#	=#	=#	=#	

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).

	Quarter1	Quarter2	Quarter3	Quarter4
North America				
Audio Systems	36,246,004	41,923,007	44,423,003	42,661,428
Digital Video	45,726,617	52,888,515	56,042,417	53,820,079
Televisions	33,644,616	38,914,179	41,234,749	39,599,603
Total North America	115,617,237	133,725,702	141,700,170	136,081,111
Latin America				
Audio Systems	4,479,843	5,181,495	5,490,484	5,272,761
Digital Video	5,651,604	6,536,783	6,926,591	6,651,920
Televisions	4,158,323	4,809,618	5,096,430	4,894,333
Total Latin America	14,289,771	16,527,896	17,513,504	16,819,014
EMEA				
Audio Systems	29,729,868	34,386,287	36,436,845	34,991,958
Digital Video	37,506,102	43,380,467	45,967,376	44,144,560
Televisions	27,596,146	31,918,372	33,821,761	32,480,574
Total EMEA	94,832,116	109,685,126	116,225,982	111,617,091
APAC				
Audio Systems	10,995,979	12,718,216	13,476,641	12,942,231
Digital Video	13,872,120	16,044,830	17,001,632	16,327,440
Televisions	10,206,794	11,805,425	12,509,418	12,013,363
Total APAC	35,074,892	40,568,471	42,987,692	41,283,034
Total Entities	259,814,016	300,507,194	318,427,348	305,800,250

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.

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.

			Q1	Q2	Q3	Q4
1		MemberAlias("Entities", 2)				
2	Children of	Children of Seg01	#	#	#	#
3		Total MemberAlias("Entities", 2)	=\$#	=\$#	=\$#	=\$#
4						
5		Total Entities	=#	=#	=#	=#

Name * Format Text 1

Applies To Row 2 Data Cells

Define condition to be met for conditional format to be applied

Position Within Row is Top Row

Conditional Format

\$123,456,789

Number

\$#

Font and Alignment

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

	Quarter1	Quarter2	Quarter3	Quarter4
North America				
Audio Systems	\$36,246,004	\$41,923,007	\$44,423,003	\$42,661,428
Digital Video	45,726,617	52,888,515	56,042,417	53,820,079
Televisions	33,644,616	38,914,179	41,234,749	39,599,603
Total North America	\$115,617,237	\$133,725,702	\$141,700,170	\$136,081,111
Latin America				
Audio Systems	\$4,479,843	\$5,181,495	\$5,490,484	\$5,272,761
Digital Video	5,651,604	6,536,783	6,926,591	6,651,920
Televisions	4,158,323	4,809,618	5,096,430	4,894,333
Total Latin America	\$14,289,771	\$16,527,896	\$17,513,504	\$16,819,014

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".

Member for Heading		Entities	Children of CurrentPOV ✕
		A	
		en of Curren	
		Actual, Plan	
1	340000	#	

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

Years	Currencies	Segments			Fiscal Calendar	Entities				
FY22	USD	Segments			Feb	Total Entities				
		North America	North America	Latin America	Latin America	EMEA	EMEA	APAC	APAC	Corporate HQ
		Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual
Net Income		3,213,602	3,436,396	225,374	154,606	15,299,792	14,859,195	-9,331,304	-9,161,633	-3,245,387

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.

Variance					fx	VARIANCE([A(A)], [A(B)])
			A	B		
			en of Curren			
			Actual, Plan	Variance		
1	340000		#	=#		

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.

B1	 Column Formula	VARIANCE([A(A)], [A(B)])		
		A	B	C
		Children of CurrentPOV		
		Actual, Plan Variance		
1	340000	#	=#	

Here is a preview of the resulting grid:

Years	Currencies			Segments			Fiscal Calendar			Entities		
FY22	USD			Segments			Feb			Total Entities		
	North America			Latin America			EMEA			APAC		
	Actual	Plan	Variance	Actual	Plan	Variance	Actual	Plan	Variance	Actual	Plan	Variance
Net Income	3,213,602	3,436,396	-222,794	225,374	154,606	70,769	15,299,792	14,859,195	440,597	-9,331,304	-9,161,633	-169,670

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

Years	Currencies			Segments			Fiscal Calendar			Entities		
FY22	USD			Segments			Feb			E01		
	North America Corporate			USA			Canada			Mexico		
	Actual	Plan	Variance	Actual	Plan	Variance	Actual	Plan	Variance	Actual	Plan	Variance
Net Income	-3,900,424	-3,740,136	-160,287	4,893,891	4,985,309	-91,417	1,621,441	1,624,636	-3,195	598,693	566,587	32,106

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 in *Working with Reports*.

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.](#)

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:

1. Select the area of the grid that you want to add a content link to (cells, rows, columns, or member heading cell).
2. In Grid Properties, click .
3. Click .
4. In the Add Drill To Content dialog box, enter a descriptive name for the drill to and, optionally, a description.

Note

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](#)

Add Drill to Content

OK

Cancel

* Name

Entity Detail Report

Description

Applies To

4A

* Link To

☒ Library File
 ☐ Web URL

Library/Samples/Sample Report 6 (Cond. Format

Browse

Display As

☒ HTML
 ☐ PDF

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.

		A	B	C
		Actual	Plan	Variance
1				
2	410000	#	#	#
3	450000	#	#	#
4	400000		#	#
5				

Entity Detail Report

Managing Drill To Content Definitions

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

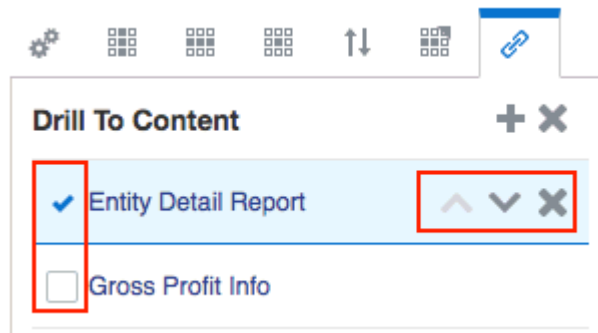
You can perform these actions on existing drill to links:

- 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.

Note

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		Entities		Accounts	
2016		Total Entities		Net Revenue	
A1					
		A	B	C	D
		Actual	Plan	[a] - [b]	
		Q1	Q2		
1	AS	#	#	=#	Click for PDF
2	DV	#	#	=#	
3	TV	#	#	=#	
4	Seg02	#	#	=#	
5					Click for HTML

Years	Entities	Accounts	
2016	Total Entities	Net Revenue	
	Actual	Plan	[a] - [b]
	Quarter1	Quarter2	
Audio Systems	78,965,495	95,159,438	-16,193,942
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 HTML

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 of the 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 (Oracle Fusion Cloud Enterprise Performance Management 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 Cloud EPM cell file attachment or Essbase Linked Reporting Object (LRO).

Note

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 through definitions when the grid is previewed or if the report is opened in HTML preview.

The screenshot shows the 'General' tab of the Grid Properties panel. The 'Name' field is 'Grid 1'. The 'Data Source' is 'Sample Model'. The 'Column Width' is '0.73' with a 'Minimum' label. The 'Row Height' is '0.26' with a 'Minimum' label. The 'Row Banding' is 'Off'. The 'Zoom' is 'Off'. The 'Zoom Before' is 'True'. The 'Drill Through to Source' property is highlighted with a red rectangle, and the 'Show' button next to it is visible.

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.
2. 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

The screenshot shows the 'Cell' properties panel in the Oracle APEX report editor. The panel includes sections for 'Cell', 'Font and Alignment', 'Border and Shading', and 'Replace Text'. The 'Drill Through to Source' section is highlighted with a red box, and a context menu is open showing options: 'Grid Setting (Show)', 'Show', and '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

Region-Product

Tap description to edit

Enabled ☒

Definition Type Valid Intersection

Entity	Product	
Children(403) 410, 421	IDescendants(P_TP)	
410	IDescendants(P_TP) P_260, P_270, P_280	
421	IDescendants(P_TP) P_220, P_250	

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.

Note

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.

Scenario	Version	Year	HSP_View	Entity	Product
Plan	Working	FY15	BaseData	403,421,410	Children of P_TP2
A1					
		A	B	C	D
		Q1	Q2	Q3	Q4
1	4001	#	#	#	#
2	5000	#	#	#	#
3	GP	#	#	#	#

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:

Entity	Product
403: Sales	P_220: Software Suite
 	
	P_230 Monitor
	P_240 Modem
	P_250 Network Card
	P_260 Game
	P_270 Camera
	P_280 Television
☐ Show Invalid Members	

- 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:

Entity	Product
410: International S...	P_220: Software Suite
	 
	P_200 Accessories
	P_210 Keyboard
	 P_220 Software Suite
	 P_230 Monitor
	P_240 Modem
	 P_250 Network Card
	☐ Show Invalid Members

- 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:

Entity	Product
421: Sales NorthEast	P_220: Software Suite
	 
	P_210 Keyboard
	 P_230 Monitor
	P_240 Modem
	 P_260 Game
	 P_270 Camera
	 P_280 Television
	☐ Show Invalid Members

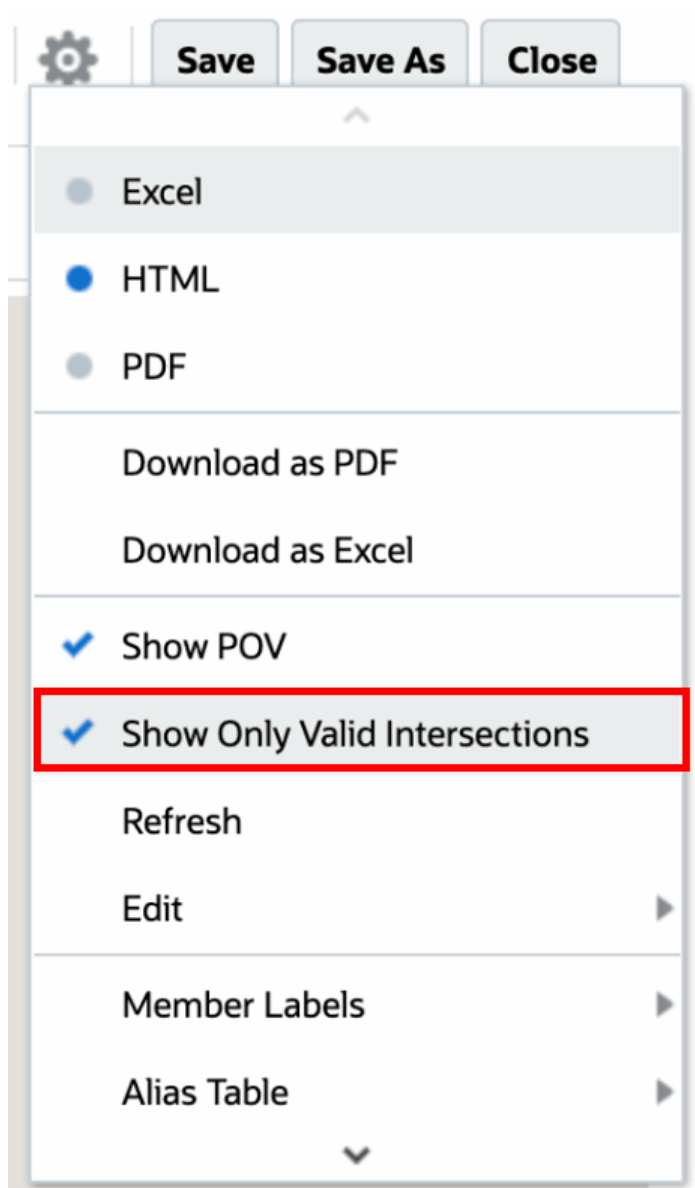
When selecting POV members in one dimension that are not valid for another POV dimension that is displayed, you show all members by selecting **Show Invalid Members** in the POV list or member selector. For example, when the **Entity 421: Sales North East** member is selected along with the **Product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

Entity	Product
421: Sales NorthEast	P_270: Camera
 	
	403 Sales
	421 Sales NorthEast
☐ Show Invalid Members	

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

Entity	Product
421: Sales NorthEast	P_270: Camera
 	
	403 Sales
	421 Sales NorthEast
	410 International Sales
☒ 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:

Entity	Product
410: International S...	P_270: Camera
No data due to invalid intersection of members on the Point Of View	

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.

Note

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**

Version	Year	HSP_View	Scenario	Period	Account
Working	FY15	BaseData	Plan	YearTotal	4001
Member and Alias for Heading		Product	Children of P_TP2 ×		
		A	B	C	
		403	410	421	
1	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		
P_200: Accessories	21,463,426	2,870,809	3,523,947		
P_210: Keyboard	13,665,957	2,519,056	1,954,009		
P_220: Software Suite	17,865,738	3,016,795	#MISSING		
P_230: Monitor	11,902,983	1,991,325	1,735,706		
P_240: Modem	27,751,398	2,853,149	5,016,043		
P_250: Network Card	6,294,063	1,282,060	#MISSING		
P_260: Game	6,943,600	#MISSING	1,534,797		
P_270: Camera	3,251,232	#MISSING	462,498		
P_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.

The screenshot displays the "Butterfly Report Grid" interface. The main grid shows a report with columns for Years, Fiscal Calendar, Entities, Segments, and Currencies. The grid is divided into sections A, B, C, D, E, and F. The data rows show values for various categories, with some cells containing "#".

The settings panel on the right is titled "General" and includes the following options:

- Name: Butterfly Report Grid
- Title: Hide
- Data Source: Sample Model
- Column Width: Minimum (0.73)
- Row Height: Minimum (0.26)
- Row Banding: Off
- Zoom: Off
- Zoom Before: True
- Ancestor Before Children: False
- Drill Through to Source: Hide
- Headings:
 - Member Labels: Alias
 - Repeated Heading: Show
 - Alias Table Name: Default - "Default"
 - Row Headings Before: A (highlighted with a red box)

Note

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

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

Performance_Report

General

Name: Performance_Report

Description: Income Statement Act

Page Size: Letter

Orientation: Portrait

Fit to Page: Both

Margin: 0.25, 0.25, 0.25, 0.25

Background:

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**.

- In the **Report Designer**, select



to view the "Butterfly Report".

Performance_Report





 Save Save As Close

Years	Fiscal Calendar	Entities	Segments	Currencies
FY18	Jun	Total Entities	All Segments	USD

 Vision Operations Income Statement Act vs Plan Report Run Date: May 21, 2019 3:02 AM					
Actual	% of Net Sales		Plan	% of Net Sales	
157,041,184	100%	Net Revenue	157,730,824	100%	
106,377,180	68%	Cost of Sales	106,662,144	68%	
50,664,003	32%	Gross Profit	51,068,680	32%	
11,369,092	7%	Total Compensation	11,355,750	7%	
639,593	0%	Travel	641,522	0%	
495,964	0%	General Supplies	495,507	0%	
959,558	1%	Telecommunications	957,189	1%	
2,346,756	1%	Equipment Maintenance	2,344,359	1%	
16,827,752	11%	Fees Outside Services	16,895,220	11%	
941,972	1%	Employee HR	942,102	1%	
2,114,102	1%	Facilities Exp	2,115,227	1%	
342,200	0%	Utilities	343,360	0%	
3,011,415	2%	Depreciation and Amort	2,999,968	2%	
39,048,403	25%	Operating Expenses	39,090,204	25%	
11,615,600	7%	Pretax Income From Operations	11,978,476	8%	
-3,790,603	-2%	Other Exp (Inc)	-3,833,059	-2%	
7,824,997	5%	Total Pretax Income	8,145,418	5%	
3,167,682	2%	Net Income	3,507,946	2%	

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:

Year
Qtr1
Qtr2
Qtr3
Qtr4

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:

Qtr1
Qtr2
Qtr3
Qtr4
Year

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 Tables

Related Topics

- [About Tables](#)
Tables are report objects in which you retrieve data from a Cloud EPM business process relational schema for Cloud EPM system reporting.
- [Adding a Table](#)
Add a table to a report to retrieve data from a Cloud EPM relational schema (Enterprise licenses only).
- [Defining the Point of View](#)
The Point of View (POV) determines the data that will be retrieved into your table.
- [Working With Rows and Columns in Tables](#)
- [Using the Formula Bar](#)
- [Working with Conditional Formatting, Text, and Suppression](#)
- [Working with Grouping](#)
- [Working with Drill To Content](#)

About Tables

Tables are report objects in which you retrieve data from a Cloud EPM business process relational schema for Cloud EPM system reporting.

Tables cannot connect to external relational databases and Reports is not intended to act as a general relational report writer.

You can add a table to your report, select members, and format the table. You can use text, dimensions, members, and formulas to define the table content. You can hide a table from being displayed in the report output. For example, if you use a chart sourced by a table and you do not want to display the table in the grid, you can hide the table by placing it in the hidden sheet.

Adding a Table

Add a table to a report to retrieve data from a Cloud EPM relational schema (Enterprise licenses only).

To add a table to a report:

1. Do one of the following:
 - From the toolbar, click  and select **Table**.
 - From a blank report, click .
2. Click **Setup Table**.
3. In Select Source, select a schema for the table.

Note

For more information on the available table sources, see *Overview in Cloud EPM System Reporting Schema Reference Guide*.

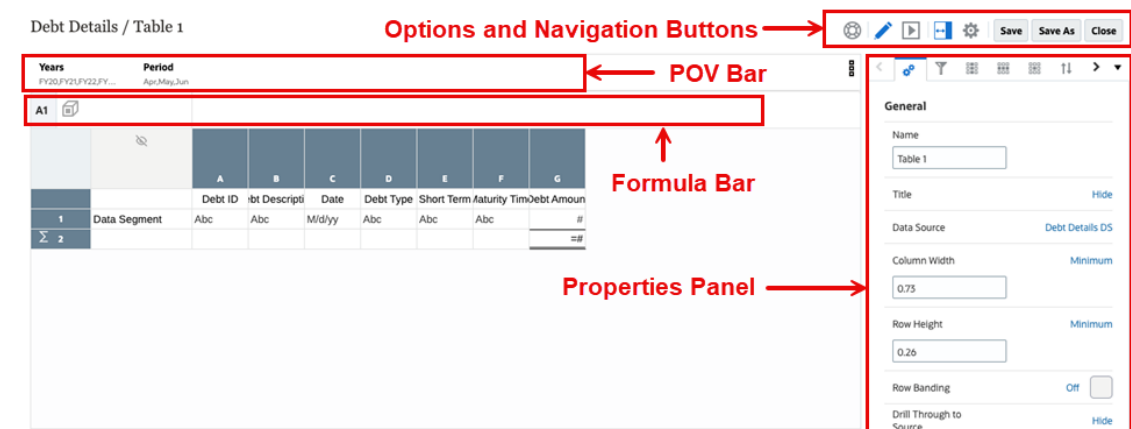
The table is displayed in Table Designer with a single data row and an attribute column. You can add more data columns, formulas, text, and separator rows. You cannot insert additional data rows in a table, however you can insert additional formulas, text, and separator rows.

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

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

About Table Designer

The table designer has the following areas:



- The Formula bar enables you to create formulas and functions and select members. See [Creating Formulas for Tables](#).
- The Properties panel displays the table, title, filter and aggregation criteria, row, column, cell, and other properties. See [Overview of Table Properties](#).

The toolbar lets you switch between edit and preview modes and change your view options. See [Table Toolbar](#).

About Table Properties

Related Topics

- [Overview of Table Properties](#)
The following table properties are available in the Properties panel while editing a table:
- [General Properties](#)
- [Column Properties](#)

- [Row Properties](#)
- [Formatting Table Cells](#)
Cell properties enable you to change the way the selected range of member header cells and data cells are displayed in the table.
- [Sorting](#)
- [Table Toolbar](#)
- [Using Hidden Tables](#)
You can hide a table from being displayed in the report output.
- [Working with Criteria](#)
- [Formatting Best Practices](#)

Overview of Table Properties

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



General Properties

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

- View or change the table's data source
- Set a title to be displayed above the table
- Define the default table behaviors for row and column sizing, row banding, and drill to source.
- Set the member heading properties
- Define the text replacement label for error data cells

For more information, see [General Properties for Tables](#).



Filter and Aggregation Criteria Properties

The Criteria properties consists of the Filter Criteria and Aggregation Criteria, which allow filtering of the table data based on conditions met, prompt or POV selections, etc. For more information, see [Criteria 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 table settings for column width, repeated headings, and data formats.

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 table settings for row height, repeated headings, and row banding.

For more information, see [Row Properties](#).



Cell Properties

Cell properties affect the selected range of cells in a table. Use cell properties to change the way cell text is formatted. For example, you can change the number, date and time formatting, 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 indent options. You can also show or hide cell attachment links for selected cells in the table that have attachments at the data source. See [Formatting Table Cells](#).



Sorting

You can sort columns in a table. You can add multiple columns sorts and change the order that the specified columns are sorted.

For more information, see [Sorting](#).



Conditional Properties

Conditional formatting, text and suppression enables you to define formatting, text or suppress cells in a table that meet conditions that you define. See [Working with Conditions](#).



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 Library and custom URL links. For more information, see [Drill To Content](#).

General Properties

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

Table 5-1 Table - General Properties

Property Name	Descriptions
Name	Edit the table name. A best practice is to name your tables with a meaningful name for easier identification of multiple tables in a report.

Table 5-1 (Cont.) Table - General Properties

Property Name	Descriptions
Title	Specify a table title, which can include text and text functions, to include at the top of the table output, which can span across column headers. The table title can also have font, border and shading formatting applied, see the related formatting topics. To add multiple lines to the table title, use the Alt+Enter keys (Option+Enter on the Mac).
Data Source	Change the data source for the table.
Column Width / Row Height	Set the default column width and row height.
Row Banding	Apply shading to alternate rows in a table. You can select the default shading color. Any columns or rows with existing shading in the table are not affected by row banding.
Drill Through to Source	To enable Drill Through to Source , which provides the ability to drill through to a source system (if defined at the source schema), for the entire table, set Drill Through to Source to Show. If set to Hide, individual cells can still be enabled in Cell Properties .
Display Options	

Table 5-1 (Cont.) Table - General Properties

Property Name	Descriptions
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.
Alias Table Name	By default, tables 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 table level. Use Alias Table Name to set an alias table for the table.
Text Options	
Error	Set the text replacement options for cells with zero results from a formula.
Text character width	The property allows you to choose between more and less conservative sizing of text in a table text cell. The property can have a value of Large , Medium , or Small . By default, the property is set to Large .
Formats	

Table 5-1 (Cont.) Table - General Properties

Property Name	Descriptions
Date and Time Formats	The date and time format for table cells that contain dates is derived from the User Preferences date/time format setting. Use Date or Time Formats in table properties to override the date/time formats with a format specific to the table. This date/time format will apply to any date/time cell values in the table. If you do not specify a date or time format for the table, the format from User Preferences is used.
Cell Padding - Horizontal - Vertical	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.
Grouping - Group Page Break - No Page Breaks in Group	Defines how page breaks are handled when previewing the report in PDF format.

Table 5-1 (Cont.) Table - General Properties

Property Name	Descriptions
Conditional Expression Use scaled/rounded value	To specify whether conditional formatting and suppression, as well as basic (table, column or row) suppression, use scaled or unscaled raw data values within a condition, use the table 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 table.

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 table settings for column width, repeated headings, and suppression settings. The table setting is displayed in brackets. For example, in the suppression setting for zeroes, **Table Setting (False)** indicates that zero values are not suppressed at the table 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 table.

Use column properties to edit the following:

Table 5-2 Review the Column Properties

Property Name	Descriptions
Width	For column width, you can either: • Use the default table 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
Repeat With Row Headings	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.
Page Break Before	Inserts a page break before a column
Formats	
Number	Specify the number format for the column

Table 5-2 (Cont.) Review the Column Properties

Property Name	Descriptions
Date and Time Formats	The date and time format for table cells that contain dates is derived from the User Preferences date/time format setting. Use Date or Time Formats in table properties to override the date/time formats with a format specific to the table. This date/time format will apply to any date/time cell values in the table. If you do not specify a date or time format for the table, the format from User Preferences is used.

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 5-3 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
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).

Table 5-3 (Cont.) Review the Row Properties

Property Name	Descriptions
Repeat With Column Headings	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.
Page Break Before	Inserts a page break before the row.
Formats	
Number	Specify the number format for the row
Date and Time Formats	The date and time format for table cells that contain dates is derived from the User Preferences date/time format setting. Use Date or Time Formats in table properties to override the date/time formats with a format specific to the table. This date/time format will apply to any date/time cell values in the table. If you do not specify a date or time format for the table, the format from User Preferences is used.

Formatting Table Cells

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

Formatting Numbers

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

The screenshot shows the Oracle BI Desktop interface. At the top, a toolbar contains several icons, with the 'Number' icon (a grid of cells) highlighted by a red box. Below the toolbar, the 'Cell' properties panel is visible, with the 'Number' property selected. A red box highlights the '#' icon in the top right corner of the 'Number' property section. Below this, the 'Number' formatting dialog is open. The dialog has a title bar 'Number' and an 'OK' button. It is divided into two columns: 'Positive' and 'Negative'. Under 'Positive', there are fields for 'Prefix' (containing '\$') and 'Suffix' (containing '+'). Under 'Negative', there are fields for 'Prefix' (containing '\$(') and 'Suffix' (containing ')'). There is a checkbox for 'Negative in Red' which is unchecked. Below these, there are two checkboxes: 'Align Prefix' and 'Align Suffix', both of which are checked and highlighted by a red box. At the bottom of the dialog, there is a 'Use Default' checkbox which is checked, and two dropdown menus: 'Thousands Separator' (set to 'Comma') and 'Decimal Separator' (set to 'Period'). At the very bottom, there is a 'Decimal Places' field set to '0' and a 'Scale Value By' dropdown menu set to 'None'.

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 right-most 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.

Note

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

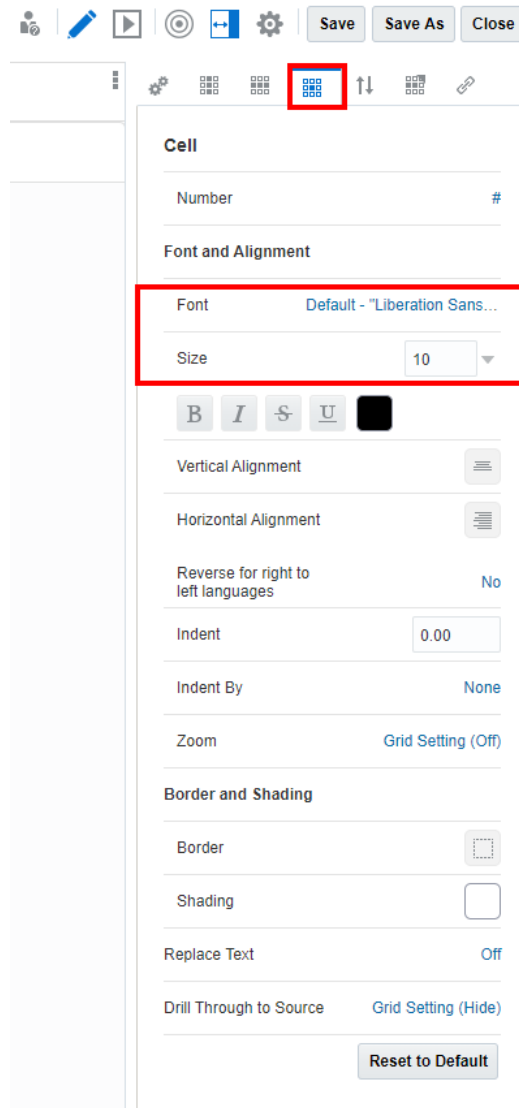
For both member heading and data cells, the Font and Alignment fields enable you to change the font, size, color, and placement of text within a cell., and to reverse the text direction for right-to-left languages. You can also specify an indent from the left cell margin.

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

- Use **Indent By** to indent the row headings by a unit of measure.
- Use **Relative indent** to adjust the size of the indent of the member labels.

To define the font for a table cell :

1. Edit a table, and click .
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 table 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 table designer as well as all rendered output.

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

Sorting

↑↓ Sorting

Sort values in a table by clicking **Add Sort** and then selecting the column to sort on. You can add multiple column sorts. You can also reorder the sort order by clicking on the up or down

arrows, or by dragging the **Reorder Sort Orders**  icon up or down. You can also delete a selected sort by clicking the **Delete**  icon. Lastly, you can click on **SortAscending/Descending** to toggle between ascending and descending sorts.

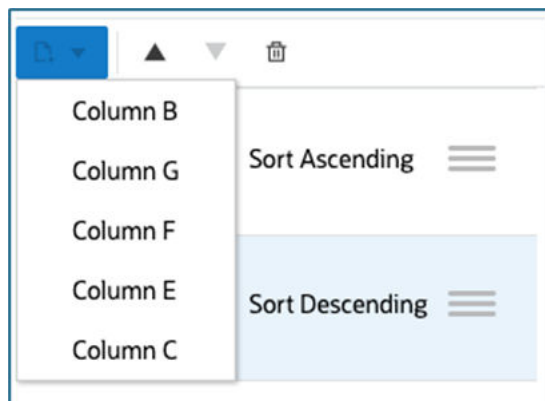
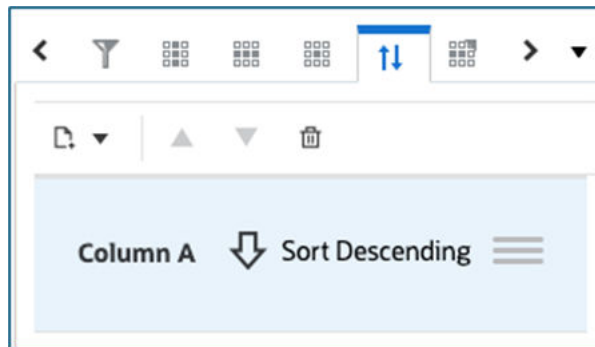


Figure 5-1 Sorting Example

In the following sort definition, you can view how the first column (Debt ID) is sorted descending.



Debt ID	Debt Description	Date	Debt Type	Short Term	Maturity Time	Debt Amount
9242902	United Bank short term loan	3/6/23	Intermediate Term Note	Yes	Less than 1 year	190,000
8450333	MKA non secured customized loan	8/14/20	Other Debt	Yes	Less than 1 year	572,500
7938777	Mhele secured special loan	7/9/23	Other Debt	No	Various	15,000
7252340	Paykota speical long term bond	10/21/22	Long Term Bonds	No	Over 5 years	400,000
6229909	Hedge fund non regulated savings bond	4/4/22	Savings Bonds	No	1 to 5 years	25,000
3454440	Janus 505 long term bond	5/12/20	Long Term Bonds	No	Over 5 years	225,000
3452990	Hedge fund non regulated savings bond	12/9/29	Savings Bonds	No	1 to 5 years	2,525,000
3333392	Prudential savings bond	7/9/21	Long Term Bonds	No	1 to 5 years	505,000

Table Toolbar

The toolbar lets you do the following:



Edit/Preview

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

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



Properties

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



Report 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 all reports.
- Select default chart colors.
- Manage named POVs (Narrative Reporting only).

- Format Manager to view and perform administrative functions on Note Templates and Notes, and create and maintain Note Formats, which are used with the Notes text function (Narrative Reporting only).

Using Hidden Tables

You can hide a table 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 tables, you can hide the source data tables by placing them in the hidden sheet.

To hide an existing table:

1. In the **Report Designer**, select the table to be hidden.
2. Right-click, and select **Move To**, and then select **Hidden Sheet**.

To create a new hidden table:

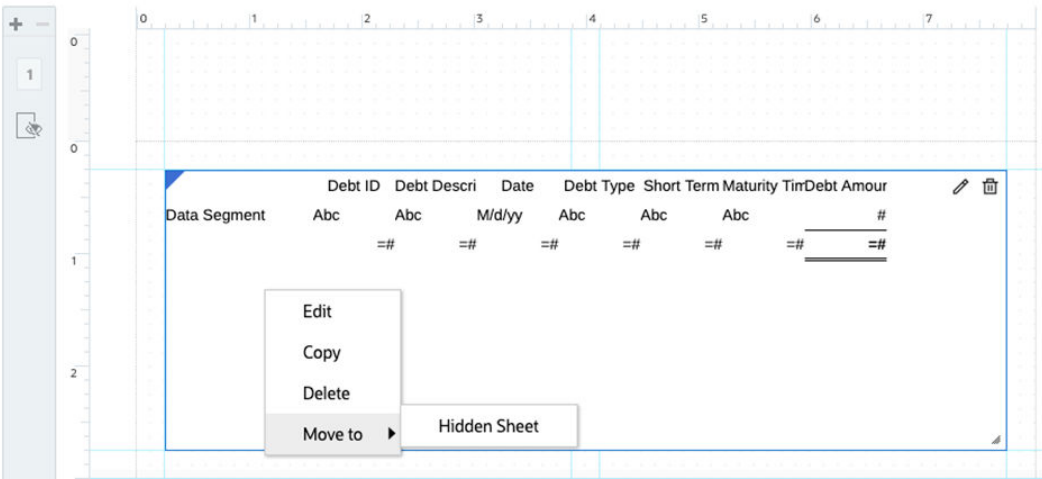


1. In the **Report Designer**, from the sheet panel, click
2. To add a table to a report, see [Adding a Table](#) topic to insert a new table.

To unhide a hidden table:



1. In the **Report Designer**, from the sheet panel, click
2. Select the table 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 table.



Working with Criteria

Related Topics

- [Overview of Criteria](#)
Criteria can be defined to filter the resulting table output.
- [Creating a New Criteria](#)
- [Editing a Criteria](#)

- [Deleting a Criteria](#)
- [Working with Table Prompts](#)

Overview of Criteria

Criteria can be defined to filter the resulting table output.

There are two types of Criteria:

- **Filter** – similar to the SQL WHERE clause. If you want to filter by an Attribute selection, you use the Filter criteria. Filter criteria can be used to expose POV and/or prompt selections to filter the table.
- **Aggregation** – similar to the SQL HAVING clause. If you want to filter by an aggregation (e.g. SUM, COUNT, AVG, MAX, etc.) on an attribute you use the Aggregation criteria.

Creating a New Criteria

You create a new criteria to control the display of rows as per your requirement.

To create a new criteria:

1. From the Home page, click **Reports**.
2. Click **New (+)** to create a New Report. An Untitled Report dialog appears.
3. From the blank report, click .
4. From the report body, right-click and select **Add Report Content**, and then select **Table**.
5. Click **Setup Table**.
6. In **Select Source**, select a schema for the table, and then click **OK**. Next, define the desired column attribute selections.
7. Click the  icon, and then select Filter Criteria or Aggregation Criteria. Based on your criteria selection, click .
8. In Edit Filter Criteria or Edit Aggregation Criteria section, you can select the attributes and values that will be used to filter data and specify multiple groups from a suggested choice list.

For each selection, you must specify the following:

- **Conjunction:** Select And or Or. These state how this group relate to prior sibling groups. This field is enabled only if the selected node is not the first child of its parent node.
- **Attribute:** An attribute is a field or value that a filter will be comparing to a value for inclusion in the result set of a filter. However, for the case of a filter, an attribute denotes more than the list of user-defined attributes.
- **Operator:** States what kind of evaluation to perform against the attribute. For example, Starts With, Ends With, In, Equals, Not Equals, Greater Than, Less Than, Greater Than or Equal To, Between, Is Null, Is Not Null, Matches, and Not Matches.
- **Value:** Specifies what values to compare the attribute against. The type of attribute determines what input field is available.

9. **(Optional)** You can add multiple filter components to a list, such as Add Child  , Add Grouping as Child  , and Add Sibling  .
10. Click **OK**. The criteria details are updated.

For the following table designed that goes against the Supplemental Data Manager schema, the following Criteria has been defined:

		A	B	C
		Entity	Debt Type	SUM(Debt Amount)
1	Data Segment	Abc	Abc	#

Here is the defined Filter and Aggregation Criteria:



Filter Criteria





[Years] = CurrentPOV AND [Period] = CurrentPOV



Aggregation Criteria





[SUM(Debt Amount)] > 1000000.0

Let's look at each Criteria definition in more detail:

Edit Filter Criteria

OKCancel

AND

Years

equeals

CurrentPOV

Period

equeals

CurrentPOV

The **Filter** Criteria definition has both **Years** and **Period** equal to the CurrentPOV. This exposes POV selections for these two attributes when the table is run for users to select.

The Aggregation Criteria filters the table if the SUM(Debt Amount) is greater than 1,000,000. SUM(Debt Amount) is in column C of the table definition.

Here is the resulting table preview. Note that the POV for **Years** and **Period** filter the table content, and the SUM(Debt Amount) displays only values above 1,000,000.

Years		Period	
FY23		Jun	
Entity	Debt Type	SUM(Debt Amount)	
C_101	Intermediate Term Note	2,875,000	
	Long Term Bonds	1,130,000	
	Savings Bonds	2,550,000	
	Treasury Bills	2,400,000	
C_131	Intermediate Term Note	2,985,000	
	Long Term Bonds	2,525,000	
	Savings Bonds	1,550,000	

Editing a Criteria

Edit a criteria to modify its definition.

To edit a filter:

1. From the Home page, click **Reports**.
2. Select the report you want to edit and click the  icon. Select **Edit**.
3. On the Report page, select the filter you want to edit, and then click the  icon.
4. Click the  icon. The Filter Criteria and the Aggregation Criteria displays.
5. Select the required criteria and click the  icon.
6. Update the required information and click **OK**.

The criteria details are updated.

Deleting a Criteria

Delete a criteria to remove its definition from the system.

To delete a criteria:

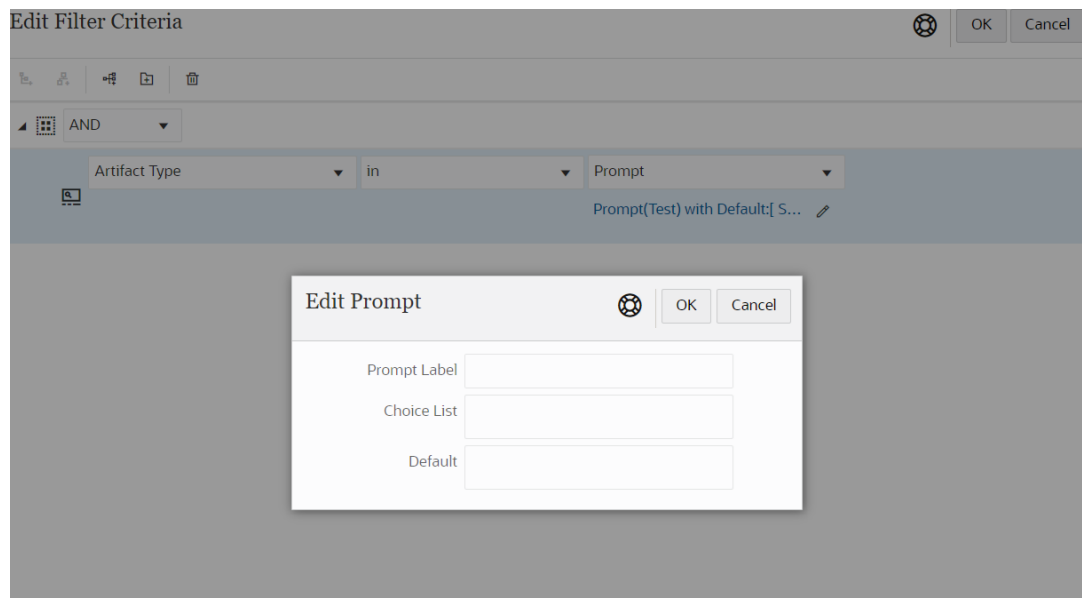
1. On the Edit Filter Criteria or Edit Aggregation Criteria page, select the filter you want to delete.
2. Click the  icon.
The criteria is deleted.

Working with Table Prompts

Prompts enable a report viewer to select the members in a table when they run the report.

To define a prompt:

1. Open a report and select a table.
2. Click the  icon, then select Filter Criteria, and then click . Optionally, you can also open the Select Members dialog box from a report if you right-click a dimension from the table and click Select Members.
3. In the Edit Filter Criteria dialog box, select an attribute, operator, and then from the Functions list, select Prompt.
4. To enter a value for Prompt from the suggested list, click .



5. In Prompt Label, enter the prompt text that is presented to the users.
6. In Choice List, select the members that are available to the users. The considerations include:

7. (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.
8. Click OK.

Formatting Best Practices

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

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

To copy formatting from a table 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 table.

Related Topics

- [About the Point of View](#)
If a report contains the table which has a Filter Criteria for an attribute referring to the currentPOV, it will have a global Point of View (POV) that applies to all report objects in the report that have the same attribute or dimension name.
- [Working with the Point of View](#)
- [Setting Up the Point of View](#)
- [Displaying the Printable Page Member](#)
When a POV dimension has multiple selections and Print All Selections is enabled, the PDF or Excel output of the report displays separate pages for each POV selection, but the POV selection name is not displayed in the PDF output of the report.

About the Point of View

If a report contains the table which has a Filter Criteria for an attribute referring to the currentPOV, it will have a global Point of View (POV) that applies to all report objects in the report that have the same attribute or dimension name.

Tables can also have a local point of view (POV) which is specific to the table for a specific attribute.

For more information, see [Creating a New Criteria](#).

Working with the Point of View

Default Setting

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

When you preview a report, you can make selections for any attributes that are surfaced in the POV. Selections that you have recently made are displayed so that you can select from them more conveniently.

Multiple Selections

While you are in edit mode, you can make multiple selections for an attribute to define a list of selections for a report viewer to choose from.

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

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

Note

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 attribute has multiple selections and **Print All Selections** enabled, the PDF Preview of the report displays separate pages for each POV selection, but the selection name is not displayed in the PDF output of the report. You must use an `AttributeValue` or `AttributeAlias` text function to display the attribute name. See [Displaying the Printable Page Member](#).

Locking or Limiting User Selections

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

Combining Attributes or Dimensions from Multiple Tables in the POV

When there are multiple tables, or both tables and grids in the report that have the same attribute or dimension names, POV selections will be combined in the POV bar when previewing the report. For example, if the Year attribute has a Filter Criteria with CurrentPOV in

the first table and second table, a user's selection for the Year attribute in the POV will affect both tables.

Note

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

If there are multiple tables in the report with different data sources, POV attributes and/or dimensions will be combined in the POV bar when previewing the report.

Setting Up the Point of View

To set up the point of view:

1. Open a table in edit mode of Table Designer. Ensure that you define at least one attribute has a Filter Criteria defined using CurrentPOV. For more information, see [Creating a New Criteria](#).
2. In the POV bar at the top of the table, click on a attribute label to open the selector for that attribute.
3. In the member selector, select one or more selections for the attribute by clicking the check mark next to an attribute.

Note

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

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

Note

If a POV attribute is defined as Local, when you preview the report in HTML preview, you make the POV selections above the table 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 attribute selections that you specify in the POV. Viewers are not able to make selections other than what has been defined by the report designer.

- **Print All Selections**—Renders each selection for an attribute on a separate page or sheet when outputting to **PDF** or **Excel**.

Note

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

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

Displaying the Printable Page Member

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

To display the attribute value or alias for the POV dimension in the report, you can use the `AttributeValue` or `AttributeAlias` text functions in a table title, text box or table text cell.

Inserting the POV Selection in the Table Title

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

1. From the **Table Designer**, select **General Properties**, and then set **Title = Show**. The Title bar is displayed above the table.
2. In the top right of the text box, click .
3. Select either `AttributeValue` or `AttributeAlias`, and then specify the required parameters. The parameter is the POV attribute with multiple selections 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 selection will display for each page of the report in the top of the table.

Inserting the POV Selection in the Header

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

1. 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 .
4. Select either `AttributeValue` or `AttributeAlias`, and then specify the required parameters such as `Table` 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.
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 page header.

Working With Rows and Columns in Tables

You organize and add content to tables by inserting different types of rows and column into the table:

- Columns - You can insert data, formula, text, and separator columns.
- Rows – You can insert formula, text, and separator rows.

Note

Tables do not support additional data rows.

Inserting Rows and Columns

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

- **Data**—Attributes that are retrieved from a database connection to a Cloud EPM relational schema. You can only insert data columns and not rows. The attribute in a new data column will default to a blank selection.

Note

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.

A # symbol in the column indicates that it is a data 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  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 table.

To insert a row or a column in a table:

1. In an existing table, select a row or column 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 **Data** (columns only), **Formula**, **Text**, or **Separator**.
3. Populate the row or column:
 - For a data row or column, right-click the column heading or click the arrow next to the column header cell, and then select dimension members to place in the column.
 - 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.
 - 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.

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 table.
- You must copy or move the entire row or column.

Note

You cannot delete or copy a data row in a table, you can only move a data row.

To copy or move rows and columns in tables, 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 Table Segment to Another

You can copy member selections from one table column segment to another one.

To copy and paste member selection between segments:

1. Right-click on a column header segment and select **Copy**.
2. Select another segment and right click and select **Paste Before** or **Paste After**.
3. Optionally select another segment and continue performing a **Paste** operation, as needed.

Hiding Rows or Columns

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

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

To hide a row or column in a table:

1. In the Table 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 Columns

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

Merging Columns

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

For example, this figure shows a table with the Short Term attribute in column D, and the Maturity Time attribute in column E.

Figure 5-2 Before Merging

		A	B	C	D	E	
		Debt ID	Debt Desc	Debt Type	Short Term	Maturity	
1	Data Segment	Abc	Abc	Abc	Abc	Abc	
Σ 2							

Copy
Delete
Move
Copy Formatting
Merge Columns

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

Figure 5-3 After Merging

Default for Heading		Row			Short Term X	Maturity Time X
		A	B	C	D	E
		Debt ID	Debt Desc	Debt Type	Short Term	Debt Amour
1	Data Segment	Abc	Abc	Abc	Abc	#
Σ 2						=#

Figure 4-28 shows the Short Term and Maturity Time attributes merged together in a single column.

Separating Columns

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

As an example, Figure 4-29 shows a table with Short Term and Maturity Time attributes merged together in a single column D.

Figure 5-4 Before Separating

Default for Heading		Row			Short Term X	Maturity Time X
		A	B	C	D	E
		Debt ID	Debt Desc	Debt Type	Short Term	Debt Amour
1	Data Segment	Abc	Abc	Abc	Abc	
Σ 2						

Copy Formatting
Paste Formatting
Select Members...
Copy Members
Separate Columns

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

Figure 5-5 After Separating

		A	B	C	D	E	F
		Debt ID	Debt Desc	Debt Type	Short Term	Maturity Time	Debt Amount
1	Data Segment	Abc	Abc	Abc	Abc	Abc	#
Σ 2						=#	=#

Figure 4-30 shows the Short Term and Maturity Time attributes separated into two columns.

Inserting Page Breaks Before a Row or Column

Inserting a page break before a row or column in a table 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 table:

1. With a table displayed in the Table 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 or table references, mathematical functions, and arithmetic operators.

A grid or table reference uses values from the current grid/table or another grid/table in a calculation. You can define arithmetic formulas on formula rows, columns, cells, or a range of formula cells in a grid/table. 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, 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.

Inserting a Formula Row or Column

To insert a formula row or column:

1. 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 Table 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 4-31](#) 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 5-6 Reason for Using Cell Level Calculation

		A	B	C	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:

1. 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  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 attributes when setting up tables 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 columns, you select members and set the row or column header label.
- For text rows and columns, you enter text to display in the table.

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 table, 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 or Columns](#).

2. Do one of the following:
 - Enter a formula manually.
 - Click , select a function from the drop-down list, and enter the formula parameters.

See [Using Functions](#).

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

Modifying Member Selection Using the Formula Bar

When working with attributes in a table, you use the formula bar to add and modify attribute selections. You can either use the member selector or manually enter attributes 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.

To modify member selection using the formula bar:

1. In a table, select a heading cell of a data column.
2. Do one or more of the following:
 - **Remove a selection:** To remove a selection from the table, click the **X** next to a member name.
 - **Manually enter a selection:** Enter a member name or function to add it to the table. 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 attributes.
 - **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.

When modifying member selection using the formula bar, attributes in the formula bar are not case-sensitive.

Using Auto-complete in the Formula Bar

You can manually enter attributes in the table 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.

Working with Conditional Formatting, Text, and Suppression

Related Topics

- [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.
- [Conditional Formatting Example](#)
- [Conditional Formatting, Text and Suppression Indicators and Tooltips](#)
- [Managing Conditions](#)
After you have created conditional formatting, text or suppressions, you manage the conditions in the Conditional Properties panel.
- [Conditional Formatting, Text and Suppression Criteria and Parameters](#)
- [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 table for further analysis capability.
- [Working with Advanced Conditions](#)

Creating a Condition

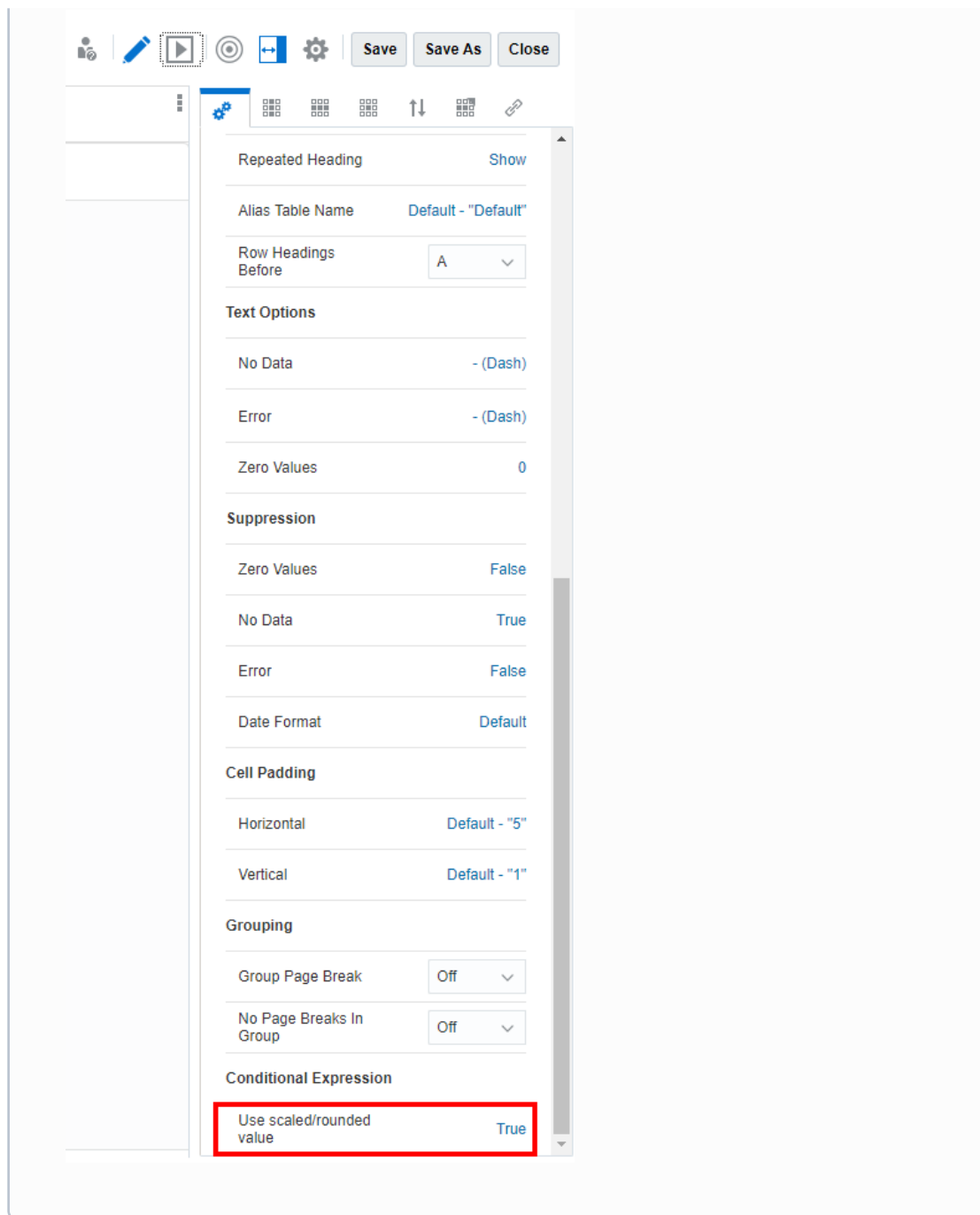
In order to get started with conditional formatting, text and/or conditional suppression, you first define the condition on the Conditional Properties panel.

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 Table Properties, you specify if conditional formatting and suppression uses scaled or unscaled raw data values within a condition using the table 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 table.



To define a condition:

1. Select the area of the table that you want to add a conditional format (cells, rows, or columns) or conditional suppression (rows or columns) to.
2. In Table 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 .
4. Enter a descriptive name for the conditional format/text or suppression in the **Name** field. The name must be unique for the table.

 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 table that you identified in step 1. You can modify the values in the Applies To field to change the area of the table 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 an attribute value.
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 Attribute Value for the type, then you enter the name of the attribute value 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, Attribute Value) 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 Attribute Value), 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. 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.

Note

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 table cells will use the cell formatting defined in the Table 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 table cell will use the negative prefix and suffix defined in the Table Cell properties.

- 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 table cell, the formatting defined for the Conditional Text will always override the cell formatting in the table or report output.

If the ConditionalText 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 ConditionalText 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.

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



to group, remove, duplicate, or move them up or down.

For more information on grouping expressions, see [Working with Advanced Conditions](#).

- 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, using a table connected to an **Enterprise Journals List** schema, we will set up conditional formats to highlight two columns' attribute values, **Status(Detailed)** and **Preparer** if the **Status(Detailed)** attribute value is **Closed** and bold any data values that are 10,000,000 or greater.

The original table is displayed in [Figure 4-33](#).

Journal Performance					
Journal ID	Journal Name	Status (Detailed)	Preparer	Total Debits	Total Credits
1000000001	MgmtAllocation	With Preparer	Kerry Lane	5,000.00	5,000.00
1000000002	JE_TransferPrice_UK	Closed	Amy Marlin	10,143,852.99	10,143,852.99
1000000003	JE_CommissionsTransfer	Closed	Anita Kennedy	2,500.00	2,500.00
1000000004	TaxProvision	Closed	Kerry Lane	2,212,590.00	2,212,590.00
1000000005	JE_TaxProvision	Closed	Casey Brown	2,212,590.00	2,212,590.00
1000000006	TransferPrice_UK	Closed	Kerry Lane	10,143,852.99	10,143,852.99
Totals				24,720,385.98	24,720,385.98

In the table editor, select the Status (Detailed) and Preparer cells in the data row, and then

click  to create the conditional formats. Repeat the process selecting the Total Debits and Total Credits cells in the data row.

For details about creating conditions, see [Creating a Condition](#).

For the Status (Detailed) and Preparer condition, create a conditional format where the Attribute Value of Status (Detailed) is not equal to Closed and the font formatting is bold with a blue font color:

Edit Conditional Format/Text

Name *

Format Text 1

Applies To

1C-1D

Define condition to be met for conditional format to be applied

Attribute Value

Status (Detailed)

not equals

Closed

+

✖

123,456,789

Number

#

Date Format

Default

Time Format

Default

Font and Alignment

Font

Default - "Liberation Sans (Arial)"

Size

10

▼

B

I

↺

U

■

OK

Cancel

For the Total Debits and Total Credits condition, create a conditional format where the Attribute Value of Total (Journal Line Items.Debit) is greater than 9999999, and the font formatting is bold and italic:

Edit Conditional Format/Text

Name *

Applies To

Define condition to be met for conditional format to be applied

Attribute Value greater than

Conditional Format

123,456,789

Number

Date Format

Time Format

Font and Alignment

Font

Size

B I

The following figure shows the final tables with both conditions applied:

Journal Performance

Journal ID	Journal Name	Status (Detailed)	Preparer	Total Debits	Total Credits
1000000001	MgmtAllocation	With Preparer	Kerry Lane	5,000.00	5,000.00
1000000002	JE_TransferPrice_UK	Closed	Amy Marlin	10,143,852.99	10,143,852.99
1000000003	JE_CommissionsTransfer	Closed	Anita Kennedy	2,500.00	2,500.00
1000000004	TaxProvision	Closed	Kerry Lane	2,212,590.00	2,212,590.00
1000000005	JE_TaxProvision	Closed	Casey Brown	2,212,590.00	2,212,590.00
1000000006	TransferPrice_UK	Closed	Kerry Lane	10,143,852.99	10,143,852.99
Totals				24,720,385.98	24,720,385.98

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.

		A	B	C
		Actual	Plan	t vs Plan Var
1	Intersect([Descendant	#	#	#.###

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.

		A	B	C	
		Actual	Plan	t vs Plan Var	
1	Intersect([Descendant	#	#	#.#	
2					
3	Total Entities	#	#	#.#	

Green
Yellow
Red

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 table 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 table, highlight that cell in the table and then click the check box next to the condition to apply it to that region.

Note:

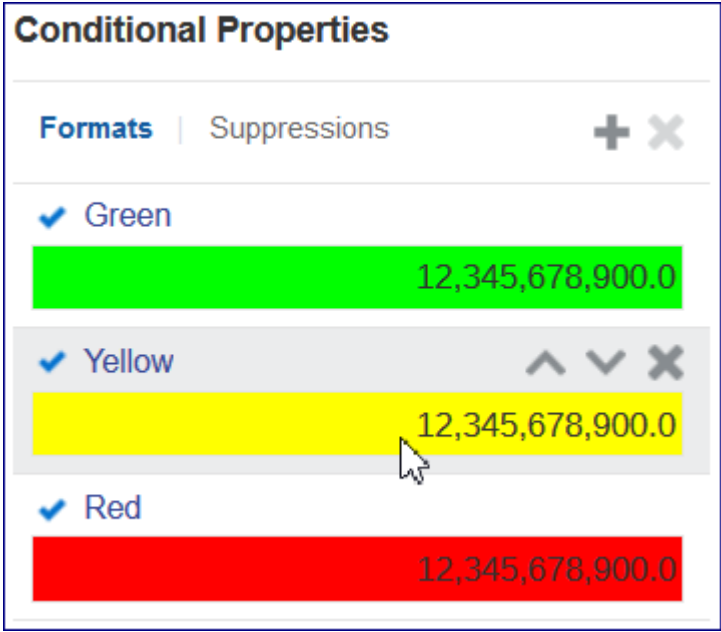
You can apply multiple conditional formats and/or text to a region of a table, but only one suppression condition per row or column. See [Applying Multiple Formats/Text to a Region](#).

- 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 table. When conditions overlap, conditional formats are applied in an order of precedence from top to bottom in the list. For example, [Figure 4-37](#) 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 5-7 Multiple Formats Example



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

Conditional Formatting, Text and Suppression Criteria and Parameters

Conditional Formatting/Text Criteria and Parameters

Type	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 For textual types: • 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 data value) • Cell Value (enter cell value: column, row) • Row Value (select row number) • Column Value (select column number) • Zero • No Data • Error • Suppressed

Type	Definition	Reference Value	Operator	Comparison Options
Row Value	Data value in a specified row	Select row number from a list of rows in the table.	For numeric and date types: • equals • not equals • greater than • less than • greater than or equal to • less than or equal to For textual types: • 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 data value) • Cell Value (enter cell value: column, row) • Row Value (select row number) • Column Value (select column number) • Zero • No Data • Error • Suppressed
Column Value	Data value in a specified column	Select column number from a list of columns in the table.	For numeric and date types: • equals • not equals • greater than • less than • greater than or equal to • less than or equal to For textual types: • 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 data value) • Cell Value (enter cell value: column, row) • Row Value (select row number) • Column Value (select column number) • Zero • No Data • Error • Suppressed
Current Cell Value	Data value in the current cell	Not applicable	For numeric and date types: • equals • not equals • greater than • less than • greater than or equal to • less than or equal to For textual types: • 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 data value) • Cell Value (enter cell value: column, row) • Row Value (select row number) • Column Value (select column number) • Zero • No Data • Error • Suppressed

Type	Definition	Reference Value	Operator	Comparison Options
Position Within	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.
Attribute Value	Attribute value that applies to a cell, row or column	Select an Attribute from a list of Attributes in the schema	• equals • not equals • starts with • ends with • contains • does not start with • does not end with • does not contain	Select an Attribute Value from the list of values in the schema
Attribute Alias	Attribute alias that applies to a cell, row or column	Select an Attribute from a list of Attributes in the schema	• equals • not equals • starts with • ends with • contains • does not start with • does not end with • does not contain	Enter text for the Attribute alias

Conditional Suppression Criteria and Parameters

Type	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 For textual types: • 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

Type	Definition	Reference Value	Operator	Comparison Options
Data Values in Row	Data value in a specified row	Select row number from a list of rows in the table	For numeric and date types: • equals • not equals • greater than • less than • greater than or equal to • less than or equal to For textual types: • 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 Columns	Data value in a specified column	Select column number from a list of columns in the table	For numeric and date types: • equals • not equals • greater than • less than • greater than or equal to • less than or equal to For textual types: • 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

Type	Definition	Reference Value	Operator	Comparison Options
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 • greater than or equal to • less than or equal to For textual types: • 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
AttributeValue	Attribute value that applies to a cell, row or column	Select an Attribute from a list of Attributes in the schema	• equals • not equals • starts with • ends with • contains • does not start with • does not end with • does not contain	Select an Attribute Value from the list of values in the schema
AttributeAlias	Attribute alias that applies to a cell, row or column	Select an Attribute from a list of Attributes in the schema	• equals • not equals • starts with • ends with • contains • does not start with • does not end with • does not contain	Enter text for Attribute dimension

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 table 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.

Add Conditional Format/Text

Name: Format Text 1

Applies To: 1A

Define condition to be met for conditional format to be applied

attribute Qualifier 1 Qualifier 2 Operator Right Qualifier

Select an attribute to begin.
Selection will determine the options that follow in the expression.

Conditional Text

☒ Enable Analytics

MemberAlias("Entities") Revenue of CellValue(A) was CellValue(C) above Plan, resulting in CellValue(D) of Total Revenue

- The target table, which is the report table where the conditional text is defined against opens in a new browser with zoom enabled for all parents on the table. No other report content (for example: charts, text boxes, images, or other tables) will be displayed in the target unless the target table has a dependency on another table such as formulas or text functions. In this case, dependent tables will appear below the source table.
- The target table 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.

	Actual	Plan	Variance %
▶ USA	65,172,091	66,014,146	(127.6%)
Zoom in	3,140,824	3,220,978	
Brazil	3,140,824	3,066,455	
▶ Europe	54,179,208	54,343,071	(30.2%)
China	6,281,647	6,150,091	213.9%
Hong Kong	4,711,236	4,668,667	91.2%
Japan	3,140,824	3,078,852	201.3%
▶ Total Entities	157,041,184	157,730,824	(43.7%)

USA Revenue of 65,172,091 was (127.6%) below Plan, resulting in 41.5% of Total Revenue

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

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

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

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 table 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.



Vision Operations

Revenue Variance by Territory
Jun 2018
Report Run Date: Feb 11, 2020 3:06 AM

	Actual	Plan	Variance %
USA	65,172,091	66,014,146	(127.6%)
Canada	3,140,824	3,220,978	(248.9%)
Brazil	3,140,824	3,066,455	242.5%
Europe	54,179,208	54,343,071	(30.2%)
China	6,281,647	6,150,091	213.9%
Hong Kong	4,711,236	4,668,667	91.2%
Japan	3,140,824	3,078,852	201.3%
Total Entities	157,041,184	157,730,824	(43.7%)

Revenue Performance for June:

USA Revenue of 65,172,091 was (127.6%) below Plan, resulting in 41.5% of Total Revenue
 Canada Revenue of 3,140,824 was (248.9%) below Plan, resulting in 2.0% of Total Revenue
 Brazil Revenue of 3,140,824 was 242.5% above Plan, resulting in 2.0% of Total Revenue
 Europe Revenue of 54,179,208 was (30.2%) below Plan, resulting in 34.5% of Total Revenue
 China Revenue of 6,281,647 was 213.9% above Plan, resulting in 4.0% of Total Revenue
 Hong Kong Revenue of 4,711,236 was 91.2% above Plan, resulting in 3.0% of Total Revenue
 Japan Revenue of 3,140,824 was 201.3% above Plan, resulting in 2.0% of Total Revenue

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

Analytics - Sample Report 6 (Cond. Format & Suppression) - Grid 1 - 0_0

Accounts	Years	Fiscal Calendar	Segments	Currencies
410000	FY18	Jun	All Segments	USD

	Actual	Plan	Variance %
USA	65,172,091	66,014,146	(12.76%)
USA Sales	65,172,091	66,014,146	(12.76%)
East Sales	30,623,031	30,946,729	(1.04%)
MA	10,992,883	11,311,895	(2.82%)
NY	17,274,530	17,252,195	0.13%
PA	2,355,618	2,382,639	(1.13%)
West Sales	22,770,972	23,145,230	(1.61%)
North Sales	6,281,647	6,431,556	(2.33%)
South Sales	5,496,441	5,490,630	0.10%
Canada	3,140,824	3,220,978	(2.49%)
Brazil	3,140,824	3,066,455	2.42%
Europe	54,179,208	54,343,071	(0.30%)
China	6,281,647	6,150,091	2.13%
Hong Kong	4,711,236	4,668,667	0.91%
Japan	3,140,824	3,078,852	2.01%
Total Entities	157,041,184	157,730,824	(43.7%)

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:



1. 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:

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

Add Conditional Suppression

Name

Suppression 1

Applies To

All Rows

Define condition to be met for conditional suppression to be applied

Member Name

Segments

equals

AS

AND

Member Name

Entities

equals

E01

Remove

Group expressions

To remove a grouping:

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

Add Conditional Suppression

Name

Suppression 1

Applies To

All Rows

Define condition to be met for conditional suppression to be applied

Member Name

Segments

equals

AS

AND

Member Name

Entities

equals

E01

OR

Duplicate

Remove

Move Up

Move Down

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

			A
			scal Calend
1	AS, DV, TV	E01, E02, E03	#

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.

Add Conditional Suppression

Name

Suppression 1

Applies To

All Rows

Define condition to be met for conditional suppression to be applied

Member Name

Segments

equals

AS

AND

Member Name

Entities

equals

E01

OK

Cancel

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**.

Add Conditional Suppression

Name * Suppression 1

Applies To All Rows

Define condition to be met for conditional suppression to be applied

Member Name	Segments	equals	AS	+ X
AND				
Member Name	Entities	equals	E01	+ X
OR				
Member Name	Segments	equals	DV	+ X
AND				
Member Name	Entities	equals	E02	+ X

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.

Add Conditional Suppression

Name * Suppression 1

Applies To All Rows

Define condition to be met for conditional suppression to be applied

Member Name	Segments	equals	AS	+ X
AND				
Member Name	Entities	equals	E01	+ X
OR				
Member Name	Segments	equals	DV	+ X
AND				
Member Name	Entities	equals	E02	+ X

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

Edit Conditional Suppression

Name * Suppression 1

Applies To All Rows

Define condition to be met for conditional suppression to be applied

Member Name	Segments	equals	AS	+ X
AND				
Member Name	Entities	equals	E01	+ X
OR				
Member Name	Segments	equals	DV	+ X
AND				
Member Name	Entities	equals	E02	+ X

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

Working with Grouping

Related Topics

- [Introduction to Grouping](#)
- [Grouping and Page Breaks](#)
- [Grouping Considerations](#)
- [Adding a grouping](#)
- [Removing a Grouping](#)
- [Sorting and Grouping](#)
- [Formulas and Text Function references to Groupings](#)

Introduction to Grouping

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

A grouping may only contain one data row 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 attribute combination; you can also add a text segment before

the data segment with a text function to display the Attribute or alias for the current attribute in the grouping.

You can add a grouping if there are at least two attributes in the columns.

Grouping and Page Breaks

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

- **Group Page Break** -- Select an attribute name on which there is a grouping. If this property is set, each grouping on the selected attribute 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 an attribute 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 attribute 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 row axis, if an inner layer grouping is removed, any groupings on the outer layers will also be removed. If an outer layer grouping is removed, any groupings on inner layers will not be affected.
- You cannot group on the row axis that only has a single Attribute selected in the columns.
- You cannot group on the innermost layer of a column attribute.
- If you add, remove or move Attributes in the columns, any groupings on the row will be removed.
- When moving column attributes 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 row 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 which are part of a group.
- You cannot chart against grouped rows. A validation error will occur if a chart includes references to row which are part of a group. The chart can contain references to a table that has groupings as long as the chart does not attempt to chart against the rows which are grouped.

Adding a grouping

A grouping may only contain one data row 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.

To add a grouping to a row selection:

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

Note

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

2. Right-click the selected row header cells, select **Group on...**, and then select the attribute name to group on.
In the example below, there are seven attributes in the columns, and we want to group on the **Journal ID** and then **Period** attributes.

Note

Formula rows 2 and 3 will act as subtotals and totals in the grouping, with a grand total formula on row 5.

First, rows 1 and 2 are selected and a grouping is added for the **Journal ID** attribute.

		A	B	C	D	E	F	G
		Years	Period	Journal ID	Journal Description	Balance Type	Debit	Credit
1		Data Segm	Abc	Abc	Abc	Abc	###	###
Σ 2				Journal ID", 1)			=#	=#
Σ 3				Period", 1)			=#	=#
4								
Σ 5				Grand Total			=#	=#

Copy
Delete
Move
Copy Formatting
Group on ▶
Remove Grouping ▶

Years
Period
Journal ID

Next, rows 1 – 3 are selected and a grouping is added for the **Period** attribute.

		A	B	C	D	E	F	G
		Years	Period	Journal ID	Journal Description	Balance Type	Debit	Credit
1		Data Segm	Abc	Abc	Abc	Abc	###	###
Σ 2				Journal ID", 1)			=#	=#
Σ 3				Period", 1)			=#	=#
4								
Σ 5				Grand Total			=#	=#

Copy
Delete
Move
Copy Formatting
Group on ▶
Remove Grouping ▶

Years
Period

- The grouping will be added to the selected segments. A grouping indicator will appear adjacent to the grouped row segments. When you hover your mouse over the indicator, a tooltip displays the group information such as the attribute name and rows on which the grouping is applied.

		A	B	C	D	E	F	G
		Years	Period	Journal ID	Journal Description	Balance Type	Debit	Credit
1	Data Segment	Abc	Abc	Abc	Abc	Abc	###	###
Σ 2				Journal ID", 1)			=#	=#
Σ 3				Period", 1)			=#	=#
Σ 5				Grand Total			=#	=#

A partial preview of the grid looks like the following:

Years	Period	Journal ID	Journal Description	Balance Type	Debit	Credit
FY 2023	May	1000000003	Transfer Commissions to Sales South		-	2,500.00
		1000000003	Transfer Commissions to Sales South		2,500.00	-
		Total for 1000000003			2,500.00	2,500.00
FY 2023	May	1000000001	Management Allocation		-	1,500.00
		1000000001	Management Allocation		-	3,500.00
		1000000001	Management Allocation		5,000.00	-
		Total for 1000000001			5,000.00	5,000.00
FY 2023	May	1000000004	Year End Tax Provision Entry		498,323.00	-
		1000000004	Year End Tax Provision Entry		-	223,018.00
		1000000004	Year End Tax Provision Entry		458,849.00	-
		1000000004	Year End Tax Provision Entry		1,255,418.00	-
		1000000004	Year End Tax Provision Entry		-	1,989,572.00
		Total for 1000000004			2,212,590.00	2,212,590.00
FY 2023	May	1000000005	Year End Tax Provision Entry		-	223,018.00
		1000000005	Year End Tax Provision Entry		498,323.00	-
		1000000005	Year End Tax Provision Entry		1,255,418.00	-
		1000000005	Year End Tax Provision Entry		458,849.00	-
		1000000005	Year End Tax Provision Entry		-	1,989,572.00
		Total for 1000000005			2,212,590.00	2,212,590.00

Removing a Grouping

To remove a grouping from a row selection:

1. In the table editor, select the all row segments included in the grouping.

Note

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

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

		A	B	C	D	E	F	G
		Years	Period	Journal ID	rnal Description	Balance Type	Debit	Credit
1	Data Segm	Abc	Abc	Abc	Abc	Abc	###	###
Σ 2				rnal ID", 1)			=#	=#
Σ 3				Period", 1)			=#	=#
4								
Σ 5				Grand Total			=#	=#

Copy
Delete
Move
Copy Formatting
Group on
Remove Grouping

Period

3. The grouping will be removed.

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/seperator 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.

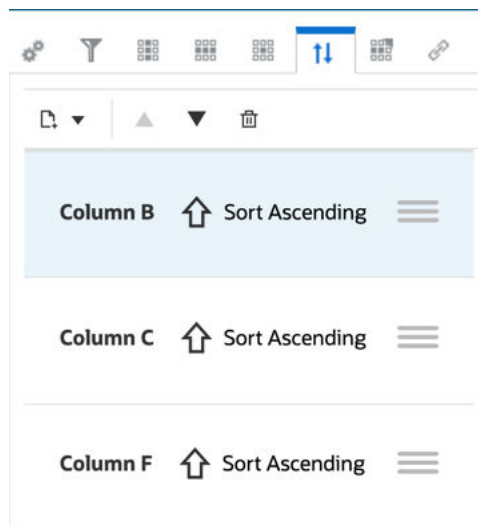
Note that in all these cases, when a grouped attribute combination is sorted, it is sorted with respect to the grouping level it occurs in.

In the design view of the table below, the following sorting is defined:

Table design:

		A	B	C	D	E	F	G
		Years	Period	Journal ID	rnal Description	Balance Type	Debit	Credit
1	Data Segm	Abc	Abc	Abc	Abc	Abc	###	###
Σ 2				rnal ID", 1)			=#	=#
Σ 3				Period", 1)			=#	=#
4								
Σ 5				Grand Total			=#	=#

Sort definition:



Here is the sorted result in a partial preview of the report. Note that the **Years**, then **Period**, then the **Debit** column values within each grouping are sorted ascending.

Years	Period	Journal ID	Journal Description	Balance Type	Debit	Credit
FY 2023	May	1000000001	Management Allocation		5,000.00	-
		1000000001	Management Allocation		-	1,500.00
		1000000001	Management Allocation		-	3,500.00
		Total for 1000000001			5,000.00	5,000.00
FY 2023	May	1000000002	Transfer Pricing Allocation to UK		483,040.62	-
		1000000002	Transfer Pricing Allocation to UK		685,202.57	-
		1000000002	Transfer Pricing Allocation to UK		8,975,609.80	-
		1000000002	Transfer Pricing Allocation to UK		-	8,975,609.80
		1000000002	Transfer Pricing Allocation to UK		-	483,040.62
		1000000002	Transfer Pricing Allocation to UK		-	685,202.57
		Total for 1000000002			10,143,852.99	10,143,852.99
FY 2023	May	1000000003	Transfer Commissions to Sales South		2,500.00	-
		1000000003	Transfer Commissions to Sales South		-	2,500.00
		Total for 1000000003			2,500.00	2,500.00
FY 2023	May	1000000004	Year End Tax Provision Entry		458,849.00	-
		1000000004	Year End Tax Provision Entry		498,323.00	-
		1000000004	Year End Tax Provision Entry		1,255,418.00	-
		1000000004	Year End Tax Provision Entry		-	1,989,572.00
		1000000004	Year End Tax Provision Entry		-	223,018.00
		Total for 1000000004			2,212,590.00	2,212,590.00

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 attribute 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 attribute combinations in a data segment regardless of the grouping.

In the following table, there are groupings on rows 1 to 2 and on rows 1 to 3. The formulas on rows 2 and 3 (SUM of row 1) is part of a group, and so will apply to the two groups. The

formula on row 5 (SUM of row 1) is not part of a group, and so will apply a grand total at the bottom of the report, summing all data combinations on row 1.

F2 Custom Formula		[1]						
			A	B	C	D	E	
			Years	Period	Journal ID	Journal Description	Balance Type	
								Debit
								Credit
1	Data Segm	Abc	Abc	Abc	Abc	Abc		###
Σ 2					Journal ID", 1)			=#
Σ 3					Period", 1)			=#
4								
Σ 5					Grand Total			=#

Note that for the grouped results, the formula row reference in row 2 will sum up the values in row 1 by **Journal ID**. The formula row reference in row 3 will sum the values in row 1 by **Period**. Lastly, the formula reference in row 5 will sum a grand total of all data rows (not shown in report preview results below).

Years	Period	Journal ID	Journal Description	Balance Type	Debit	Credit
FY 2023	May	1000000001	Management Allocation		5,000.00	-
		1000000001	Management Allocation		-	1,500.00
		1000000001	Management Allocation		-	3,500.00
		Total for 1000000001			5,000.00	5,000.00
FY 2023	May	1000000002	Transfer Pricing Allocation to UK		483,040.62	-
		1000000002	Transfer Pricing Allocation to UK		685,202.57	-
		1000000002	Transfer Pricing Allocation to UK		8,975,609.80	-
		1000000002	Transfer Pricing Allocation to UK		-	8,975,609.80
		1000000002	Transfer Pricing Allocation to UK		-	483,040.62
		1000000002	Transfer Pricing Allocation to UK		-	685,202.57
		Total for 1000000002			10,143,852.99	10,143,852.99
FY 2023	May	1000000003	Transfer Commissions to Sales South		2,500.00	-
		1000000003	Transfer Commissions to Sales South		-	2,500.00
		Total for 1000000003			2,500.00	2,500.00
FY 2023	May	1000000004	Year End Tax Provision Entry		498,323.00	-
		1000000004	Year End Tax Provision Entry		1,255,418.00	-
		1000000004	Year End Tax Provision Entry		-	1,989,572.00
		1000000004	Year End Tax Provision Entry		-	223,018.00
		Total for 1000000004			2,212,590.00	2,212,590.00
FY 2023	May	1000000005	Year End Tax Provision Entry		498,323.00	-
		1000000005	Year End Tax Provision Entry		1,255,418.00	-
		1000000005	Year End Tax Provision Entry		-	1,989,572.00
		1000000005	Year End Tax Provision Entry		-	223,018.00
		Total for 1000000005			2,212,590.00	2,212,590.00
FY 2023	May	1000000006	Transfer Pricing Allocation to UK		483,040.62	-
		1000000006	Transfer Pricing Allocation to UK		685,202.57	-
		1000000006	Transfer Pricing Allocation to UK		8,975,609.80	-
		1000000006	Transfer Pricing Allocation to UK		-	483,040.62
		1000000006	Transfer Pricing Allocation to UK		-	685,202.57
		1000000006	Transfer Pricing Allocation to UK		-	8,975,609.80
		Total for 1000000006			10,143,852.99	10,143,852.99
		Total for May			24,720,385.98	24,720,385.98

Working with Drill To Content

Drill to content allows you to set up content links on table 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.

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 table as a reference doclet in a report package, the content links are disabled.

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:

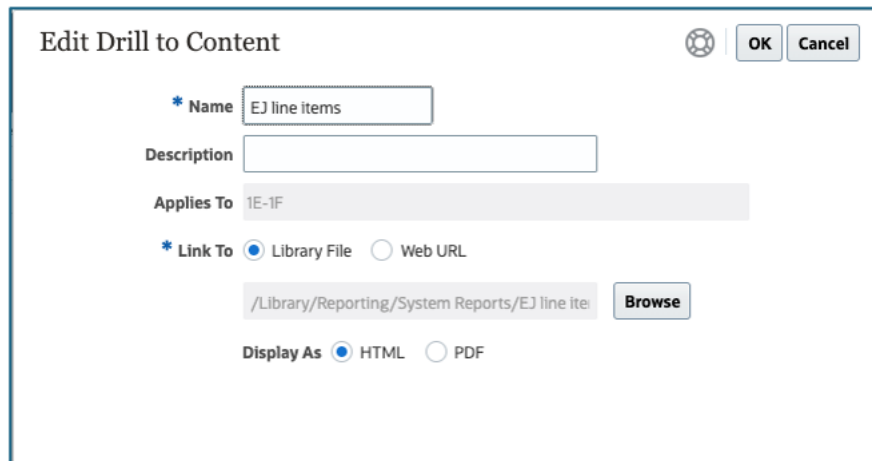
1. Select the area of the grid that you want to add a content link to (cells, rows, columns, or member heading cell).
2. In Grid Properties, click  .
3. Click  .
4. In the Add Drill To Content dialog box, enter a descriptive name for the drill to and, optionally, a description.

Note

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.



Edit Drill to Content

* Name: EJ line items

Description:

Applies To: 1E-1F

* Link To: ☒ Library File ☐ Web URL

/Library/Reporting/System Reports/EJ line ite:

Display As: ☒ HTML ☐ PDF

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.

		A	B	C	D	E	F
		Journal ID	Journal Name	Status (Detailed)	Preparer	Total Debits	Total Credits
1		Data Segm Abc	Abc	Abc	Abc	###	###
Σ 2					Totals	=#	Format Text 2 EJ line items =#

Managing Drill To Content Definitions

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

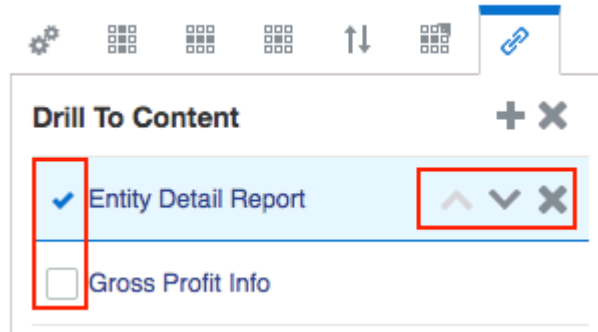
You can perform these actions on existing drill to links:

- With a region of the table 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.

Note

You can apply multiple drill to links to a cell, row, or column in the table. 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.

6

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](#)
In Reports, the **Text Character Width** property enables report designer's to select text sizing options for grids and Note objects.

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 .
 - 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](#)

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](#).

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:

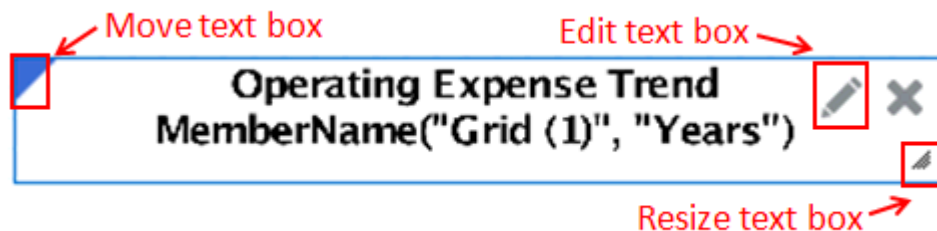
- Use the properties panel to edit properties for the entire text box, such as the name, background color, default font and font size, and vertical alignment. You can also Reset format properties to Default to restore the default format settings.

Note

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

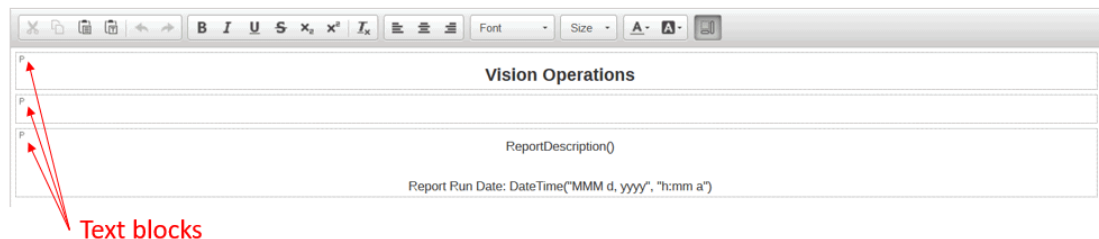
Text within a text box is broken down into text blocks. As you enter text, every time you press Enter, you create a new text block. Each text block can be formatted differently. For example, the title of a report can have a large font size, and the subtitle can have a smaller font size. You

do not need to create new text boxes for each block of text. Click  to view the text blocks 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 6-1 Text Block Example



Note

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.

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

Use  to remove formatting from text.

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

Note

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

Use  to cut, copy, paste, or paste as text.

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](#).

Use  to undo or redo an action.

Use  to align the text in a text block to the left, center or right of the text box.

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:

1. 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:

1. 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**.

	Actual	Plan
	Bottom Members	Bottom Members
	FY18	FY18
410000	#	#
450000	#	#
Corem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque sit amet nisi velit. Pellentesque blandit eleifend est a pulvinar. Integer rhoncus sodales leo, e 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. 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 congue pretium. 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.		

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



Vision Operations
Income Statement Act vs Plan
For Televisions
Report Run Date: Nov 10, 2020 8:52 AM

	Actual January 2018	Actual February 2018	Actual March 2018	Actual April 2018	Actual May 2018	Actual June 2018	Actual July 2018	Plan January 2018	Plan February 2018	Plan March 2018	Plan April 2018	Plan May 2018	Plan June 2018	Plan July 2018	Plan August 2018	Plan September 2018
Net Revenue	23,780,527	22,635,709	24,242,126	29,594,662	20,696,263	31,774,728	27,641,322	28,795,456	22,735,363	24,664,103	30,134,652	20,787,799	31,915,657	27,764,442	22,149,571	39,869,227
Cost of Sales	17,789,158	16,097,282	17,666,007	21,654,072	15,683,672	24,992,745	22,991,868	20,239,923	16,140,403	17,939,286	22,010,960	15,725,686	25,059,696	23,053,459	14,980,367	26,964,660
Gross Profit	5,991,368	6,538,427	6,576,120	7,940,590	5,012,591	6,781,982	4,649,454	8,555,534	6,594,960	6,724,817	8,123,693	5,062,114	6,855,961	4,710,983	7,169,204	12,904,567

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Nullam non bibendum nisi, quis efficitur nisi. 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 ultrices trincidunt rhoncus.

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



Layout

Name

Size 10.47, 2.17 

Size Width to Grid Width **Grid 1**

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



Vision Operations
Income Statement Act vs Plan
For Televisions
Report Run Date: Nov 10, 2020 9:06 AM

	Actual January 2018	Actual February 2018	Actual March 2018	Actual April 2018	Actual May 2018	Actual June 2018	Actual July 2018	Plan January 2018	Plan February 2018	Plan March 2018	Plan April 2018	Plan May 2018	Plan June 2018	Plan July 2018	Plan August 2018	Plan September 2018
Net Revenue	23,780,527	22,635,709	24,242,126	29,594,662	20,696,263	31,774,728	27,641,322	28,795,456	22,735,363	24,664,103	30,134,652	20,787,799	31,915,657	27,764,442	22,149,571	39,869,227
Cost of Sales	17,789,158	16,097,282	17,666,007	21,654,072	15,683,672	24,992,745	22,991,868	20,239,923	16,140,403	17,939,286	22,010,960	15,725,686	25,059,696	23,053,459	14,980,367	26,964,660
Gross Profit	5,991,368	6,538,427	6,576,120	7,940,590	5,012,591	6,781,982	4,649,454	8,555,534	6,594,960	6,724,817	8,123,693	5,062,114	6,855,961	4,710,983	7,169,204	12,904,567

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Nullam non bibendum nisi, quis efficitur nisi. 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. I eu mollis id, lobortis in mauris. Mauris ultrices trincidunt rhoncus.

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

In Reports, the **Text Character Width** property enables report designer's to select text sizing options for grids and Note objects.

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:

A4	Custom Text	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.						
		A	B	C	D	E	F	G
		Actual		Plan		Act vs Plan Var		Act vs Plan Var %
1								
2	500000		#		#		#	#
3								
T 4		Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor inci						

Text Character Width = Large:

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

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Text Character Width = Medium:

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

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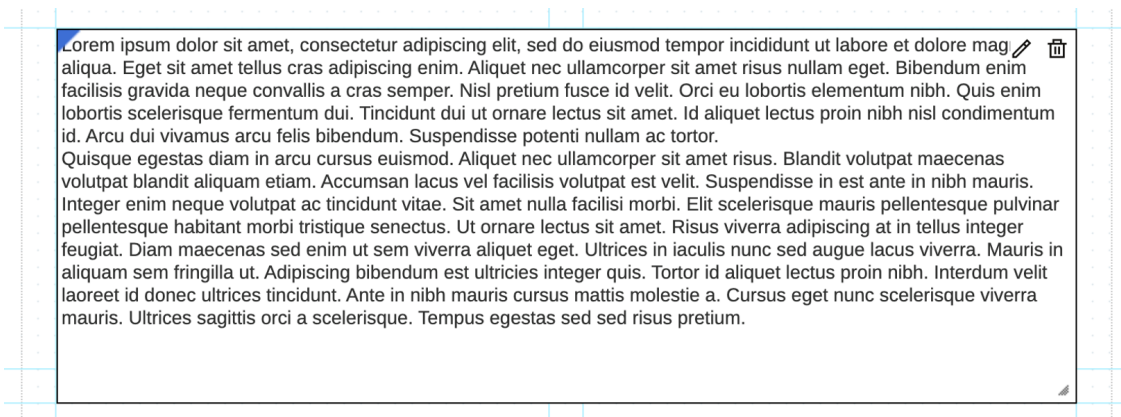
Text Character Width = Small:

	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:



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7

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

Note

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:

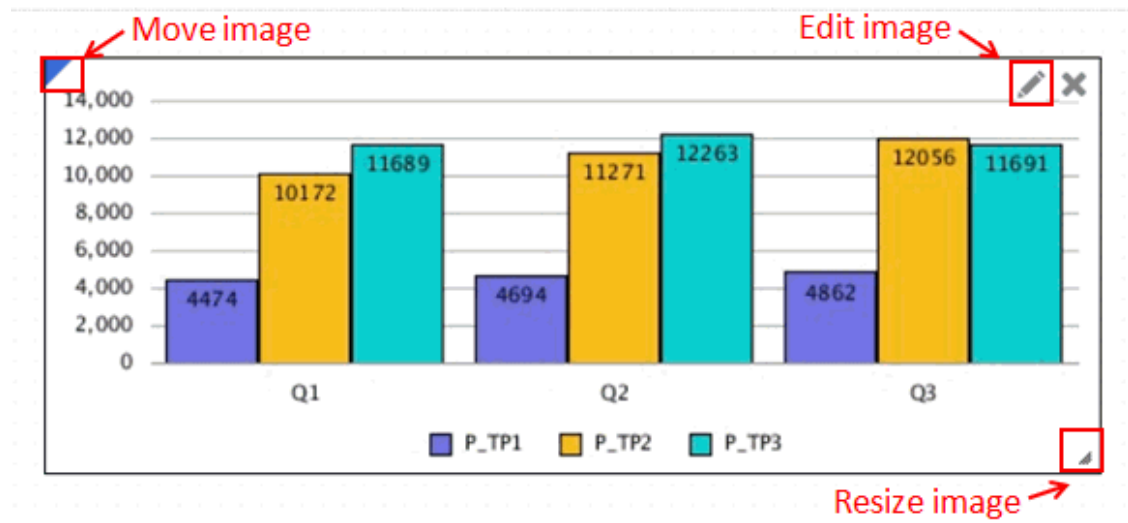
- From the toolbar, click  and select **Image**.
- From a blank report page, click .
- From the report header, footer, or body, right-click and select **Add Report Content**, and then select **Image**.

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.

8

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](#)
This section introduces two new chart types: Treemap and Sunburst charts, which help you find data patterns and compare data quantities.
- [About Gauge Charts](#)
This section describes the use of the gauge chart type, which enables you to identify the data values within the specified range; you can compare data values to fall under the maximum or minimum range.

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

Table 8-1 Supported Types of Charts

Chart Type	Supported for Grids	Supported for Tables
Bar: includes Bar, Stacked Bar, Horizontal Bar, Horizontal Stacked Bar	Yes	Yes
Line: includes Line, Stacked Line, Horizontal Line, Horizontal Stacked Line	Yes	Yes
Area: includes Area, Stacked Area, Horizontal Area, Horizontal Stacked Area	Yes	Yes
Combination: includes Combination, Stacked Combination, Horizontal Combination, Horizontal Stacked Combination	Yes	Yes
Waterfall	Yes	No
Pie: includes Pie, Donut	Yes	Yes
Pyramid	Yes	Yes
Polar: includes Polar, Polar Bar, Polar Line, Polar Fill	Yes	Yes
Radar: includes Radar Line, Radar Fill	Yes	Yes
Scatter	Yes	No
Bubble	Yes	No
Treemap	Yes	No
Sunburst	Yes	No
Gauge	Yes	Yes

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  and select **Chart**.
- From a blank report, click .
- From the report body, right-click and select **Add Report Content**, and then select **Chart**.

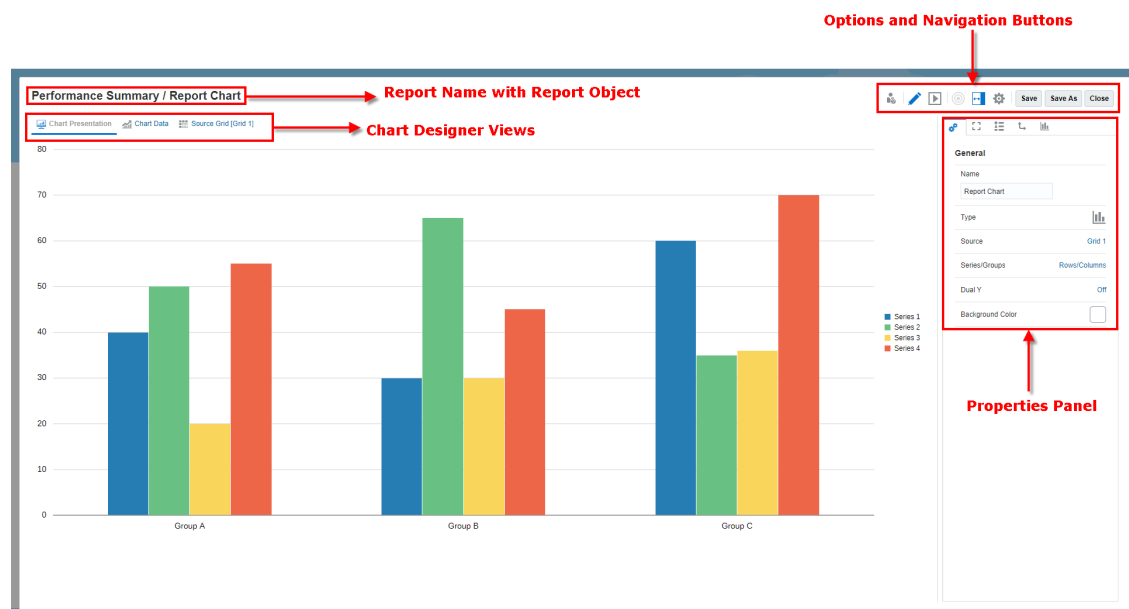
2. Click **Setup Chart**.
3. In **Select Source**, do one of the following:
 - Click **Models**, and select a data source to create a new grid that is stored in the **Hidden Sheet**.
 - Click **Existing Grids**, and select a grid that already exists in the report to use as the data source for the chart.
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:

1. Click the **Chart Data** tab.
2. 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.

Note

If the chart title is turned off or the title text is empty, the subtitle will not be displayed.

- 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

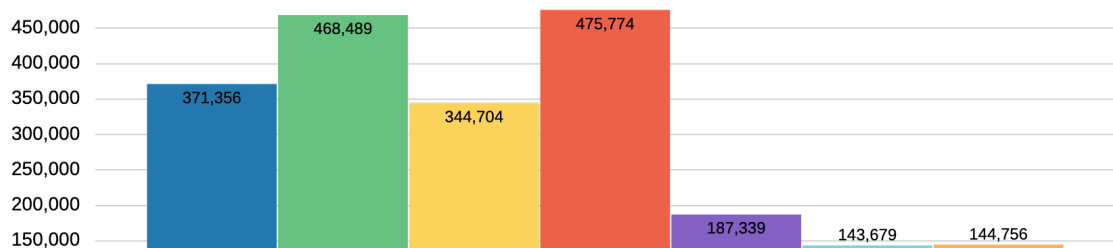
Maximum plotted data value: 475,774

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:

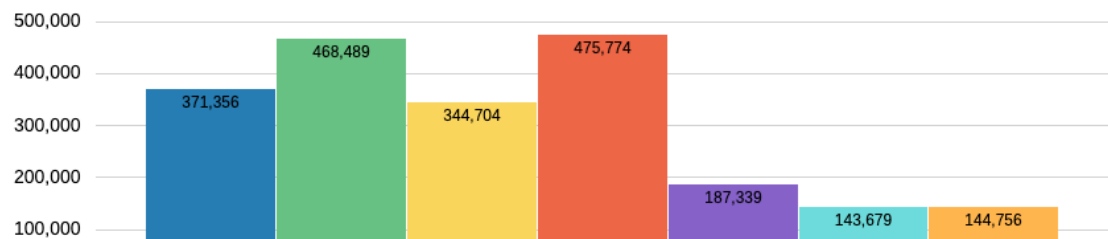
$$475,774 - 143,679 = 332,095$$

$$\text{Minimum: } 143,679 - (332,095 \times 20\%) = 77,260$$

$$\text{Maximum: } 475,774 + (332,095 \times 20\%) = 542,193$$

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 set-specific 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.

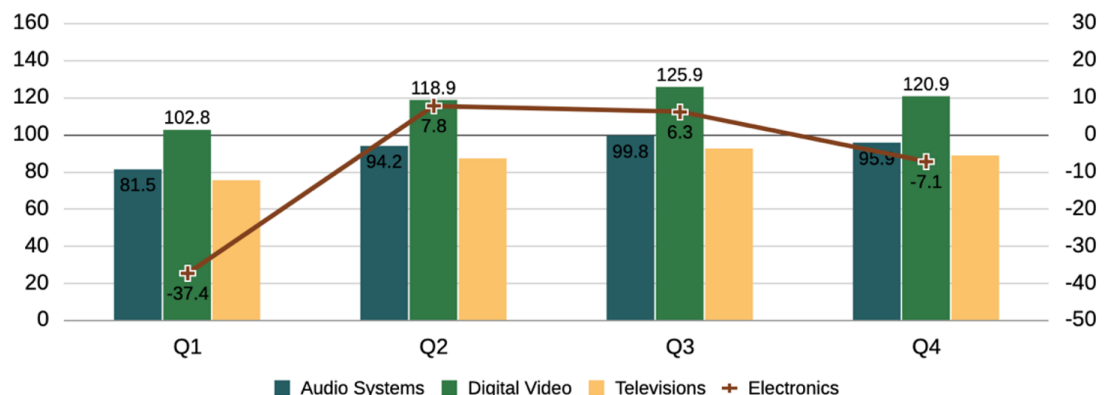
For example, in a Bar chart, the available label locations are: **Auto**, **None**, **Center**, **Inside Bar Edge**, and **Outside Bar Edge**.

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**

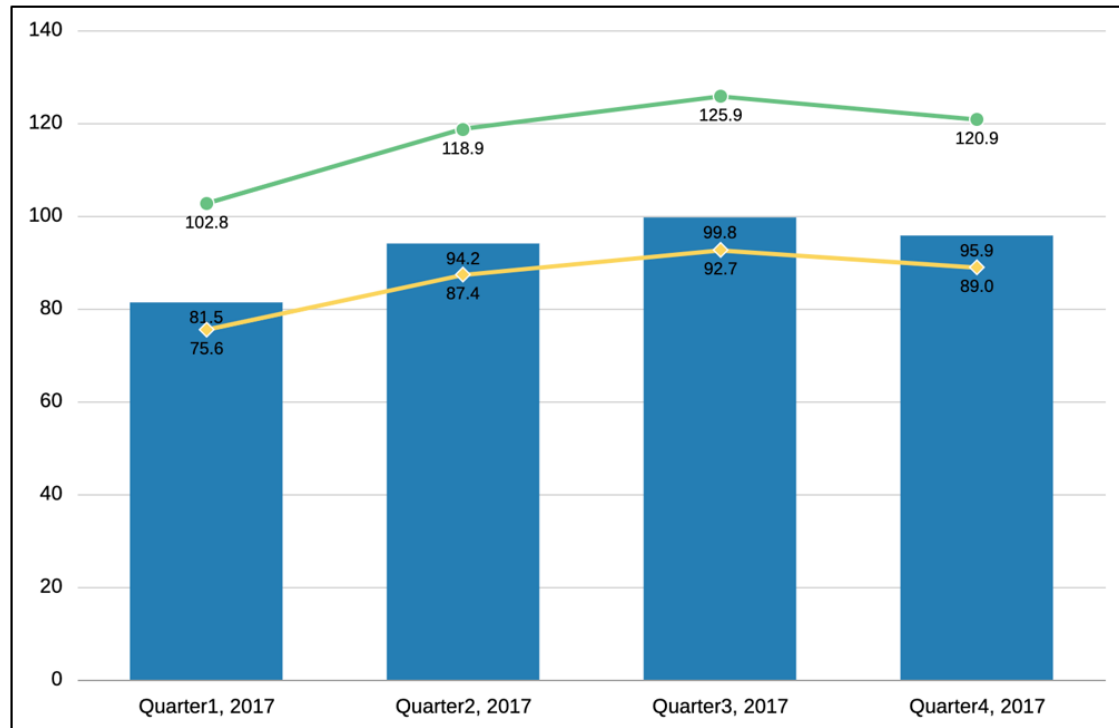
**Combine Y Axes**

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**

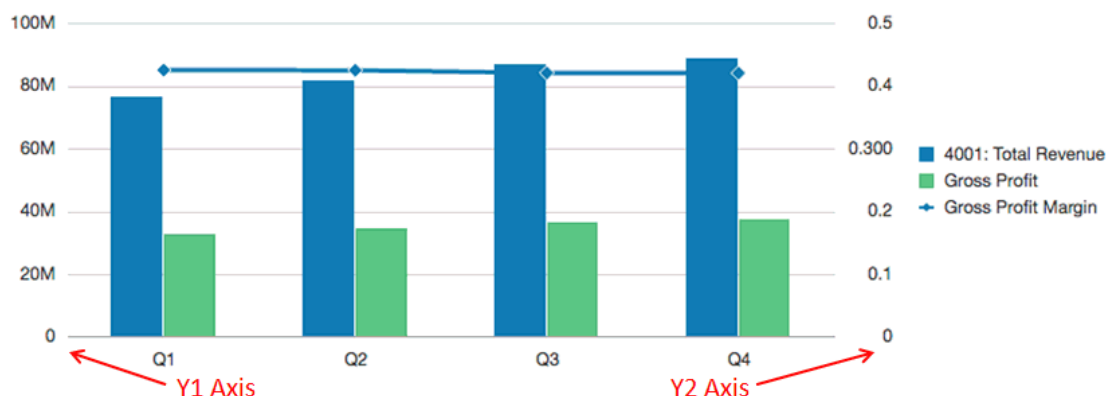


Understanding the Size of Chart Data Points and Label Display

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 8-1 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)

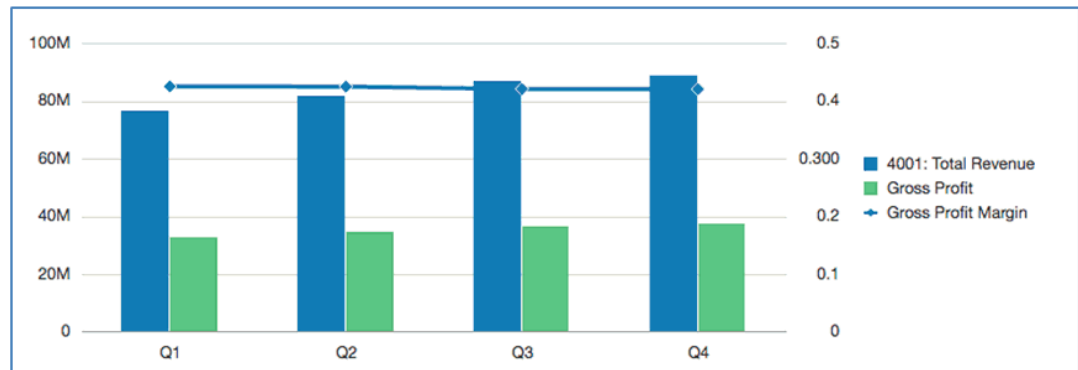
1. Because all of the data series will be displayed in the same chart, in chart general properties, change the **Chart Type** to **Combination**.
2. Set **Split Dual Y** to **Off**.
3. In the Chart Data view, select the rows and columns for the primary (Y1) axis. In this example, we select rows 1 and 2, and columns A-D:

Chart Presentation		Chart Data		Source Grid [Grid 1]	
Y1		Y2			
		A	B	C	D
		Q1	Q2	Q3	Q4
1	4001	#	#	#	#
2	GP	#	#	#	#
3	Gross Profit Margin	#%	#%	#%	#%

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:

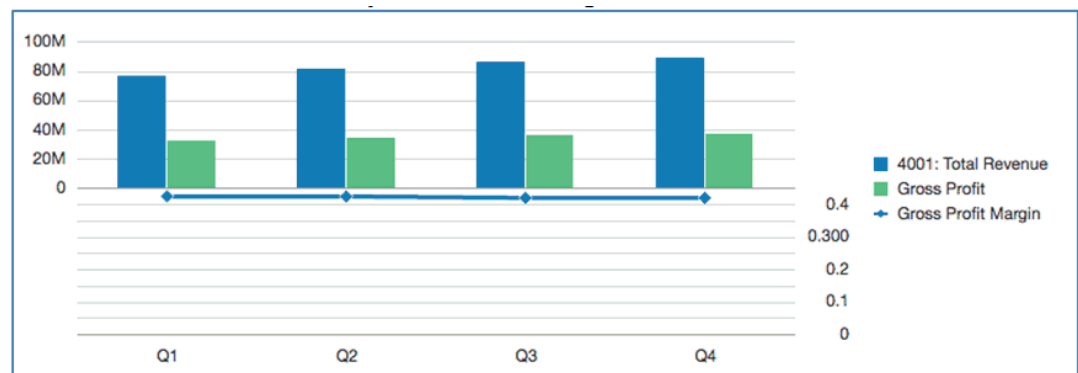
Y1		Y2			
		A	B	C	D
		Q1	Q2	Q3	Q4
1	4001	#	#	#	#
2	GP	#	#	#	#
3	Gross Profit Margin	#%	#%	#%	#%

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.

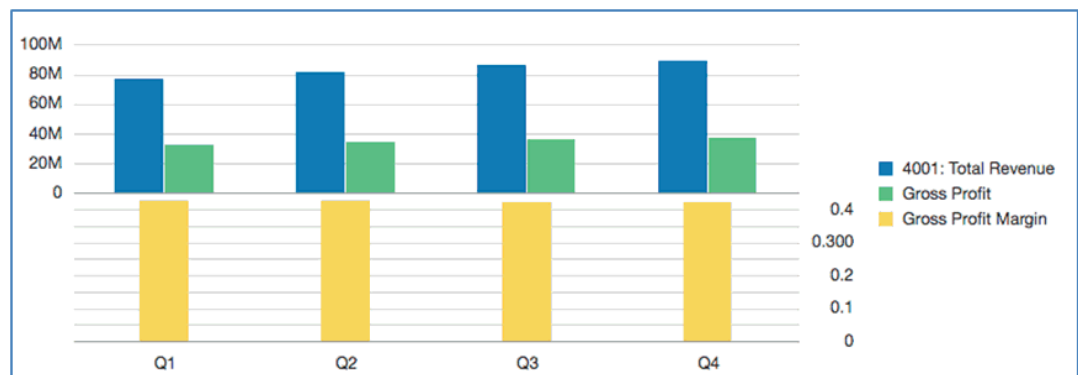


Example 2: Dual Y = Split Dual (Split Dual = On)

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.

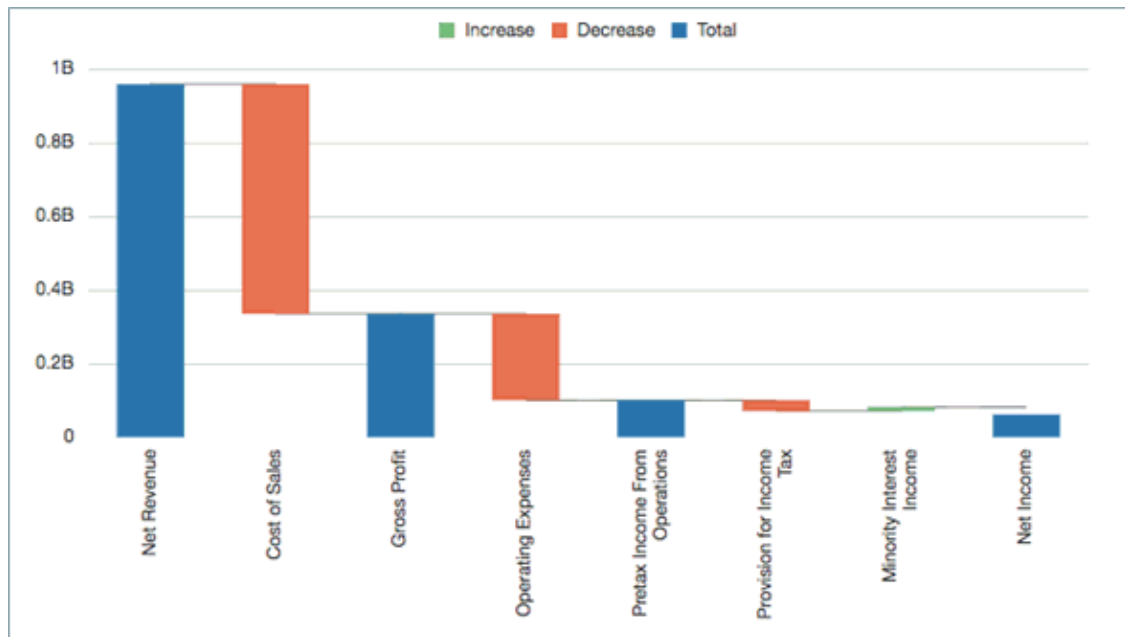


About Waterfall Charts

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 8-2 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 8-3 Waterfall Negative Data Values

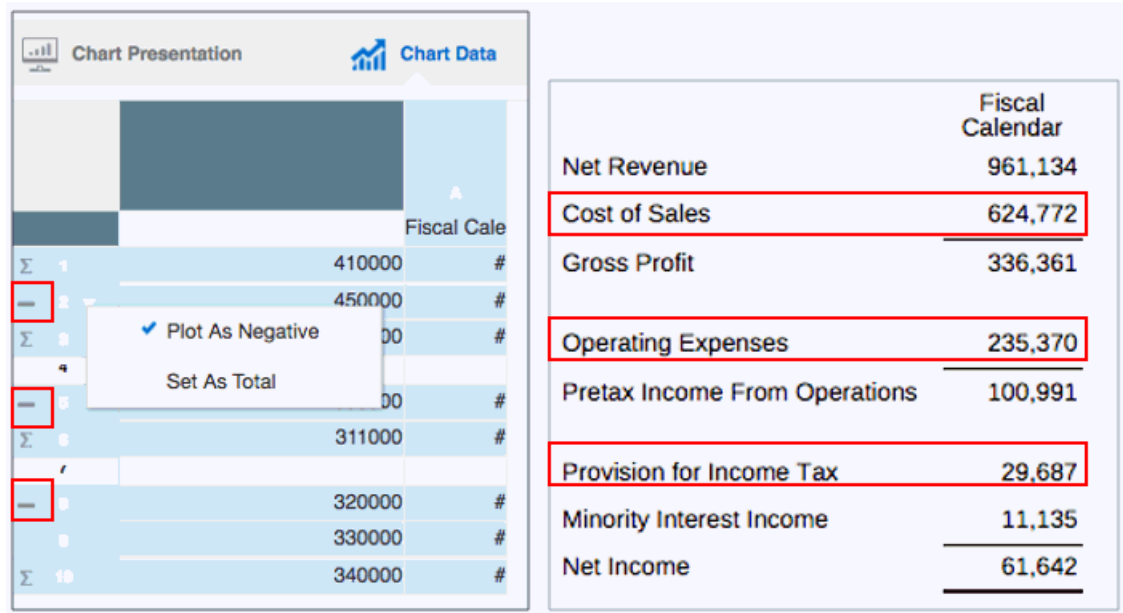


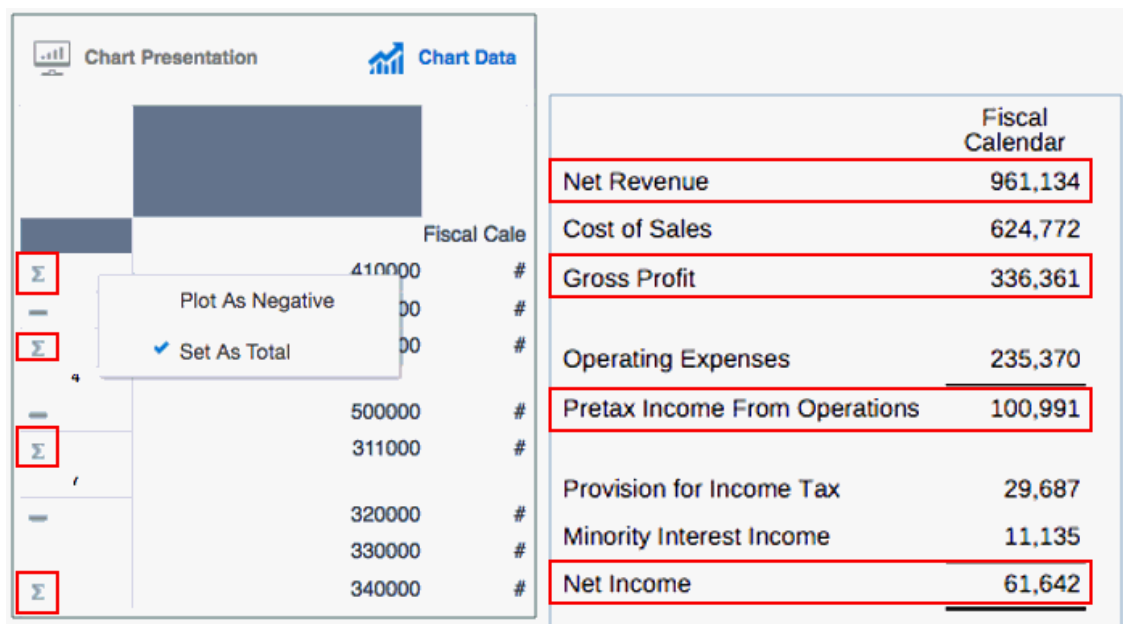
Figure 2 shows an example of Cost of Sales, Operating Expenses, and Provision for Income Tax set as negative data values.

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.
2. On the row header, click the down arrow, and select **Set As Total**.

The row or column displays a Σ sign to indicate that it is a total value.

Figure 8-4 Waterfall Total Data Values



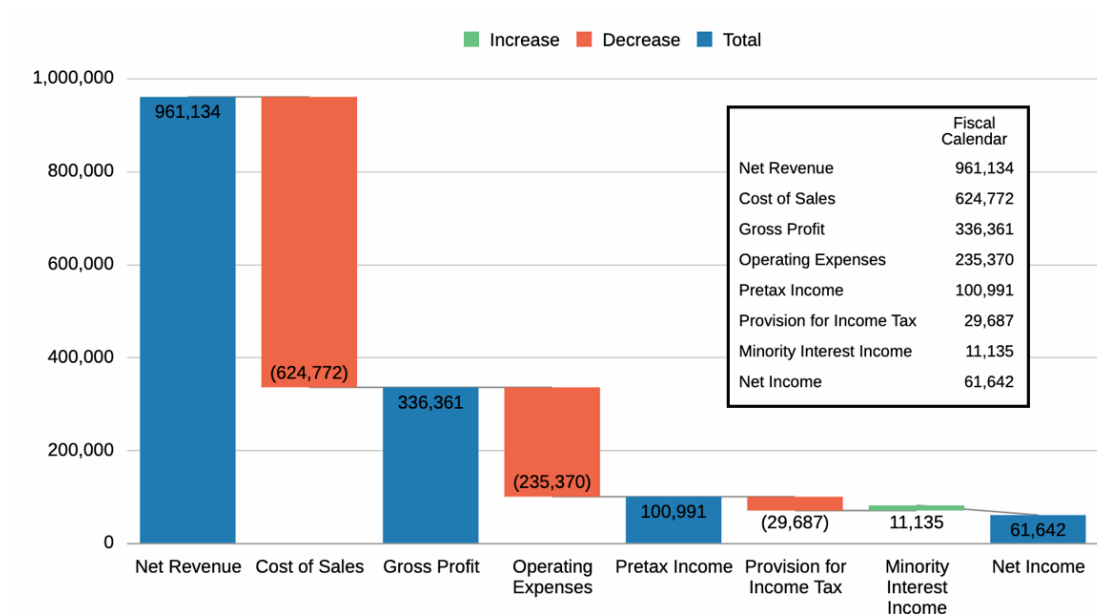
[Figure 3](#) shows an example of Net Revenue, Gross Profit, Pretax Income From Operations, and Net Income set as total data values.

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 8-5 Waterfall Chart Finished Example



[Figure 4](#) shows a finished example of a waterfall chart with the corresponding data values inset.

Note

Sample Report 2b (Advanced Charts) contains a bubble chart example.

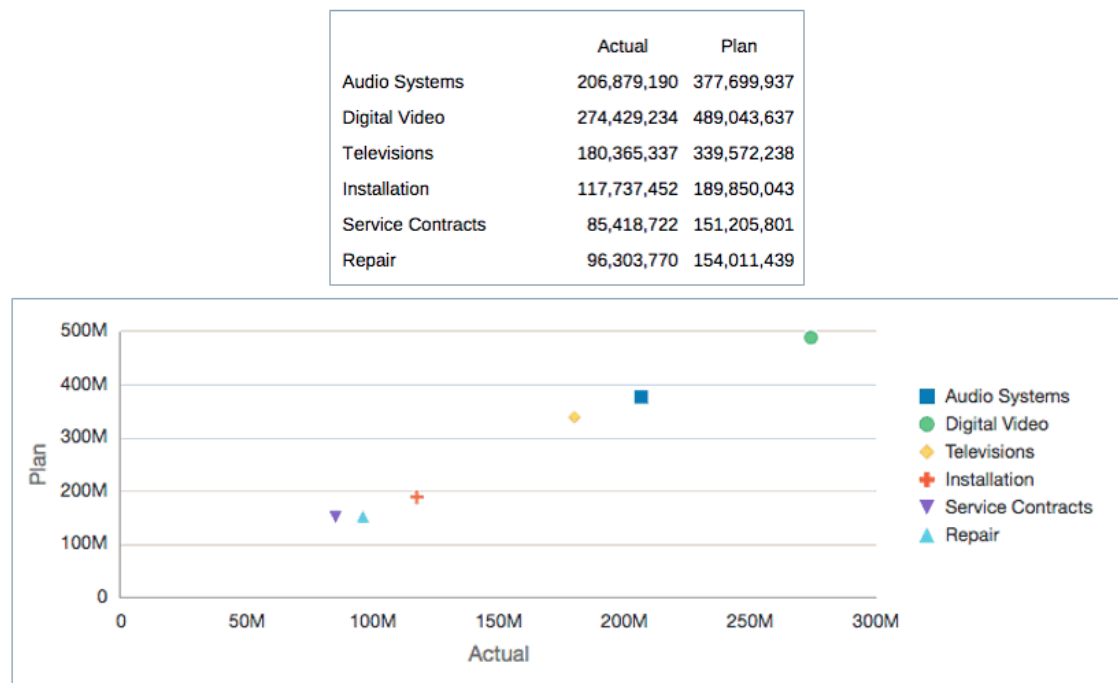
About Scatter and Bubble Charts

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 8-6 Scatter Chart and Data



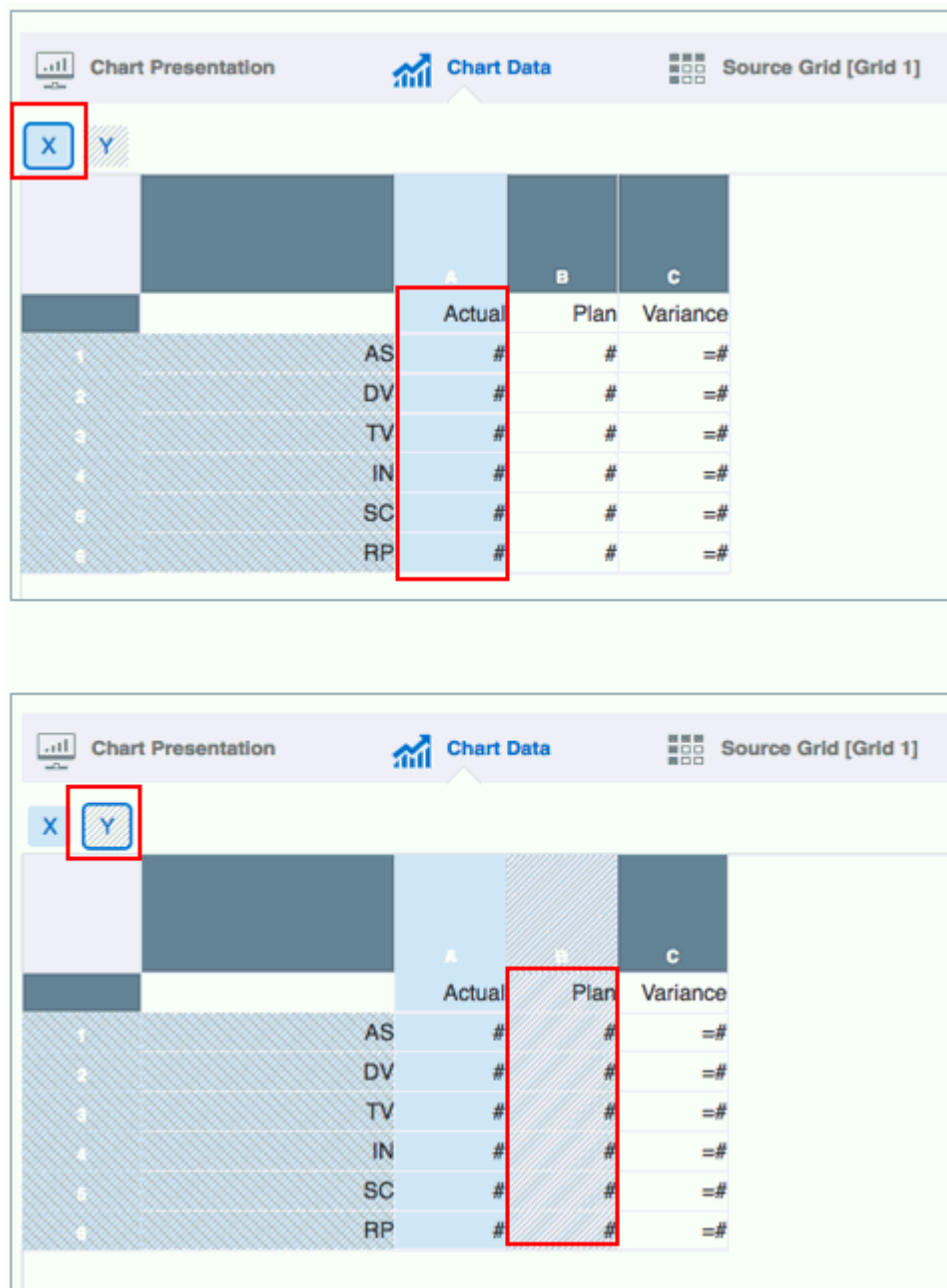
[Figure 1](#) displays a set of Actual and Plan data for products and services for an electronics store. In the accompanying scatter chart, the Actual data is plotted along the horizontal X-axis, and the Plan data is displayed on the vertical Y-axis.

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**.

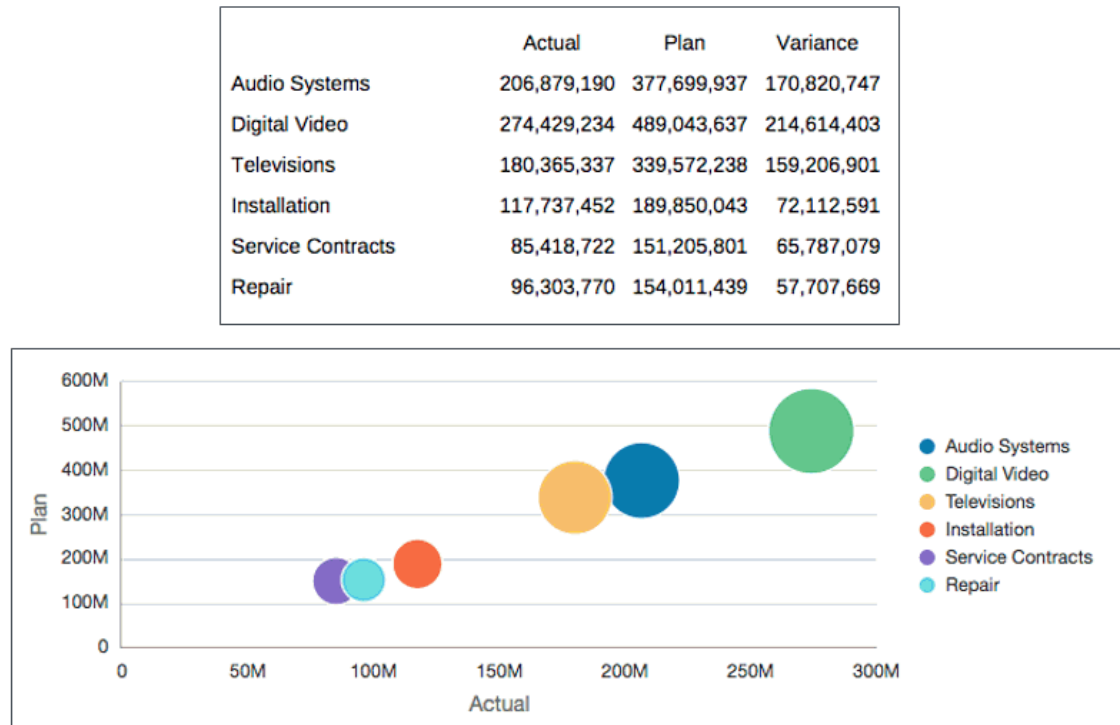
[Figure 2](#) shows the setup of the Actual data in the X-axis and the Plan data in the Y-axis.

Figure 8-7 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 8-8 Bubble Chart and Data

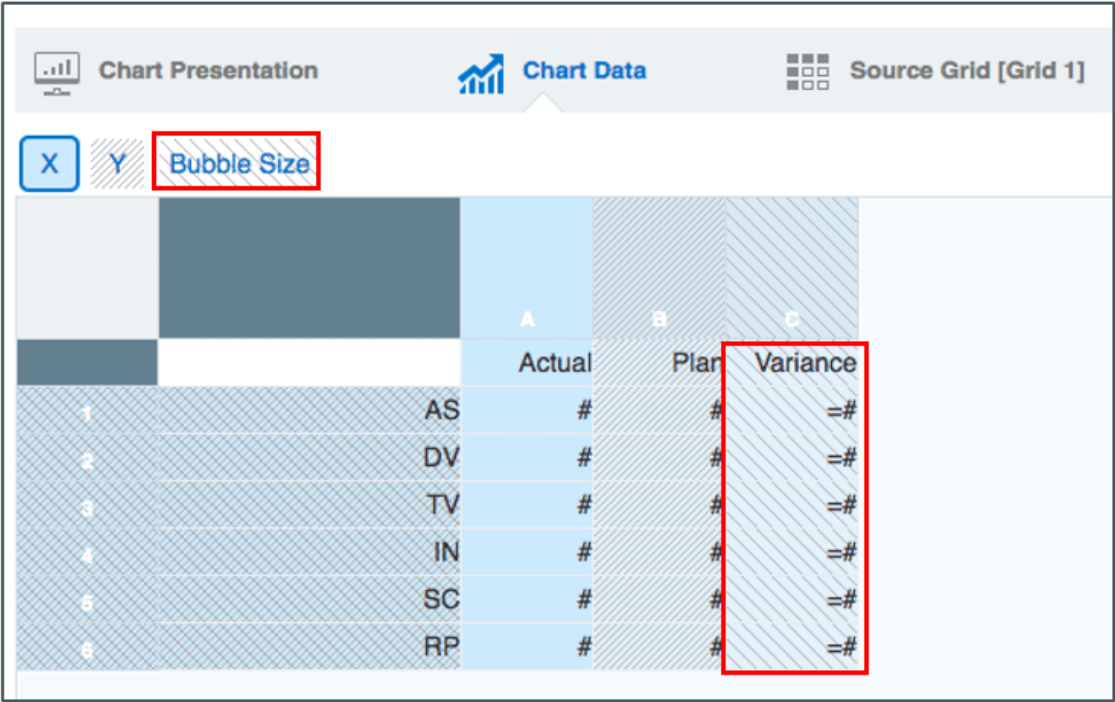
[Figure 3](#) displays a set of Actual and Plan data for products and services for an electronics store, as well as a third column that shows the variance between the two. In the accompanying bubble chart, the Actual data is plotted along the horizontal X-axis, the Plan data is displayed on the vertical Y-axis, and the Variance data is represented by the size of the bubbles.

To create a bubble chart:

1. 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 8-9 Bubble Chart Setup



Note

Sample Report 8 (Waterfall and Bubble Charts) contains a bubble chart example.

About Treemap and Sunburst Charts

This section introduces two new chart types: Treemap and Sunburst charts, which help you find data patterns and compare data quantities.

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.

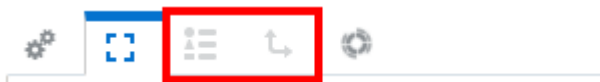
Both of these chart types make it easy to spot data patterns or to compare data quantities. In Reports, you select members and functions from a single dimension to visualize the hierarchy in a Treemap or sunburst chart. You can also set chart properties and define element colors, as needed.

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.

A screenshot of the 'Plot Area' properties panel. The panel has a title 'Plot Area' and several settings. The 'Title' is 'Sunburst Report' and is turned 'On'. The 'Subtitle' is 'Historical Data Value' and is also turned 'On'. Below these, there are two sections: 'Color Label' with the value 'Region' and 'Size Label' with the value 'Earnings per Region'. These two sections are enclosed in a red rectangular box. The panel also includes font size adjustment icons (T) for the title and subtitle.

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 2** 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:

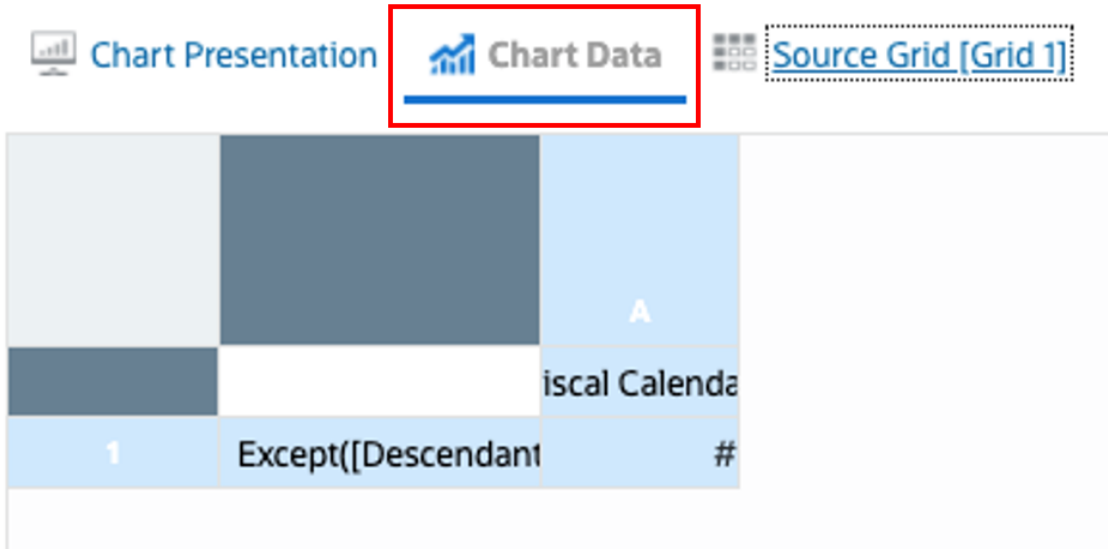
Descendants of Seg01 (Inclusive), excluding Gen 6; Descendants of Seg02 (Inclusive)

Here is the grid preview.

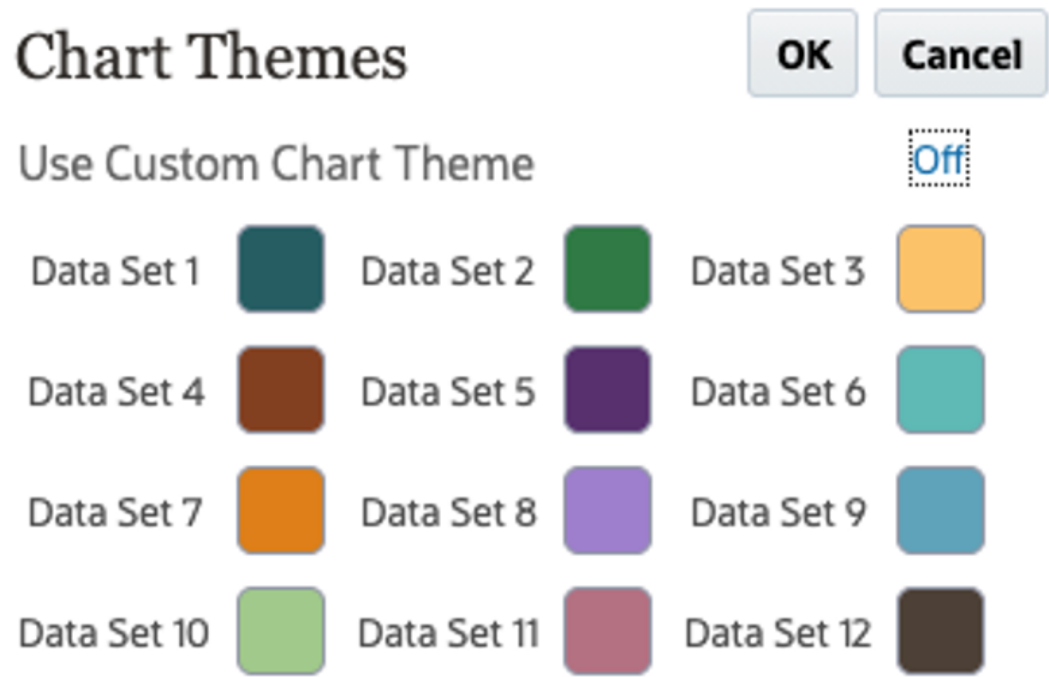
Note the indented list of the descendants of **Seg01** and **Seg02**:

	Fiscal Calendar
HA	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:

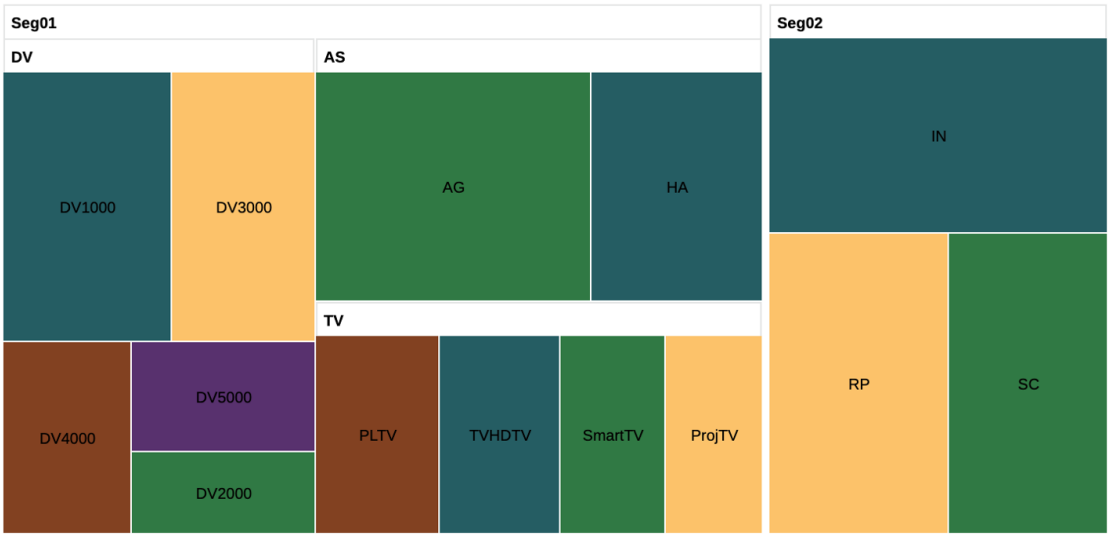


Here are the **Default Chart Colors** which will be displayed in the example:



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 8-2 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 .
Separators	Separators between the node boxes: Gaps or Bevels .

Table 8-2 (Cont.) Tree Options

Field	Description
Tooltip Number	Tooltip number formatting for the underlying numerical data value.

Table 8-3 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:



① 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 8-4 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

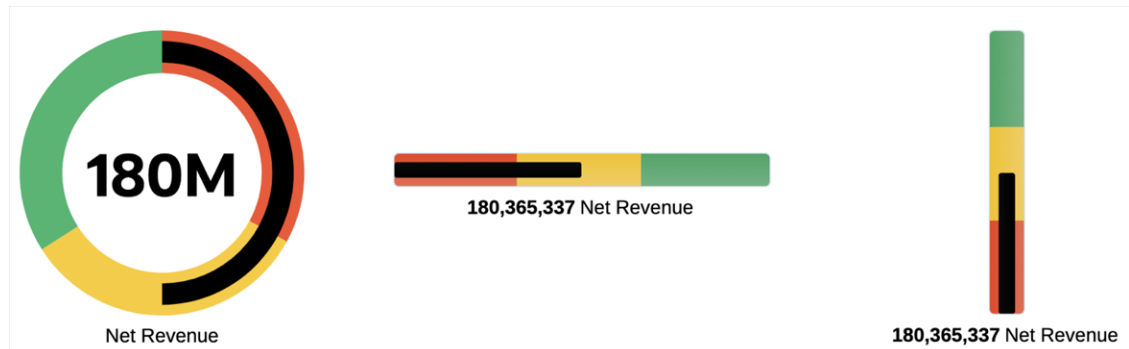
This section describes the use of the gauge chart type, which enables you to identify the data values within the specified range; you can compare data values to fall under the maximum or minimum range.

Gauge Charts

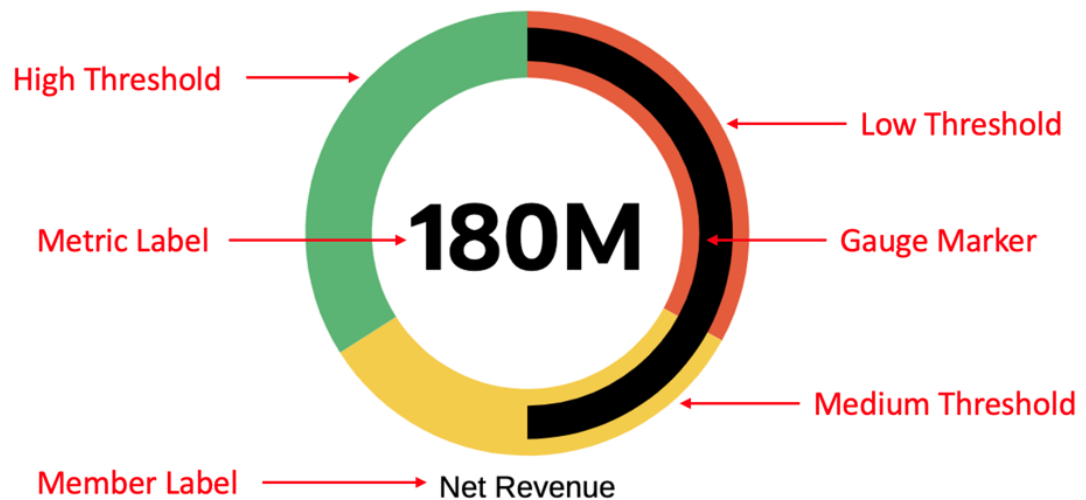
Gauge chart types show you whether data values fall within an acceptable range or not. You set the minimum and maximum values, the range maximums, and the gauge by default uses **Red**, **Yellow**, and **Green** traffic lighting to help you quickly assess a current value and identify problems in important 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 8-5 General Properties

Property Name	Description
Orientation	Select from the following options: • Circular • Horizontal • Vertical

Table 8-6 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 8-7 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 8-7 (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 8-8 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 8-8 (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 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.

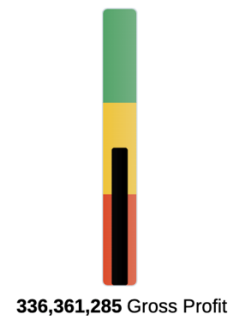
Example: Gauge Charts

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**.

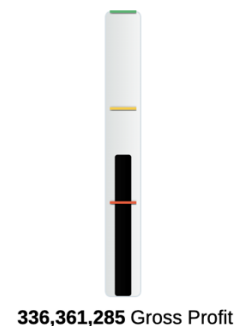
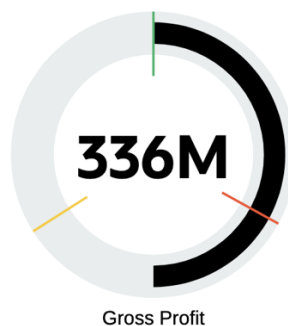
Note: The low, medium and high thresholds (**Red**, **Yellow**, and **Green**, respectively) are displayed in the body of the chart with the black gauge marker plotting the metric value.



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

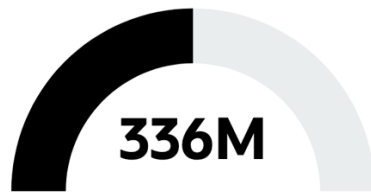
The following examples illustrate the **Circular**, **Horizontal**, and **Vertical** gauge chart types for a **Threshold** property setting of **None**, which means that the low, medium and high thresholds are not displayed. Only the black gauge marker plotting the metric value is displayed. In addition, 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**



Gross Profit



336,361,285 Gross Profit



336,361,285 Gross Profit

9

Working with Analytics Images

Related Topics

- [Inserting an Analytics Image](#)

An Analytics Image is an Oracle Analytics Cloud (OAC) dashboard that is inserted into a report as a static refreshable image. When a report is previewed, the OAC dashboard image is retrieved from the OAC server.

Inserting an Analytics Image

An Analytics Image is an Oracle Analytics Cloud (OAC) dashboard that is inserted into a report as a static refreshable image. When a report is previewed, the OAC dashboard image is retrieved from the OAC server.

Note

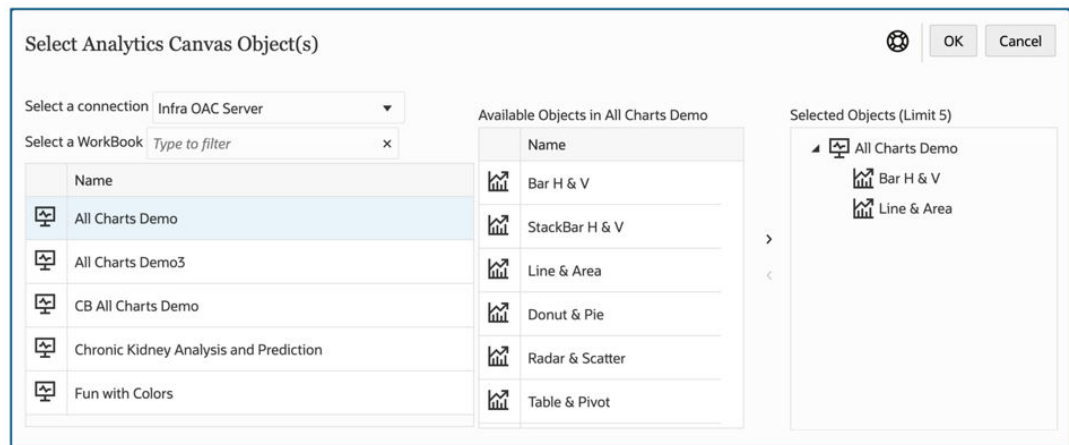
Filters and other OAC dashboard interactions, such as hover and drill, are not available with an Analytics Image.

To insert an Analytics Image into a report:

1. Perform one of the following steps:

- From the toolbar, click  and select **Analytics Image**.
- From a blank report page, click .
- From the report header, footer, or body, right-click and select **Add Report Content**, and then select **Analytics Image**.

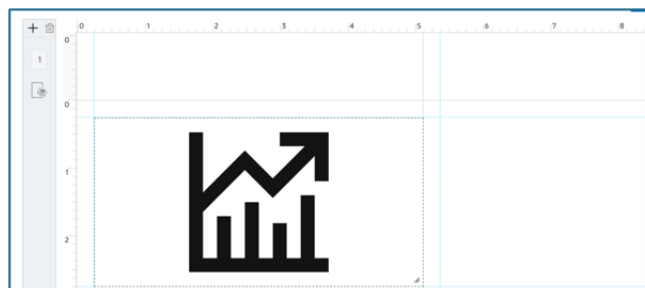
2. Click  or **Setup Analytics Image**.
3. In the **Select Analytics Canvas Object(s)** dialog, under **Select a connection**, select an OAC Connection, and then select an OAC Workbook from the list in the **Select a Workbook** pane on the left.
For more information on OAC connections, see [Creating a Connection to Oracle Analytics Cloud](#).
4. 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.

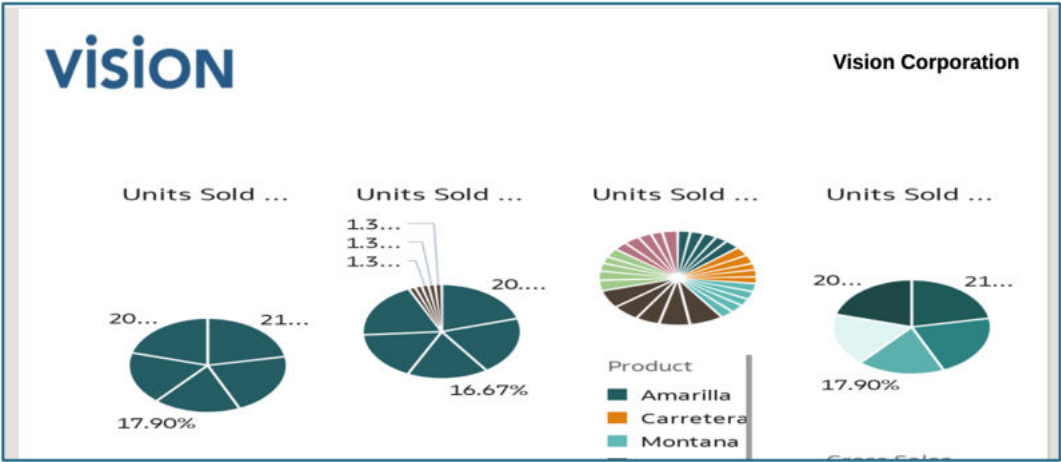


Note

- 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 object multiple times into a report.
- You can select a maximum of five objects.
- You can select objects from only one workbook at a time, not multiple workbooks.

- Click **OK** to return to **Report Designer**.
- The selected OAC objects are inserted into the report.





Note

The report canvas preview does not display a preview of the OAC canvas. It displays the default icon.

- 7. **Optional:** You can move or resize the object either by dragging the report object manually with your mouse, or by selecting the report object and then clicking the **Layout** tab in the **Report Designer** properties.
- 8. **Optional:** When editing an Analytics Image, in the **General** Properties panel you can change the object's name, Data Source, and Workbook.

General

Name

Analytics Image 1

Data Source

Infra OAC Server

Workbook

CB All Charts Demo

Working with Shared Reports and Objects

Related Topics

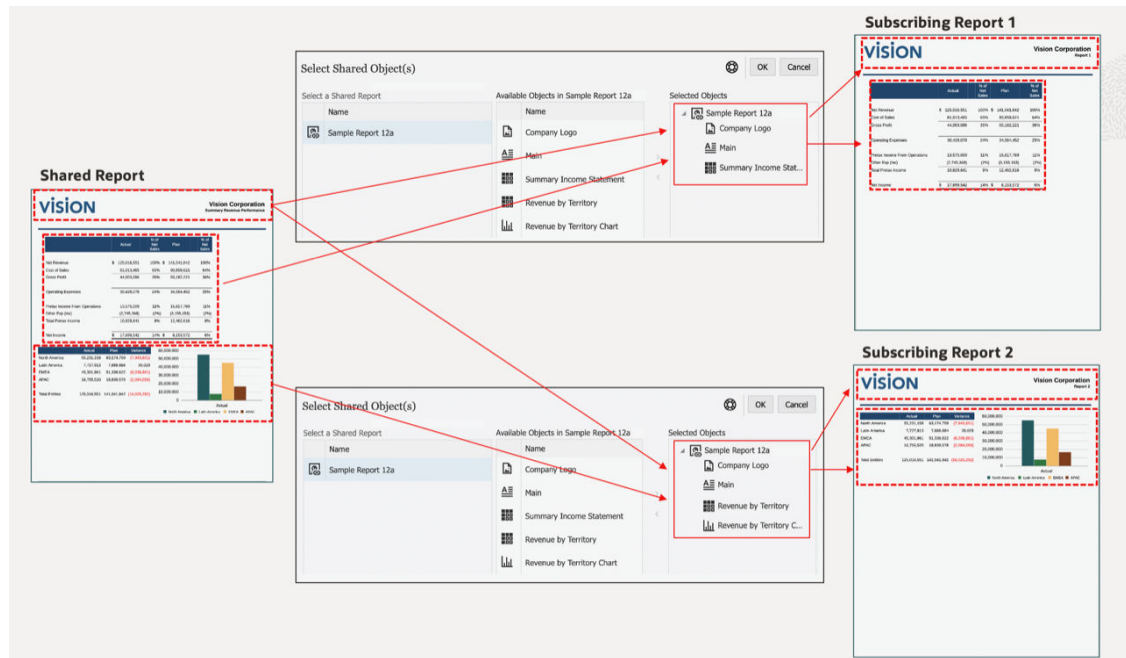
- [About Shared Reports and Objects](#)
This section explains more about Shared Reports and Objects, providing a single point for accessing and updating all subscribing reports.
- [Saving a Report as a Shared Report](#)
- [Inserting a Shared Object into a Report](#)
- [Unlinking a Shared Object in a Report](#)
- [Limitations and Behaviors for Shared Reports and Objects](#)
This section describes how to work on shared reports and objects, and you must review the list of limitations and behaviors.

About Shared Reports and Objects

This section explains more about Shared Reports and Objects, providing a single point for accessing and updating all subscribing reports.

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 Cloud EPM 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**.

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.

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**.

Save Report

* Name: Sample Report 3

Description: Revenue by Territory

* Save To: Library/Samples/Report: Browse...

☒ Save As Shared Report

Note

- In Narrative Reporting deployments, shared reports cannot be saved to the **My Library** folder.
- In Cloud EPM Platform deployments, you cannot save a shared report as the same name as its original report in the same folder. The Cloud EPM Platform Library does not support artifacts with the same name in 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)

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.

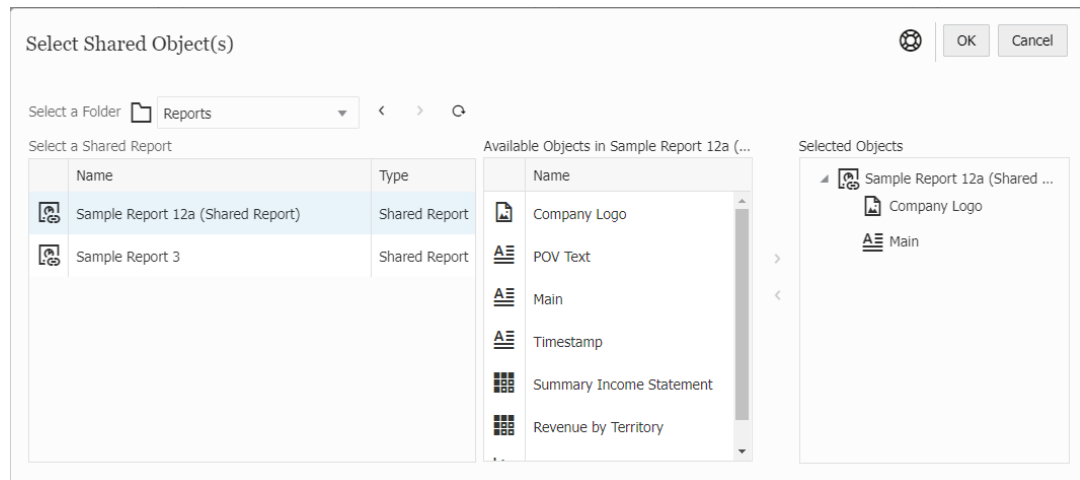
Note

After migrating Financial Reporting saved objects in Cloud EPM 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**.
2. 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**.

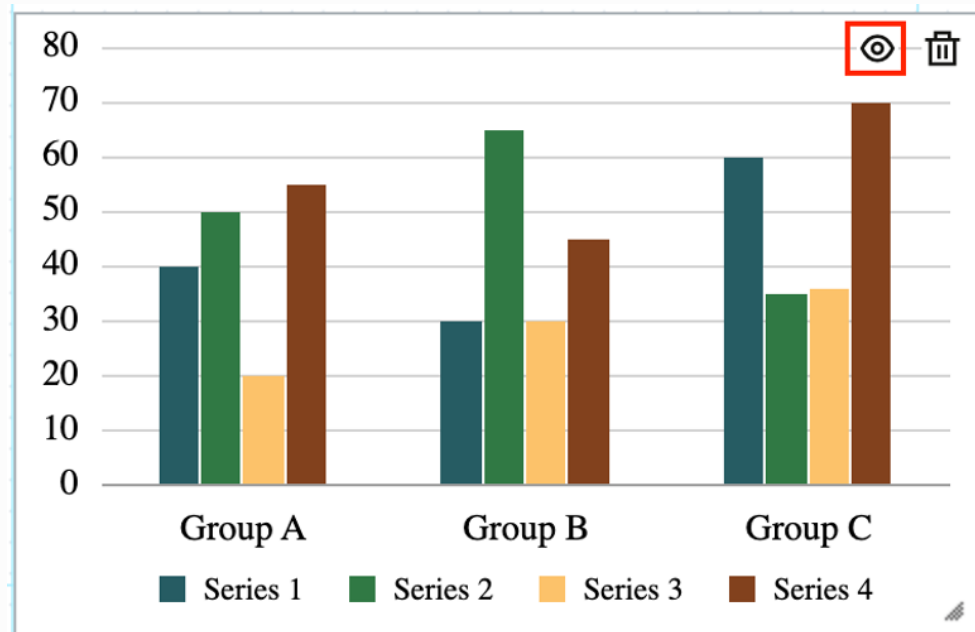
- In the **Select Shared Objects** dialog, only the shared reports that the report designer has access to will be listed.

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

You can view the properties of an inserted shared object by either clicking on the **View** icon in the top right of the object, or by right-clicking on the object and selecting **View**.

**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

6. **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.

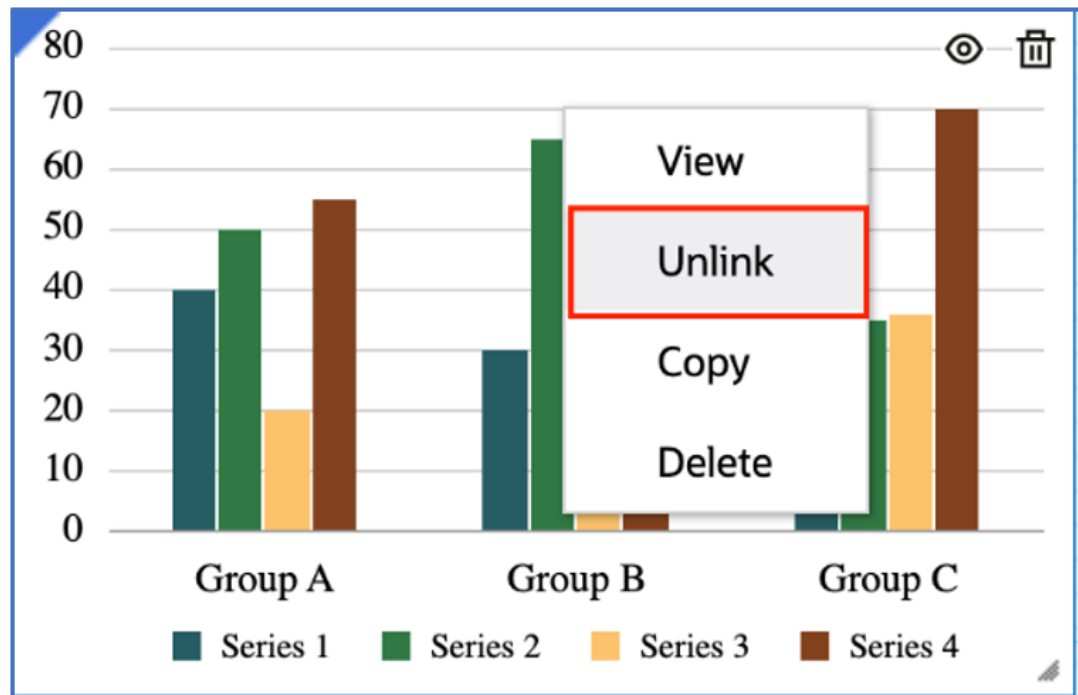
For a list of limitations and behaviors when using shared reports and objects, see [Limitations and Behaviors for Shared Reports and Objects](#).

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.

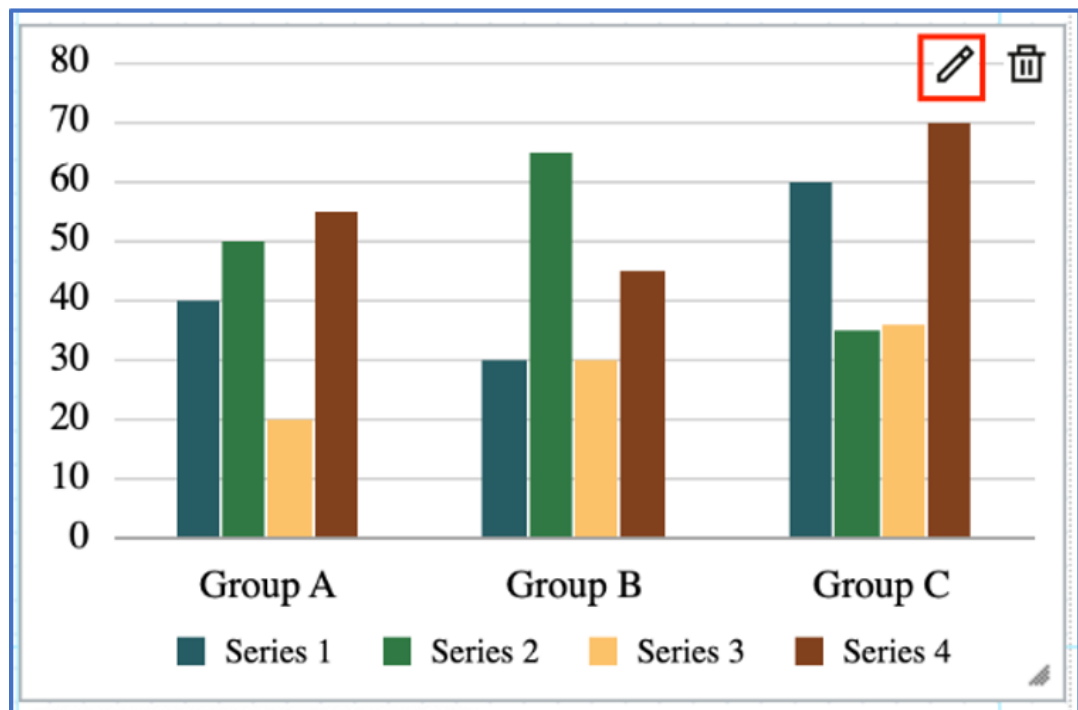
To unlink an inserted shared object in a report:

1. In the **Report Designer**, right-click on the inserted shared object and then select **Unlink**.



- 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.



Note

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

This section describes how to work on shared reports and objects, and you must review the list of limitations and behaviors.

Before working on the shared reports and objects, you need to review the list of limitations and behaviors.

Table 10-1 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 10-1 (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.

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 Oracle Fusion Cloud Enterprise Performance Management 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.

Note

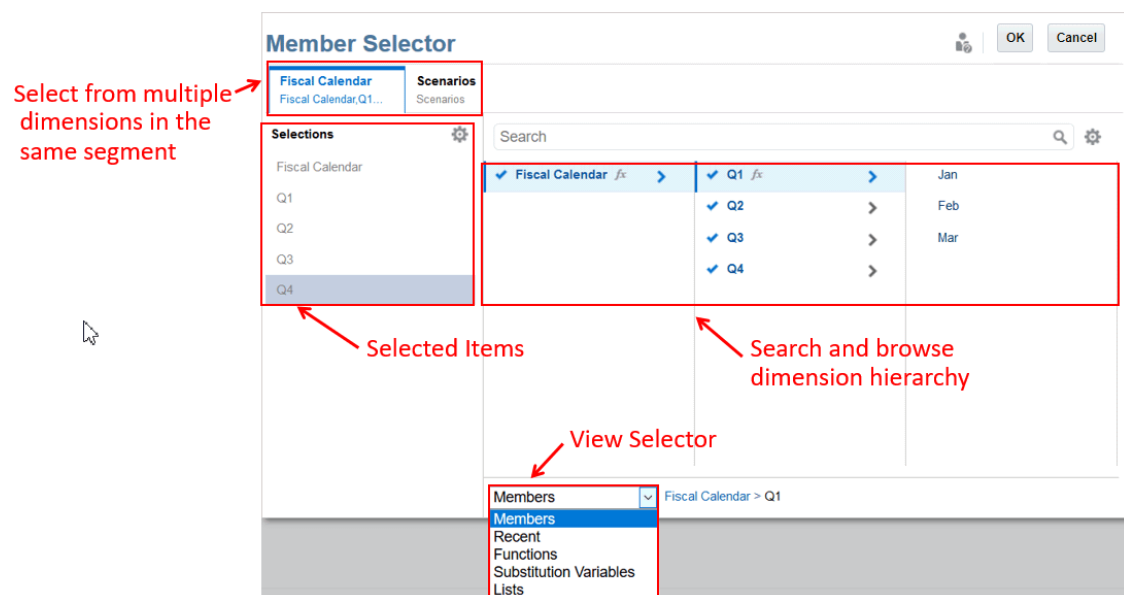
The members displayed in the member selector are dependent on the user's metadata security defined at the data source.

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 be 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.

Note

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 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 be 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:

1. 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.

Note

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:

1. 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, click  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:

1. 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.
5. 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 11-1 Functions Available Through Member Selection

Function	Parameters Needed	Description
Ancestors	Ancestors of <i>member</i> (Inclusive)	Members at all levels above the specified member
Bottom	Bottom <i>dimension</i> (Inclusive)	All Level 0 members
Children	Children of <i>member</i> (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	<i>DTS member (Time Dimension member)</i> 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) • WTD (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 (<i>member1</i>, <i>member2</i>, 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 <i>number</i>	Members based on a generation number in a hierarchy

Table 11-1 (Cont.) Functions Available Through Member Selection

Function	Parameters Needed	Description
Intersect	Intersect (<i>member1</i> , <i>member2</i> , 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 <i>number</i>	Members based on a level number in a hierarchy
Match	Include CurrentPOV (<i>No</i> , <i>Member Name as prefix</i> , <i>Member Name as suffix</i>) Match with (<i>member name</i> , <i>alias</i> , or <i>both</i>)	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 <i>member</i> (Inclusive)	Member one level above the specified member
PeriodOffset	PeriodOffset (<i>member</i> , <i>offset</i> , <i>secondary dimension</i> , <i>periods below member</i>) 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: <i>periods below member</i> 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) away from the specified member. Applies to the Period/Time dimension spanning months and years, where the Year dimension is selected as part of the function. Note: The Time and Year dimensions cannot exist in opposite axes. They must both be either in the row or column axis. 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.
Property	User Defined Attributes (UDAs) or Associated Attribute dimension. Operator: equals (=) or not equals (<>) NOTE: Oracle Fusion Cloud Enterprise Performance Management 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 11-1 (Cont.) Functions Available Through Member Selection

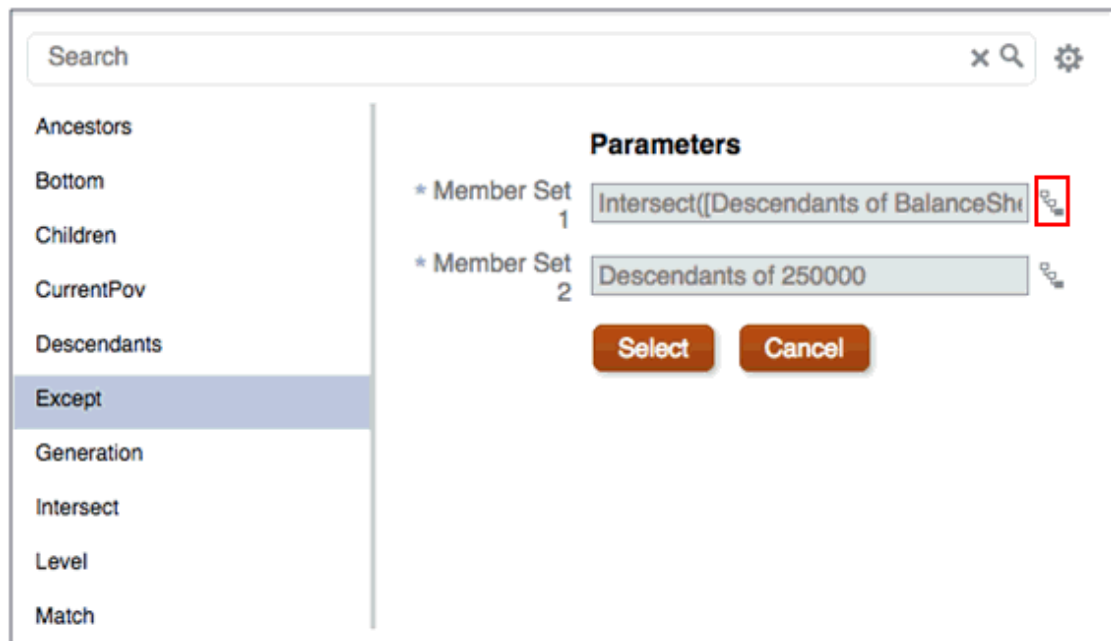
Function	Parameters Needed	Description
Range	Range (<i>frommember</i> , <i>tomember</i>) The starting and ending members can be fixed members, CurrentPOV, or a prompt.	Defines a range of members. For example, you can use the "Year" dimension to specify all months in the first quarter by selecting "January" 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> , <i>Relative Member List</i> , <i>Use First Descendants</i>) Example: RelativeMember(Mar,-1) returns February. 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. Relative Member List refers to the Level or Generation member list. When specified, relative members are selected from the specified list of members. - The First Descendant function returns the first descendant from the hierarchy under the specified member. Note: You cannot use both the Hierarchy Under Member and the Relative Member List parameters in the same definition.	Members an arithmetic offset (positive or negative) away from the specified member. Applies to any dimension.
SameGeneration	Same generation as <i>member</i>	Members of the same dimension and generation as the specified member
SameLevel	Same level as <i>member</i>	Members from the same dimension and on the same level as the specified member
Siblings	Siblings of <i>member</i> (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 11-1 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 11-2 Intersect Function

Accounts
Intersect([Descenda...]

Selections

Intersect([Descendants ...]

Parameters

* Member Set 1 Descendants of BalanceSheet

* Member Set 2 Level 1

5. Click **Select**, and then click **OK**.
6. In **Member Set 2**, enter Descendants of 25000.

Figure 11-3 Result of Except and Intersect Functions

Preview OK

Member Name	Alias
113000	Total Inventory
150000	Fixed Assets
180000	Other Assets
211200	Other Current Liabilities
212000	Long-Term Liabilities

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	B	C	D
		FY17	FY18	FY18	
		Actual	Plan	Plan	YTD
		n Jan to Cember 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 :

Name *

Applies To

Define condition to be met for conditional suppression to be applied

Data Values in Column equals

Here is the conditional suppression definition for columns C:

Name *

Applies To

Define condition to be met for conditional suppression to be applied

Member Name equals

Here is the report preview with "June" selected for the **Fiscal Calendar** dimension:

	Actual						Plan						YTD
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Net Revenue	138,553	106,518	136,538	135,907	135,399	154,215	148,385	110,093	182,352	142,464	142,627	139,291	1,672,342
Cost of Sales	89,173	68,441	86,047	88,189	84,325	100,588	99,741	70,066	117,467	92,232	91,144	89,085	1,076,498
Gross Profit	49,380	38,077	50,491	47,718	51,073	53,627	48,644	40,027	64,885	50,232	51,483	50,206	595,843

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:

Default for Heading		Period	Range from PeriodOffset ... X
			A
			NI
1	CurrentPOV	Range from	#

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

Year	Period
CurrentPOV	Range from Period...

Selections	Parameters
Range from PeriodOffs...	* From Member PeriodOffset of CurrentPOV - 2 for * To Member PeriodOffset of CurrentPOV + 14 fo Update Close

From member selection:

Period

PeriodOffset of Cur...

Selections

PeriodOffset of Current...

Parameters

* Member Parameter

CurrentPOV

* Offset

-2

* Secondary Dimension

Year

Periods below Member

YearTotal

Update

Close

To member selection:

Period

PeriodOffset of Cur...

Selections

PeriodOffset of Current...

Parameters

* Member Parameter

CurrentPOV

* Offset

14

* Secondary Dimension

Year

Periods below Member

YearTotal

Update

Close

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	CO	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.

Default for Heading		Year	Members matching Curr... X
		A	B
		CurrentPOV	Member Name
1	Descendants of Profit (Inclusive)	#	#

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**.

Match
Parent
Prompt
Range
RelativeMember
SameGeneration
SameLevel
Siblings

Parameters

* Search YTD

* Include CurrentPOV Member Name as prefix

* Match with Member Name or Alias

Select Close

No
Member Name as prefix
Member Name as suffix

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:

Scenarios	Entities	Currencies	Segments	Years	Fiscal Calendar	
Default	Default	Default	Default	2022,2023	March,June,Septe...	
Default for Heading		Fiscal Calendar	Parent of PeriodOffset of ... ✕			
		A	B	C	D	E
		CurrentPOV	CurrentPOV	CurrentPOV	CurrentPOV	CurrentPOV
		dOffset of C	dOffset of C	dOffset of C	dOffset of C	nt of Curren
1	Children of 500000	#	#	#	#	#
2	500000	#	#	#	#	#

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 11-2 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.
B	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.
C	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.
E	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	Entities	Currencies	Segments	Years	Fiscal Calendar
Scenarios	Entities	Currencies	Total Segments	2023	June
		2022	2022	2022	2023
		Quarter2	Quarter3	Quarter4	Quarter1
Total Compensation		28,648,853	29,921,682	29,194,845	24,762,818
Travel		2,110,408	2,067,139	2,032,620	1,976,320
General Supplies		1,590,147	1,561,081	1,522,015	1,495,651
Telecommunications		2,789,423	2,807,857	2,752,029	2,534,584
Equipment Maintenance		6,605,956	6,725,156	6,685,744	5,901,271
Fees Outside Services		44,122,517	46,621,210	53,666,333	39,411,600
Employee HR		2,890,800	2,877,416	2,842,501	2,666,731
Facilities Exp		5,716,135	5,918,373	6,222,202	5,085,534
Utilities		937,557	976,218	1,118,115	846,364
Depreciation and Amort		7,773,844	8,235,915	9,475,704	6,879,454
Operating Expenses		103,185,641	107,712,046	115,512,108	91,560,328

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	Entities	Currencies	Segments	Years	Fiscal Calendar
Scenarios	Entities	Currencies	Total Segments	2023	March
		2022	2022	2022	2023
		Quarter1	Quarter2	Quarter3	Quarter4
Total Compensation		27,278,656	28,648,853	29,921,682	29,194,845
Travel		2,328,175	2,110,408	2,067,139	2,032,620
General Supplies		1,700,393	1,590,147	1,561,081	1,522,015
Telecommunications		2,902,990	2,789,423	2,807,857	2,752,029
Equipment Maintenance		7,074,899	6,605,956	6,725,156	6,685,744
Fees Outside Services		70,890,879	44,122,517	46,621,210	53,666,333
Employee HR		3,150,763	2,890,800	2,877,416	2,842,501
Facilities Exp		7,182,913	5,716,135	5,918,373	6,222,202
Utilities		1,506,838	937,557	976,218	1,118,115
Depreciation and Amort		12,447,424	7,773,844	8,235,915	9,475,704
Operating Expenses		136,463,930	103,185,641	107,712,046	115,512,108

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 11-4 POV and Grid Prompt Example

Select Members [Reset] [OK] [Cancel]

▲ Report POV

* Choose a reporting region

▲ Revenue by Segment

Rows

* Select one or more Segments

Columns

* Select a Quarter

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:

1. Open a report and edit 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. From the Functions list, select **Prompt**.
- 5. In **Prompt Label**, enter the prompt text that is presented to the users. For example, "Select a Quarter:".
- 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.
 - Choice list with a single member selection function of **Descendants** or **Descendants (Inclusive)** will be rendered in a hierarchy format to end users.
- 7. Use **Allow Multiple Selections** to either restrict users to a single selection or to allow them to choose multiple dimension members.

Note

You can enable **Allow Multiple Selections** when a prompt is used as a parameter within the **Children**, **Descendants**, and **Bottom** member selection functions.

- 8. **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.

Note

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.

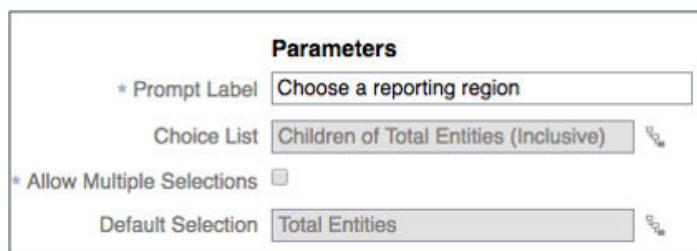
- If a report has multiple data sources and the POV dimension with the prompt is shared between them, the prompt will display a list of common members between the data sources (as is currently done with the POV).

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.

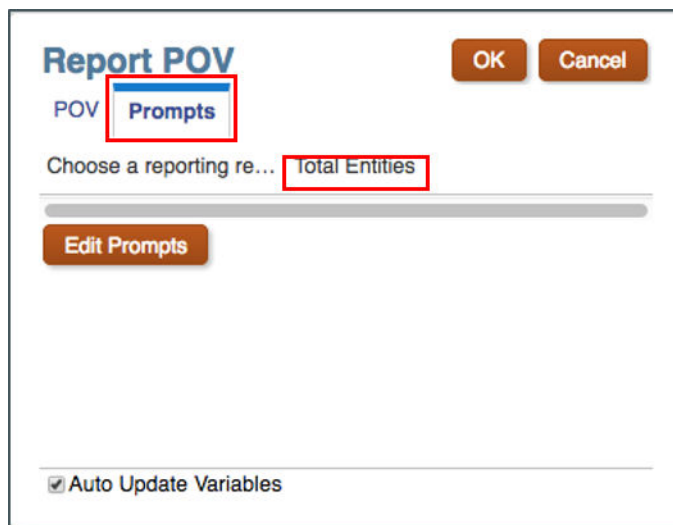
Figure 11-5 Reference Doclet Prompt Example: Definition



The image shows a 'Parameters' dialog box with the following fields:

- * Prompt Label:** Choose a reporting region
- Choice List:** Children of Total Entities (Inclusive)
- * Allow Multiple Selections:** ☐
- Default Selection:** Total Entities

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.



The image shows the 'Report POV' dialog box with the 'Prompts' tab selected. The 'POV' dropdown is set to 'Prompts'. The 'Choose a reporting re...' dropdown is set to 'Total Entities'. There is an 'Edit Prompts' button and an 'Auto Update Variables' checkbox at the bottom.

[Figure 3](#) shows the output of the inserted reference doclet, with Total Entities displayed in the POV.

Figure 11-6 Reference Doclet Prompt Example: Output

1 Finance Review				
Summary Income Statement:				
Total Entities	June		YTD(Jun)	
	Actual	Plan	Actual	Plan
Net Revenue	\$157,041,184	\$157,730,824	\$813,397,703	\$836,170,987
Cost of Sales	106,377,180	106,662,144	525,297,518	538,717,753
Gross Profit	50,664,003	51,068,680	288,100,185	297,453,234
Operating Expenses	39,048,403	39,090,204	198,134,121	204,616,280
Pretax Income From Operations	11,615,600	11,978,476	89,966,065	92,836,953
Other Exp (Inc)	(3,790,603)	(3,833,059)	(17,411,614)	(18,263,253)
Total Pretax Income	7,824,997	8,145,418	72,554,450	74,573,700
Provision for Income Tax	4,673,177	4,637,471	25,097,577	25,731,792
Net Income	\$3,151,820	\$3,507,946	\$47,456,874	\$48,841,908

Working with Substitution Variables and User Variables

Substitution variables are variables that are defined at the Oracle Fusion Cloud Enterprise Performance Management or Essbase data source that serves as a placeholder for specific members that change regularly.

In the Cloud EPM, 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 .

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 Functions for Grids](#)

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.
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 **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.

Note

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 your Reports 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.
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, in the **Selections** pane, click .

4. 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:

1. 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.
2. From the **View Selector** drop-down menu, select **Saved Selections**.
3. 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 menu next 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

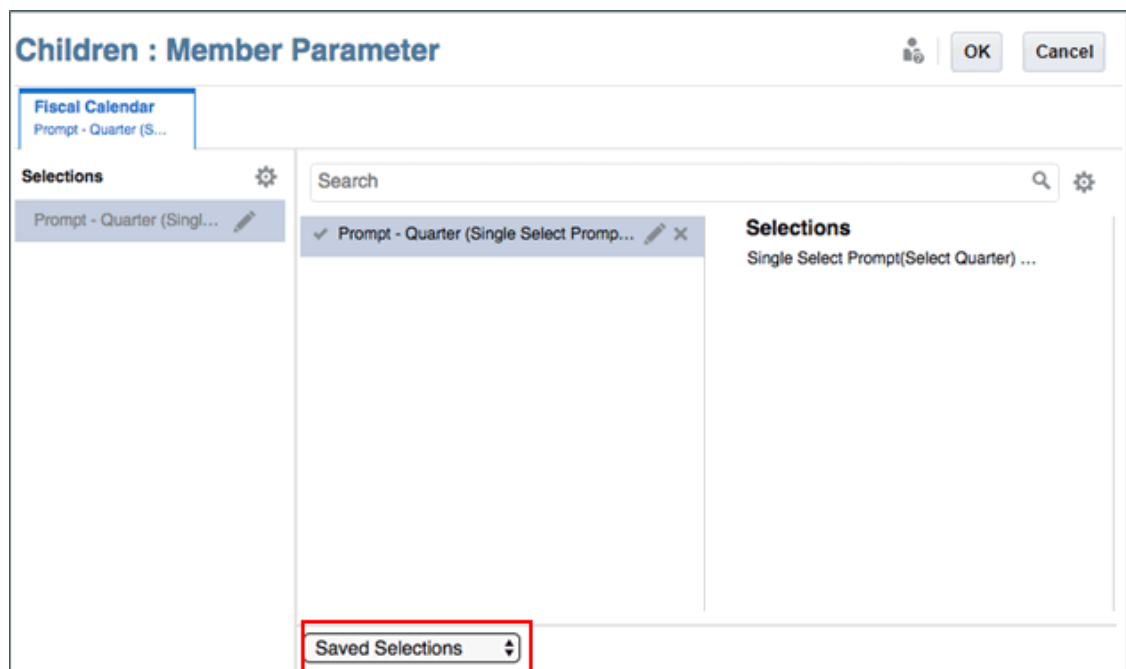
After you have created a saved member selection (see [Creating, Editing, Deleting, Renaming and Duplicating Saved Member Selections](#)), you can use the saved selection as a member selection.

To use a saved selection as a member selection:

1. Open the member selector dialog for the member on which you want to use a saved selection.
2. 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.

Note

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 Oracle Fusion Cloud Enterprise Performance Management 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](#)
All the Mathematical functions listed below apply to grids and tables. Two new functions, Cell and Dated Difference are now introduced for tables.
- [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](#)
- [Cell, Column, Row](#)
- [Difference](#)
- [Eval](#)
- [IFThen](#)
- [Max](#)
- [Min](#)
- [PercentofTotal](#)
- [Product](#)
- [Rank](#)
- [Round](#)
- [Sum](#)
- [SumV](#)
- [Truncate](#)
- [Variance](#)

- [Expected Results Using Essbase](#)
- [Expected Results Using Cloud EPM](#)
- [Variance Behavior](#)
- [Examples](#)
- [VariancePercent](#)
- [Expected Results Using Essbase](#)
- [Expected Results Using Cloud EPM](#)
- [VariancePercent Behavior](#)
- [Examples](#)
- [Text Functions](#)
- [About Text Functions for Grids](#)

Text functions for grids return report information, such as the report name or the report description.
- [Text Function Considerations](#)
- [Parameters for Text Functions](#)
- [AncestorName / AncestorAlias](#)
- [AutoTextSummary](#)
- [CellText](#)
- [ColumnNumber/RowNumber](#)
- [DataSource](#)
- [DateTime](#)
- [DateDifference](#)
- [CellValue](#)
- [GridNotes](#)
- [ConditionalText](#)
- [HeadingValue](#)
- [Left/Right/Mid](#)
- [LeftTrim/RightTrim](#)
- [MemberAlias](#)
- [MemberName](#)
- [MemberProperty](#)
- [Notes](#)
- [PageCount](#)
- [PageNumber](#)
- [ReportAuthor](#)
- [ReportCreatedOn](#)
- [ReportDescription](#)
- [ReportLocation](#)

- [ReportModifiedBy](#)
- [ReportModifiedOn](#)
- [ReportName](#)
- [ReportRunBy](#)
- [SummarizeGridNotes](#)
- [About Text Functions for Tables](#)
- [AncestorAlias](#)
- [AttributeValue](#)
- [DateOffset](#)
- [Conditional Functions](#)
- [IFThen,If](#)
- [Conditional Operators](#)
- [Complex Conditions](#)

Mathematical Functions

All the Mathematical functions listed below apply to grids and tables. Two new functions, Cell and Dated Difference are now introduced for tables.

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](#)
- [Cell, Column, Row](#)
- [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.

Note

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:

Note

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 12-1 Argument Components

Argument	Description
<i>GridName</i>	(Optional) Name of a grid. For example, <code>Difference (grid1.row[5], grid2.row[5])</code> returns the difference of two rows on grid1 and grid2. If <i>GridName</i> is not specified, the default is the current grid where the formula is entered. If a <i>GridName</i> has a space in it (for example, <code>Income Statement</code>), when using it in a formula, it needs to be surrounded by quotes (for example, <code>"Income Statement"</code>). 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: <code>"Grid 2".[1]</code>
<i>GridElement</i>	(Optional) One of the following keywords: <code>row</code>, <code>col</code>, <code>column</code>, or <code>cell</code>. For example, <code>Max(row[1], row[2], row[3])</code> returns the maximum value of three rows. (The keyword <code>row</code> and <code>column</code> or <code>col</code> is optional.) You must specify row and column segment IDs. For example, <code>cell[2, A]</code> refers to the cell that is the intersection between row 2 and column A. The keyword <code>cell</code> is optional. For example, <code>[5, B]</code> refers to the cell that is the intersection between row 5 and column B. Cell references can use <code>[row, col]</code> syntax or <code>[col, row]</code> syntax. Note: - The keyword <code>cell</code> is optional. For example, <code>[5, B]</code> refers to the cell that is the intersection between row 5 and column B. Cell references can use <code>[row, col]</code> syntax or <code>[col, row]</code> syntax. - The keywords <code>row</code> and <code>column</code> are also optional. For example, <code>[5]</code> refers to row 5 and <code>[C]</code> refers to columns C If <i>GridElement</i> is specified, letters represent columns and numbers represent rows; for example, <code>Max ([1,A], [2,A], [3,A])</code>
<i>segment</i>	(Required) Row, column, or cell reference number of a grid. For example, <code>[2]</code> addresses row segment 2. Segments are enclosed in square brackets <code>[]</code>.
<i>range</i>	(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, <code>row[2(3:5)]</code> uses only the 3rd through 5th rows of expanded segment 2. When <i>range</i> is not provided, all expanded cells are used. Note: If a segment expands to only one row or column, do not use the <i>range</i> argument.

Embedded Functions as Arguments

You can embed functions as arguments within a function. In the following example, the function `Average` is embedded in the function `Sum`:

```
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 12-2 Operators and Components in Standard Formulas

Type	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: 5 - -4
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	^	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	[]	Specifies a row, column, or cell in a grid. Use numbers for rows and letters for columns.	Add the values in rows 4 and 12. 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 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 12-3 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].

Note

For cross-grid references, only specific members can be referenced in a grid. You cannot use member selection functions (for example, Children and Bottom) to enumerate members.

For example:

The report contains three grids: "Grid 1" contains formulas referring to other hidden grids, "Grid 2" and "Grid 3".

"Grid 2" (hidden) Design

		A
		Q3
1	AS	#
2	DV	#
3	TV	#

"Grid 2" (hidden) Output

	Quarter3
Audio Systems	1,986,838
Digital Video	2,506,521
Televisions	1,844,242

“Grid 3” (hidden) Design

		A	B
		Jan	Feb
1	110000	#	#

“Grid 3” (hidden) Output

	January	February
Current Assets	1,010,931,599	873,241,572

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 contains the formulas) Design

		A	B	C	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:

1. Unary minus (-# where # is any number)
Do not add a space after the unary minus operator.
2. 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 *argument* is one of the following values:

Argument	Description
numeric	A numeric value. For example, <code>Absolute(-20)</code> 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.
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.

Note

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, <code>Average(10, 20, 30)</code> 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 <code>Avg(Grid1.row[4(3:5)])</code> 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.

Note

#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, <code>AverageA(10, 20, 30)</code> returns the value 20. 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. For example, <code>AvgA(Grid1.row[4(3:5)])</code> 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, <code>Count (10, 20, 30)</code> 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])
```

Cell, Column, Row

Cell, Column, Row are mathematical functions that are long form syntax for row, column and cell references.

Examples

[C] is the same as Column[C]

[3] is the same as Row[3]

[3,C] is the same as Cell[3, C]

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, <code>Difference(3, 5)</code> 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: <code>Difference(grid1.row[1], grid2.row[6])</code>
function	An embedded function. See Mathematical Functions .

Note

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])
```

Note

You can type the text label "Difference" or "Variance".

Eval

`Eval` is a mathematical function that evaluates an expression. Use `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.
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)
```

Note

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

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, <code>Max(10, 20, 30)</code> returns the value 30. 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 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, <code>PercentOfTotal(100, 20)</code> returns the value 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.
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	B
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, <code>Product(2, 20)</code> returns the value 40. 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 40:

`Product(2, 20)`

Rank

Rank is a financial function that provides a rank value for a value in a specified range. Rank is processed by Financial Reporting and does not depend on the database connection.

Syntax:

Rank(*[Reference]*, *Order*)

Rank(*[Reference]*, *Order*, *Unique*)

Argument	Description
<i>Reference</i>	The range of cells, rows, or columns to rank, with letters identifying columns and numbers identifying rows. For example, specify <code>[A,1:5]</code> to rank the values for rows 1 through 5 in column A. You can use the <code>.ifNN</code> 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 <code>.ifNN(-1)</code> to assign the value -1 to any cell with a missing value.
<i>Order</i>	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.

Argument	Description
<i>Unique</i>	(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 *arg1* 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, <code>Sum(10, 20, 30)</code> 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.

```
SumV([E], [G], [I])
```

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.

Argument	Description
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
```

Note

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 12-4 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 Cloud EPM

Table 12-5 Expected Results When Using Variance With Cloud EPM

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 12-6 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 Cloud EPM

Table 12-7 Expected Results When Using VariancePercent WithCloud EPM

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

Table 12-7 (Cont.) Expected Results When Using VariancePercent WithCloud EPM

Column A	Column B	Var ([A] , [B])=0	Var ([A] , [B])>0	Var ([A] , [B])<0
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 for Grids](#)
Text functions for grids return report information, such as the report name or the report description.
- [AncestorName / AncestorAlias](#)
- [AutoTextSummary](#)
- [CellText](#)
- [ColumnNumber/RowNumber](#)
- [DataSource](#)
- [DateTime](#)
- [DateDifference](#)
- [CellValue](#)
- [GridNotes](#)
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- [MemberName](#)
- [MemberProperty](#)
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- [ReportAuthor](#)
- [ReportCreatedOn](#)
- [ReportDescription](#)
- [ReportLocation](#)
- [ReportModifiedBy](#)
- [ReportModifiedOn](#)
- [ReportName](#)
- [ReportRunBy](#)
- [SummarizeGridNotes](#)
- [About Text Functions for Tables](#)

About Text Functions for Grids

Text functions for grids return report information, such as the report name or the report description.

Related Topics

- [Text Function Considerations](#)
- [Parameters for Text Functions](#)

Text Function Considerations

Note

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 12-8 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 than 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.
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").

Table 12-8 (Cont.) Text Function Parameters

Parameter	Definition
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:

	AncestorAlias("Segments", (1)) fx Segments	Bottom Members of AILS... ×	
		A	B
			scal Calend
1	AncestorAlias("Segments", (1))	MemberAlias("Segments")	#

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

 Note

See [Parameters for Text Functions](#) for parameter definitions.

AutoTextSummary

AutoTextSummary is a text function that returns the resulting narrative text from the Generative AI (GenAI) service for a conditional text condition defined by the report designer.

Syntax:

AutoTextSummary (AutoText Summary Criteria)

AutoText Summary Criteria is the Criteria Definition name, which defines the GenAI use case and its related parameters.

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)

Note

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)

ColumnNumber/RowNumber

ColumnNumber or RowNumber are functions that return the column number or row number in a grid.

Syntax:

ColumnNumber(SkipEmpty)

Note

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).

DataSource

DataSource is a text function that returns the application name, database, or alias table name of a grid. Use DataSource in a text box, text cell, or a row or column heading.

Syntax:

<<DataSource("GridName,InfoType")>>

Argument	Description
<i>GridName</i>	(Required) Any grid in a report, enclosed in quotes.
<i>InfoType</i>	(Required) One of the following keywords: • <i>App</i> returns the application name. • <i>DB</i> returns the database name. • <i>Alias</i> returns the alias table name. To return the alias, the grid must have the alias table enabled. By default, the alias table is disabled. • <i>Name</i> returns the database connection name associated with the specified grid. Note "Server" is not supported as an argument for <i>InfoType</i>. for Planning data sources.

Note

All arguments are case insensitive.

Example

Insert data source information in your report:

```
<<DataSource("Grid1", DB)>>
```

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.

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 12-9 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

Table 12-9 (Cont.) Date and Time Format Characters

Format Characters	Meaning	Data Type	Example
H	hour in day (0-23)	number	22
m	minute in hour	number	30
s	second in minute	number	25
S	millisecond	number	978
E	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
a	am/pm marker	text	PM
k	hour in day (1-24)	number	23
K	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
y	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:

DateTime("dd-M-yy") displays 24-4-17

DateTime("dd-MM-yy") displays 24-04-17

DateTime("dd-MMM-yy") displays 24-Apr-17

DateTime("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:

```
DateTime("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:

```
DateTime("hh 'o''clock' ")
```

Examples:

Date Format	Result
DateTime("d/M/yy")	23/3/17
DateTime("d-MMM-yy")	23-Mar-17
DateTime("EEEE, MMMM dd, yyyy")	Tuesday, March 23, 2017
DateTime("h:mm:ss a")	12:52:05 PM
DateTime("h:mm:ss a zzzz")	12:52:05 PM Eastern Standard Time
DateTime("EEEE, MMMM dd, yyyy G 'time:' h:mm:ss a zzzz")	Tuesday, March 23, 2017 AD time: 12:52:05 PM Eastern Standard Time
DateTime("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.

DateDifference

The `DateDifference()` formula (valid for relational tables as well as date-type values in Cloud EPM Platform and Essbase grids) calculates the difference between two referenced date values. The difference is in terms of the calendar-unit specified: days, months or years.

Syntax

```
DateDifference(referenceA, referenceB, calendar-unit)
```

```
DateDiff(referenceA, referenceB, calendar-unit)
```

Parameters

referenceA - This is the start date. The reference can be either a column reference (eg: [C], [C(E)]) or a cell reference (eg: [1,C], [1(5), C], [1(5), C(E)]). If a column reference (eg: [C], [C(E)]) the row is the current row.

referenceB - This is the 'end date'. The reference can be either a column reference (eg: [C], [C(E)]) or a cell reference (eg: [1,C], [1(5), C], [1(5), C(E)]). If a column reference (eg: [C], [C(E)]) the row is the current row.

calendar-unit - The calendar unit is a required parameter. It can be either: day, month, or year; and will determine in what unit of measurement the data difference is calculated. A 0, 1, or 2 can also be used in place of day, month, or year, respectively.

Note

If the start-date occurs after the end-date, the difference is negative, or the difference is positive.

If either referenceA or referenceB points to a non-date value, an #ERROR is returned.

There is no additional validation done when a DateDifference() function references a column/cell which does not contain a date. The function just evaluates to #ERROR.

The internal representation of dates is in terms of 'milliseconds since 1/1/1970'. So, the internal representation has the ability to include details to the millisecond. So, the number of days between two dates also takes into account the time of day to the millisecond, and so 7/20/2023 19:00 and 7/22/2023 07:00 is 1 day (not 2), because it takes into account the number of full-24hour-days. When the date is displayed as a cell value, it may (or may not) show the hours:minutes:seconds:milliseconds, but the internal representation is what is used, not the visible, formatted date during the DateDifference() calculations.

Example

If the date value in the referenced column B is 'Jul, 21, 2023' and the date value in the referenced column C is 'Aug, 25, 2023':

- DateDiff([B], [C], day) will return 35
- DateDiff([C], [B], day) will return -35
- DateDiff([B], [C], month) will return 1
- DateDiff([C], [B], month) will return -1
- DateDiff([B], [C], year) will return 0

Example 2

If the date value in the referenced column B is 'Jul, 21, 2023' and the date value in the referenced column C is 'Aug, 25, 2024':

- DateDiff([B], [C], day) will return 401
- DateDiff([B], [C], month) will return 13
- DateDiff([C], [B], month) will return -13
- DateDiff([B], [C], year) will return 1
- DateDiff([C], [B], year) will return -1

CellValue

CellValue is a text function that returns a data value from cell in a grid.

Syntax:

CellValue("GridName", Row, Column)

Note

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.

GridNotes

GridNotes retrieves Note text attached to a cell based on the selected Note Format and Note Template. If your instance has Generative AI (GenAI) enabled, you can optionally summarize the Notes returned.

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, Summarize Notes)`

- **Note Formats** are defined in the Note Format Manager in the Notes Manager. For more information, see [Working with Note Formats](#).
- You can select a **Note Template** or choose to display all Note Templates. For examples and more usage information, see [Creating and Managing Note Templates](#).
- **Summarize Notes** (optional): set to either true or false.

Note

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", false)`

		A	B	T C
		Jun		Comments
1				
2	AS, DV, TV		#	GridNotes (1, A, "Grid Cell Note Format", "Performance Summary", false)

Here is the Grid Notes report preview:

Accounts	Years	Scenarios	Entities	Currencies
340000	FY18	Actual	E01_101_1110	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	Tellus pellentesque eu tincidunt tortor aliquam nulla facilisi cras. Blandit volutpat maecenas volutpat blandit aliquam etiam erat. Nunc pulvinar sapien et ligula ullamcorper malesuada proin libero nunc. Sed risus pretium quam vulputate dignissim suspendisse in est. Pharetra convallis posuere morbi leo.		

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)

Note

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)`

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)`

Note

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
<code>HeadingValue("Grid1", "Month", A)</code>	Jan
<code>HeadingValue("Grid1", "Month", B)</code>	Feb
<code>HeadingValue("Grid1", "Market", 1)</code>	Georgia
<code>HeadingValue("Grid1", "Market", 2)</code>	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*])

Note

"*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.)

LeftTrim/RightTrim

LeftTrim and RightTrim allow you to trim text from the results of other text functions such as MemberAlias and MemberName based on a specified delimiter. These functions can be used in place of the left, right, and mid text functions, where the number of characters to trim may vary and there is a delimiter present in the text. For example, "-".

Syntax

LeftTrim (*text*, *delimiter*, *start position*, *occurrence*)

RightTrim (*text*, *delimiter*, *start position*, *occurrence*)

"text": Select the text function whose output the trim will be applied to.

"delimiter": The character (or string) used to split/parse the resulting text.

"occurrence" (optional): A number indicating which instance of the delimiter to use when parsing (e.g., 1 = first occurrence, 2 = second).

Examples

For a segment with Accounts where MemberAlias("Accounts") = "10000 - Net Income":

LeftTrim(MemberAlias("Accounts"), "-", 1) yields "10000"

RightTrim(MemberAlias("Accounts"), "-", 1) yields "Net Income"

For a segment with Accounts where `MemberAlias("Accounts") = "10000 - Net Income - Summary"`, note the occurrence is set to 2:

`LeftTrim(MemberAlias("Accounts"), -, 1, 2)` yields "10000 - Net Income"

`RightTrim(MemberAlias("Accounts"), "-", 1, 2)` yields "Summary"

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")`

Note

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")
```

Note

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

Note

Non-indexed attribute dimensions are currently not supported with the MemberProperty text function. For example, an attribute dimension attached to the **Accounts** dimension.

- UDA - User-defined attributes

Note

For Oracle Fusion Cloud Enterprise Performance Management 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 Cloud EPM data sources
- Description - member description for Cloud EPM 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

Note

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

Note

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

Note

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. If your instance has Generative AI (GenAI) enabled, you can optionally summarize the Notes returned in a Note text box.

Syntax:

```
Notes (Note Format, Named POV, Note Template, Summarize Notes)
```

- **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.
- **Summarize Notes** (optional): set to either true or false.

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().

Note

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 ()

Note

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")
```

Note

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()
```

Note

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")
```

Note

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

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( )
```

SummarizeGridNotes

The SummarizeGridNotes text function can be inserted into a text box and used to summarize Notes that appear in a Note segment in a grid (inline grid Note entry).

This function is only available in a text box and not a text row or column. It also requires a grid with a Note segment (column or row) to be present in the report.

Syntax:

```
SummarizeGridNotes(Note Segment, Use Context)
```

- **Note Segment:** is the Note row or column reference to be summarized
- **Use Context** (true or false): include the data value for the member associated with the Note segment.

Example:

Summarizes Notes in Note column **F** and includes the data context in the summarization.

```
SummarizeGridNotes(F, true)
```

For more information on the SummarizeGridNotes text function, see [Creating a Report with Generative AI for Narrative Summaries](#).

About Text Functions for Tables

There are three table-specific text functions:

- AttributeAlias
- AttributeValue
- DateOffset

AncestorAlias

The AncestorAlias () text function is used to return the value of a given attribute-name returned from the relational table query. This function is valid for relational tables.

Syntax

```
AttributeAlias("TableName", "AttributeName", row-reference,)
```

Parameters

TableName - this is an optional parameter if the text function is used in a text cell of the relational table. If the text function is used in a Text object, the table-name parameter is optional if there is only a single relational-table in the report, otherwise the table-name parameter is required.

AttributeName - this is the attribute-name is a required parameter. This attribute-name must correspond to an attribute-name along the column axis of the relational-table, or on the POV of the relational table.

row-reference - this is an optional parameter. If no row-reference parameter is given and the attribute-value text function occurs in a text cell of a relational-grid, the 'current' row in the relational table is used. If the attribute-value text function occurs in a text object, and the attribute-name is on the column-axis, the row-reference is required. The row reference can include an offset (eg: a row-reference of 1(5) will return the attribute-value for the 5th tuple in row 1).

Note

- If the attribute-value function does not have a table-name parameter and occurs in a text object, and there are two or more relational-tables, a validation error occurs.
- If the attribute-name parameter is not on the column axis or pov, or if the only occurrence is within an aggregate function (eg: Count(), Max(), etc), a validation error occurs.

Example

- AttributeValue("Artifact Actions.User"): will return the attribute-value for the given attribute-name in the current row of the relational table, or the attribute-value of the given attribute-name on the POV.

- `AttributeValue("Artifact Actions.User", 1(5))`: will return the attribute-value for the given attribute-name in the 5th row of the relational table. This syntax is not valid if the attribute-name is on the POV. A validation error will occur. If the relational-table resultset does not have 5 rows, an empty string will be returned.
- `AttributeValue("Table 1", "Artifact Actions.User", 1(5))`:
- `AttributeValue("Table 1", "Artifact Actions.User", 1(5))`: will return the attribute-value for the given attribute-name in the 5th row of the specified relational table. This syntax is not valid if the attribute-name is on the POV. A validation error will occur. If the relational-table resultset does not have 5 rows, an empty string will be returned.

AttributeValue

The `AttributeValue()` text function is used to return the value of a given attribute-name returned from the relation table query. This function is valid for relational tables.

Syntax

```
AttributeValue("TableName", "AttributeName", row-reference,)
```

Parameters

TableName - this is an optional parameter if the text function is used in a text cell of the relational table. If the text function is used in a Text object, the table-name parameter is optional if there is only a single relational-table in the report, otherwise the table-name parameter is required.

AttributeName - this is a required parameter. This attribute-name must correspond to an attribute-name along the column axis of the relational-table, or on the POV of the relational table.

row-reference - this is an optional parameter. If no row-reference parameter is given and the attribute-value text function occurs in a text cell of a relational-grid, the 'current' row in the relational table is used. If the attribute-value text function occurs in a text object, and the attribute-name is on the column-axis, the row-reference is required. The row reference can include an offset (eg: a row-reference of 1(5) will return the attribute-value for the 5th tuple in row 1).

Note

- If the attribute-value function does not have a table-name parameter and occurs in a text object, and there are two or more relational-tables, a validation error occurs.
- If the attribute-name parameter is not on the column axis or pov, or if the only occurrence is within an aggregate function (eg: `Count()`, `Max()`, etc), a validation error occurs.

Example

- `AttributeValue("Artifact Actions.User")`: will return the attribute-value for the given attribute-name in the current row of the relational table, or the attribute-value of the given attribute-name on the POV.
- `AttributeValue("Artifact Actions.User", 1(5))`: will return the attribute-value for the given attribute-name in the 5th row of the relational table. This syntax is not valid if the attribute-

name is on the POV. A validation error will occur. If the relational-table resultset does not have 5 rows, an empty string will be returned.

- `AttributeValue("Table 1", "Artifact Actions.User", 1(5))`:
- `AttributeValue("Table 1", "Artifact Actions.User", 1(5))`: will return the attribute-value for the given attribute-name in the 5th row of the specified relational table. This syntax is not valid if the attribute-name is on the POV. A validation error will occur. If the relational-table resultset does not have 5 rows, an empty string will be returned.

DateOffset

The `DateOffset()` text function (valid for relational tables as well as date-type values in planning and essbase grids) will calculate a new date offsetting the referenced date by the specified offset-amount. The offset-amount is based in the units specified (either days, months, or years). The table-name is optional if the text function appears in a relational-table or if there is only a single relational-table in the report, otherwise the table-name needs to be provided. The row reference is optional, and will be the current-row if not provided. The unit parameter is required and needs to be either day, month, or year.

Syntax

```
DateOffset("Grid/TableName", row-reference, col-reference, calendar-unit, offsetAmount)
```

Parameters

`Grid/TableName` - this is an optional parameter if the text function is used in a text cell of the grid/relational table. If the text function is used in a Text object, the grid/table-name parameter is optional if there is only a single grid/relational-table in the report, otherwise the grid/table-name parameter is required.

`row-reference` - this is an optional parameter. If no row-reference parameter is given the 'current' row (the row that the text function occurs in) will be used (this is similar to the way text functions like `CellValue()` and `CellText()` work. If the date-offset text function occurs in a text object, the row-reference is required. The row reference can include an offset (eg: a row-reference of 1(5) will return the attribute-value for the 5th tuple in row 1). The referenced column must reference a date or timestamp value in the datasource, otherwise an empty string will be returned.

`col-reference` - this is an optional parameter. If no col-reference parameter is given the 'current' col (the col that the text function occurs in) will be used (this is similar to the way text functions like `CellValue()` and `CellText()` work. If the date-offset text function occurs in a text object, the col-reference is required. The col reference can include an offset (eg: C(E) will reference the 5th attribute-name in column C). The referenced column must reference a date or timestamp value in the datasource, otherwise an empty string will be returned.

`calendar-unit` - The calendar unit is a required parameter. It can be either: day, month, or year; and will determine in what unit of measurement the date difference offset is calculated.

`offsetAmount` - The offset-amount is required and must be a positive or negative integer (not zero). **If the offset-amount is positive, it must include a leading '+' symbol (eg: +3).**

Note

If either row-reference or col-reference refer to a non-date value, the function returns an empty string.

There is no additional validation done when a `DateOffset()` function references a column/cell which does not contain a date. The function will return an empty string in this case.

As specified in the parameter description, if the `offsetAmount` is a positive number, it must be preceded by a plus symbol '+'. If the plus symbol is missing, and there is no negative symbol, a syntax error will occur. This is required to properly be able to parse the text function string.

Example

If the date value in the referenced column B is 'Jul, 21, 2023':

- `DateOffset(B, day, +4)` will return Jul 25, 2023
- `DateOffset(B, day, -4)` will return Jul 17, 2023
- `DateOffset(B, month, +1)` will return Aug 21, 2023
- `DateOffset(B, month, -1)` will return Jun 21, 2023
- `DateOffset(B, year, +2)` will return Aug 21, 2025
- `DateOffset(B, year, -2)` will return Jun 21, 2021

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 12-10 Conditional Operators

Conditional Operator	Syntax	Logic
Equal To	<i>expression</i> = <i>expression</i>	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	<i>expression</i> > <i>expression</i>	Tests if the left expression is greater than the right expression. Example: 1 > 4 returns false.
Greater Than or Equal To	<i>expression</i> >= <i>expression</i>	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	<i>expression</i> < <i>expression</i>	Tests if the left expression is less than the right expression. Example: 1 < 4 returns true.
Less Than or Equal To	<i>expression</i> <= <i>expression</i>	Tests if the left expression is less than or equal to the right expression. The correct syntax is "<=". The syntax "<" is not supported. Example: 1 <= 4 returns true.
Not Equal To	<i>expression</i> <> <i>expression</i> <i>expression</i> != <i>expression</i>	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 be true. Example: IsMissing([1]) returns true if row 1 has a #missing value.

Table 12-10 (Cont.) Conditional Operators

Conditional Operator	Syntax	Logic
IsError	IsError (<i>reference</i>) IsErr (<i>reference</i>)	Tests if the reference contains an #error result. 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	IsNN (<i>reference</i>) IsNonNumerid (<i>reference</i>) IfNN (<i>reference</i>) IfNonNumber (<i>reference</i>)	Tests if the reference contains a #missing or #error results. 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	(<i>condition</i>)	Groups a condition. Example: (1 > 4) returns false.

Complex Conditions

Table 12-11 Complex Conditions

Complex Conditions	Syntax	Logic
And	(<i>condition</i> AND <i>condition</i>) (<i>condition</i> & <i>condition</i>)	Compares two conditions. Returns true if all conditions are true. Example: (1 > 4 AND 5 > 2) returns false.
Not	NOT (<i>condition</i>) ! (<i>condition</i>)	Negates the result by reversing the result of the condition. Example: Not (1 > 4) returns true.
Or	(<i>condition</i> OR <i>condition</i>) (<i>condition</i> <i>condition</i>)	Compares two conditions. Returns true if any of the conditions are true. Example: (1 > 4 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])

Working with Notes

Related Topics

- [About Notes](#)
This feature provides increased flexibility, interactivity, and usability for reporting on Notes.
- [Creating a Note Template](#)
This chapter describes how to create a Note Template.
- [Using Note Manager](#)
- [Using the Notes Text Function](#)
- [Security - Roles and Access for Note Templates and Notes](#)
This section outlines the control of access permissions for Note Templates and Notes based on a user or group role.
- [Best Practices](#)

About Notes

This feature provides increased flexibility, interactivity, and usability for reporting on 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.

Note

The Notes feature is only available in Narrative Reporting deployments, it is not available in Oracle Fusion Cloud Enterprise Performance Management 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



Vision Operations

Revenue by Territory
Jun 2018
For All Segments

	Actual	Plan	Variance	Comments
North America	69,883,327	70,782,846	(899,519)	I'm baby semiotics polaroid 8-bit af taxidermy, williamsburg put a bird on it prism cardigan man braid tousled humblebrag. Normcore unicorn occupy wolf, paleo biodiesel shoreditch man braid. Bushwick live-edge pickled heirloom, kogi banjo succulents keytar
Latin America	8,637,265	8,526,252	111,013	YOLO raw denim mumblecore. Skateboard taiyaki raclette umami messenger bag selfies chambray whatever scenester fam heirloom franzen wayfarers shoreditch photo booth. Meh listicle whatever master cleanse pug normcore readymade, sustainable single-origin coffee green juice offal raw denim edison bulb.

In-line grid entry of Notes

Fiscal Calendar	Accounts	Years	Entities	Currencies
Jan	340000	FY18	E01	USD

Children ...
E01
Children of E01
Children of E01
(Inclusive)
Bottom Members
of E01
Bottom Members

Summary
8/21

Fiscal Calendar: Jan
n chillwave mlkshk fingerstache.
Fiscal Calendar: Jan
pok before they sold out ramps organic normcore YOLO chicharrones. Brooklyn waistcoat direct
ch flannel, synth sustainable retro tbh. Copper mug banjo 8-bit activated charcoal, iceland
nbing gochujang meditation pour-over adaptogen seitan cliché roof party.

**Summary
8/21**
Segments: DV, Fiscal Calendar: Jan
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 cliché
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	Years	Scenarios	Entities	Currencies
340000	FY18	Actual	E01_101_1110	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	Tellus pellentesque eu tincidunt tortor aliquam nulla facilisi cras. Blandit volutpat maecenas volutpat blandit aliquam etiam erat. Nunc pulvinar sapien et ligula ullamcorper malesuada proin libero nunc. Sed risus pretium quam vulputate dignissim suspendisse in est. Pharetra convallis posuere morbi leo.		

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.
3. 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.
5. The Note Manager can be used to view, edit, and manage **Note Templates**, **Notes**, and **Note Formats**.
6. Display Notes in a report using a **Note Template** or the **Notes** text function or the **GridNotes** text function.
7. 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

Note

A user with view permission can only **Export**. They cannot perform **Import** operations.

Creating a Note Template

This chapter describes how to create a Note Template.

Related Topics

- [Working with Note Templates](#)
This section describes how to create and insert new Note Templates.
- [Setting up the Inline Grid Entry of Notes](#)
This section describes how to work with Inline Grid Entry of Notes.

Working with Note Templates

This section describes how to create and insert new 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
Setting up the Note Template	You can setup the Note Template, by selecting an option: - To create a new Note Template, select a data source. - To use an Existing Note, select an existing Note Template.	Setting up the Note Template
Setting the Properties	You can set the properties: Properties control the Note Template, such as Name, Description, Data Source, Character Limit, and Format.	Setting the Properties
Optionally add a Placeholder Text in the Note Template	You can enter optional 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.	Entering a Placeholder Text in the Note Template

Tasks	Perform these Sub Tasks	For More Information
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. All Note Templates can be shared across reports, they are not saved with the report.	Saving the Note Template

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

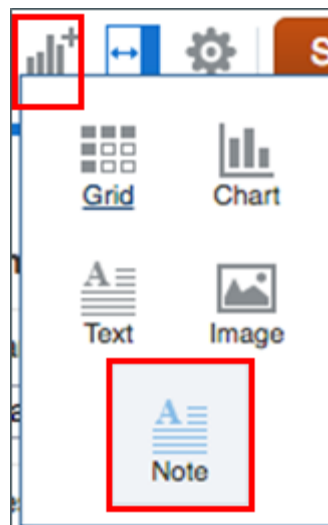
To Insert a Note box:

1. To insert a Note Template, perform an action:

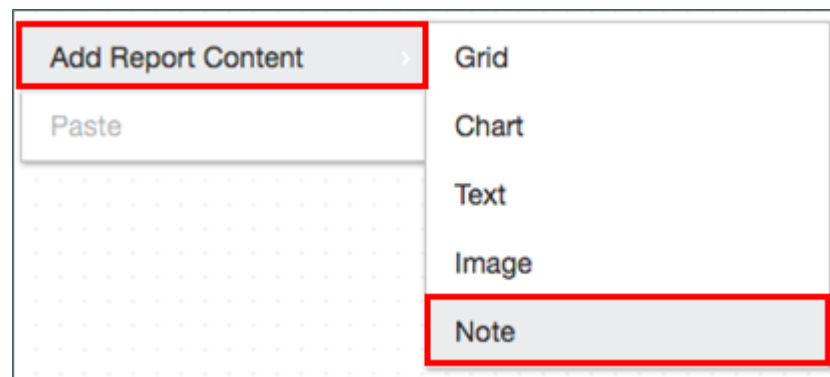
- a. From the toolbar, click



and select **Note**.



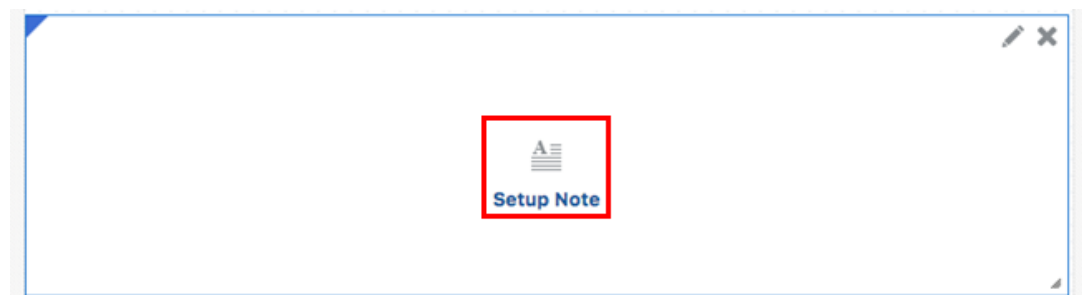
- b. From the report body, right-click and select **Add Report Content**, and then select **Note**.



- 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**.

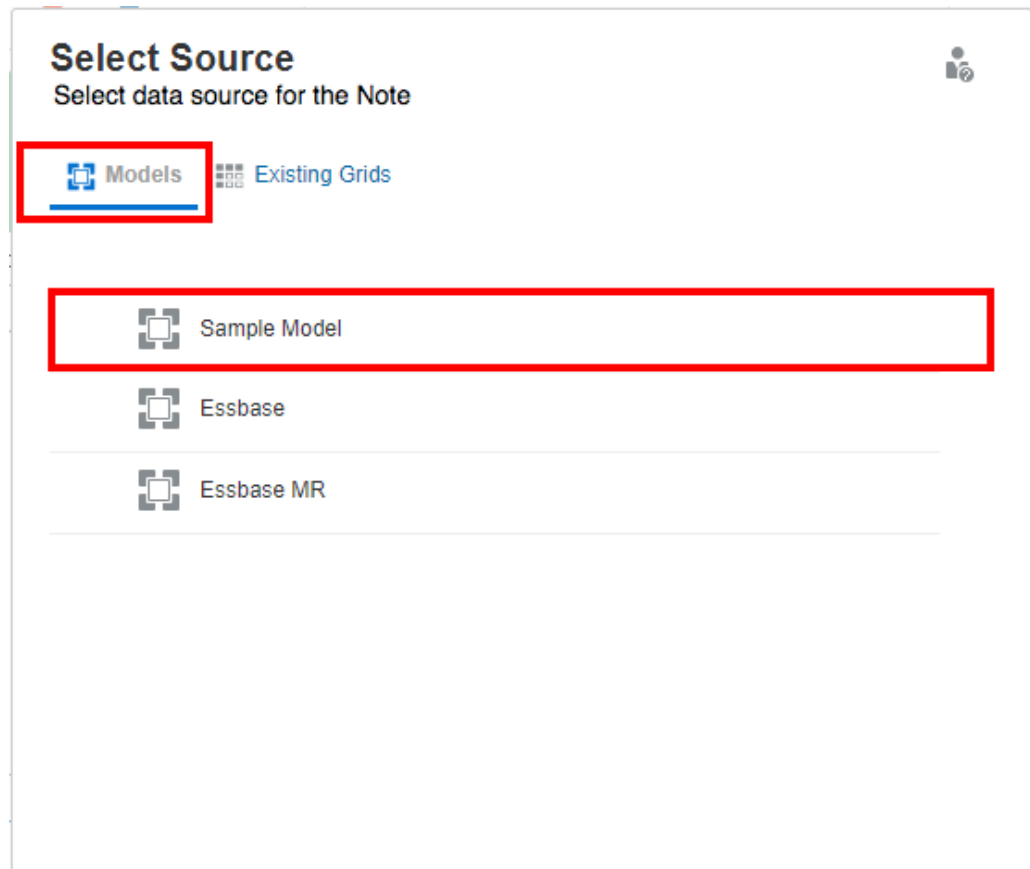


To proceed further on **Creating a Note Template**, see [Setting up the Note Template](#).

Setting up the Note Template

To setup the Note Template, perform these steps:

1. 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.

Select Source
Select data source for the Note

Models **Existing Grids**

Performance Summary Sample Model

Variance Explanation Sample Model

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.

General

Name
Performance Summary

Description

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.

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.

5. 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.

General

Name
Performance Summary

Description
Summary Report

Data Source [Sample Model](#)

Character Limit 1000

Editable False

Format

Background Color

Font [Default - "Liberation San..."](#)

Size 10

Vertical Alignment

[Reset format properties to Default](#)

Note

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.

Enter place holder text


Default - "Liberation Sans (Arial)" ▾ Default - "10" ▾  ▾  ▾  

P

Enter the Performance Summary here.

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:

1. Click **Show Dimension Layout** to display the Dimension Layout.
2. 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:

1. In the POV bar at the top of the **Note**, click on a dimension label to open the member selector for that dimension.

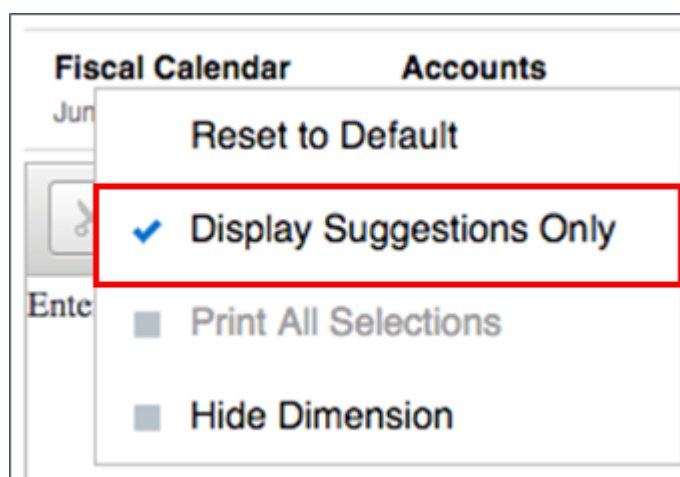
The screenshot shows the 'Performance Summary' report editor. At the top, a red box highlights the POV bar with dimensions: Account, Period, HSP_View, Year, Scenario, Version, Entity, and Product. Below this is a text editor with a toolbar and a large text input field. The right sidebar contains settings for Name, Description, Data Source, Character Limit, Editable, Format, Background Color, and Vertical Alignment.

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  next to a POV dimension, and then 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**.

Note

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](#)
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.

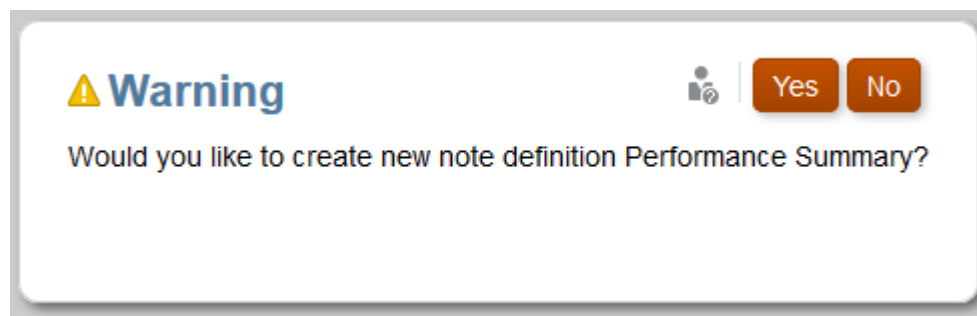
Saving the Note Template

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:

1. In **Note Template** editor, you must ensure the desired **Name** is specified, and the required dimensions exist in **Dimension Layout** for the Note Template.

2. 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

This section describes how to work with 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.

① Note

- Note segments can only be associated with data segments, Note segments cannot be associated with formula segments.
- When entering **Notes** in a Note row or column segment, the Note entry box allows a user to define different font formatting on text entered within a Note (For example, font type and size, bold, italic, underline, and so on.). However, grid cells only support a single font format, which is defined in the **Cell Formatting** properties for the Note cell, therefore any formats entered in the Note entry box will not be displayed in the Note row or columns segment.

To insert a Note column or row segment:

Table 13-1 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.



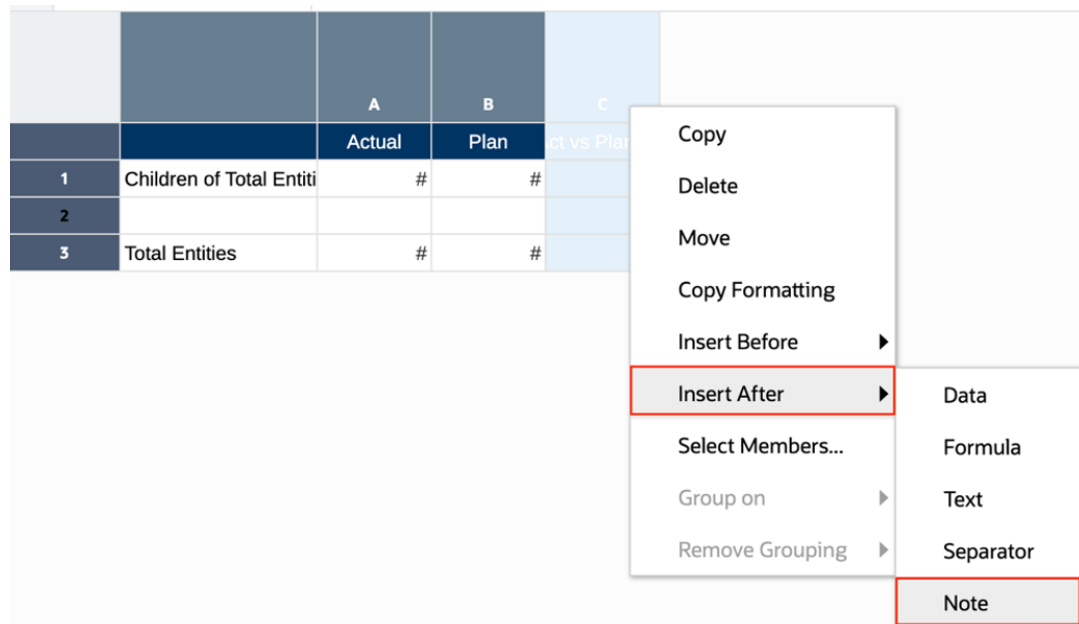
-- [Setting Up the Inline Grid Entry of Notes.](#)

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.

	Default for Heading	Scenarios		Act vs Plan Var	
		A	B	C	D
		Actual	Plan	Act vs Plan Var	Act vs Plan Var
1	Children of Total Entiti	#	#	#	

- 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".

		A	B	C	D
		Actual	Plan	Act vs Plan Var	Comments
1	Children of Total Entiti	#	#	#	

Note

- 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.

Scenarios			
Act vs Plan Var X			
A	B	C	D
Actual	Plan	Act vs Plan Var	Comments

To select members for a Note segment:

1. 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**.

Note

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**.

The screenshot shows the Oracle Financial Reporting Studio interface. The main table has columns: Accounts (410000), Years (FY18), Fiscal Calendar (Jun), Segments (Children of Seg01C...), and Currencies (USD). The table has rows for 'Children of Total Entities' and 'Total Entities'. The 'Comments' column is highlighted. The 'Cell' properties panel on the right shows the 'Allow Note Input' property set to 'No'.

4. When previewing the report in HTML, the edit icon  will not be displayed for the previously selected note cell(s).

	Actual	Plan	Variance	Comments
North America	7,228,875	7,321,459	(92,584)	
Latin America	893,456	882,051	11,406	
EMEA	5,929,302	5,948,660	(19,358)	
APAC	2,193,029	2,163,463	29,566	
Total Entities	16,244,663	16,315,633	(70,970)	

For more information, see [Cell Properties](#)

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.

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.

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.
11. 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.

		A	B	C	D
		Actual	Plan	Act vs Plan Va	Comments
1	Children of Total Entiti	#	#	#	
2					
3	Total Entities	#	#	#	

The condition tests for the variance amount in column C to be greater than zero and **Allow Note Input = No**.

Edit Conditional Format/Text

Name *

Applies To

Define condition to be met for conditional format to be applied

Column Value greater than Value

OK Cancel

Conditional Format

Number 123,456,789

Font and Alignment

Font Default - "Liberation Sans (Arial)"

Size 10

Horizontal Alignment

Indent 0.00

Border and Shading

Border

Shading

Replace Text Off

Allow Note Input No

In the report preview, only the negative variance rows have the **Note** entry icon displayed:

	Actual	Plan	Variance	Comments
North America	7,228,875	7,321,459	(92,584)	
Latin America	893,456	882,051	11,406	
EMEA	5,929,302	5,948,660	(19,358)	
APAC	2,193,029	2,163,463	29,566	

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:

1. Select a Note Column or Note Row, and click on  or  for either Column or Row properties.
2. Under **Note** properties, select **Note Template**, click on **Not available** to open the **Note Templates** window.

Accounts 410000 Years FY18 Fiscal Calendar Jun Segments Children of Seg01,C... Currencies USD

		A	B	C	
		Actual	Plan	Act vs Plan V	Comments
1	Children of Total Enti	#	#	#	
2					
3	Total Entities	#	#	#	

Column

Width Minimum 4.90

Display Show

Page Break Before No

Repeated Heading Grid Setting (Show)

Note

Note Template Not available

3. In **Note Templates**, either select an existing **Note Template**, or click  to create a new Note Template.

Note Templates OK Cancel

Name	Description	Data Source	Dimensions	Action
Performance Comments		Sample Model	Fiscal Calendar,Accounts,Years,Scenarios,Entities,Currenci...	...
Quarterly Variance		Sample Model	Fiscal Calendar,Accounts,Years,Scenarios,Entities,Segments	...
Variance Comments		Sample Model	Fiscal Calendar,Accounts,Years,Scenarios,Entities,Currenci...	...

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.

Dimension Layout OK Cancel

POV ... Fiscal Calendar Accounts Years +

- Scenarios
- Entities
- Currencies
- Segments

- 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**.

Create Note Template



OK

Cancel

* Name Entity Variance Description

Description

Character Limit

Editable ☒

* Data Source Sample Model

Fiscal Calendar

Accounts

Years

Scenarios

Ei >



Enter place holder text

✂️ 📄 📋 📌 ↶ ↷ B I U ⌂ x₂ x² I_x ≡ ≡ ≡

Default - "Liberation Sans (Arial)"

Default - "10"

A

🖋️

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?

- Click **OK** to close **Note Templates**.

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.

Managing Note Templates for Inline Grid Entry

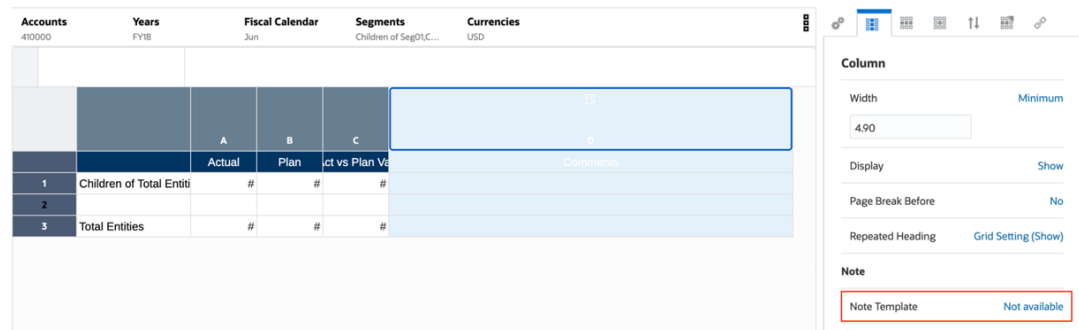
Using **Notes Manager** you can view and perform administrative functions on **Note Templates** and **Notes**.

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:

1. Select a Note Column or Note Row, and click on  or  for either Column or Row properties.
2. Under **Note** properties, select **Note Template**, click on **Not available** to open the **Note Templates** window.



3. 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

Note Templates

					OK	Cancel
					Search 	
Name	Descri...	Data Source	Dimensions	Action		
Entity Variance Description		Sample Model	Fiscal Calendar,Accounts,Years,Scenarios,Entities,Currency...	...		
Performance Comments		Sample Model	Fiscal Calendar,Accounts,Years,Scenarios,Entities,C...	...		
Quarterly Variance		Sample Model	Fiscal Calendar,Accounts,Years,Scenarios,Entities,S...	...		
Variance Comments		Sample Model	Fiscal Calendar,Accounts,Years,Scenarios,Entities,Currency...	...		

Edit
Delete
Refresh

Using Note Manager

Related Topics

- [Introduction to Notes Manager](#)

This section describes how to create, manage, and use Note Templates, Notes, and Note Formats, that are used with the Notes text function.

Introduction to Notes Manager

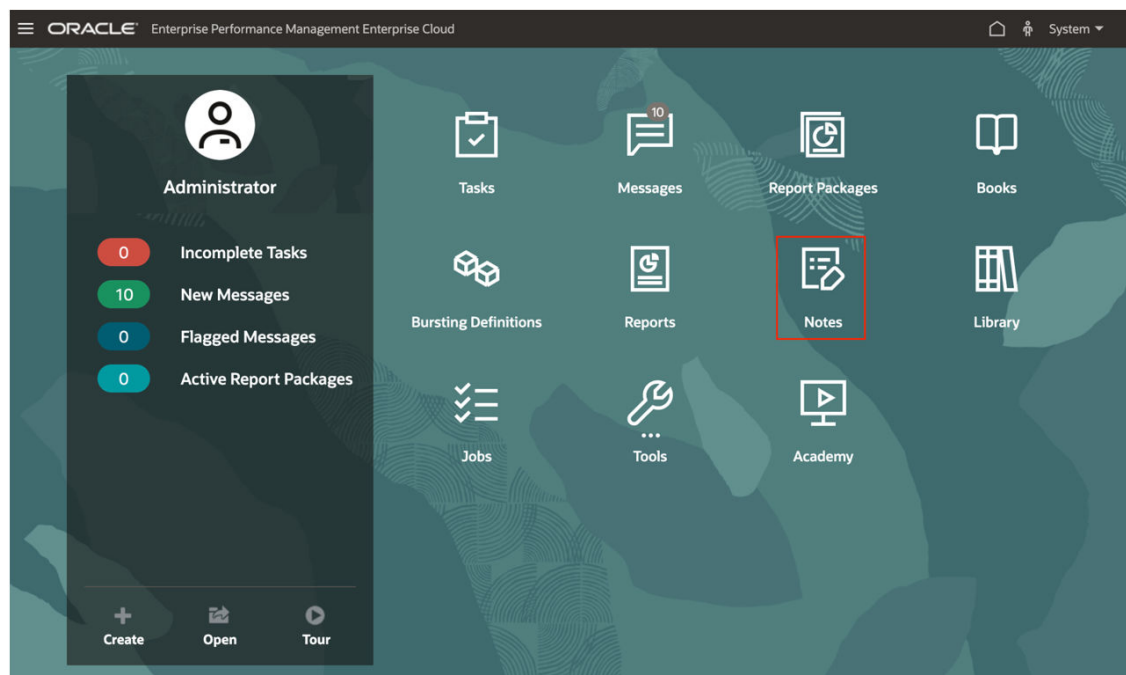
This section describes how to create, manage, and use Note Templates, Notes, and Note Formats, that are used with the Notes text function.

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 Notes Manager, you can utilize the Advanced Filtering option to filter note templates based on a selected data source, and to filter notes using the Point of View (POV) selections. To enable Advanced Filtering, select



next to the search bar and filter the list by data source.



- In **Note Templates**, you can:
 - View information about the Note Template, such as data source, if the Note Template Notes are editable or not, 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** permissions to the Note Template.
 - **Edit** the Note Template
 - Enable or disable the Note template's Notes from being **Editable**

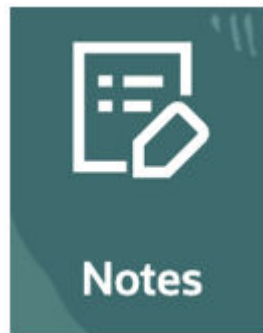
- **Delete** the Note Template and its related Notes.
- **Export** the Note Template and its related Notes for the purposes of moving Notes between Narrative Reporting environments.
- In **Note**, you can:
 - **View, Edit, or Clear** the Note Text.
 - Set **Access** permissions to the Note.
 - **View the source reports** where the Note is inserted.
 - **Delete** the Note.
 - **Copy** the Note to a specified POV.
 - **Export** the Note for the purposes of moving Notes between Narrative Reporting environments.
- 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 for the purposes of moving Note Formats between Narrative Reporting environments.

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



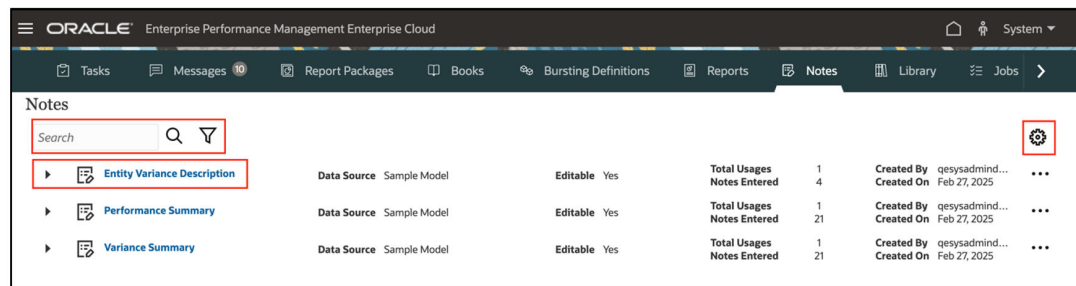
on the Narrative Reporting home page.

2. The **Notes Template** window is displayed.

Navigating the Note Manager

To navigate to the Notes Manager:

1. In the **Notes Template** window, you can view all Note Templates with information such as, **Data Source**, if the Note Template is **Editable**, **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

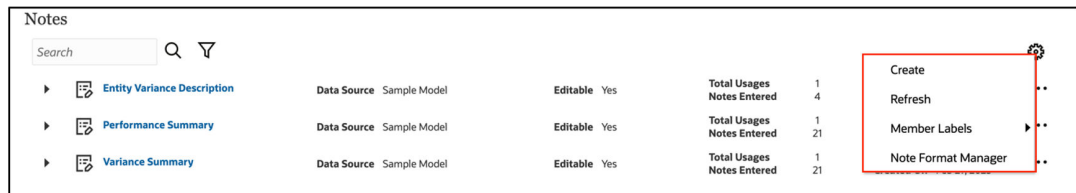


next to the search.

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**



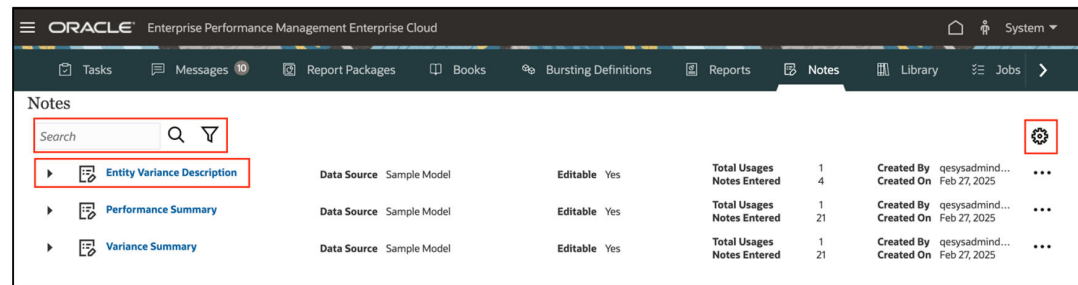
menu for a **Note Template** or select multiple **Note Templates** and select the **Note Manager Actions** menu, to access the available **Note Template** actions.



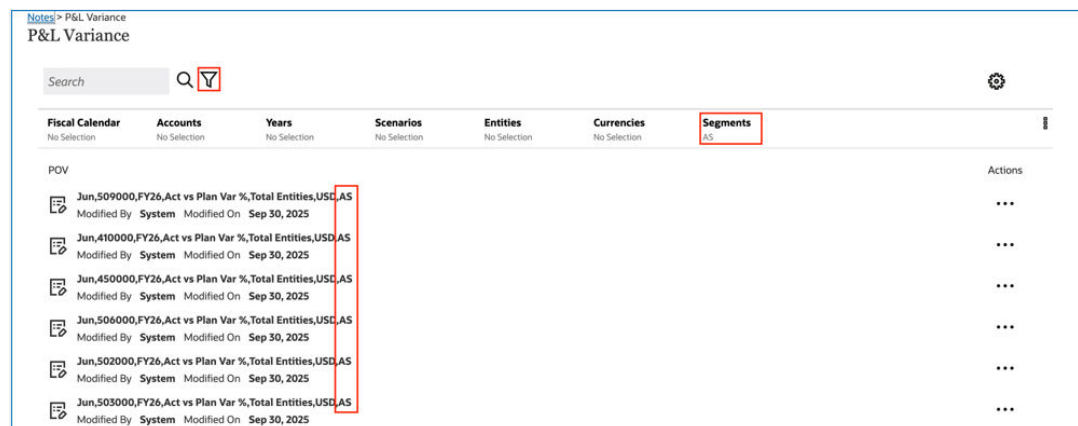
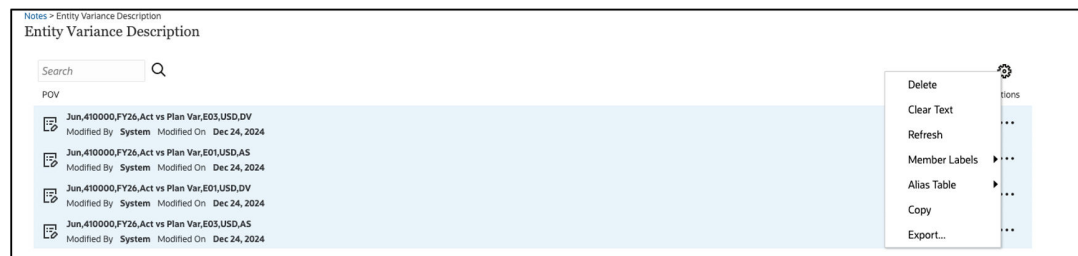
5. Click



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**.

In the **Note Viewer**, you can perform **Notes** filtering based on your POV selections.

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
Editing the Note Template	You can edit the Note Template	Editing 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
Clearing the Note Text	You can clear the Note Text.	Clearing the Note Text
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



- 2. In the **Notes Manager**, highlight a **Note Template**, and then click **...** to select **View Source Reports**.

ORACLE® EPM Cloud Narrative Reporting

Tasks

Messages

Report Packages

Books

Reports

Notes

Disclosure Management

Library

Application

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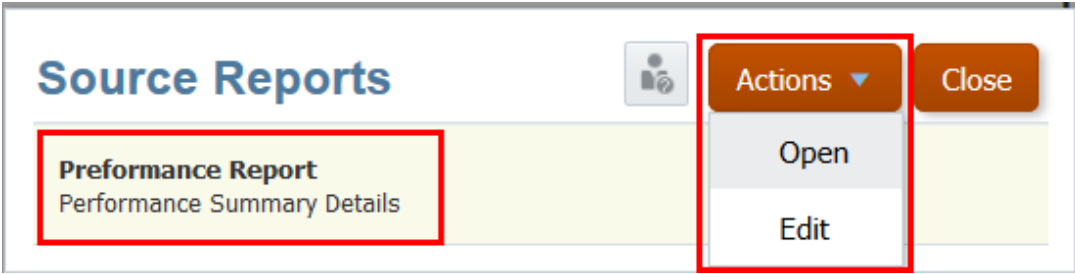
Administrator

Notes

Search

Performance Summary	Performance Report Information	Data Source	Vision	Total Usages	1	Created By Administrator
				Notes Entered	3	View Source Reports
Variance Summary	Variance Report Information	Data Source	Vision	Total Usages	1	Refresh
				Notes Entered	3	Change Data Source
						Access
						Delete

- 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**.



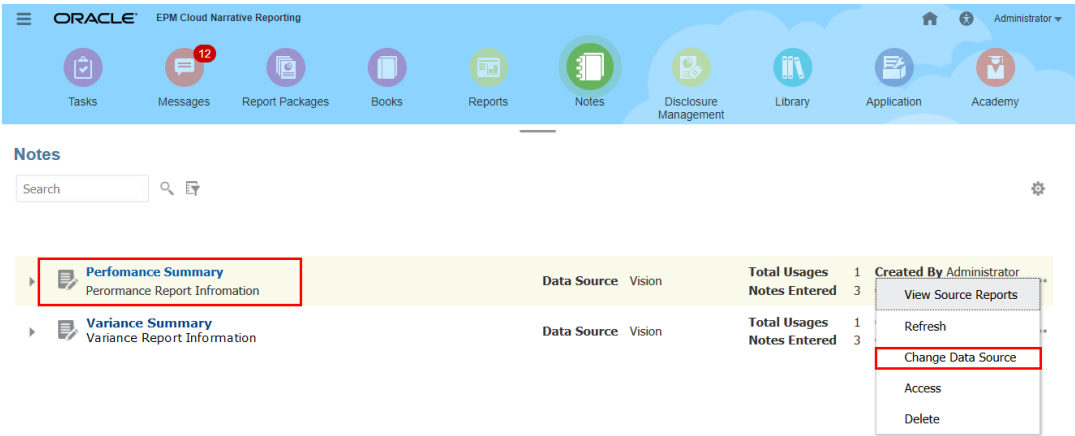
Changing the Data Source for the Note Template

To change the data source:

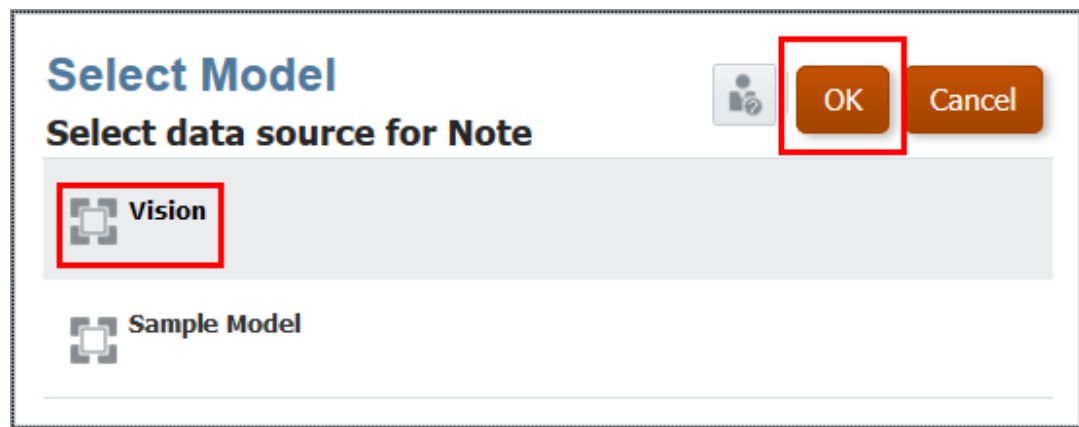
1. Log into Narrative Reporting. On the Home page, select



2. In the **Notes Manager**, highlight a **Note Template**, and then click ... to select **Change Data Source**



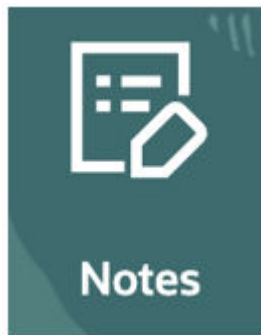
3. In the **Select Model** dialog, select a data source, and then click **OK**.



Granting Access to the Note Template

To grant access to the Note Template:

1. Log into Narrative Reporting. On the Home page, select

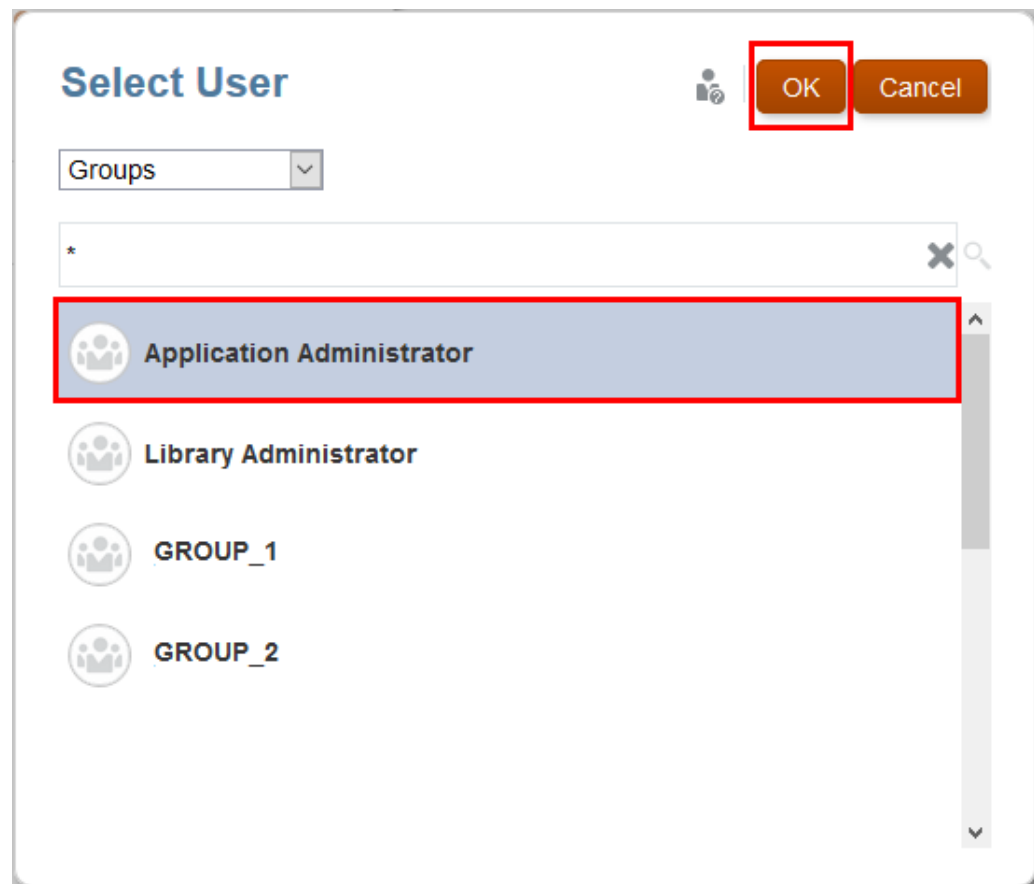


2. In the **Notes Manager**, highlight a **Note Template**, and then click **...** to select **Access**.
3. In the **Note Template** access window, click

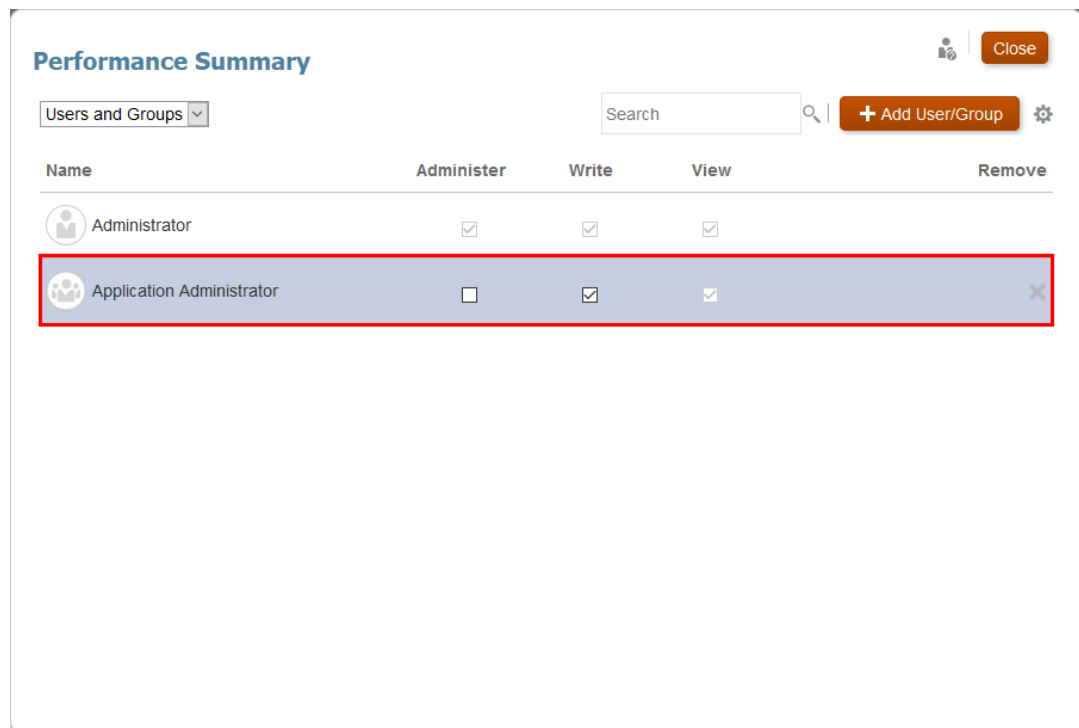


and select the users to which you want to assign access, as follows:

- 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.

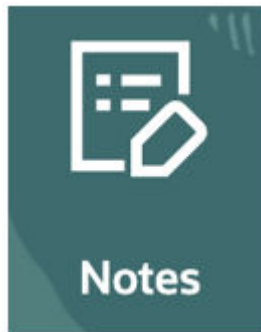


6. Click **Close**.

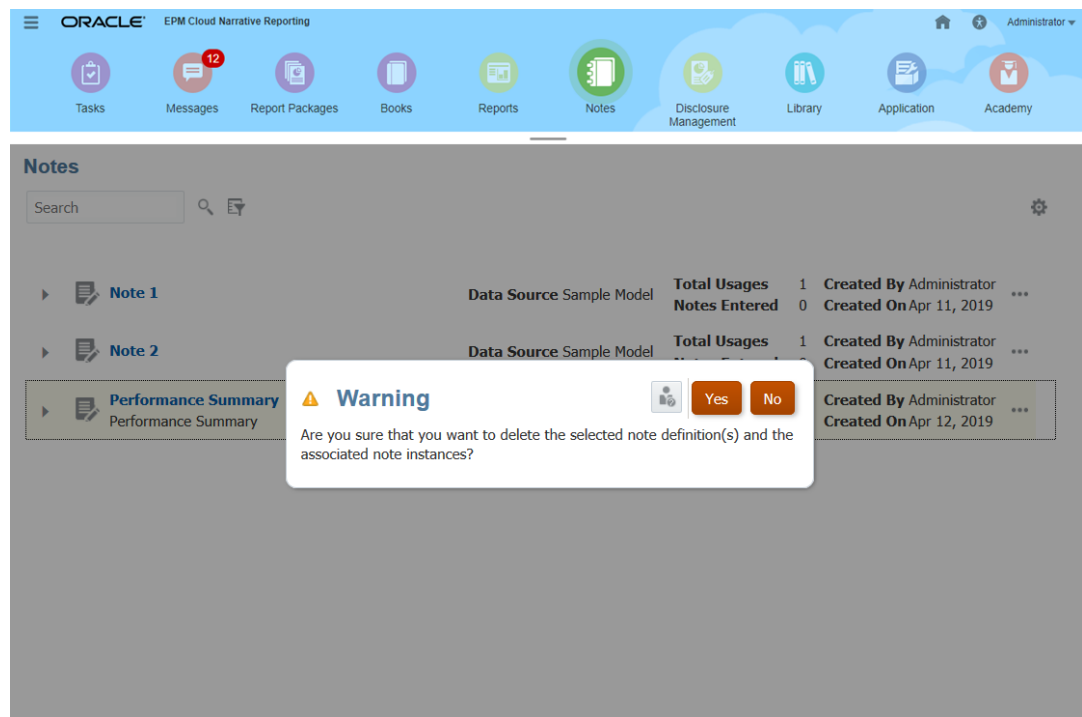
Deleting the Note Template

To delete the Note Template, perform these steps:

1. Log into Narrative Reporting. On the Home page, select



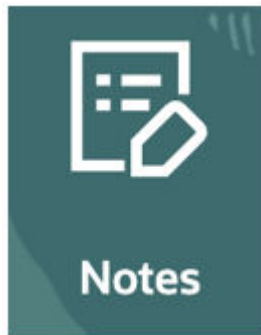
2. In the **Notes Manager**, highlight a **Note Template**, and then click **...** to select **Delete**.
3. In **Warning** dialog box, you will be prompted to confirm deleting the selected **Note Definition** and associated **Note**, click **Yes**.



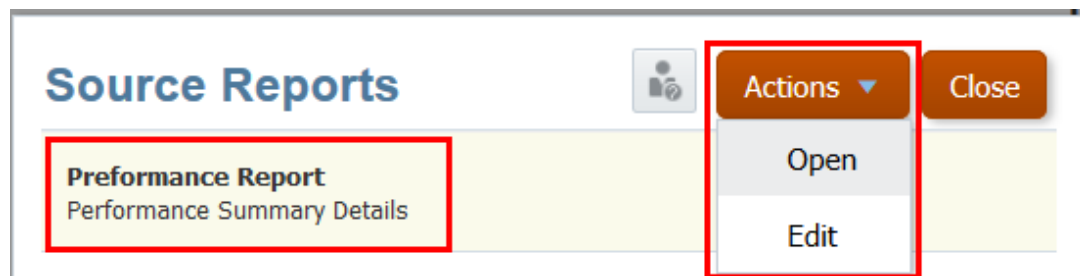
Viewing the Source Reports from the Notes

To view the Source Reports from the Notes:

1. Log into Narrative Reporting. On the Home page, select



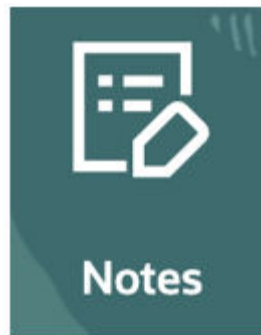
2. In the **Notes Manager**, double-click on the **Note Template**, highlight a **Note**, and then click **...** to select **View Source Reports**.
3. **Optional:** In the Source Reports dialog, select a **Note Template**, and select **Action**, and then click **Edit**.
4. **Optional:** In the Source Reports dialog, select a **Note Template**, and select **Action**, and then click **Open**.



Granting Access to the Notes

To grant access to the Notes:

1. Log into Narrative Reporting. On the Home page, select

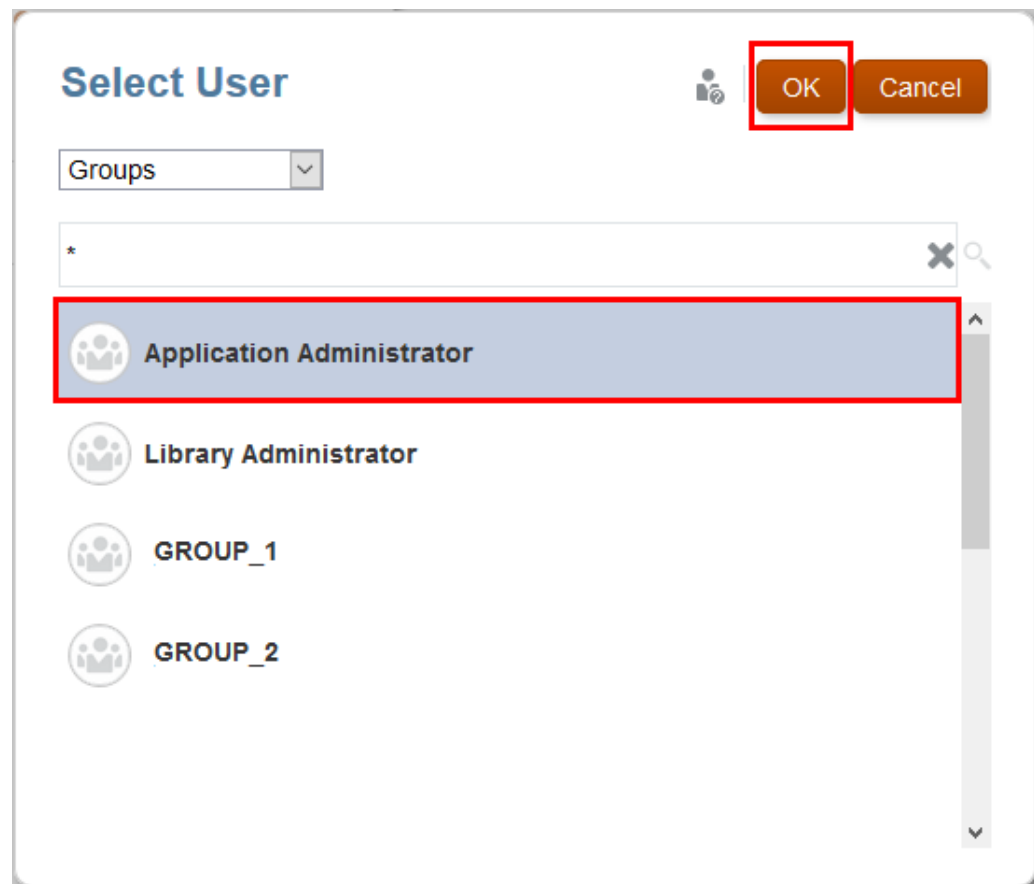


2. In the **Notes Manager**, double-click on the **Note Template**, highlight a **Note**, and then click ... to select **Access**.
3. In the **Notes** access window, click

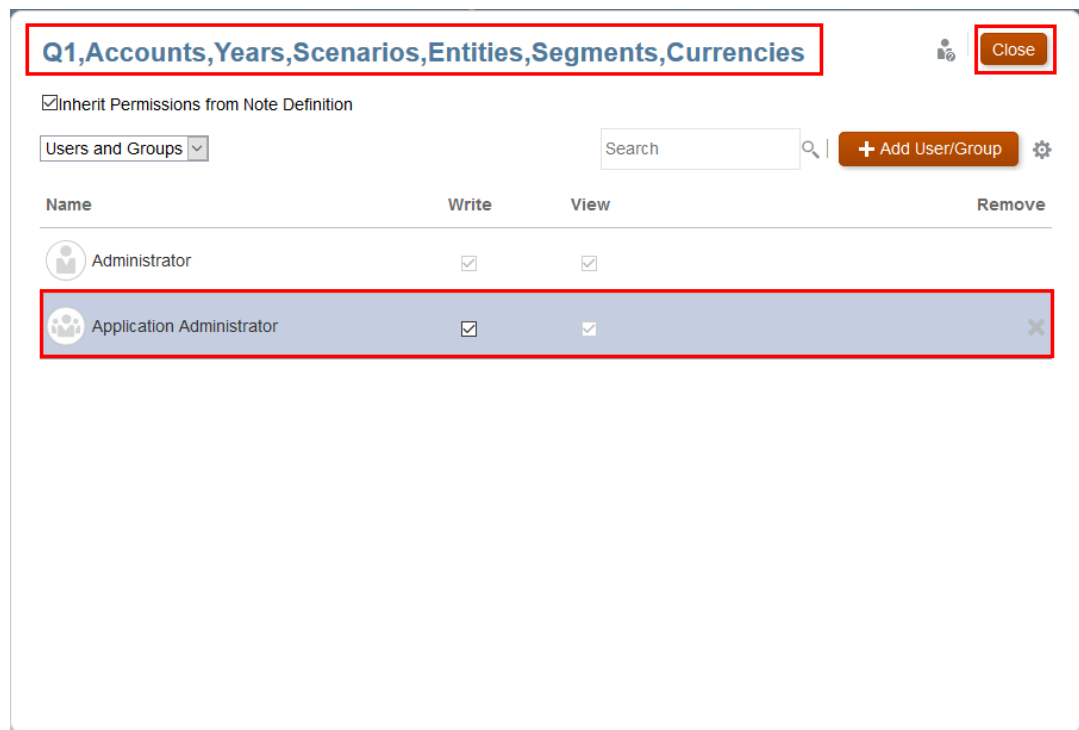
Add User/Group

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.

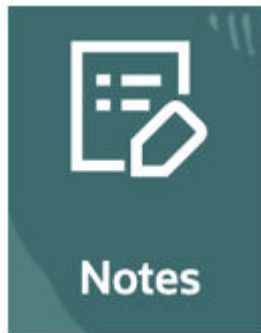


6. Click **Close**.

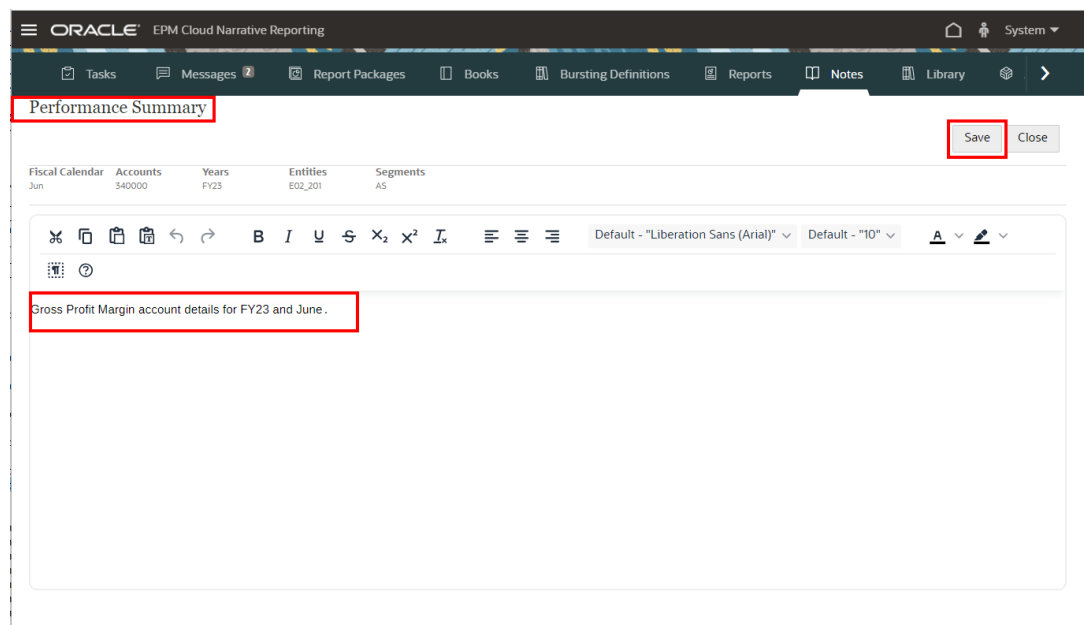
Editing the Note Template

To edit the Note Template, perform these steps:

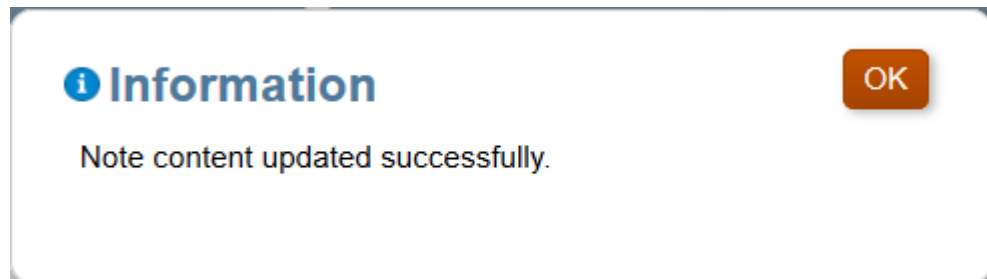
1. Log into Narrative Reporting. On the Home page, select



2. In the **Notes Manager**, double-click on the **Note Template**, highlight a **Note**, and then click **...** to select **Edit Text**.
3. 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 Template is updated successfully, click **OK**.

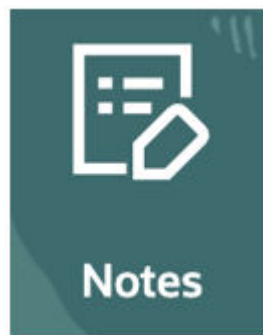


5. Click **Close**.

Deleting a Note

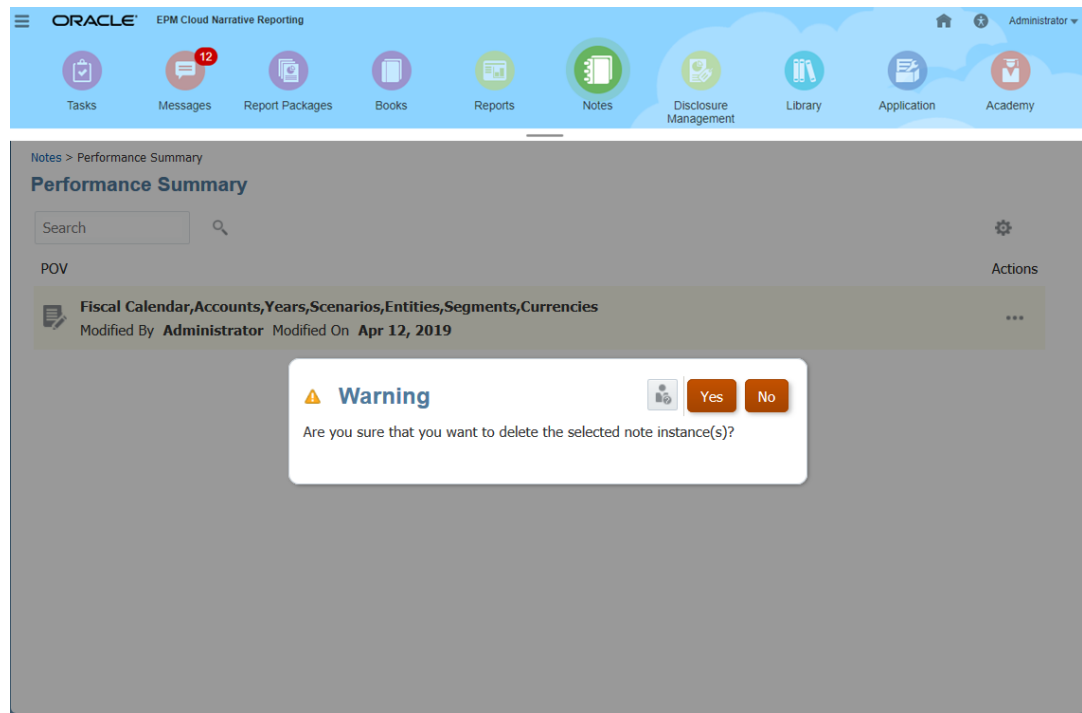
To delete a Note, perform these steps:

1. Log into Narrative Reporting. On the Home page, select



2. In the **Notes Manager**, double-click on the **Note Template**, highlight a **Note**, and then click **...** to select **Delete**.

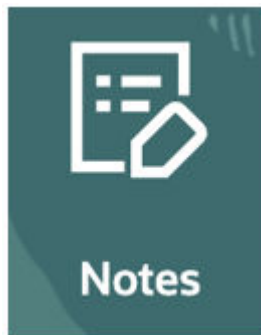
3. In **Warning** dialog box, you will be prompted to confirm deleting the selected Notes, click **Yes**.



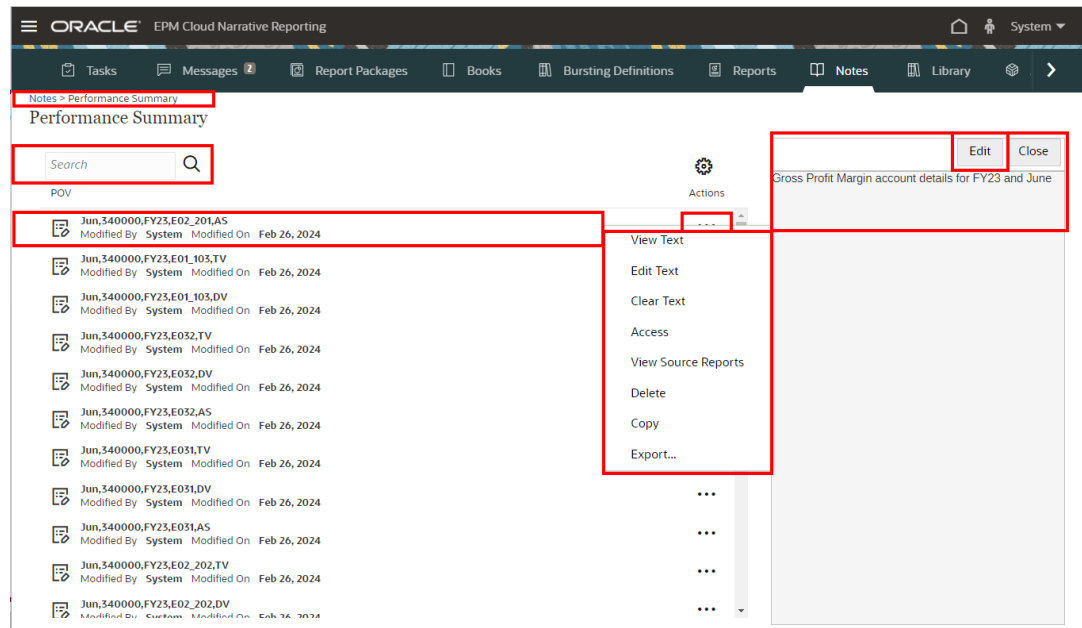
Viewing and Editing the Note Text

To view and edit the Note Text, perform these steps:

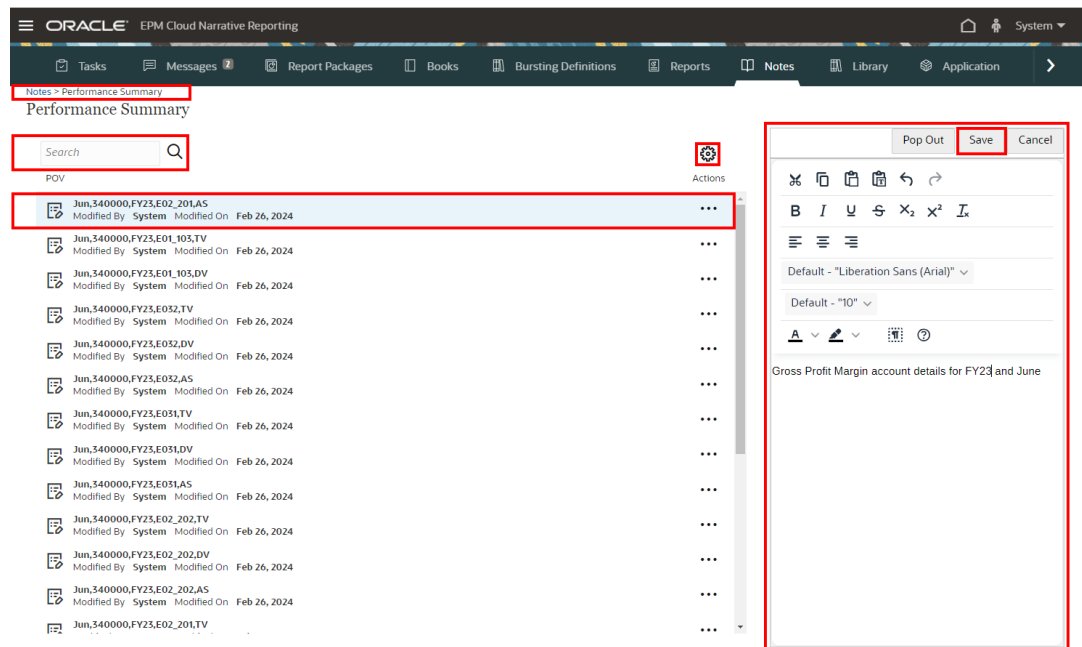
1. Log into Narrative Reporting. On the Home page, select



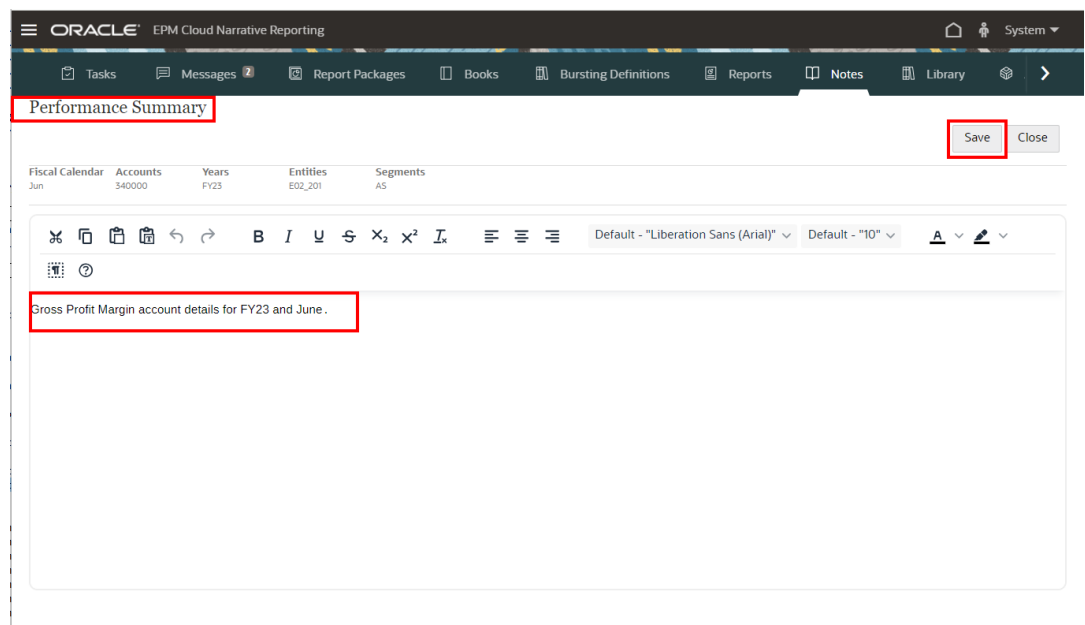
2. In the **Notes Manager**, double-click on the **Note Template**, highlight a **Note**, and then click **...** to select **View Text**.



3. 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.

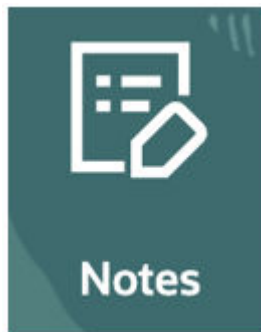


5. **Optional:** In the **Note Template** editor, you can edit the **Note** text, and then click **Save**.

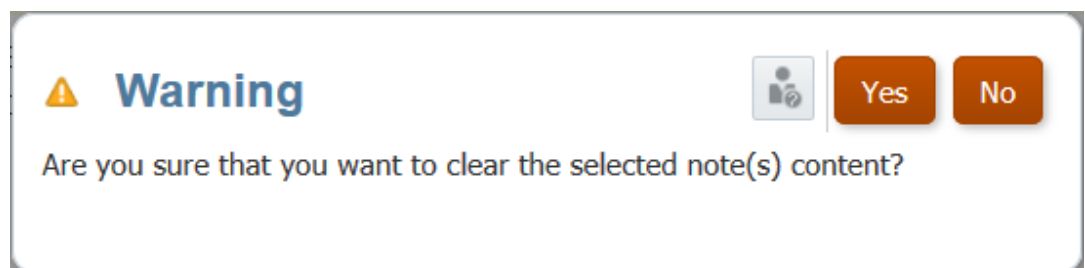
Clearing the Note Text

To clear the Note Text, perform these steps:

1. Log into Narrative Reporting. On the Home page, select



2. 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.

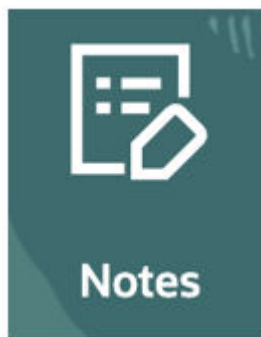
For example, you can copy Notes created for all Departments in Q1 to Q2, to use as a starting point for entering Notes in Q2. You specify the destination POV selections for the copied Notes, you can select one or more members, Substitution and User variables, Lists, and member functions for each dimension in the destination POV.

Note

You can only copy up to 1,000 Notes. If the amount of Notes you are trying to copy exceeds this limit, separate the Notes into multiple Copy actions.

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**.

Note

If there are already existing target POV for the selected Notes, then you may either select **Skip** or **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 13-2 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)

Source POV (Matching 4 notes selected)

Fiscal Calendar Dec	Accounts IncomeStatement	Years FY17	Entities Total Entities	Segments *
------------------------	-----------------------------	---------------	----------------------------	---------------

Target POV

Fiscal Calendar Jan	Accounts IncomeStatement	Years FY18	Entities Children of Total Ent...	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.

Note

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**.
3. 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.

Note

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](#)
2. 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.

Note

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, 2021 9:16:20 AM. The details are below. Artifact Note Format 1 of type Note Format was successfully exported.

5. 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:

1. 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.
4. 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

- Note write succeeds Note read permission
- Note Template read succeeds Note write permission
- Note Template write succeeds Note Template read permission

Scenario 1

Table 13-3 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 13-4 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 13-5 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 13-6 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 13-7 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 13-8 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 13-9 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 13-10 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.

Note

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](#).
- You can optionally configure the **Notes** text function to **Summarize Notes** using Generative AI (GenAI) via a text function parameter. For more information, see [Working with Generative AI in Reports](#)

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

This chapter describes how to create and manage Note Formats.

Related Topics

- [Introduction to Note Formats](#)
- [Accessing the Note Format Manager](#)
This section describes how to navigate from the Home page to the Note Format Manager.
- [Creating a Note Format](#)
This section describes how to create and maintain Note Formats.
- [Using Note Format Text Functions](#)
This section describes how to use the syntax of Note Text functions within a Note Format.
- [Limitations for Creating a Note Format](#)
In Reports, you will find limitations for creating a Note Format.
- [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.

Introduction to Note Formats

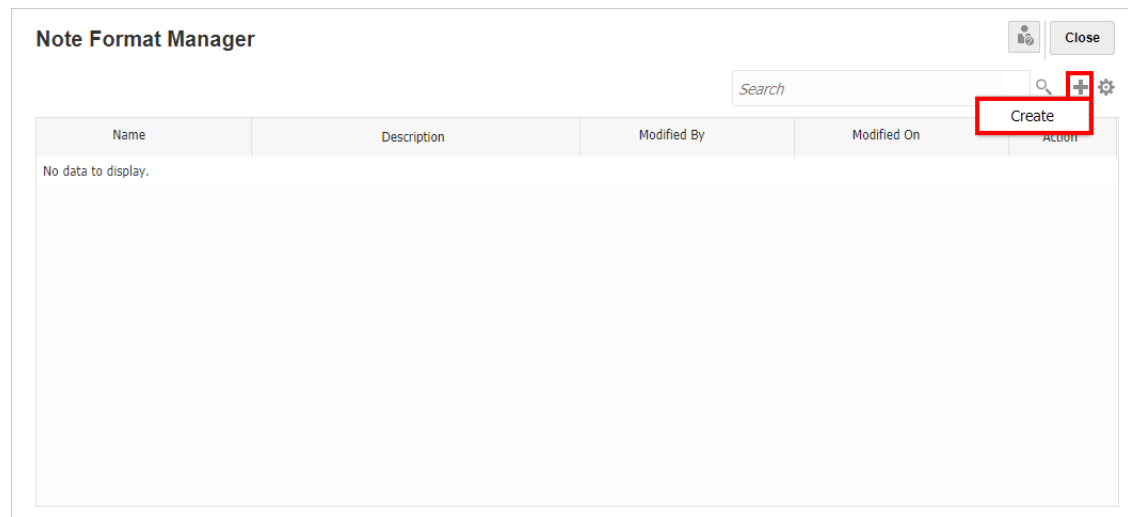
A Note Format defines the output content, layout, and format of the Notes text function. You can create and maintain Note Formats in the Note Manager and can use Note Formats across multiple reports.

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 indentation 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](#).

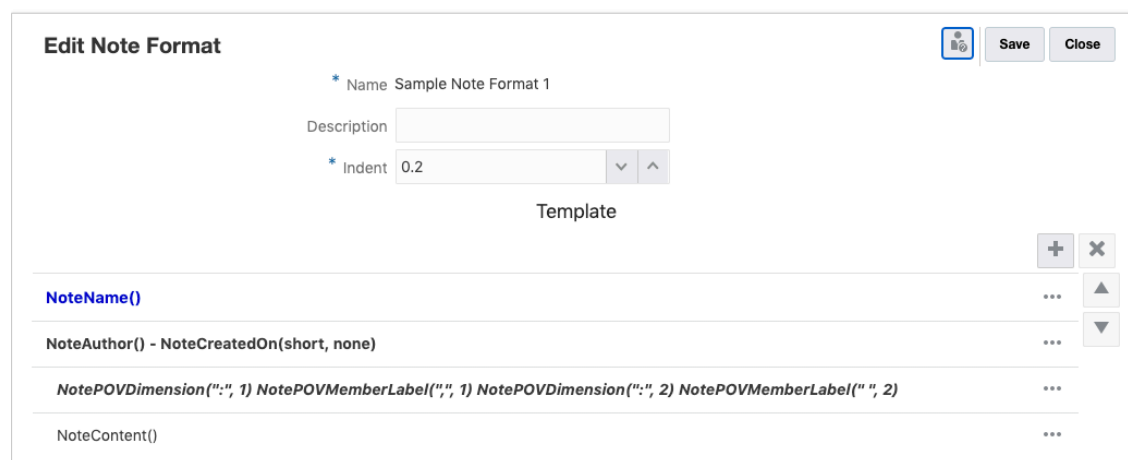


Note Format Manager

Search + Create

Name	Description	Modified By	Modified On	Action
No data to display.				

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.



Edit Note Format Save Close

* Name Sample Note Format 1

Description

* Indent 0.2 ▼ ▲

Template

NoteName()	...	▲
NoteAuthor() - NoteCreatedOn(short, none)	...	▼
<i>NotePOVDimension(":", 1) NotePOVMemberLabel(":", 1) NotePOVDimension(":", 2) NotePOVMemberLabel(" ", 2)</i>	...	
NoteContent()	...	

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 congue.

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 congue pretium.

Note

- 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

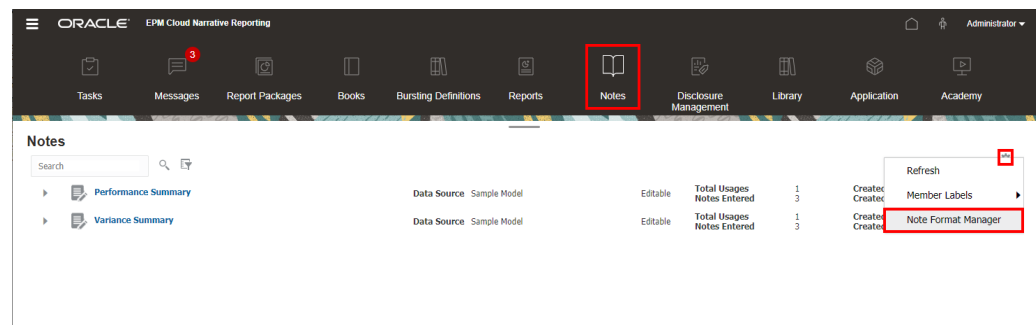
This section describes how to navigate from the Home page to the Note Format Manager.

To access the **Note Format Manager**:

1. Do one of these steps:
 - In the **Notes Manager** Actions



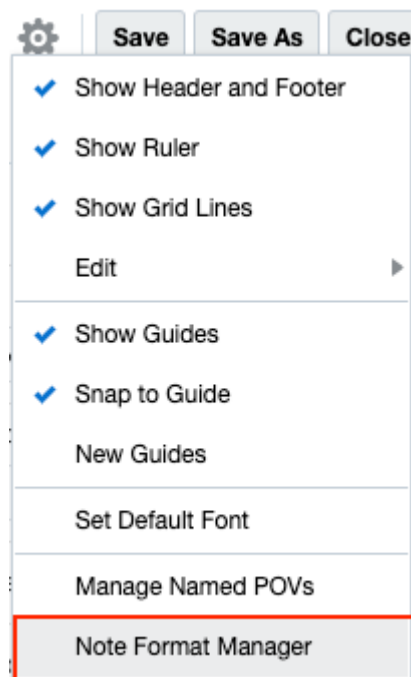
menu, select **Note Format Manager**.



- In the Report Designer while editing a report, select the



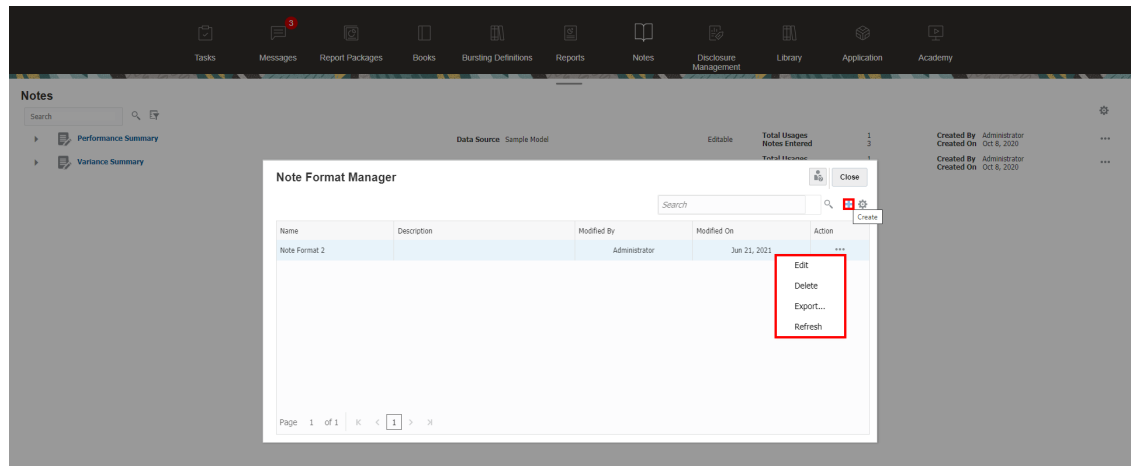
and **Note Format Manager**.



- The **Note Format Manager** dialog box is displayed.

You can:

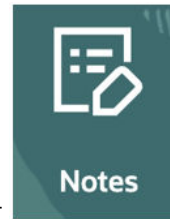
- Create** a new Note Format.
- Edit** an existing Note Format.
- Delete** a selected Note Format.
- Refresh** the Note Format view.
- Export** a Note Format.



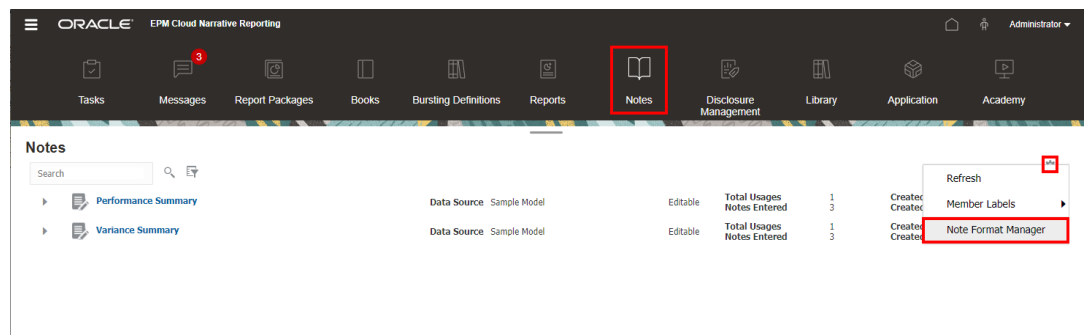
Creating a Note Format

This section describes how to create and maintain Note Formats.

To create a Note Format:



1. From the Narrative Reporting Home page, select
2. In the **Notes Manager** Actions  menu, select **Note Format Manager**.



3. In the **Note Format Manager**, click  to add a new format.

Note Format Manager Close

Search +

Name	Description	Modified By	Modified On	Action
No data to display.				

4. In **Add Note Format**:

- Enter a unique **Name** for the Note Format.

Note

Once a Note Format is created, you cannot change its Name.

- Enter an optional **Description**.
- Select a size for **Indent**, which is used when indenting Sections in the Note Format.

Add Note Format

Save Close

* Name

Description

* Indent ▼ ▲

Template

NoteContent()

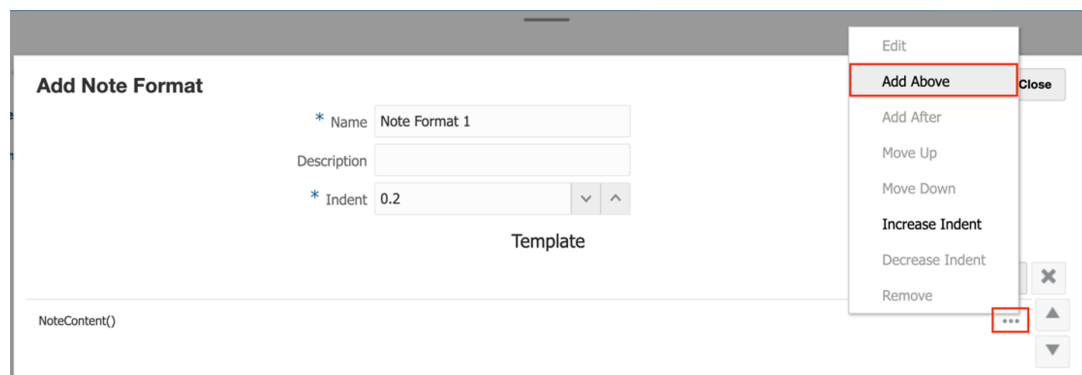
+ ×

... ▲ ▼

5. Click + to add a Section to the Note Format.

Add Note Format

You can click the **Actions** menu for a Section and select **Add Above**, where applicable.

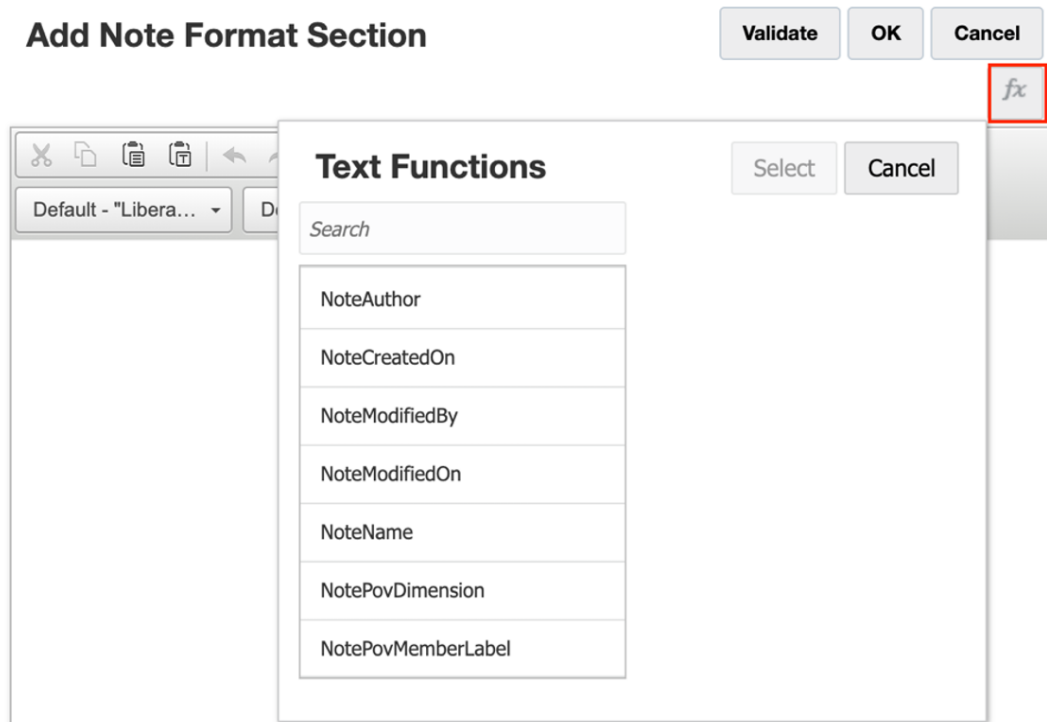


Note

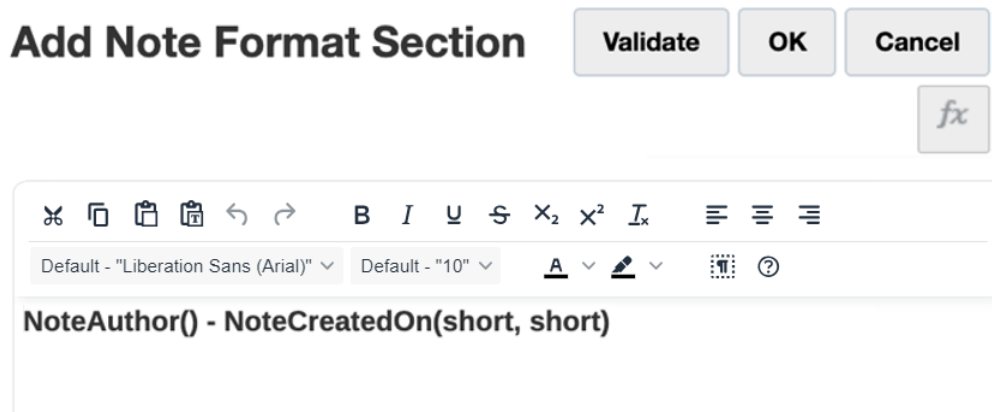
The default `NoteContent()` Section can only appear last in the **Note Format**, and you can only add a Section above it and not after it.

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](#).



7. Click **Validate** to check the text function syntax, and then click **OK** to close the **Add Note Format Section** dialog.

Note

Repeat Steps 5 – 7 to add additional Sections as needed.

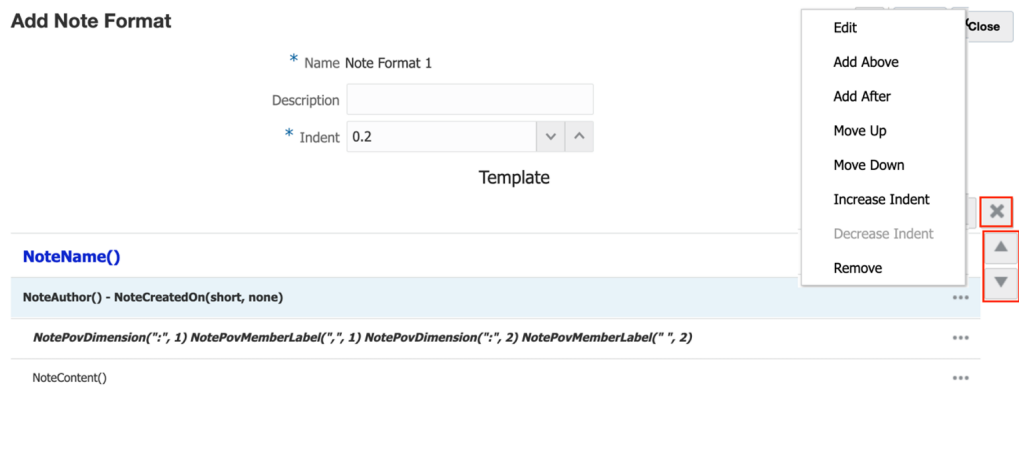
8. Select a Section, and you can:
 - Use **Actions** menu to **Edit** each Section.

- 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.

Note

The indentation amount is based on the Indent specified in the **Add Note Format** dialog.

Add Note Format



9. Click **Save**, and then select **Close** to save the Note Format.

Example 13-1 Grouping and Sorting based on the Segment Member Name

By default, there is one Section in the Note Format with the NoteContent () text function, which returns each Note's text. You can insert additional Sections above the NoteContent () 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.

Edit Note Format

Save

Close

* Name Sample Note Format 1

Description

* Indent 0.2

Template

+

×

NoteName()	...	▲
NoteAuthor() - NoteCreatedOn(short, none)	...	▼
NotePOVDimension(":", 1) NotePOVMemberLabel(":", 1) NotePOVDimension(":", 2) NotePOVMemberLabel(":", 2)	...	
NoteContent()	...	

Note

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 13-2 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.

Edit Note Format

Save

Close

* Name Sample Note Format 1

Description

* Indent 0.2

Template

+

×

NoteName()

...

▲

NoteAuthor() - NoteCreatedOn(short, short)

...

▼

NotePOVDimension(":", 1) NotePOVMemberLabel(":", 1) NotePOVDimension(":", 2) NotePOVMemberLabel(":", 2)

...

NoteContent()

...

Note

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 "Performance Summary" 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 volutpat. Nullam rutrum euismod congue.

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 section describes how to use the syntax of Note Text functions within a Note Format.

This topic provides information on the usage and syntax of the available text functions in a Note Format.

Table 13-11 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	<i>Date Format</i> and <i>Time Format</i> . 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	<i>Date Format</i> and <i>Time Format</i> . 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 last modified.
NoteName	N/A	Returns the Note Template name.
NotePOVDimension	<i>Delimiter</i> – select a delimiter character to appear after the text function result. Note: You can also select a blank space, a NewLine or NewLineIndent. <i>Ordinal</i> – select a number that represents the dimension position in a report's Named POV.	Returns the specified dimension name for a Note, based on the position of the dimension in the report's Named POV.
NotePOVMemberLabel	<i>Delimiter</i> – select a delimiter character to appear after the text function result. Note: You can also select a blank space, a NewLine or NewLineIndent. <i>Ordinal</i> – select a number that represents the dimension position in a report's Named POV.	Returns the specified dimension's member label for a Note, based on the position of the dimension in the 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

In Reports, you will find 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 13-3 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.

Create Named POV



* Name

Description

* Data Source

<u>Segments</u>	<u>Fiscal Calendar</u>
Children of Seg01	Jan

Example 13-4 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.

1	NoteName()
2	NoteAuthor() - NoteCreatedOn(short, none)
3	<i>NotePovDimension(":", 1) NotePovMemberLabel(" ", 1) NotePovDimension(":", 2) NotePovMemberLabel(" ", 2)</i>
4	NoteContent()

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 13-5 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.

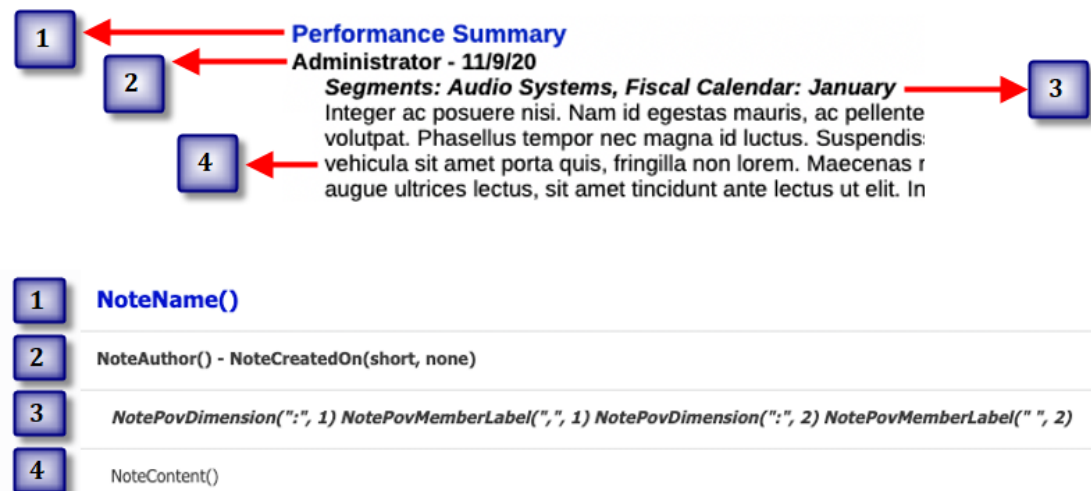
Segments: Digital Video, Fiscal Calendar: January

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 congue.

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.

Note

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

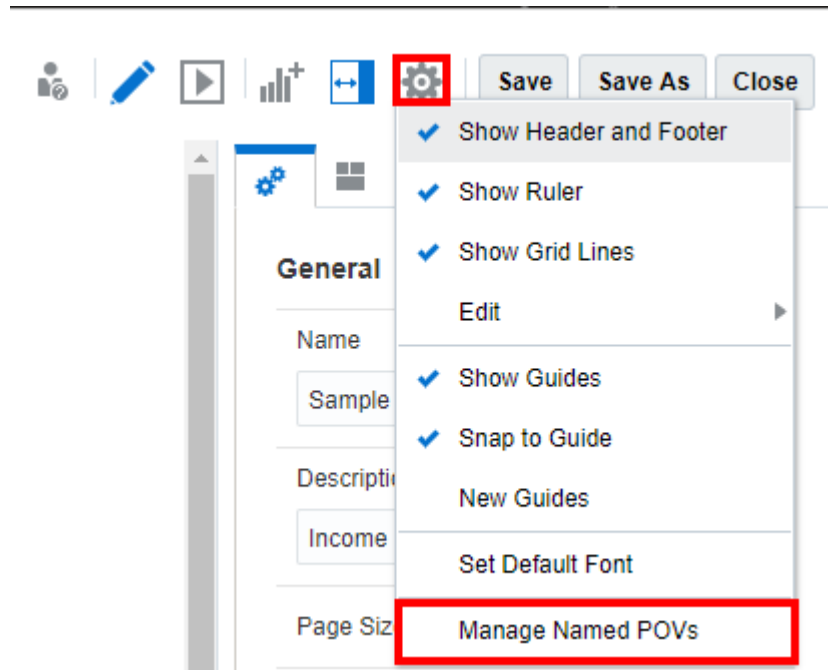
To create a Named POV:

1. Select an existing **Report** or create a new **Report**, if you want to insert the **Notes** text function.

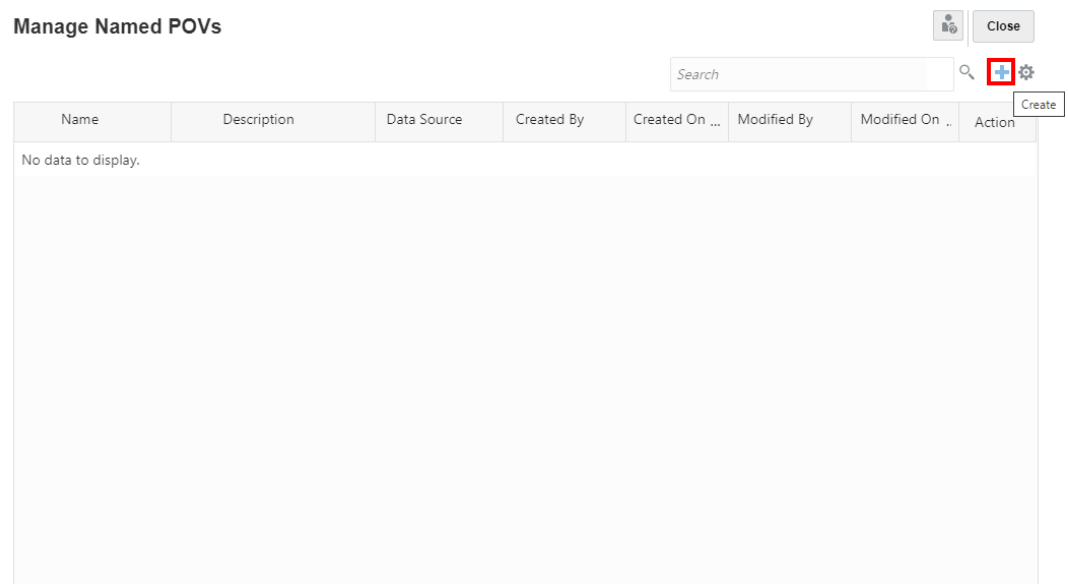
Note

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.

Manage Named POVs

Name	Description	Data Source	Created By	Created On	Modified By
No data to display.					

Page 1 | K < 1 > X

In the **Secondary POV Functions** dialog, you can select or deselect member selection functions.

Secondary POV Functions

☒ Member

☒ Children of Member

☐ Children of Member (Inclusive)

☒ Bottom Members of Member

☐ Bottom Members of Member (Inclusive)

☒ Descendants of Member

☐ Descendants of Member (Inclusive)

Note

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.

Note

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.

Create Named POV

 **OK** Cancel

* Name	Sample_Report1_Named_POVs
Description	This action is applicable for the current report only.
* Data Source	Sample Model ▼

<	Fiscal Calendar No Selection	Accounts No Selection	Years No Selection	Scenarios No Selection	Entities No Selection	Currencies No Selection	>	⋮
---	--	---------------------------------	------------------------------	----------------------------------	---------------------------------	-----------------------------------	---	---

Note

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.

 Note

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**  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**.

 Note

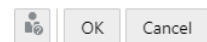
Repeat steps above for any additional dimensions.

7. 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**.

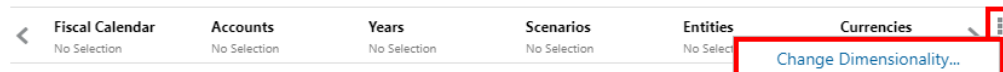
Create Named POV



* Name

Description

* Data Source



- In **Dimension Layout**, click  next to a dimension. Repeat for other dimensions, if needed.

Dimension Layout

OK Cancel



- Click **OK** to close **Dimension Layout**, and to return to the **Create Named POV**.

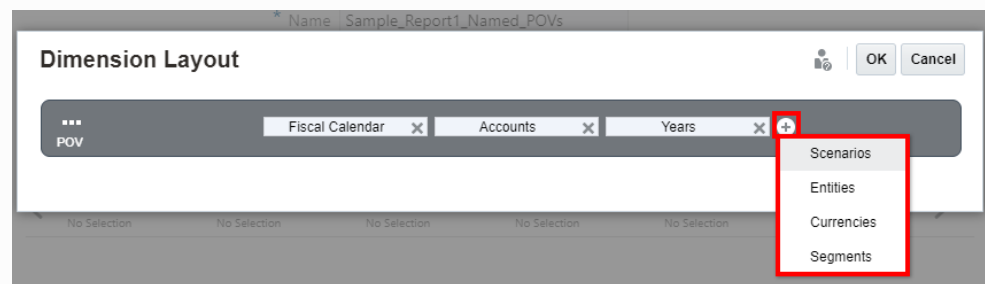
Note

We recommend you remove any unnecessary dimensions, where you are not going to specify a selection, from Dimension Layout.

This makes it easier to specify the Ordinal parameter in the NotePOVDimension and NotePOVMemberLabel functions. For more information, see [Using Note Format Text Functions](#).

Note

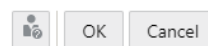
You can always add dimensions back using the Add Dimension button:



- 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).

Create Named POV



* Name Sample_Report1_Named_POVs

Description This action is applicable for the current report only.

* Data Source Sample Model

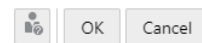
Segments	Fiscal Calendar	
Children of Seg01	Jan	

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**.

Create Named POV



* Name Sample_Report1_Named_POVs

Description This action is applicable for the current report only.

* Data Source Sample Model

Fiscal Calendar	Accounts	Years	Scenarios	Entities	Currencies	
No Selection	No Selection	No Selection	No Selection	No Selection	No Selection	
					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.

Edit Named POV

Name * Named POV 1

Description

Data Source * Sample Model

Segments	Fiscal Calendar	Entities
Children of Seg01	No Selection	No Selection

Select Members...
Reset to Default
✓ Control by Text POV
POV Member Function ▶
✓ Display on Secondary POV

Member
Children of Member
✓ Bottom Members of Member
Descendants of Member

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.

Notes("Named POV 1", "Text Box Note Format")

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.

Edit Named POV

OK

Cancel

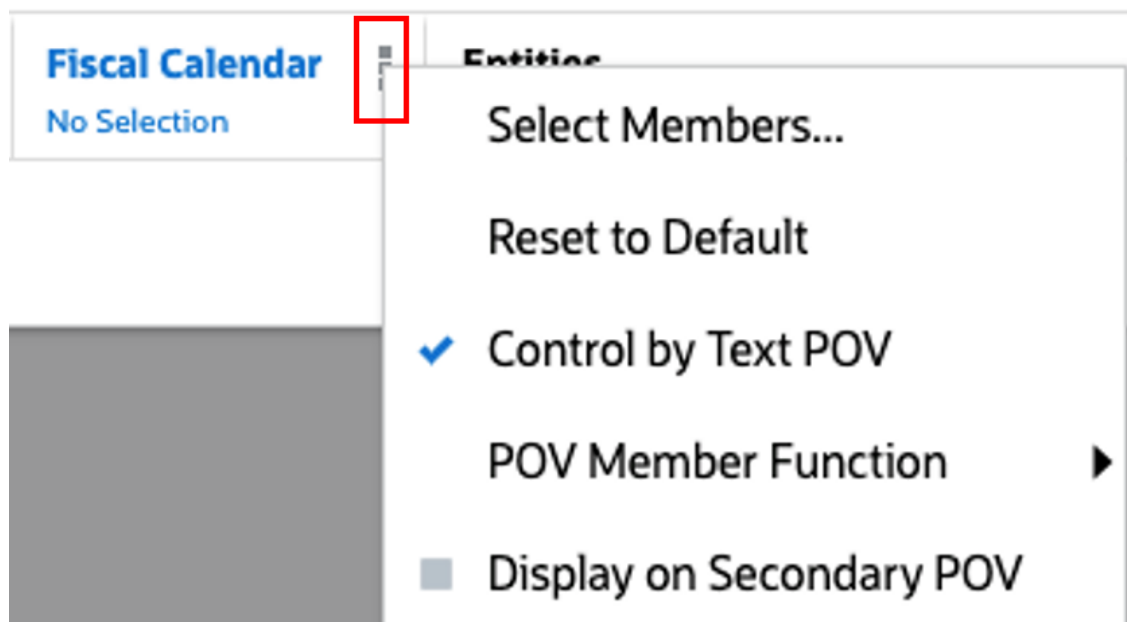
Name * Named POV 1

Description

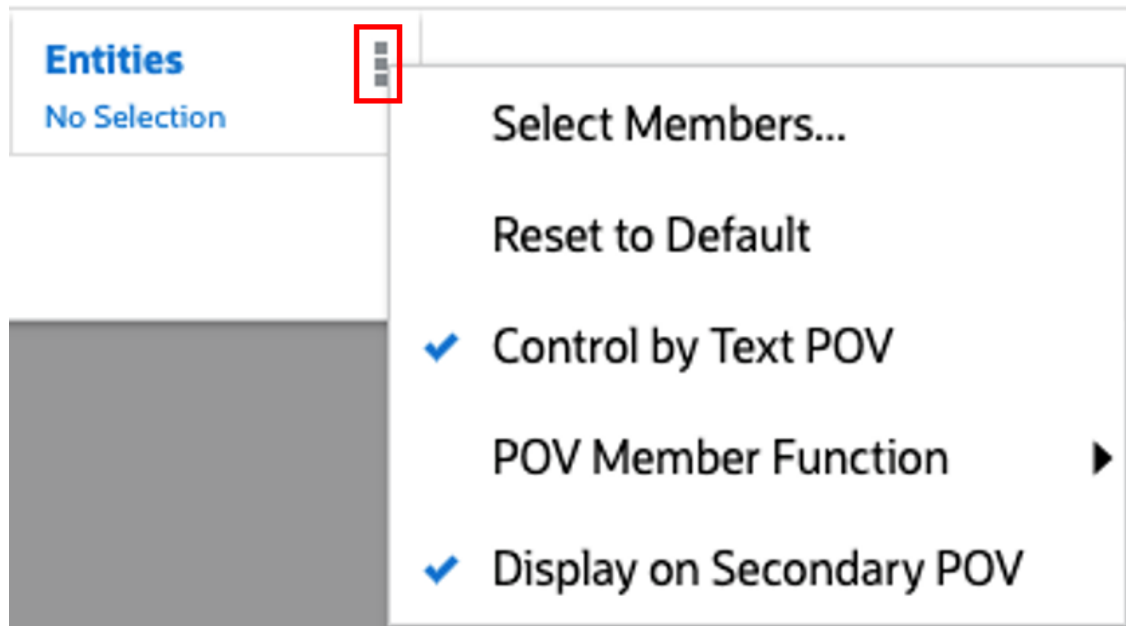
Data Source Sample Model

Segments	Fiscal Calendar	Entities
Children of Seg01	No Selection	No Selection

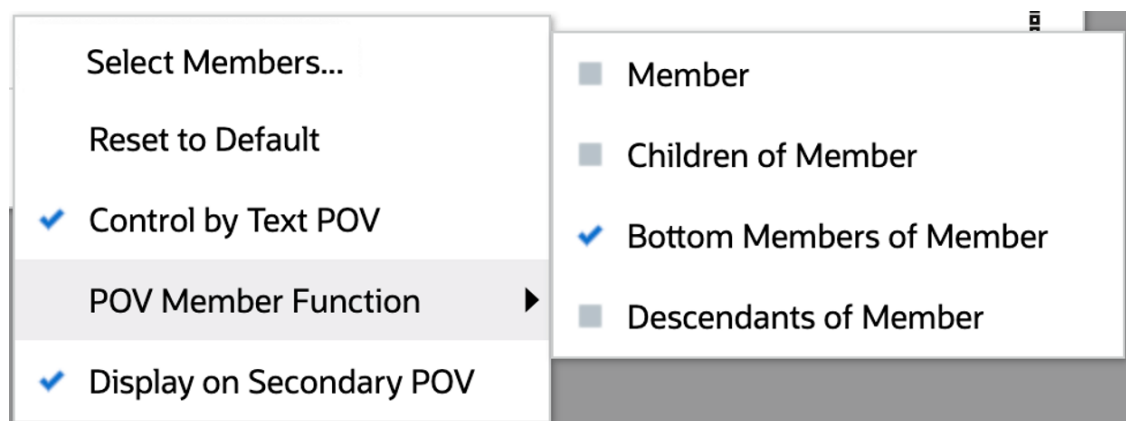
Fiscal Calendar POV dimension options



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.

 Note

These selections apply to all dimensions and all Named POVs in the report.

For example, we selected only four from the list of member selection functions that are displayed in the secondary POV.

Secondary POV Functions 

☒ Member

☒ Children of Member

☐ Children of Member (Inclusive)

☒ Bottom Members of Member

☐ Bottom Members of Member (Inclusive)

☒ Descendants of Member

☐ Descendants of Member (Inclusive)

OK Cancel

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:

Fiscal Calendar	Accounts	Years	Entities
Jan	340000	FY23	Total Entities



Vision Corporation
Note Text Box Report

Total Entities | January | FY23

Run Date: 01-Apr-22 7:13:11 AM
By System

Bottom M... ▼

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.

Fiscal Calendar	Accounts	Years	Entities
Jun	340000	FY23	Total Entities



Vision Corporation
Note Text Box Report
Run Date: 01-Apr-22 7:17:15 AM
By System

Total Entities | June | FY23

Bottom M... ▼

Performance Summary
System - 4/1/22

Entities: E01_102
Segments: AS, Fiscal Calendar: Jun
Nullam aliquet est non faucibus cursus. In sodales id purus et maximus. Aliquam risus turpis, blandit sed varius imperdiet, interdum et arcu. Sed non venenatis arcu. Vivamus iaculis in massa sed imperdiet. Duis laoreet enim leo, nec eleifend mi dictum vel.
Segments: DV, Fiscal Calendar: Jun
Integer vestibulum turpis non sodales lobortis. Aliquam aliquet mi non augue porttitor rutrum. Vivamus id ipsum id nulla egestas scelerisque in in mi. Suspendisse tempus neque quis sapien vulputate porta.
Segments: TV, Fiscal Calendar: Jun
Vestibulum eget tortor mauris. Etiam pharetra elit mi, sit amet auctor odio dictum eu.
Entities: E01_103
Segments: AS, Fiscal Calendar: Jun
Nam nec commodo mauris. Nulla sodales turpis nec massa maximus finibus. Sed rhoncus ornare arcu non dapibus. Cras et mattis augue. Proin in vehicula nunc.
Segments: DV, Fiscal Calendar: Jun
Praesent vel semper dolor, vitae dignissim orci. In vulputate vel lacus a lacinia. Aenean aliquet vestibulum varius. Phasellus tristique rhoncus diam, ac porttitor ipsum euismod non.
Segments: TV, Fiscal Calendar: Jun
In rhoncus justo sit amet dolor condimentum porta. Integer tincidunt neque id nunc convallis, sit amet consectetur dui tincidunt. Vestibulum ut nisi dui. Nam quis viverra lacus.

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.

Fiscal Calendar	Accounts	Years	Entities
Jun	340000	FY23	E01



Vision Corporation
Note Text Box Report
Run Date: 01-Apr-22 7:35:13 AM
By System

North America | June | FY23

Children o... ▼

Performance Summary
System - 4/1/22

Entities: E01_101
Segments: AS, Fiscal Calendar: Jun
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque aliquam est finibus urna mollis, vel venenatis justo commodo. Phasellus malesuada, turpis a rhoncus efficitur, lorem enim faucibus lacus, in hendrerit tellus nisi sit amet leo. Proin eu elit dui. Lorem ipsum dolor sit amet, consectetur adipiscing elit.
Segments: DV, Fiscal Calendar: Jun
Duis sollicitudin tortor est, sed sollicitudin nibh eleifend in. Cras felis erat, posuere sit amet bibendum vel, fermentum eget magna. Curabitur nulla augue, ornare quis ullamcorper eget, molestie in erat.
Segments: TV, Fiscal Calendar: Jun
Ut id pretium lacus. Etiam at diam egestas, posuere leo ut, congue eros. Integer suscipit suscipit est, sed egestas tortor ultricies a. Aliquam at nisl sit amet sem rutrum lobortis.
Entities: E01_102
Segments: AS, Fiscal Calendar: Jun
Nullam aliquet est non faucibus cursus. In sodales id purus et maximus. Aliquam risus turpis, blandit sed varius imperdiet, interdum et arcu. Sed non venenatis arcu. Vivamus iaculis in massa sed imperdiet. Duis laoreet enim leo, nec eleifend mi dictum vel.
Segments: DV, Fiscal Calendar: Jun
Integer vestibulum turpis non sodales lobortis. Aliquam aliquet mi non augue porttitor rutrum. Vivamus id ipsum id nulla egestas scelerisque in in mi. Suspendisse tempus neque quis sapien vulputate porta.
Segments: TV, Fiscal Calendar: Jun
Vestibulum eget tortor mauris. Etiam pharetra elit mi, sit amet auctor odio dictum eu.

Inserting the Notes Text Function in a Report

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](#).

You can optionally configure the **Notes** text function to **Summarize Notes** using Generative AI (GenAI) via a text function parameter. For more information, see [Working with Generative AI in Reports](#)

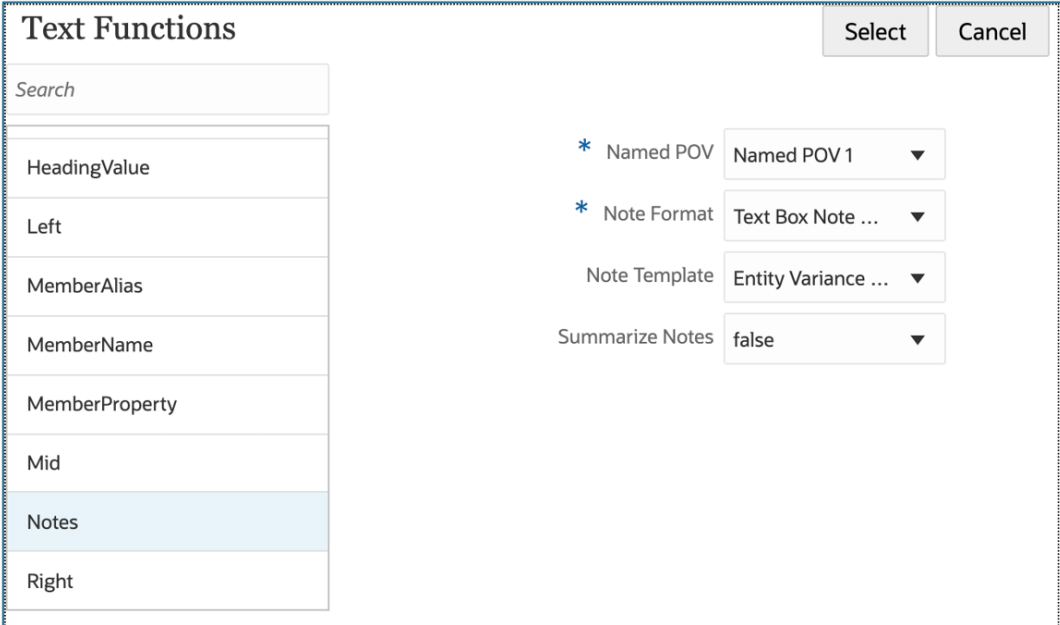
For more information on working with text boxes, grid text rows, columns, and cells, and conditional text, see the following links:

- [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 .
2. 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 leave the Note Template field blank to use all Note Templates. You can also optionally select to Summarize Notes (true or false).



Text Functions		Select	Cancel
Search			
HeadingValue	* Named POV	Named POV 1	▼
Left	* Note Format	Text Box Note ...	▼
MemberAlias	Note Template	Entity Variance ...	▼
MemberName	Summarize Notes	false	▼
MemberProperty			
Mid			
Notes			
Right			

Note

- 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 13-6 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.

Named POVs with the **Segments**, **Fiscal Calendar**, and **Entities** dimensions, with their respective member selections. The remaining dimensions were removed from the dimension layout, because no selections are required for them.

Edit Named POV


OK
Cancel

* Name Named POV 1

Description

* Data Source Sample Model ▼

Segments	Fiscal Calendar	Entities	
Children of Electron...	No Selection	No Selection	☰

Text Box Note Format with the NotePOVDimension and NotePOVMemberLabel text functions that have Ordinal parameters "1", "2" and "3", which refer to the **Segments**, **Fiscal Calendar**, and **Entities** dimensions, respectively:

Edit Note Format Save Close

* Name Text Box Note Format

Description Detailed Note Format for text boxes

* Indent 0.2

Template

NoteName()	...
NoteAuthor() - NoteCreatedOn(short, none)	...
NotePOVDimension(":", 3) NotePOVMemberLabel(" ", 3)	...
NotePOVDimension(":", 1) NotePOVMemberLabel(" ", 1) NotePOVDimension(":", 2) NotePOVMemberLabel(" ", 2)	...
NoteContent()	...

Text function selector with **Named_POV1**, **Text Box Note Format**, and the **Performance Summary** Note template, and **Summarize Notes** = false selected:

Text Functions Select Cancel

Search

GridNotes
HeadingValue
Left
MemberAlias
MemberName
MemberProperty
Mid
Notes

* Named POV Named POV 1

* Note Format Text Box Note ...

Note Template Performance S...

Summarize Notes false

Note text function inserted in the text box:

```
Notes("Named POV 1", "Text Box Note Format", "Performance Summary", false)
```

Resulting partial report preview, with the user's **Member Label** preference set to **Alias**, so the NotePOVMemberLabel function returns the member aliases for the **Segments**, **Fiscal Calendar** and **Entity** members.

Performance Summary**System - 7/8/25****Entities: Canada****Segments: Audio Systems, Fiscal Calendar: June**

Nullam aliquet est non faucibus cursus. In sodales id purus et maximus. Aliquam risus turpis, blandit sed varius imperdiet, interdum et arcu. Sed non venenatis arcu. Vivamus iaculis in massa sed imperdiet. Duis laoreet enim leo, nec eleifend mi dictum vel.

Segments: Digital Video, Fiscal Calendar: June

Integer vestibulum turpis non sodales lobortis. Aliquam aliquet mi non augue porttitor rutrum. Vivamus id ipsum id nulla egestas scelerisque in in mi. Suspendisse tempus neque quis sapien vulputate porta.

Segments: Televisions, Fiscal Calendar: June

Vestibulum eget tortor mauris. Etiam pharetra elit mi, sit amet auctor odio dictum eu.

Entities: Mexico**Segments: Audio Systems, Fiscal Calendar: June**

Nam nec commodo mauris. Nulla sodales turpis nec massa maximus finibus. Sed rhoncus ornare arcu non dapibus. Cras et mattis augue. Proin in vehicula nunc.

Segments: Digital Video, Fiscal Calendar: June

Praesent vel semper dolor, vitae dignissim orci. In vulputate vel lacus a lacinia. Aenean aliquet vestibulum

Security - Roles and Access for Note Templates and Notes

This section outlines the control of access permissions for Note Templates and Notes based on a user or group role.

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 13-12 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 <i>Administer</i> 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 13-13 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 13-14 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](#)
Books enable grouping of Narrative Reporting Reports, Books, and other documents for a single PDF output, with customizable Table of Contents and common margins.
- [Limitations for Creating a Book](#)
You will find instructions on how to create a book and its limitations in this section.
- [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 enable grouping of Narrative Reporting Reports, Books, and other documents for a single PDF output, with customizable Table of Contents and common margins.

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.

Note

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 Fusion Cloud Enterprise Performance Management 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

You will find instructions on how to create a book and its limitations in this section.

In the current release, Books has these limitations:

- 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.
- When books are inserted into another book (referred to as the "main book"), when exporting or importing the "main book" into Excel, only reports in the "main book" will be included in the Excel output, not inserted books.

Accessing the Book Creation Window

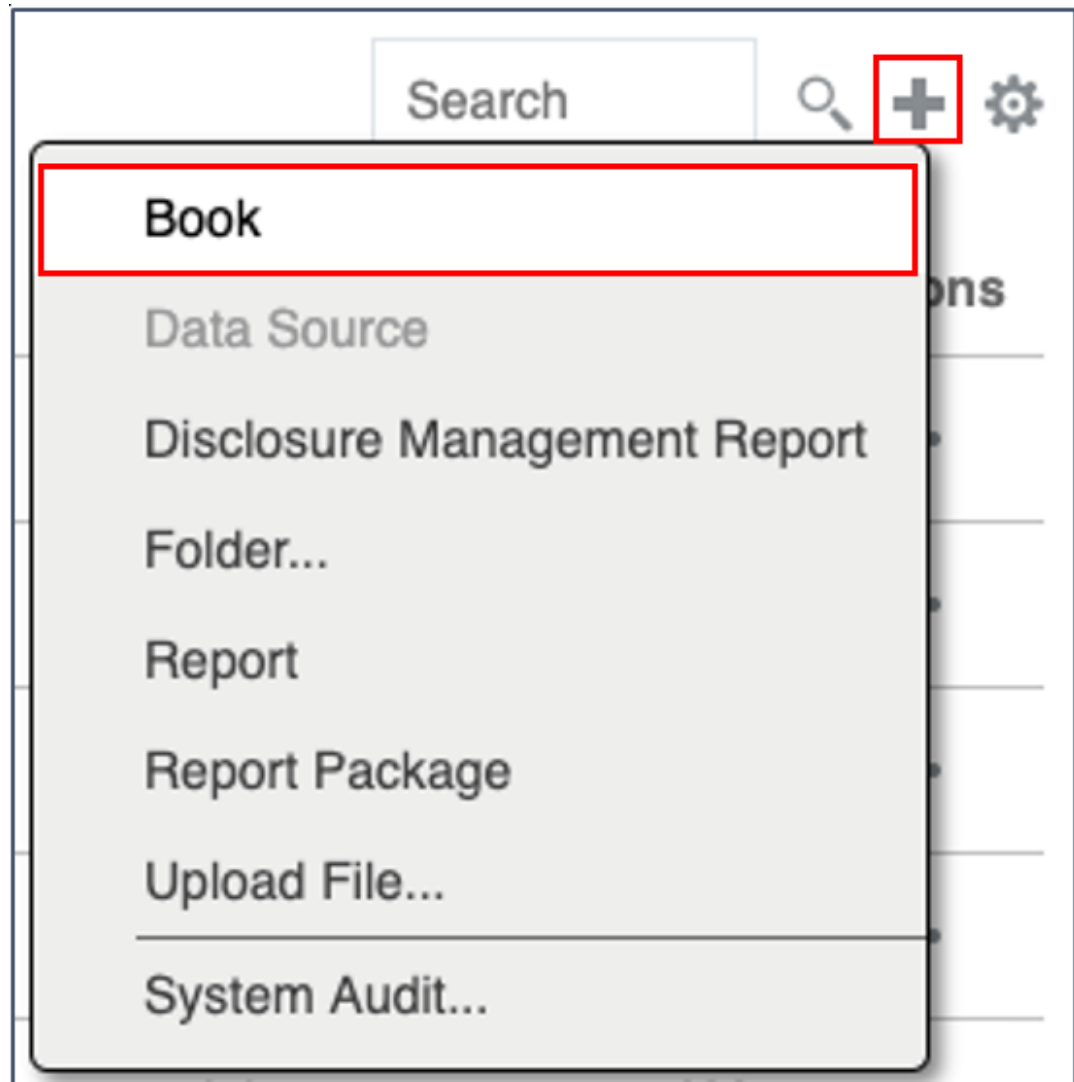
For Narrative Reporting Deployments:

You access the Book Creation window in the following ways:

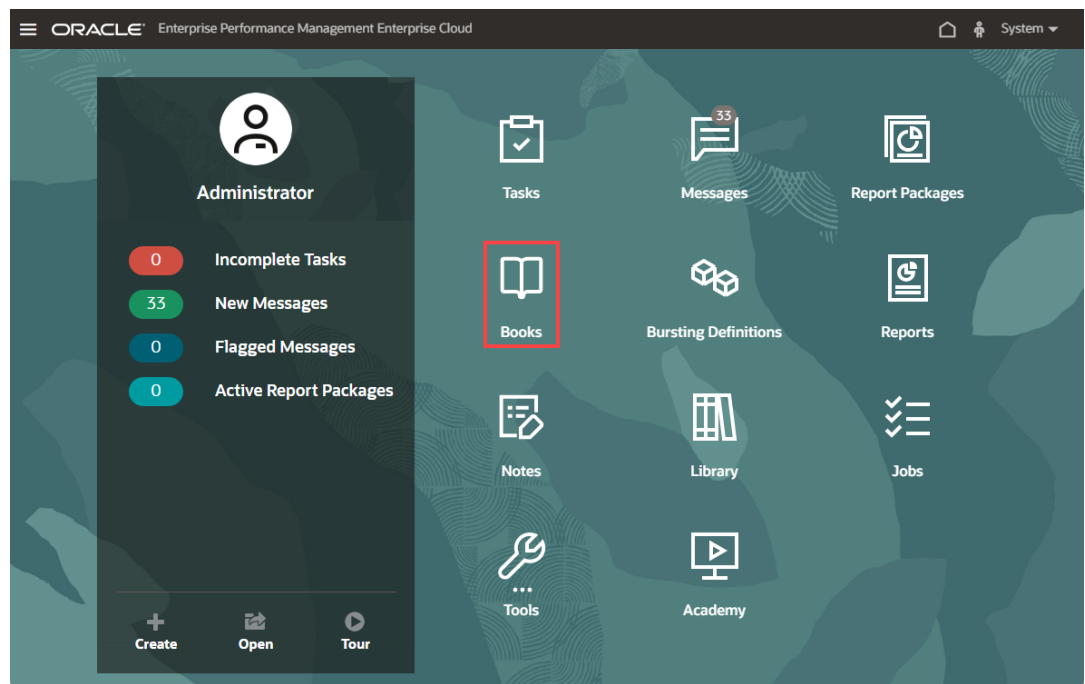
- You can create Books from the Book system folder or any non-system folder, click **Add** -



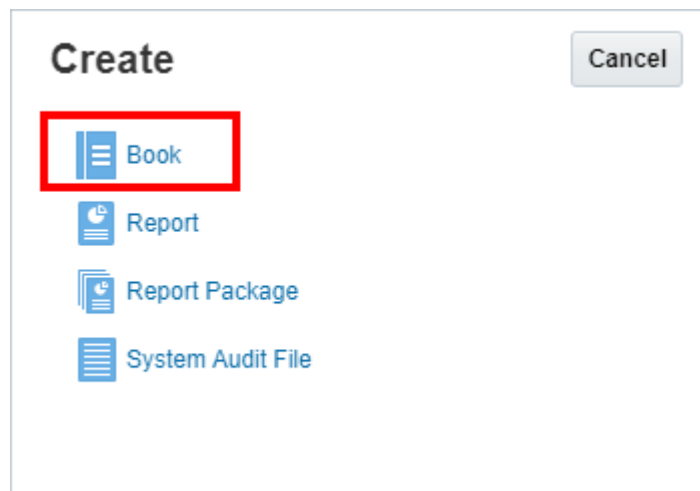
and select **Book** from the menu.



2. From the **Books** pane, click **Add** -  .



3. From the Home page, click **Create**, and select **Book**.



Note

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:

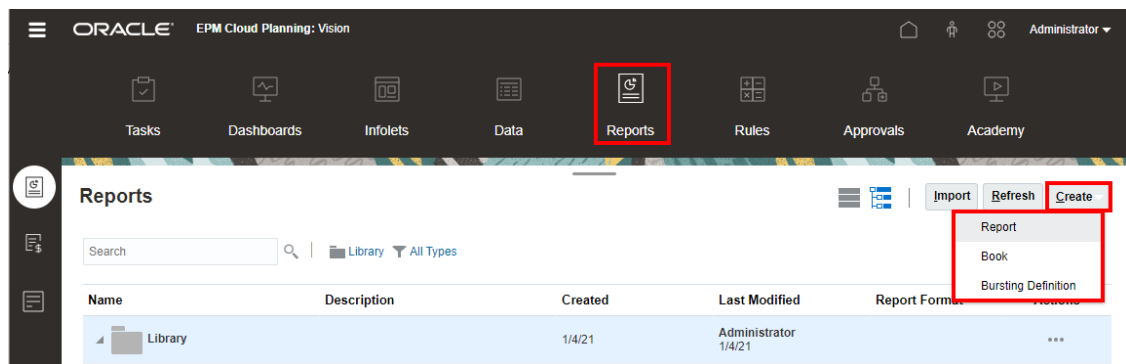
From an Oracle Fusion Cloud Enterprise Performance Management service, select



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.



-- [Overview of 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.



-- [Creating Books in Narrative Reporting](#).

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.



-- [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.

- [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.

Note

Reports, other Books, Word, and PDF documents are supported.

2. 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.

Note

You can add or remove documents within the **Selected** documents pane on the right using the **Move Right** -  and **Move Left** -  buttons.

- 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.
3. **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**.

Note

The dimensions available under **Select Dimensions** or **Dimension Layout** are based on the selection in the **Data source** drop down.

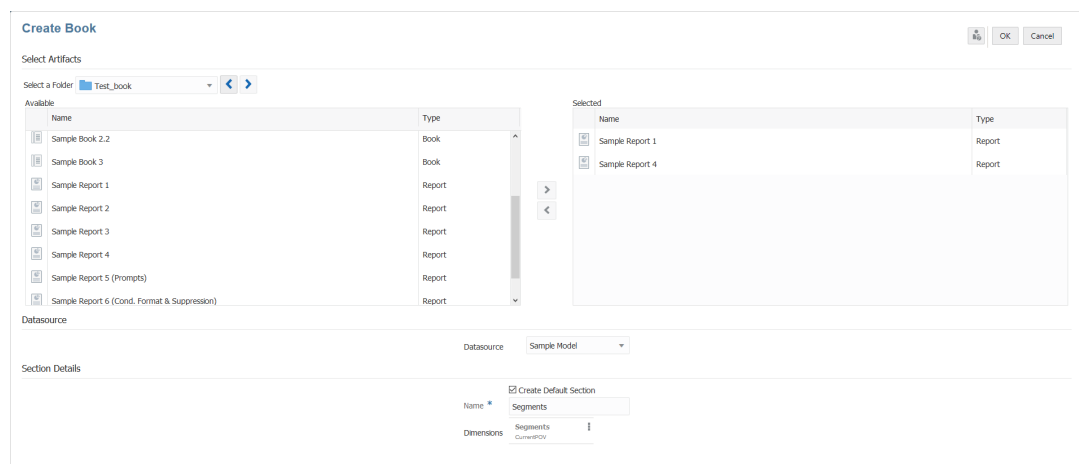
Sections can be used to group multiple documents under a common Table of Contents entry and run reports for a common Point of View.

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**.

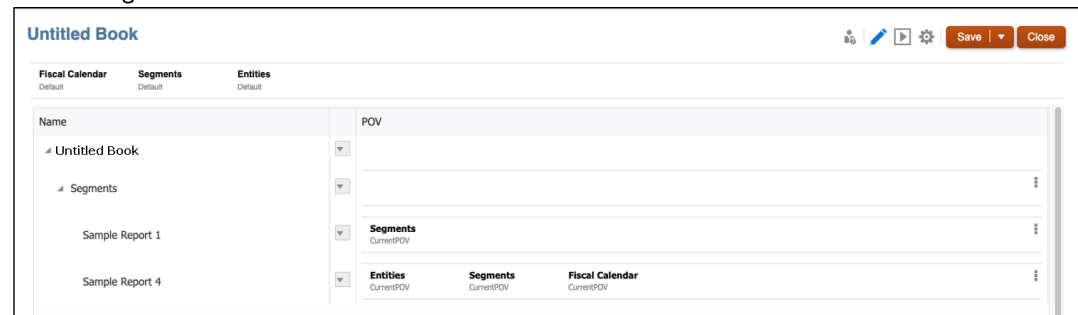
You can define the POV for the **Default Section** called **Segments** in the Book Designer.

Note

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.



-- [Creating Books in Narrative Reporting](#).

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:

1. 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**.

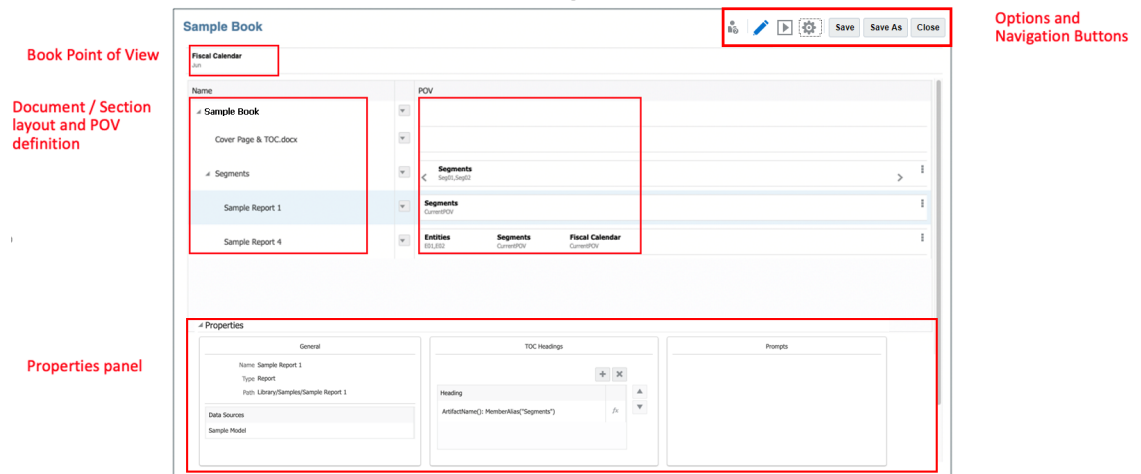
About the Book Designer

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.

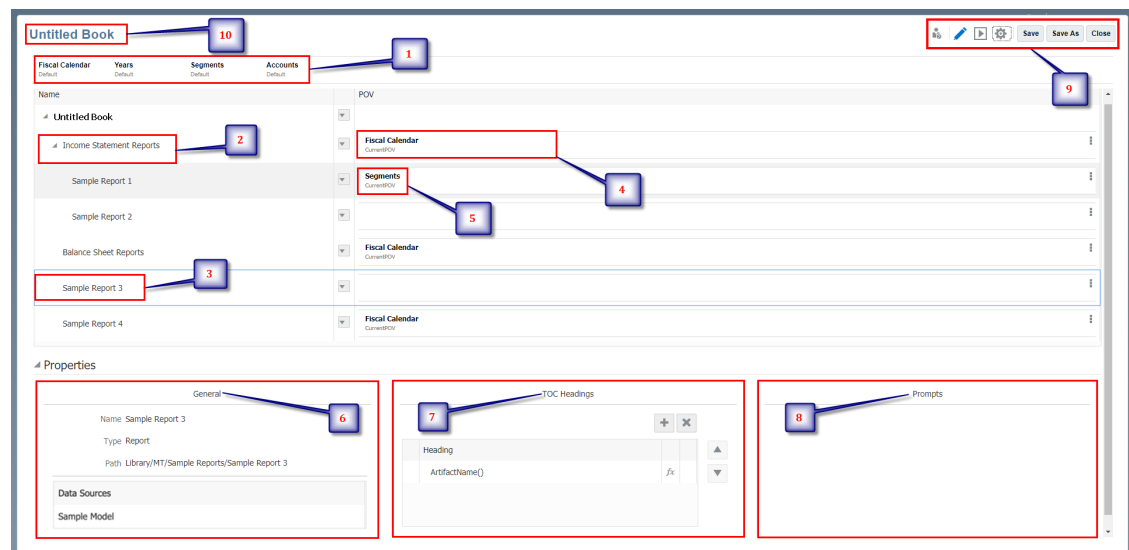


Table 14-1 Book Layout Information

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.
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:

Edit/Preview -  

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:

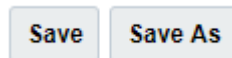
- Toggle thumbnail sidebar
- Find text within the document
- Go to the previous/next page
- Go to an entered page number
- Zoom in/out buttons
- Select a zoom level (For example: %, **Automatic**, **Page Width**, and so on.)
- Switch to Presentation Mode
- Print the document
- Download the document
-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



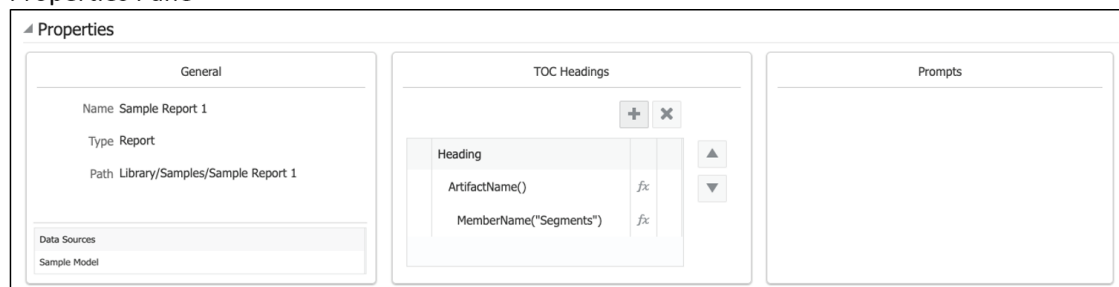
Save the Book definition to the Library.

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

The screenshot shows the 'Properties' pane with three tabs: 'General', 'TOC Headings', and 'Prompts'. The 'General' tab is active, showing fields for 'Name' (Sample Report 1), 'Type' (Report), and 'Path' (Library/Samples/Sample Report 1). Below these is a 'Data Sources' section with a table containing 'Sample Model'. The 'TOC Headings' tab is also visible, showing a table with columns 'Heading', 'ArtifactName()', and 'MemberName("Segments")', both containing the text 'fx'. The 'Prompts' tab is empty.

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**.

Headers and Footers

General

Margins

All Pages

☐ Different odd and even pages

Starting Page Number:

Start stamping at document: [Select a document](#)

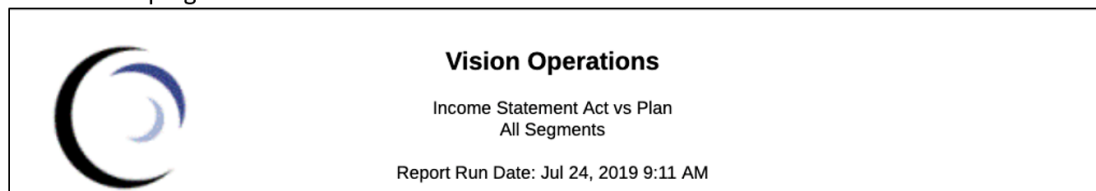
Exclude From Stamping: [Select documents](#)

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:



After Stamping:



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**.
2. 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.

Headers and Footers

OK

Cancel

General

Margins Even Pages Odd Pages

☒ Different odd and even pagesStarting Page Number: Start stamping at document: [Select a document](#)Exclude From Stamping: [Select documents](#)**Specifying Margin Sizes**

The screenshot shows the 'Headers and Footers' dialog box with the 'Margins' tab selected. It contains four input fields for margin sizes in inches, each with a default value of 0.50 and up/down arrow controls. The fields are: Top Margin (in inches), Bottom Margin (in inches), Left Margin (in inches), and Right Margin (in inches). The 'General' and 'All Pages' tabs are also visible.

Margin Type	Value (inches)
Top Margin	0.50
Bottom Margin	0.50
Left Margin	0.50
Right Margin	0.50

To specify page margin sizes:

1. Click **Margins**.
2. 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**.

Note

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.

The screenshot shows the 'Headers and Footers' dialog box with the 'All Pages' tab selected. It displays a grid for entering header and footer information. The grid has two rows: 'Header' and 'Footer'. Each row has three empty boxes for text or images, with a small edit icon (pencil) next to each box. The 'General' and 'Margins' tabs are also visible.

Section	Left	Center	Right
Header			
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.

2. Perform an action:

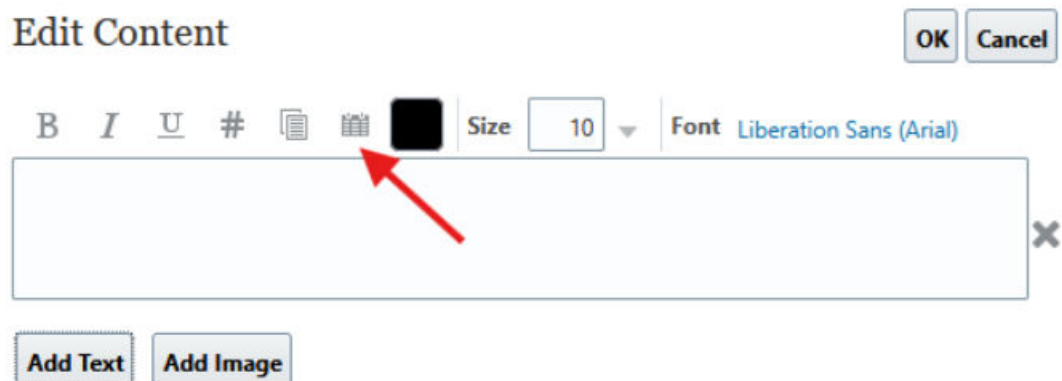
- To add text, click **Add Text** and enter the text to display in the **Edit Content** dialog box. The rich text editor enables you to bold, underline, italicize, and change the font and color of your text. You can also click the **Number** button  to insert a text function that returns the current 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]` or `&[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.
 - When you are finished entering text and images, click **OK** to save your changes.
 - To delete text or an image after you have clicked OK to save, click **Delete** -  next to the line that you want to delete.

 Note

After you save a line of text, you are unable to edit it. Click **Delete** -  and enter a new line of text.

To enter date and time in your header and footer:

- Click **Edit** -  next to the header or footer box.
- Click **Add Text**, and then click **Insert Date** from the Edit Content dialog box.



- Select the **Date Format** and **Time Format**, and then click **Select**.



A dialog box with two dropdown menus. The first dropdown is labeled '* Date Format' and has 'Short' selected. The second dropdown is labeled '* Time Format' and also has 'Short' selected. To the right of the dropdowns are two buttons: 'Select' and 'Cancel'.

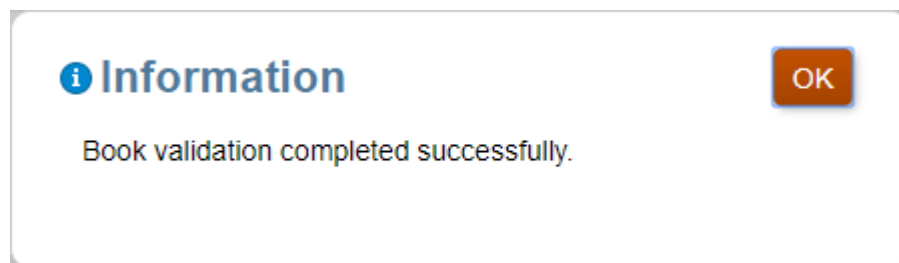
4. Click **OK**.
For example, if you select `&[DateTime(short, short)]` in the Header area, the PDF generates a timestamp 5/12/26 10:49 PM. The same timestamp will appear on all the stamped pages in the PDF.

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**.

Type	Message
▲ /Segment Reports/Sample Report 1	
✖ Content Element	Content Artifact Sample Report 1 is missing
✖ Dimension Query	Dimension Segments is not allowed

Note

You must resolve all validation errors and ensure that the book is valid before executing it.

Managing Data Sources

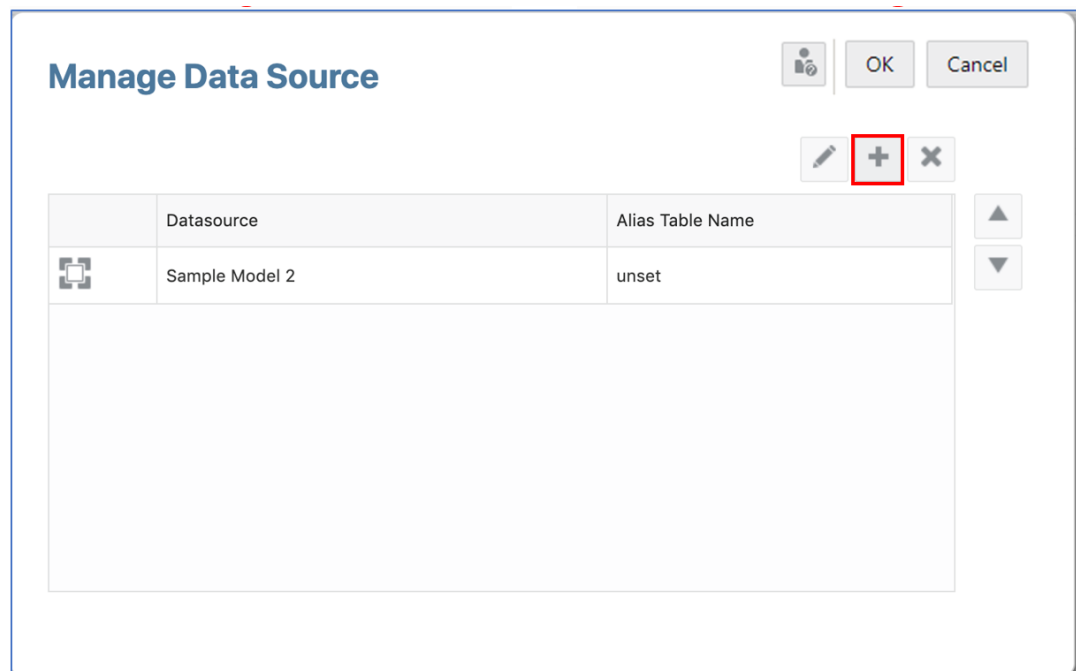
Manage Data Source enables you to add data sources to the Book, manage the Alias tables used in the Book, change a data source used in the book to another one, or set the priority of data sources used to display in the POV for common dimensions. For more information, see the following links:

- [Adding a Data Source](#)
- [Reordering the Data Source](#)
- [Changing the Data Source](#)
- [Managing Alias tables in the Book](#)

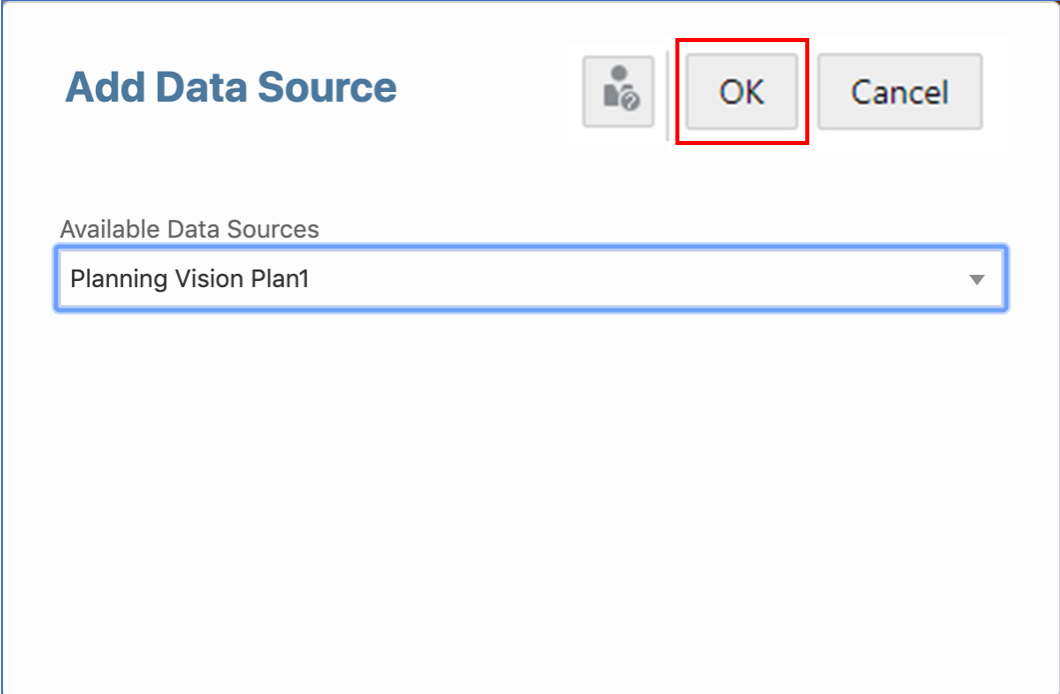
Adding a Data Source

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**.

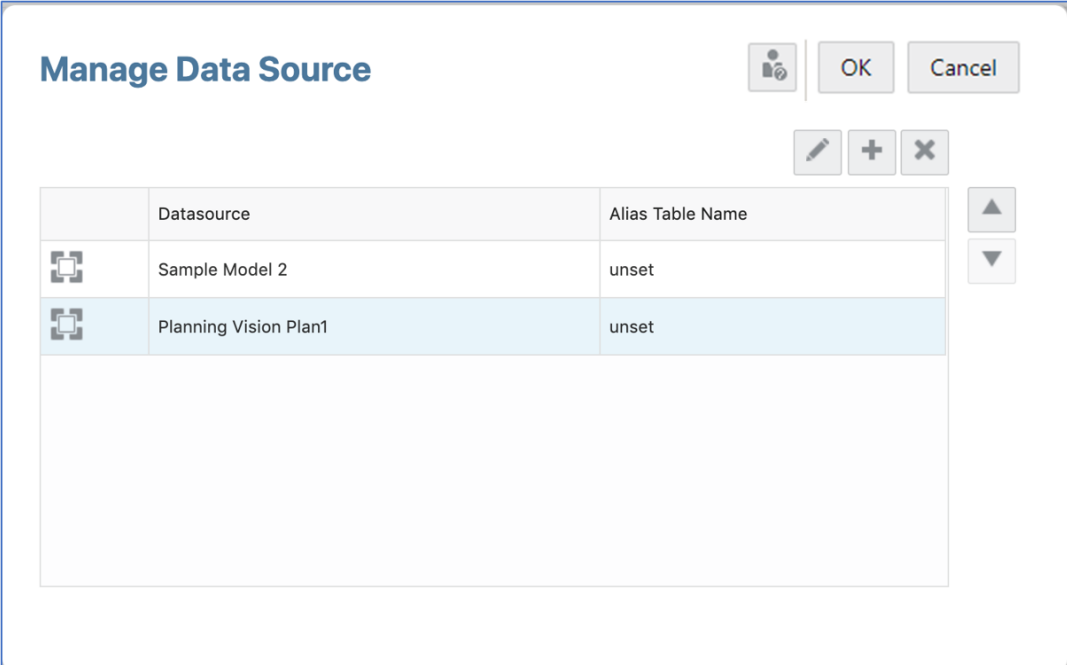


2. In **Manage Data Source**, click  to open the **Add Data Source** dialog.



The **Add Data Source** dialog box is shown. It has a title bar with a close button and a help button. The main area is titled **Add Data Source**. Below the title, there is a section labeled **Available Data Sources** containing a list box with the item **Planning Vision Plan1**. To the right of the list box are **OK** and **Cancel** buttons. The **OK** button is highlighted with a red rectangle.

3. In **Add Data Source**, select the desired data source from the list of available data sources.
4. Click **OK** to close the **Add Data Source** dialog. The added data source will appear in the **Manage Data Source** dialog. Click **OK**.



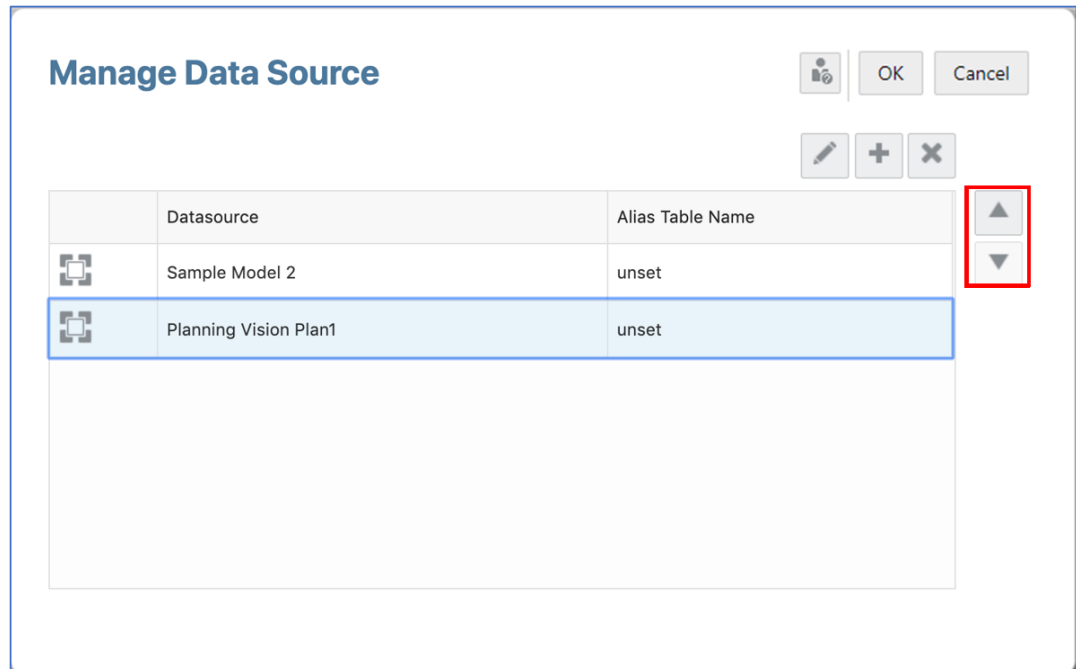
The **Manage Data Source** dialog box is shown. It has a title bar with a close button and a help button. The main area is titled **Manage Data Source**. Below the title, there is a section with a table. Above the table are buttons for edit, add, and delete. The table has two columns: **Datasource** and **Alias Table Name**. The table contains two rows: **Sample Model 2** and **Planning Vision Plan1**. The **Planning Vision Plan1** row is highlighted. To the right of the table are up and down arrow buttons.

	Datasource	Alias Table Name
	Sample Model 2	unset
	Planning Vision Plan1	unset

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.



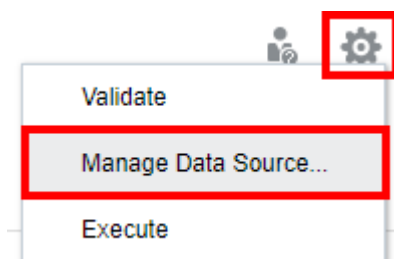
3. Click  or  to reorder the data source. Click **OK**.

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. In the Book Designer, click **Action** -  and then select **Manage Data Source**.





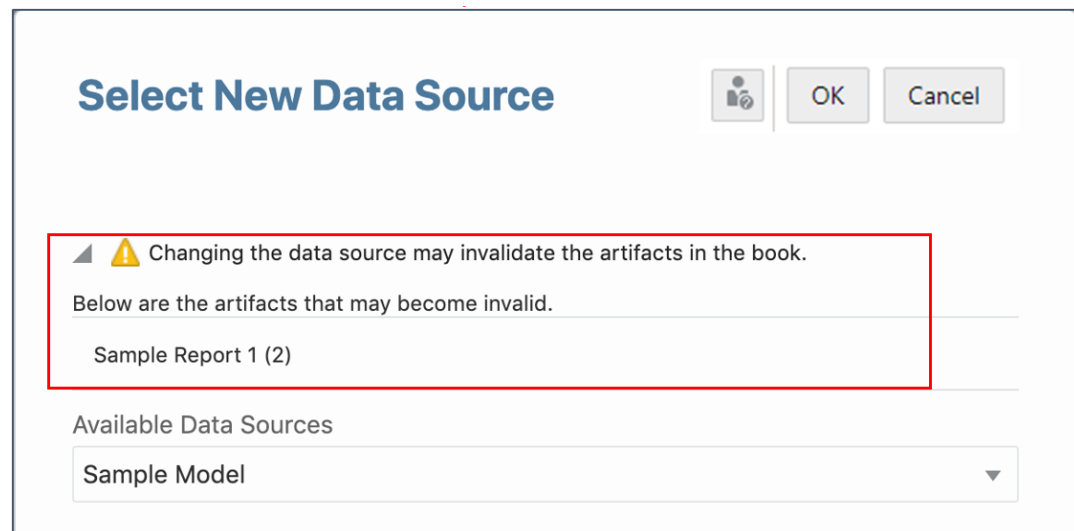
2. Select the data source to change, and click .
3. In **Select New Data Source**, select the desired data source from the list, and click **OK**.



Note

Changing the Data Source will impact the data source for the Book only. The underlying Reports and Books that are inserted into the Book are not affected.

Click  to see the list of artifacts that are affected by the data source change.



Select New Data Source

⚠ Changing the data source may invalidate the artifacts in the book.

Below are the artifacts that may become invalid.

Sample Report 1 (2)

Available Data Sources

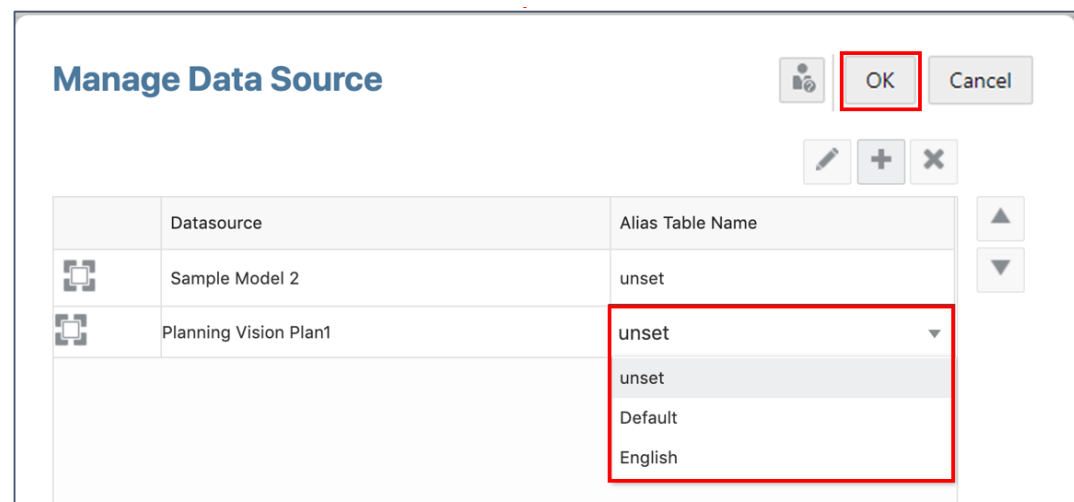
Sample Model

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.



Manage Data Source

OK Cancel

✎ + ✕

	Datasource	Alias Table Name
	Sample Model 2	unset
	Planning Vision Plan1	unset unset Default English

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:

1. 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.
5. Continue selecting members and setting POV options for the remaining POV dimensions as needed.

Managing Documents in a Book

Table 14-2 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

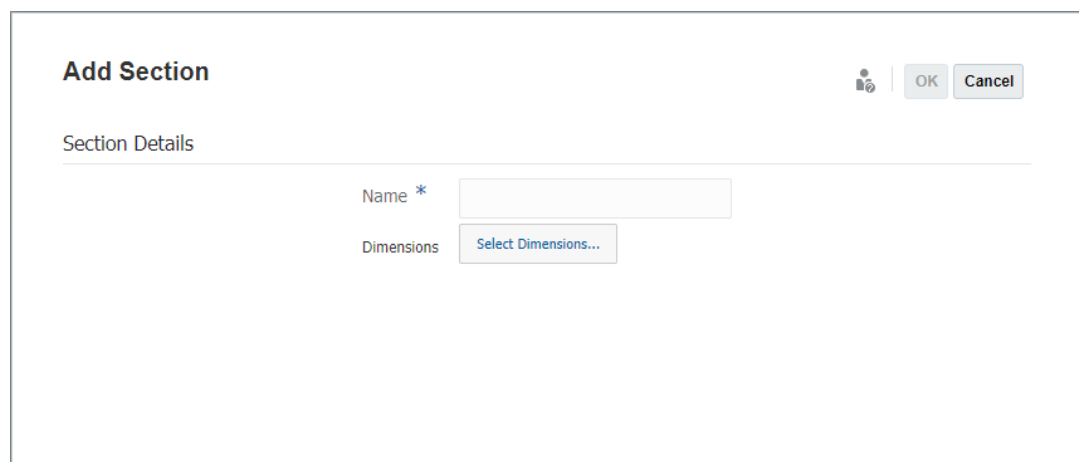
Table 14-2 (Cont.) Managing Documents and Sections within a Book

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:

- 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**.



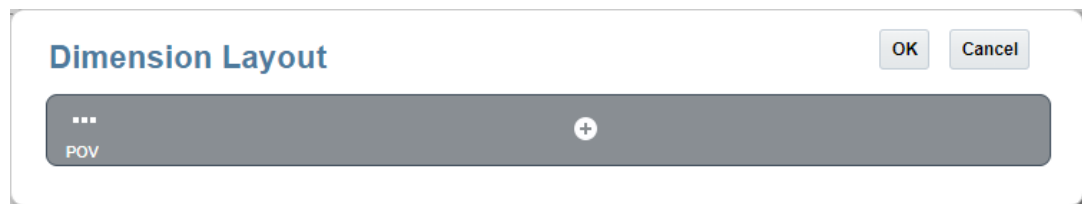
Add Section   

Section Details

Name *

Dimensions

- In **Add Section** dialog box, provide a **Name** of the section.



3. **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 drop-down list, and then click **OK**.

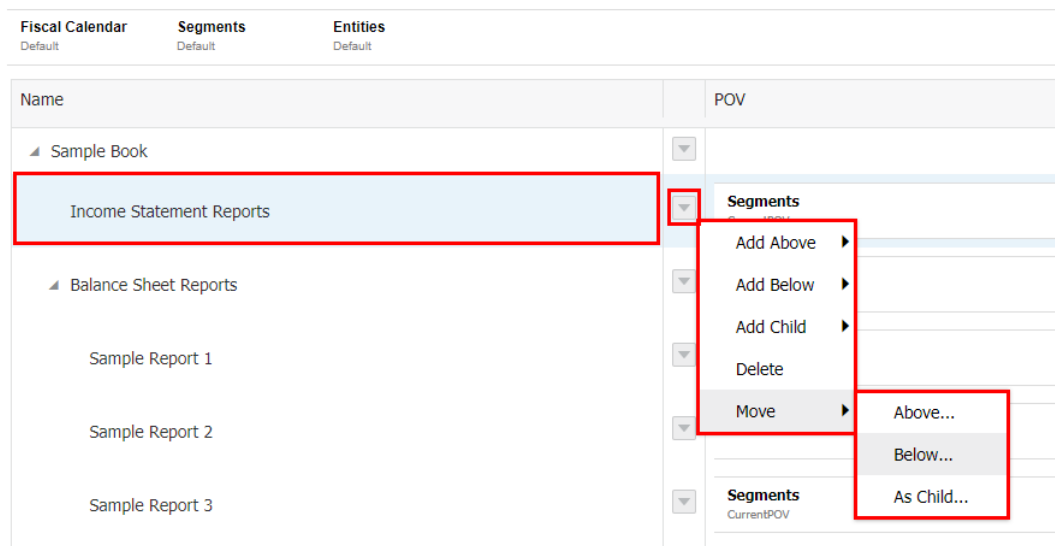
If a Section contains reports with multiple data sources, you need to add the data source in the Section's Actions menu and select Manage Data Source. The available dimensions in Dimension Layout are based on the first data source appearing in the Manage Data Source dialog.
4. Click **OK** to add the section to the Book.

Moving a Section within a Book

To move a section within a Book:

1. In the **Book Designer**, select a **Section**, 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**.

Select Destination Node

OK

Cancel

Name

Sample Book

Income Statement Reports

Balance Sheet Reports

Sample Report 1

Sample Report 2

Sample Report 3

Sample Report 4

Sample Report 5 (Prompts)

Sample Report 6 (Cond. Format & Suppression)

3. The Section is moved to its selected destination.

Sample Book

Fiscal Calendar

Default

Segments

Default

Entities

Default

Name

POV

Sample Book

Balance Sheet Reports

Sample Report 1

Sample Report 2

Sample Report 3

Income Statement Reports

Sample Report 4

Sample Report 5 (Prompts)

Sample Report 6 (Cond. Format & Suppression)

Segments

CurrentPOV

Segments

CurrentPOV

Segments

CurrentPOV

Segments

CurrentPOV

Entities

CurrentPOV

Segments

CurrentPOV

Fiscal Calendar

CurrentPOV

Note

You can only move a Section as a child of another Section, you cannot add a Section as a child of another Document.

Designing with Reports
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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**.

Note

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.

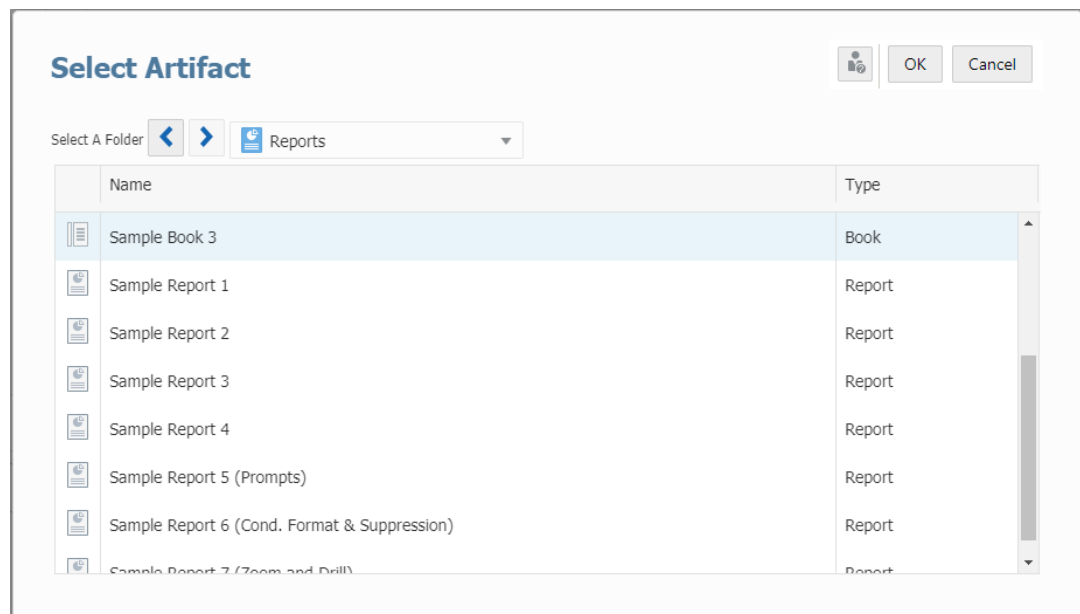
Note

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 Oracle Fusion Cloud Enterprise Performance Management 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.

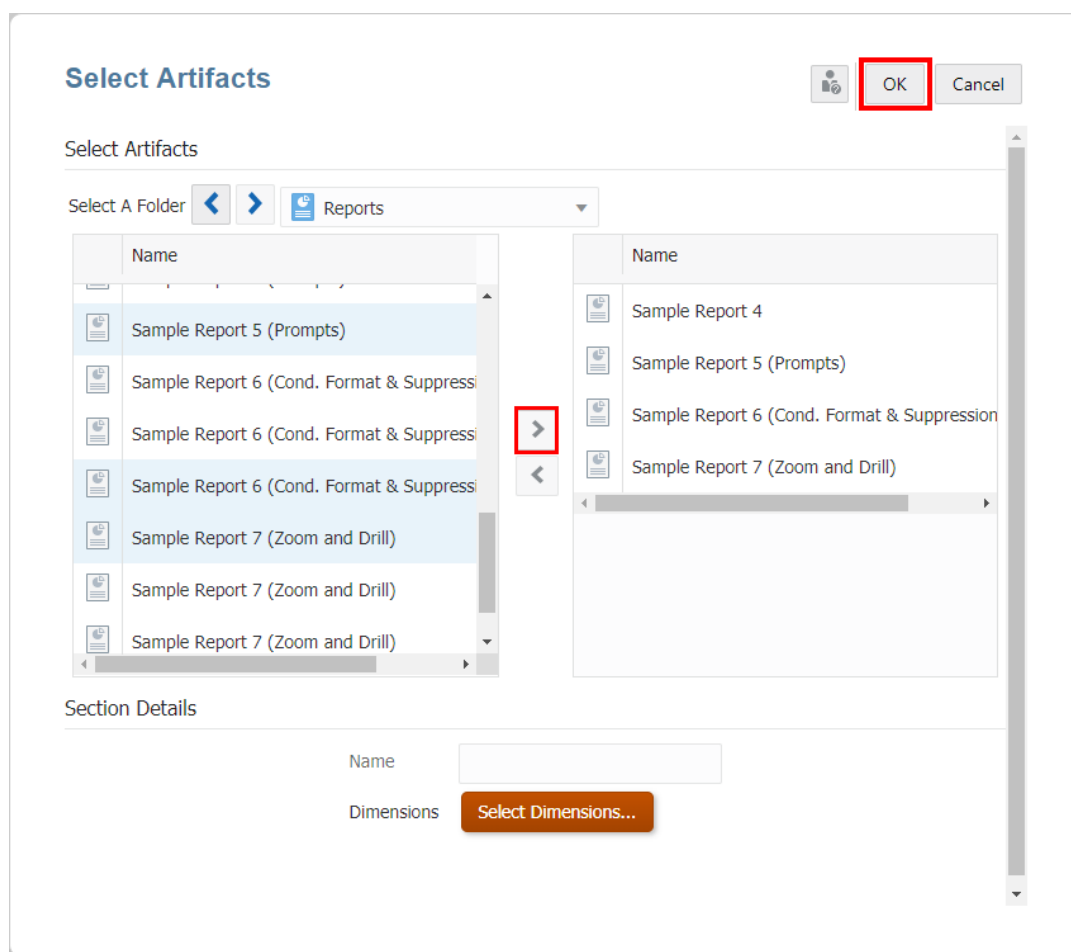
Note

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 Oracle Fusion Cloud Enterprise Performance Management 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.

Note

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.

3. **Optional:** Under **Section Details**, select **Create Default Section**, and then enter a **Name** of the section to group all the selected documents.
4. **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.

Note

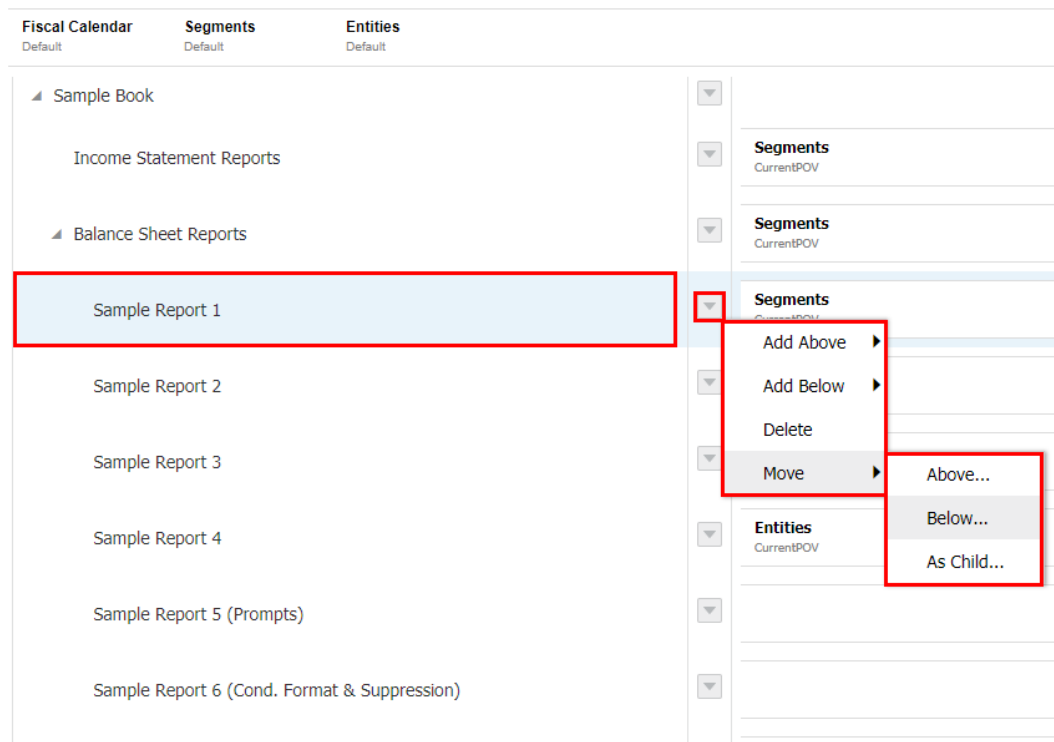
When inserting third party documents such as Word, PDF or a Word-based Table of Contents, the documents need to be uploaded to the repository. In Narrative Reporting deployments, upload the document from the Narrative Reporting Library. In Oracle Fusion Cloud Enterprise Performance Management deployments, upload the document from the **Documents** tab in the **Reports** card (Library card in Tax Reporting).

Moving a Document within a Book

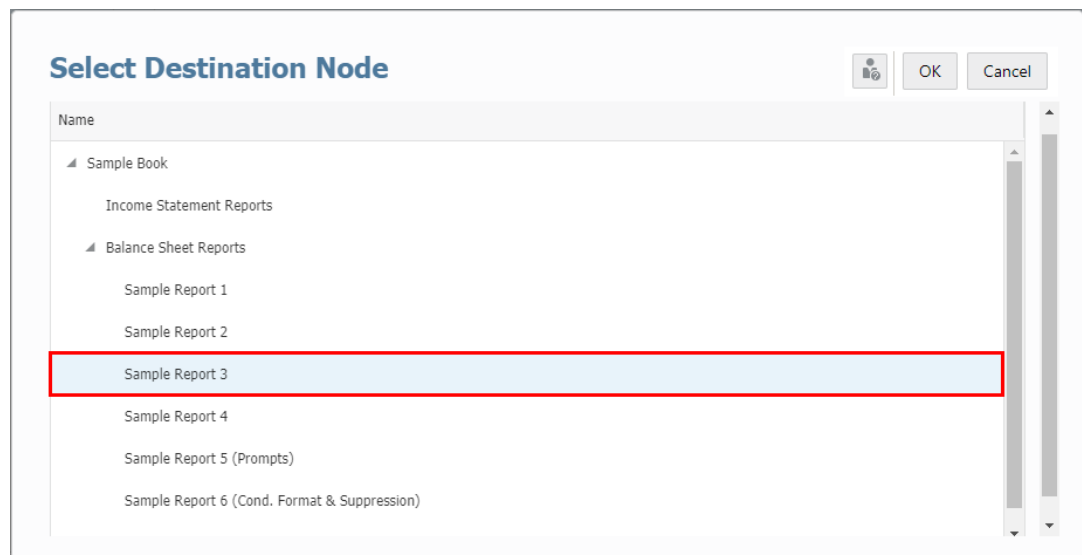
To move a document within a Book:

1. In the **Book Designer**, select a **Document**, and click  and select **Move**, and then select either **Above**, **Below** or **As Child**.

Sample Book

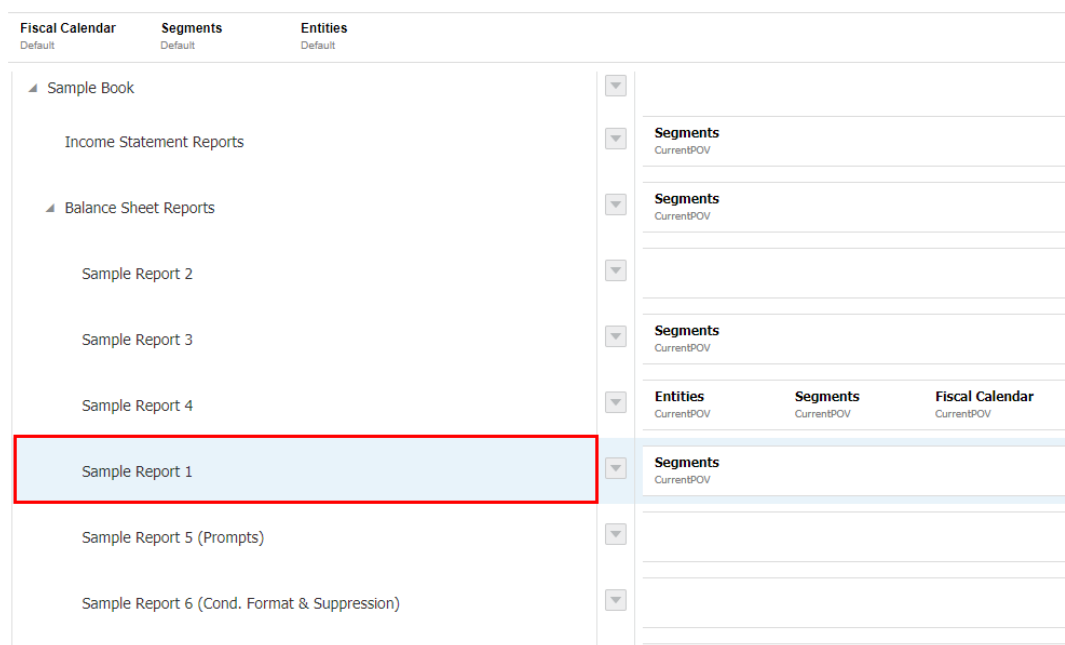


2. In the **Select Destination Node** dialog box, select a destination Document or Section, and then click **OK**.



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

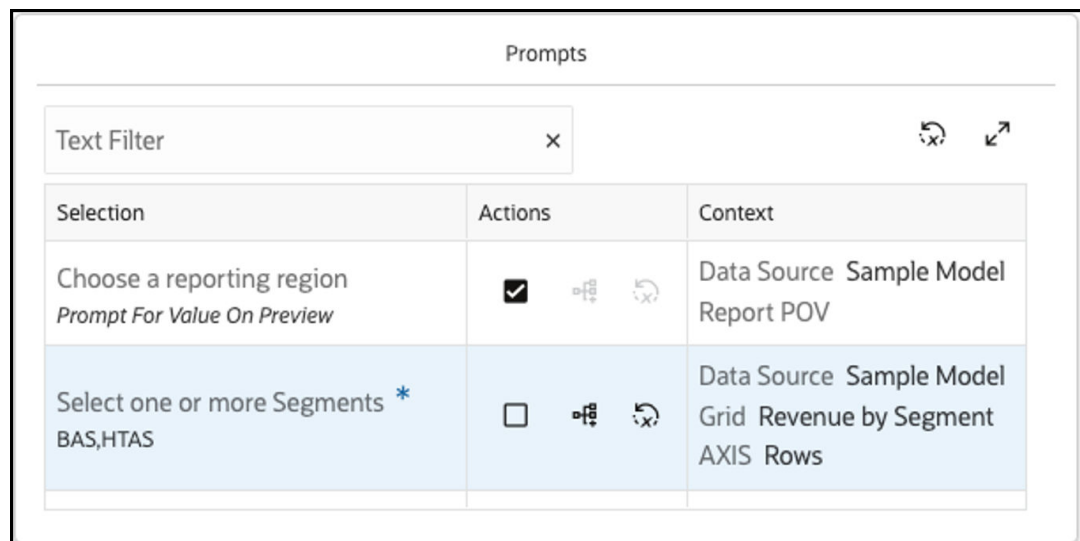
If reports in the book contain prompts, you can specify prompt member selections at the designer level (**Prompt For Value On Preview** Disabled) or allow the users to respond to the prompts when running the book (**Prompt For Value On Preview** Enabled).

When previewing a book, when responding to prompts, you can either use:

- **Full Mode:** displays all prompts in all reports and inserted books separately.
- **Compact Mode:** consolidates duplicate prompts (same dimension, prompt label, choice list, default selection, and "Allow Multiple Selections" setting for the same data source) across reports.

To define the Prompt selections:

1. 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.



In Prompts, you can:

- Filter the prompt list by entering filter criteria text into the **Text Filter** box.
 - Click **Reset All Prompt Selections** to reset any prompt selection changes to the original report prompt selection. This only applies if one or more prompts in the report have **Prompt For Value On Preview** disabled.
 - Click **Expand** to expand the Prompts window to full size.
3. You can configure each prompt:

- The **Selection** column displays the prompt label and selection.
- The **Actions** column allows disabling or enabling **Prompt For Value On Preview**; when enabled, it displays the prompt for the end user running the book. When disabled, the book designer specifies the selection for the prompt by clicking **Select**

Members  to open the member selector.

- You can also click **Reset All Prompt Selections**  to reset any prompt selection changes to the original report prompt selection.
- The **Context** column displays the data source and where the prompt is applied (for example, grid rows, POV, and so on).

In the following example, the first prompt (Choose a reporting region) has **Prompt For Value On Preview** enabled in the **Actions** column, and this is also reflected in the **Selection** column. The second prompt (Select one or more **Segments**) has **Prompt For Value On Preview** disabled in the **Actions** column. In the **Selection** column, the member selections "BAS" and "HTAS" from the report's prompt are displayed, and you can click

Select Members  to open the member selector and make different selections.

With only these two prompts in the report and only this report in the book, when running the book, you only need to select members for the first prompt (Choose a reporting region), as the second prompt has its selection hard-coded by the book designer.

Selection	Actions	Context
Choose a reporting region <i>Prompt For Value On Preview</i>	☒  	Data Source Sample Model Report POV
Select one or more Segments * BAS,HTAS	☐  	Data Source Sample Model Grid Revenue by Segment AXIS Rows

4. After configuring each prompt for a report, you can select another report in the book, if needed, and repeat the above steps from 1 to 3 and configure the prompts.

For more information, see [Assigning Members Using Prompts](#).

To respond to prompts when previewing a book:

1. You can preview a book by either clicking on the book in the Library, or when editing a book click on **Preview** .
2. The **Prompts** dialog will appear if there are prompts in the report(s) in the book that have been configured with **Prompt For Value On Preview** enabled. The Prompts dialog has two modes: **Compact** and **Full**.
3. Select **Compact** to view duplicate prompts (same dimension, prompt label, choice list, default selection and "Allow Multiple Selections" setting, for the same data source) across reports consolidated.

OR

Select **Full** to view all prompts in all reports and inserted books separately.

Note

- Selections are only applicable to the mode (**Compact** vs **Full**) where the selections were made.
- Prompts will be exposed for an inserted book at the "node" level and always show a **Compact** list of all the prompts in the inserted book.

Prompts OK Cancel

Compact shows a consolidation of prompts while Full shows all the prompts that exist in the book. Please choose Compact or Full view and proceed to make member selections. Member selections are only applicable to the prompts in the view where the selections were made.

Compact **Full**

Text Filter x 

Selection		Context
Select a month * Jun	 	Artifact Name Multiple Data Source Sample Model
Select one or more Segments * BAS,HTAS	 	Artifact Name Multiple Data Source Sample Model Grid Multiple
Select an Entity * E01	 	Artifact Name Sample Report 14b (Prompt report2) Data Source Sample Model Grid Grid 1
Choose a reporting region * E01,E02	 	Artifact Name Sample Report 5 (Prompts) Data Source Sample Model
Select a Quarter * Q1	 	Artifact Name Sample Report 5 (Prompts) Data Source Sample Model

- For each prompt, click **Select Members**  to open the member selector and make the desired selection. You can also click **Reset All Prompt Selections**  to reset any prompt selection changes to the original report prompt selection.
- Once all prompts have been selected, click **OK** to proceed with the book preview.

Book Prompt Examples

The following is an example of using reports with prompts within a book, from a book designer and preview standpoint.

The book contains three reports with prompts. For simplicity purposes, there aren't any POV selections exposed for any of the reports.

Name		POV
▲ Prompt Book	▼	
Cover Page & TOC.docx	▼	
Sample Report 14a (Prompt report1)	▼	
Sample Report 14b (Prompt report2)	▼	
Sample Report 5 (Prompts)	▼	

The three reports' prompts are defined as follows:

Sample Report 14a (Prompt report1)

Selection	Actions	Context
Select a month <i>Prompt For Value On Preview</i>	☒  	Data Source Sample Model Report POV
Select one or more Segments <i>Prompt For Value On Preview</i>	☒  	Data Source Sample Model Grid Grid 1 AXIS Rows

Sample Report 14b (Prompt report2)

Selection	Actions	Context
Select an Entity <i>Prompt For Value On Preview</i>	☒  	Data Source Sample Model Grid Grid 1 AXIS Rows
Select a month <i>Prompt For Value On Preview</i>	☒  	Data Source Sample Model Grid Grid 1 AXIS Columns

Sample Report 5 (Prompts)

Selection	Actions	Context
Choose a reporting region * E01,E02	☐  	Data Source Sample Model Report POV
Select one or more Segments <i>Prompt For Value On Preview</i>	☒  	Data Source Sample Model Grid Revenue by Segment AXIS Rows
Select a Quarter <i>Prompt For Value On Preview</i>	☒  	Data Source Sample Model Grid Revenue by Segment AXIS Columns

Note the following about the prompts across all three reports:

- The "Select a month" prompt is the same in **Sample Report 14a** and **Sample Report 14b**.
- The "Select one or more Segments" prompt is the same in **Sample Report 14a** and **Sample Report 5 (Prompts)**.
- In **Sample Report 5 (Prompts)**, the "Choose a reporting region" prompt has **Prompt For Value On Preview** disabled, which means that the prompt's default selection (**E01** and **E02**) will be used when running the book. The user previewing the book will not respond to the prompt.
- All of the other prompts have **Prompt For Value On Preview** disabled, which means that the user previewing the report will need to respond to the prompt.
- The following prompts are specific to a single report and do not appear across multiple reports: **Sample Report 14b** "Select an Entity" and **Sample Report 5 (Prompts)** "Select a Quarter".

When previewing the book and responding to prompts, note that in **Compact** mode, four prompts are listed.

The first two are common across multiple reports, and the last two are specific to single reports.

Compact		Full
Text Filter		
Selection	Actions	Context
Select a month * Jun		Data Source Sample Model Artifact Name Multiple
Select one or more Segments * BAS,HTAS		Data Source Sample Model Artifact Name Multiple Grid Multiple
Select an Entity * E01		Data Source Sample Model Artifact Name Sample Report 14b (Prompt report2) Grid Grid 1
Select a Quarter * Q1		Data Source Sample Model Artifact Name Sample Report 5 (Prompts) Grid Revenue by Segment

In **Full** mode, all the prompts are listed individually:

Compact	Full	
Text Filter		
Selection	Actions	Context
Select a month * Jun		Data Source Sample Model Artifact Name Sample Report 14a (Prompt report1)
Select one or more Segments * BAS,HTAS		Data Source Sample Model Artifact Name Sample Report 14a (Prompt report1) Grid Grid 1
Select an Entity * E01		Data Source Sample Model Artifact Name Sample Report 14b (Prompt report2) Grid Grid 1
Select a month * Jun		Data Source Sample Model Artifact Name Sample Report 14b (Prompt report2) Grid Grid 1
Select one or more Segments * BAS,HTAS		Data Source Sample Model Artifact Name Sample Report 5 (Prompts) Grid Revenue by Segment
Select a Quarter * Q1		Data Source Sample Model Artifact Name Sample Report 5 (Prompts) Grid Revenue by Segment

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

▲ Segments Sample Report 1 Sample Report 4	▼ Segments Seg01, Seg02 ▼ Segments CurrentPOV ▼ Entities E01, E02 Segments CurrentPOV Fiscal Calendar CurrentPOV
--	---

Output of Table of Contents

Segments.....
Sample Report 1: Seg01
Sample Report 4
E01, Seg01
E02, Seg01
Sample Report 1: Seg02
Sample Report 4
E01, Seg02
E02, Seg02

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**.

Note

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

Segments	▼				
Sample Report 1	▼	Segments AS,DV			
Sample Report 4	▼	<table> <tr> <td>Entities E01,E02</td><td>Segments Seg01,Seg02</td><td>Fiscal Calendar CurrentPOV</td></tr> </table>	Entities E01,E02	Segments Seg01,Seg02	Fiscal Calendar CurrentPOV
Entities E01,E02	Segments Seg01,Seg02	Fiscal Calendar CurrentPOV			

Output of Table of Contents

Segments.....
Sample Report 1: AS
Sample Report 1: DV
Sample Report 4
E01, Seg01
E01, Seg02
E02, Seg01
E02, Seg02

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.

Note

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.

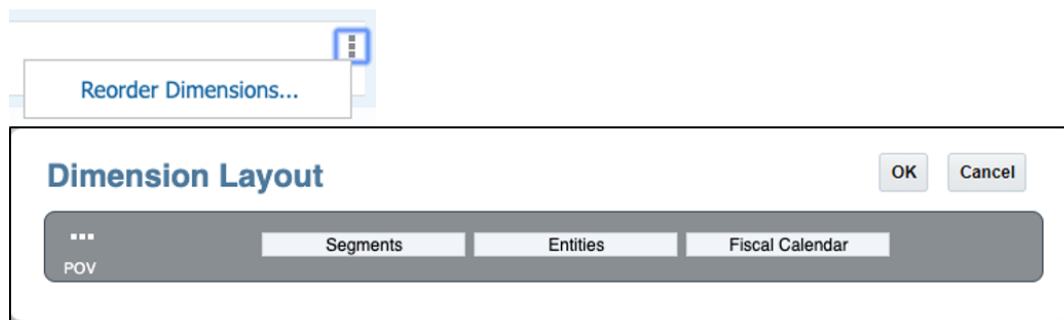
Use the following conventions to select members.

- Click **Expand** - ➤ to drill into a parent member.
- Click **Select** - ✓ to select and deselect a member.

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** -  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.
 4. 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

Name		POV						
ROOT								
Cover Page & TOC.docx								
Sample Report 4		<table><tr><th>Entities</th><th>Segments</th><th>Fiscal Calendar</th></tr><tr><td>E01,E02</td><td>Seg01,Seg02</td><td>CurrentPOV</td></tr></table>	Entities	Segments	Fiscal Calendar	E01,E02	Seg01,Seg02	CurrentPOV
Entities	Segments	Fiscal Calendar						
E01,E02	Seg01,Seg02	CurrentPOV						

Output of Table of Contents

Sample Report 4	3
E01, Seg01.....	3
E01, Seg02.....	4
E02, Seg01.....	5
E02, Seg02.....	6

Example 2: **Segments** POV dimension appears before the **Entities** POV dimension, where the results in the output are grouped by **Segments**.

Book Designer View

Name		POV						
ROOT								
Cover Page & TOC.docx								
Sample Report 4		<table><tr><th>Segments</th><th>Entities</th><th>Fiscal Calendar</th></tr><tr><td>Seg01,Seg02</td><td>E01,E02</td><td>CurrentPOV</td></tr></table>	Segments	Entities	Fiscal Calendar	Seg01,Seg02	E01,E02	CurrentPOV
Segments	Entities	Fiscal Calendar						
Seg01,Seg02	E01,E02	CurrentPOV						

Output of Table of Contents:

Sample Report 4	3
E01, Seg01.....	3
E02, Seg01.....	4
E01, Seg02.....	5
E02, Seg02.....	6

 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

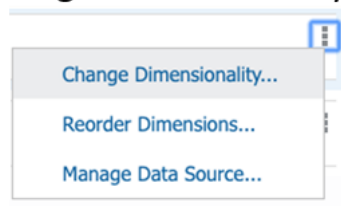
Sections can be used to group multiple documents under a common TOC entry and optionally run reports for a common POV.

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.

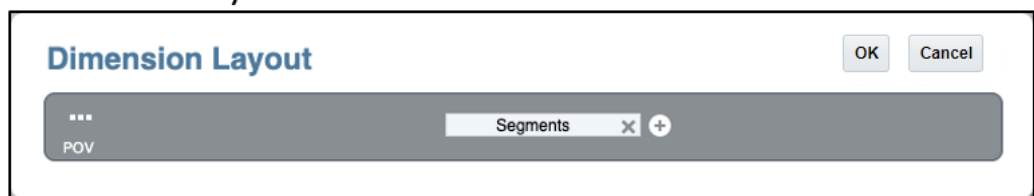
To set up the POV for a Section:

1. 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



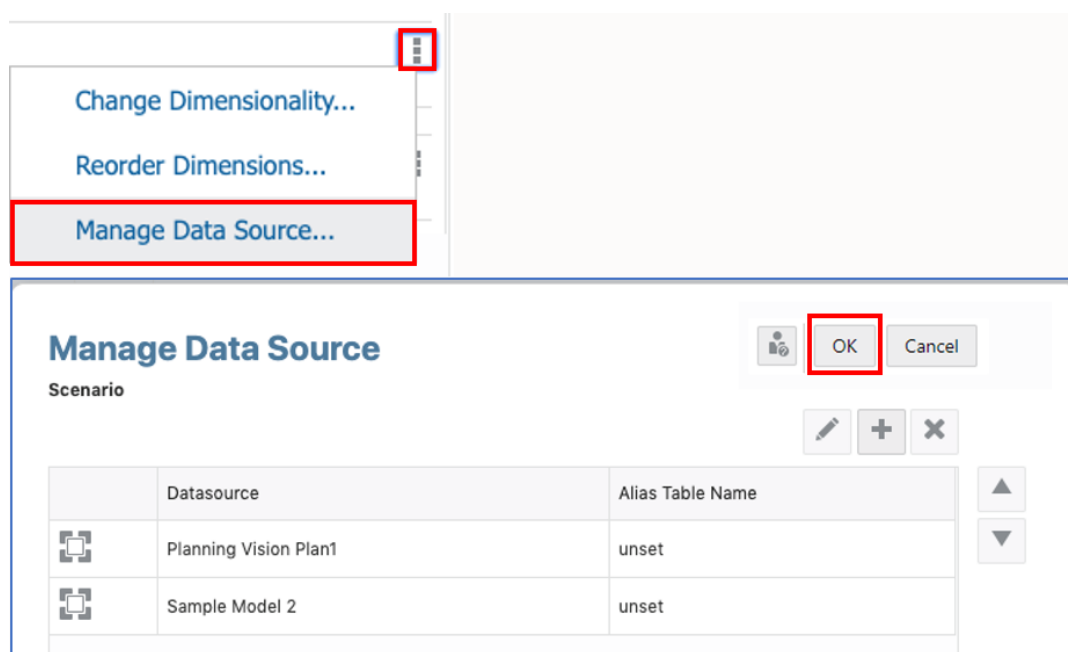
Dimension Layout View



3. To reorder POV dimensions for the **Section**, click the POV, and select **Action** - , and 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**.

Note

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.

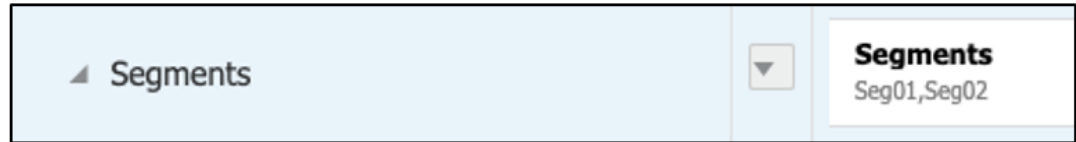
- Click **Expand** - to drill into a parent member.
- Click **Select** - to select and deselect a member.

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** - 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.
 9. 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.
- You can upload the Word document containing the TOC to the **Library**:
 - In Narrative Reporting, uploading the Word document containing the TOC can be performed via **Library**.
 - In Cloud EPM Platform, uploading the Word document containing the TOC can be performed, using the **Documents** card or **Tab** (Tab for Financial Consolidation and Close, and Tax Reporting).
- 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.

You can upload the Word document containing the TOC to the **Library**:

- In Narrative Reporting, uploading the Word document containing the TOC can be performed via **Library**.
- In Cloud EPM Platform, uploading the Word document containing the TOC can be performed, using the **Documents** card or **Tab** (Tab for Financial Consolidation and Close, and Tax Reporting).

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](#).

HomeInsertDrawDesignLayoutReferences

Add Text

ab¹

ab¹ Next Footnote

Automatic Table of Contents

Classic

Table of Contents

Heading 1..... 1

Heading 2..... 1

Heading 3..... 1

Contemporary

Table of Contents

HEADING 1..... 1

HEADING 2..... 1

HEADING 3..... 1

Formal

Table of Contents

HEADING 1..... 1

HEADING 2..... 1

Heading 3..... 1

Modern

Table of Contents

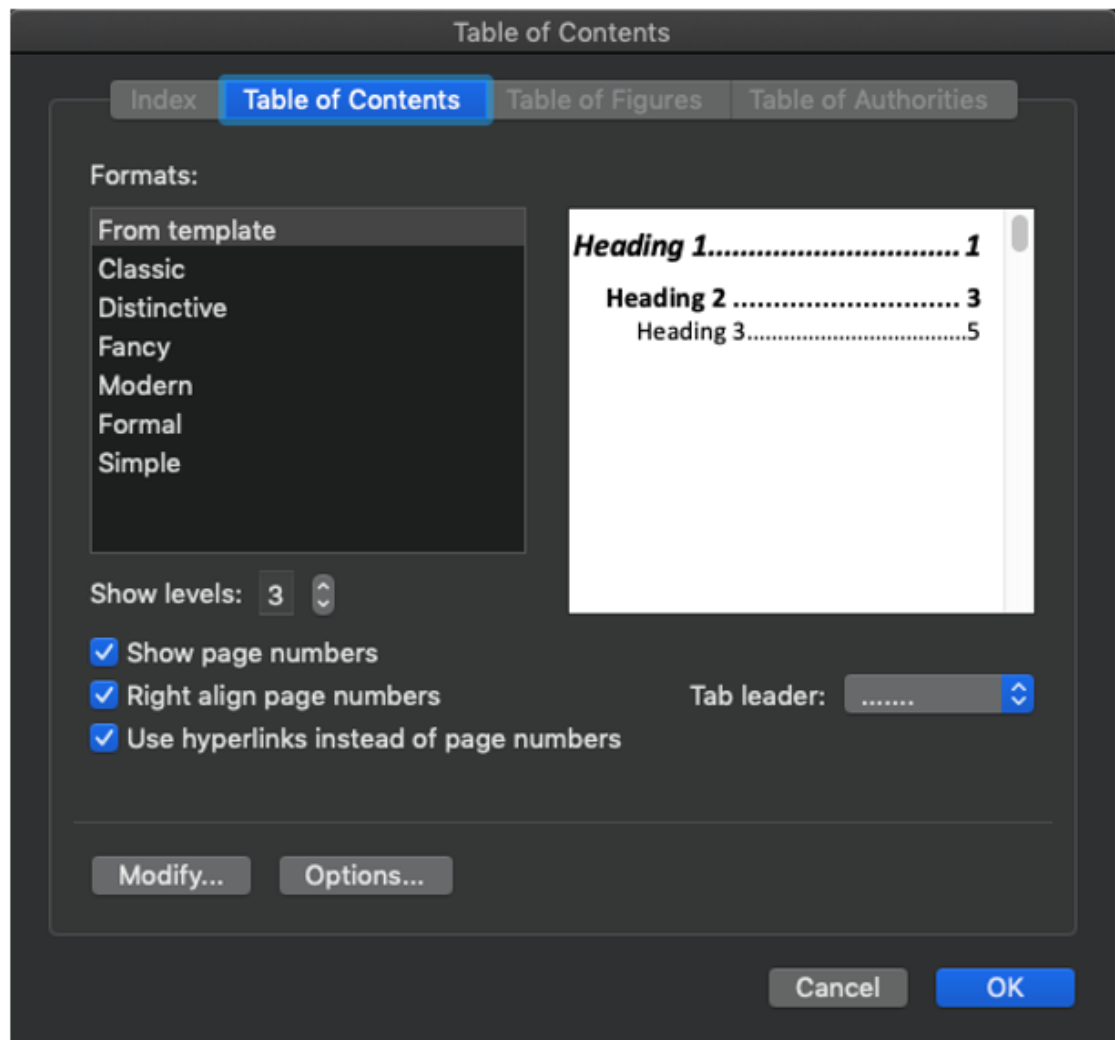
Heading 1..... 1

Heading 2..... 1

Heading 3..... 1

Custom Table of Contents...

Remove Table of Contents



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 indentation.

Table of Contents

Heading 1.....1

Heading 2.....1

Heading 3.....1

Table of Contents

Segments.....1

Sample Report 1: Electronics.....1

Sample Report 42

North America, Electronics.....2

Latin America, Electronics.....3

Sample Report 1: Services4

Sample Report 45

North America, Services5

Latin America, Services6

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**.
2. 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.

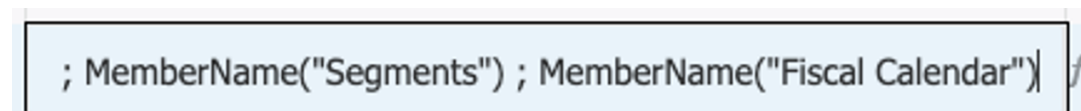
For example, see the Sample Report information.

Sample Report 4		Entities E01,E02	Segments CurrentPOV	Fiscal Calendar CurrentPOV
-----------------	--	----------------------------	-------------------------------	--------------------------------------

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")`

3. 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:



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.

TOC Headings

+

×

Heading			▲
ArtifactName()	fx		▼
MemberAlias("Entities"), MemberAlias("Segments")	fx		

Output of Table of Contents

Sample Report 4
North America, Services
Latin America, Services

7. **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.

+

×

Heading			▲
ArtifactName()	fx		▼
MemberAlias("Entities"), MemberAlias("Segments")	fx		

Note

Multiple rows always represent a hierarchical display structure.

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.....	4
E01 ; Seg02.....	5
E02 ; AS.....	6
E02 ; Seg01.....	7
E02 ; Seg02.....	8
Sample Report 1.....	9
HA.....	9
AG.....	10
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.



-- [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.

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:

- **Sample Model 2:** A modified Narrative Reporting Sample Model, with two dimensions (Scenario and Entity) renamed to match dimension names in the Planning Vision Plan1 application/cube.

Note

The Narrative Reporting Sample Application or Model is no longer available to new Oracle Fusion Cloud Enterprise Performance Management 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.

Scenario		Entity	
Actual, Plan		Total Entity	
Name		POV	
Multi-Source Book 1			
Cover Page & TOC.docx			
Segments		Segments Children of AllSegme...	
Sample Report 1 (Model 2)		Segments CurrentPOV	Scenario CurrentPOV
Sample Planning		Scenario CurrentPOV	Entity CurrentPOV

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.

Scenario	Entity
Plan	Total Entity
	
	
	
Table of Contents	
Segments: Scenario - Plan3	
Sample Report 1 (Model 2): Electronics3	
Sample Report 1 (Model 2): Services4	
Sample Report 1 (Model 2): All Segments5	
Sample Planning: Scenario - Plan6	

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.

Segments		Entity	
AllSegments		Total Entity	
Name		POV	
Multi-Source Book 2			
Cover Page & TOC.docx			
Scenario		Scenario Actual,Plan	
Sample Report 1 (Model 2)		Segments CurrentPOV	Scenario CurrentPOV
Sample Planning		Scenario CurrentPOV	Entity CurrentPOV

Note

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.

Segments

AllSegments

Entity

Total Entity

Vision Corporation

Employee Summary

C

Table of Contents

Scenario.....3

Sample Report 1 (Model 2): Actual3

Sample Planning: Actual4

Sample Report 1 (Model 2): Plan.....5

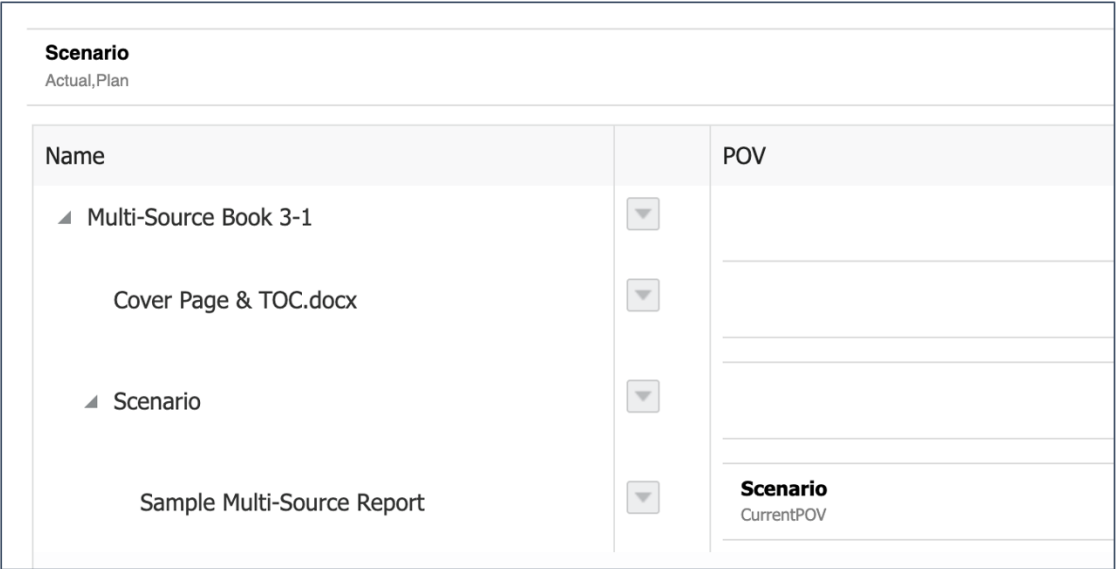
Sample Planning: Plan.....6

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.

Scenario
Actual

Table of Contents

Scenario.....3

Sample Multi-Source Report: Actual3

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](#)
In Reports, you will find 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](#)
This section outlines the control of access permissions for Bursting Definitions and functionality based on a user or group role.

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

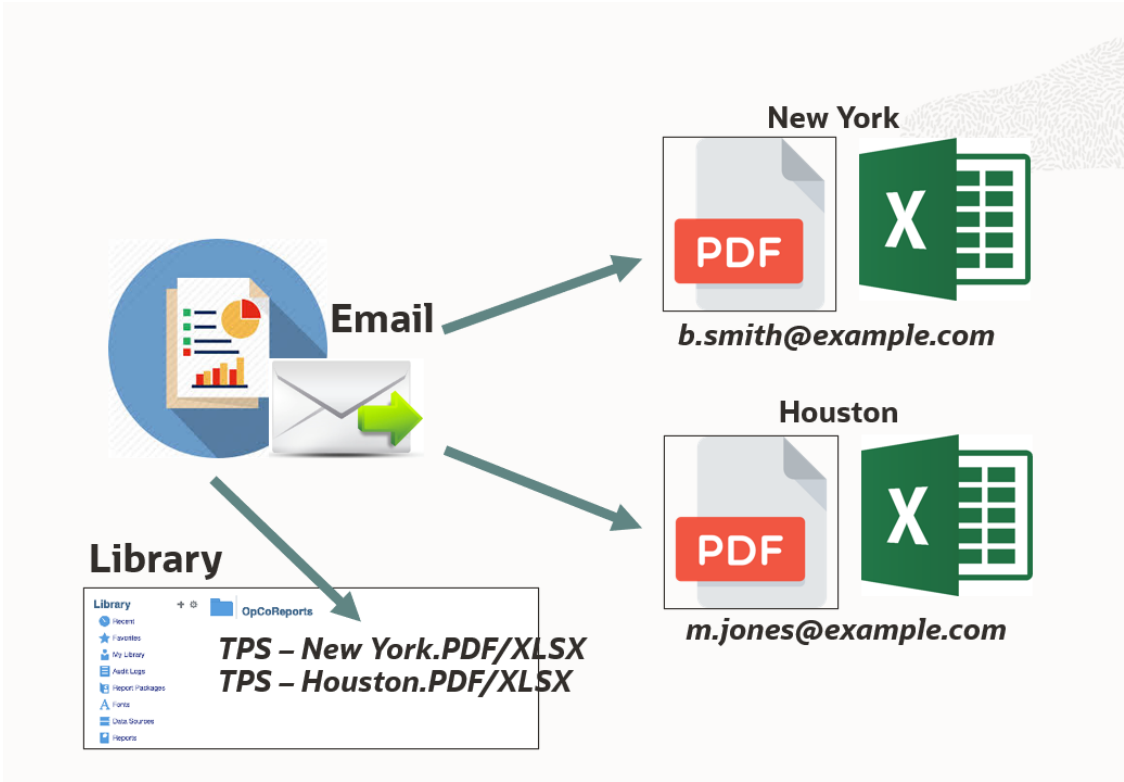
Using Bursting, you can send an email with the published output files attached to a specified recipient list. You can also save the published output files to the Library. You can also both email and save the published output files to the Library.

In Narrative Reporting deployments, scheduling for bursting definitions is done via the Narrative Reporting Job Console or via Narrative Reporting Commands in *Working with EPM Automate* (executeBurstDefinition in *Working with EPM Automate*).

In Oracle Fusion Cloud Enterprise Performance Management deployments, scheduling for bursting definitions is done via the Cloud EPM Platform Job Scheduler or via Narrative Reporting Commands in *Working with EPM Automate* (executeBurstDefinition in *Working with EPM Automate*).

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:

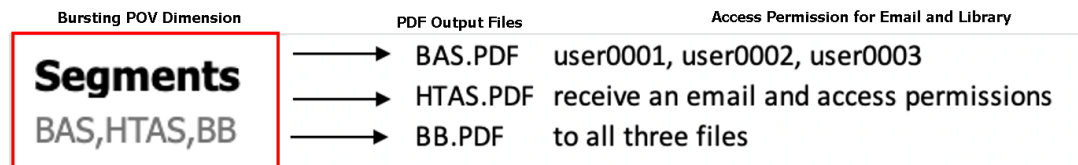
- Send the output files to system users and groups, as well as external email addresses.
- Set the Library access permissions for the system users and groups.

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.

Targeted Distribution File (CSV)			PDF Output Files	Access Permission for Email and Library
member	user_names	user_emails		
BAS	user0001	user0001	→ BAS.PDF	user0001: email and access permissions
HTAS	user0002	user0002	→ HTAS.PDF	user0002: email and access permissions
BB	user0003	user0003	→ BB.PDF	user0003: email and access permissions

- 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	
BB	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	
BB	user0003		jane.q.public@company.com	user0003	
PCD	user0004		zachary.smith@company.com	user0004	
MP3	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.



Samples > Sample Report 1

Sample Report 1

	Name
	Income Statement Act vs Plan - Bookshelf Audio System.pdf
	Income Statement Act vs Plan - Boom Box.pdf
	Income Statement Act vs Plan - Home Theater Audio System.pdf
	Income Statement Act vs Plan - MP3 Player.pdf
	Income Statement Act vs Plan - Personal CD Player.pdf

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.

Option 1: 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.

☒ Email

☒ Send all generated reports to all recipients in a single email

The Distribution File not used.

☒ Distribution List

jane.q.pu...

In **Library**, select the **Assign permissions to the generated reports** option.

☒ Library

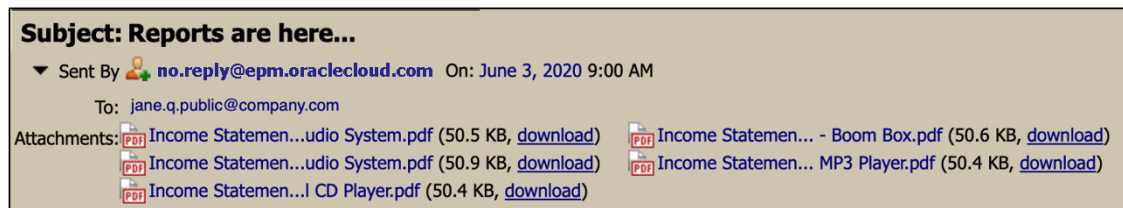
☒ Assign all permissions to the generated reports

 The Distribution File not used.

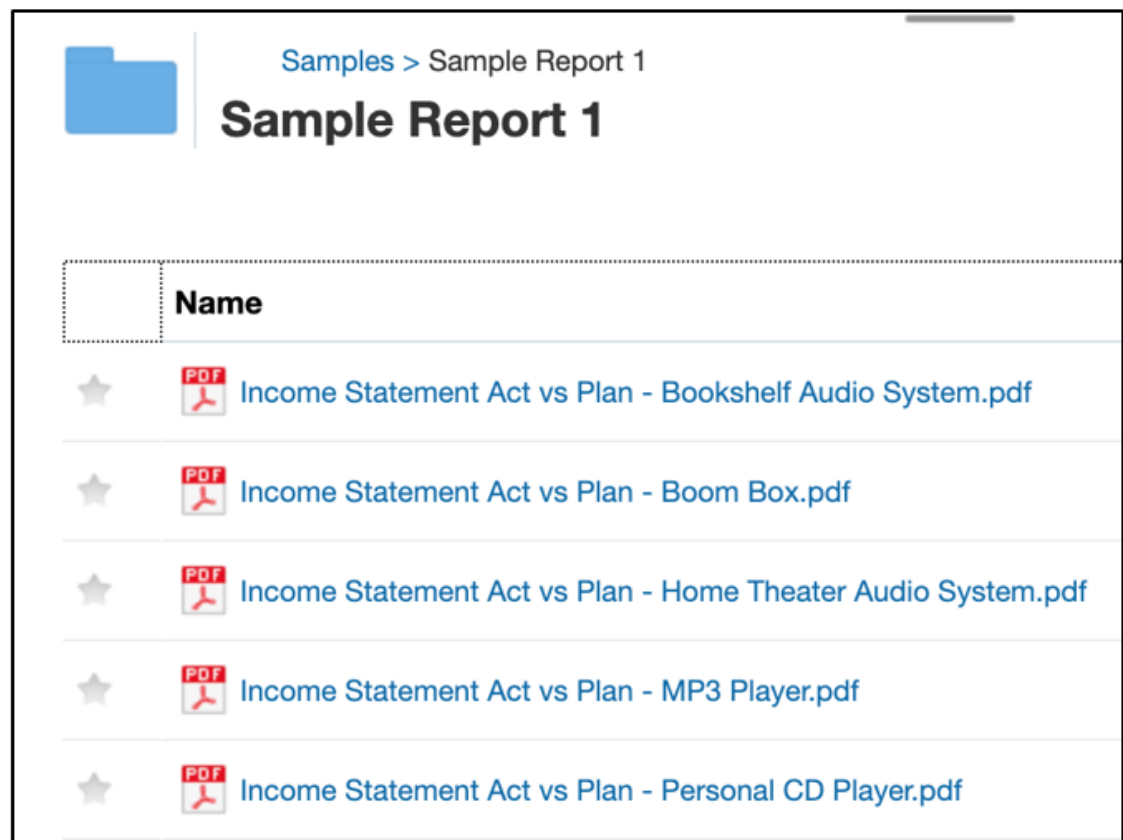
* User List


 user0001

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.

Income Statement Act vs Plan - Bookshelf Audio System.pdf

Access

☐ Inherit permissions from parent folder

Users and Groups

Search

Name	Administer	View
Administrator	☒	☒
user0001	☐	☒

Option 2: Select the **Assign permissions to the generated reports** from the **Library** channel with **Distribution List** and **User List** 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**.

Bursting Artifact

Sample Report 1

Bursting POV Dimension

Segments

BAS,HTAS,BB,PCD,M...

Global Dimension

Fiscal Calendar

Jun

Use Legacy Distribution File

☐

Targeted Distribution File

bursting_file_segments.csv

Distribution Format

☒ PDF ☐ Excel

Success Notification

Edit...

Failure Notification

Edit...

☒ Email

☐ Send all generated reports to all recipients in a single email

* Attachment Name

ArtifactDescription() - MemberAlias("Segments")

fx

* Bursting Email

Edit...

☒ Library

☒ Assign all permissions to the generated reports

⚠ The Distribution File not used.

User List

user0001

user0002

Designing with Reports
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August 31, 2026
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Option 3: 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**.

* Bursting Artifact [Sample Report 1](#)

Bursting POV Dimension **Segments**
BAS,HTAS,BB,PCD,M...

Global Dimension **Fiscal Calendar**
Jun

Use Legacy Distribution File ☐

Targeted Distribution File [bursting_file_segments.csv](#)

Distribution Format ☒ PDF ☐ Excel

Success Notification [Edit...](#)

Failure Notification [Edit...](#)

▲ ☒ **Email**

☒ Send all generated reports to all recipients in a single email

⚠ The Distribution File not used.

* Distribution List

zachary.s... jane.q.pu...

Showing 1 - 2 of 2

* Attachment Name [fx](#)

* Bursting Email [Edit...](#)

▲ ☒ **Library**

☐ Assign all permissions to the generated reports

Option 4: If **Send all generated reports in a single email** option in Email or **Assign all permissions to the generated reports** option in Library are not selected, and you want to send targeted emails using a distribution file, you can download an empty bursting Targeted Distribution File (CSV) as a template for the new bursting mode.

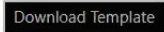
Note

You can download the template only if the **Use Legacy Distribution File** option is not selected.

Bursting POV Dimension **Segments** Seg01,Seg02

Global Dimension < **Currencies** Entities Scenarios Years >
Currencies Entities Scenarios Years

Use Legacy Distribution File ☐

Targeted Distribution File test_targeted_valid.csv < >  

Distribution Format ☒ PDF ☐ Excel

Success Notification [Edit...](#)

Failure Notification [Edit...](#)

You can download and preview the existing CSV file in the Bursting Definition Editor.

* Bursting Artifact simplebook1

Bursting POV Dimension **Segments** Seg01,Seg02

Global Dimension < **Currencies** Entities Scenarios Years >
Currencies Entities Scenarios Years

Use Legacy Distribution File ☐

Targeted Distribution File test_targeted_valid.csv < >  

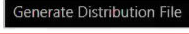
Distribution Format ☒ PDF ☐ Excel

Success Notification [Edit...](#)

Failure Notification [Edit...](#)

You can also generate and download a bursting CSV file based on your Bursting POV dimension selection.

* Bursting Artifact simplebook1

Bursting POV Dimension **Segments** Seg01,Seg02  

Global Dimension < **Currencies** Entities Scenarios Years >
Currencies Entities Scenarios Years

Use Legacy Distribution File ☐

Targeted Distribution File test_targeted_valid.csv < > 

Distribution Format ☒ PDF ☐ Excel

Success Notification [Edit...](#)

Failure Notification [Edit...](#)

For more information, see the following videos and tutorials.

- Watch this overview video, you'll learn more about the Bursting.



-- [Overview: Bursting in Narrative Reporting for Targeted Reporting and Distribution.](#)

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.



-- [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.

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 Administering Narrative Reporting*. In Oracle Fusion Cloud Enterprise Performance Management deployments, create a bursting file using the format outlined in [Using a Targeted Distribution File](#).

Simple Steps for Creating a Bursting Definition

Table 15-1 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 15-1 (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 15-1 (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. <i>Optionally</i>, 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 Definition - Managing the Data Sources - Executing 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 15-1 (Cont.) How to create a Bursting Definition

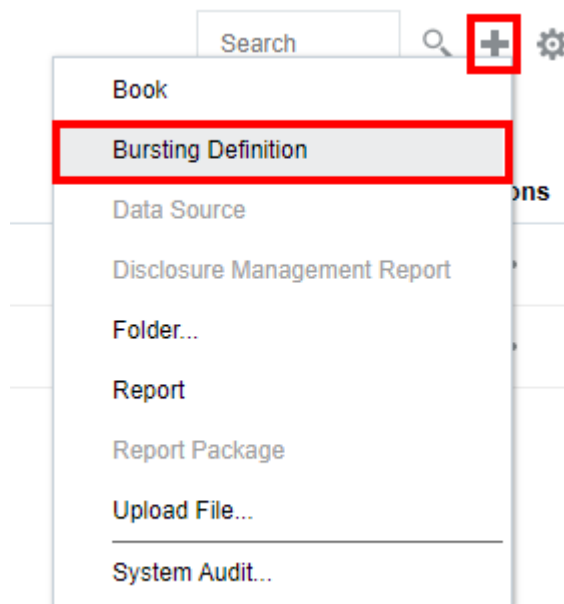
Tasks	Perform these Sub Tasks	For More Information
Set Access Permissions for Bursting Definition	You can set roles and access for the Bursting Definition.	Setting Access Permissions for a Bursting Definition

Creating a new Bursting Definition

For Narrative Reporting Deployments:

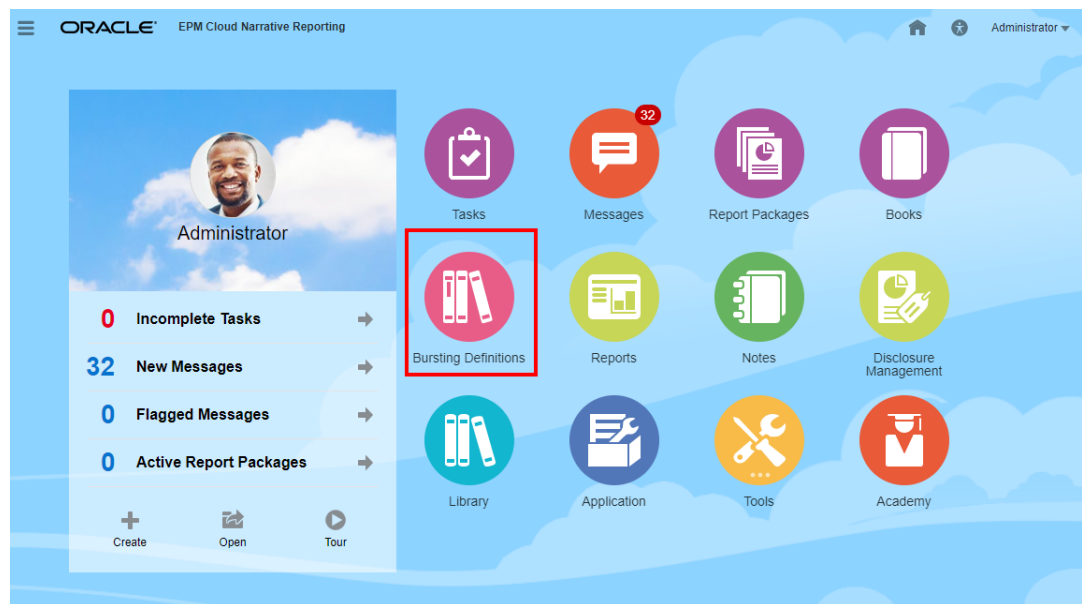
You can create a new **Bursting Definition** in the following ways:

1. 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.

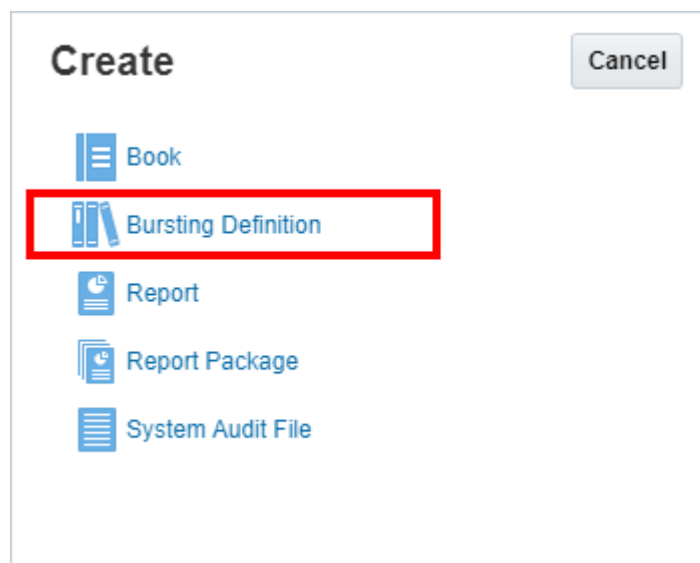


2. From the Home page, click **Bursting Definition**.

From the **Bursting Definition** pane, click **Add** .



- From the Home page, click **Create**, and select **Bursting Definition**.



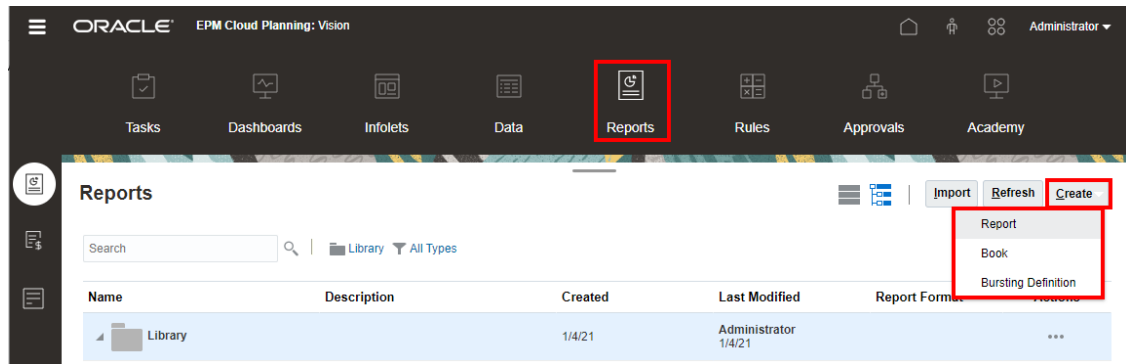
For Enterprise Performance Management Cloud Deployments:

You access the Bursting Definition:

From an Oracle Fusion Cloud Enterprise Performance Management 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.



Note

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.



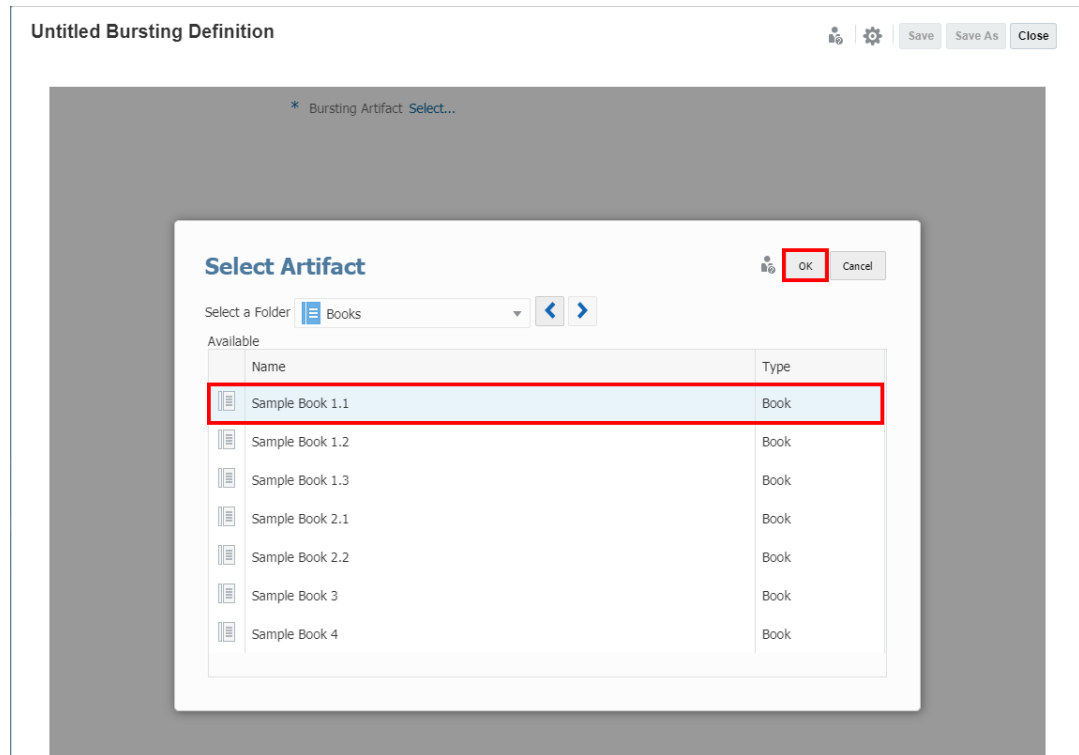
-- [Creating Bursting Definitions](#).

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.
3. 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:

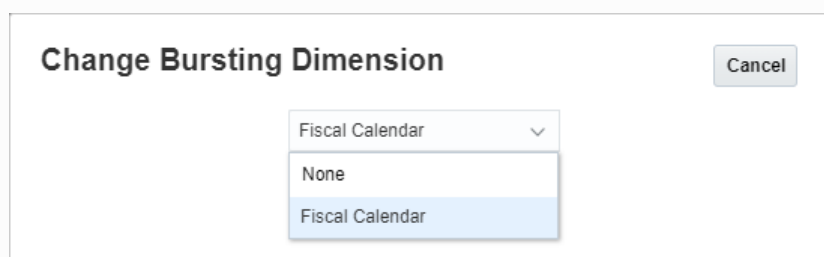
1. In the POV bar, click **Actions** -  and then select **Change Bursting Dimension**.



2. In the **Change Bursting Dimension** dialog box, select a dimension from the drop-down list.

Note

Optionally, you can set the Bursting POV Dimension to **None**. The Bursting Definition will generate a single output file.



For example, you set the Bursting POV Dimension to **None** if you want to automate the output file for a report or book, then you can perform scheduling tasks via Narrative Reporting Commands in *Working with EPM Automate*.

You can select members for the Bursting POV dimension by choosing individual members, functions, and lists. You can also populate the Bursting POV dimension from the distribution (CSV) file by copying members upon upload. For more information, see [Selecting the Targeted Distribution File](#).

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**  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.

To select members for each Global Dimension:

1. Create a new **Bursting Definition** or select an existing **Bursting Definition** in edit mode.
2. In the **Global 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** 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:

1. Create a new **Bursting Definition** or select an existing **Bursting Definition** in edit mode.
2. Create the **Targeted Distribution File** using one of the following methods:

- Click **Generate Distribution File**  to generate and download a bursting CSV file based on the Bursting POV dimension selections.
- Click **Download template**  (next to **Targeted Distribution File**) to download and complete a blank template, and create a bursting file using the format described in [Using a Targeted Distribution File](#).

Note

In Narrative Reporting deployments, *bursting_file_empty.csv* is included with the Sample Management Reports in Samples\Bursting Definitions. For more information, see [Using a Targeted Distribution File](#).

3. Click **Select** to select a file.

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**.

- To download the selected bursting CSV file, click  **Download Distribution File**.

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	
BB	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 15-2 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 15-3 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,
```

① Note

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.

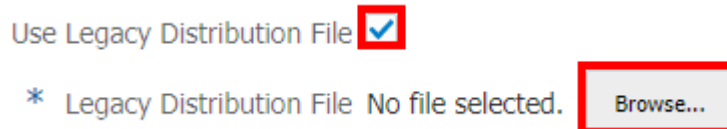
For more information, see [About Bursting](#)

Setting the Legacy Distribution File

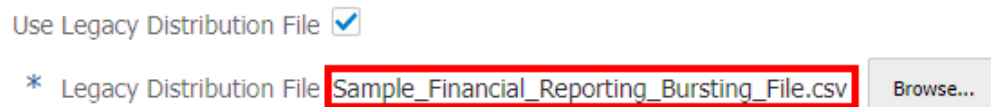
You can utilize a Legacy bursting CSV file that was previously used in Financial Reporting (FR) by selecting the **Use Legacy Distribution File** in the bursting definition.

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:

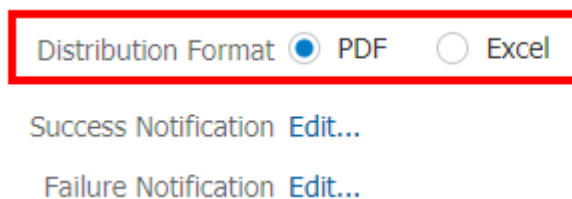
- [Creating a new Bursting Definition](#)
- [Selecting a Bursting Artifact](#)
- [Setting the Bursting Point of View](#)
- [Setting the Legacy Distribution File](#)
- [Selecting the Targeted Distribution File](#)
- [Selecting a Distribution Format](#)
- [Defining Success Notifications](#)

- [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:

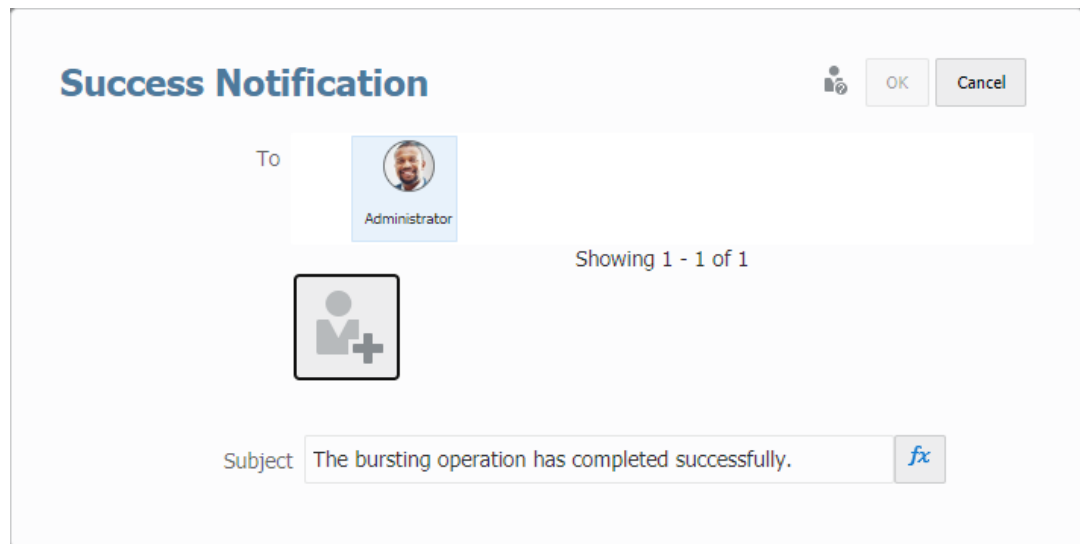
- [Creating a new Bursting Definition](#)
- [Selecting a Bursting Artifact](#)
- [Setting the Bursting Point of View](#)
- [Setting the Legacy Distribution File](#)
- [Selecting the Targeted Distribution File](#)
- [Selecting a Distribution Format](#)
- [Defining Success Notifications](#)
- [Defining 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.
2. In **Success Notification**, click **Edit....**



Success Notification

To: 
Administrator

Showing 1 - 1 of 1



Subject: The bursting operation has completed successfully. 

OK Cancel

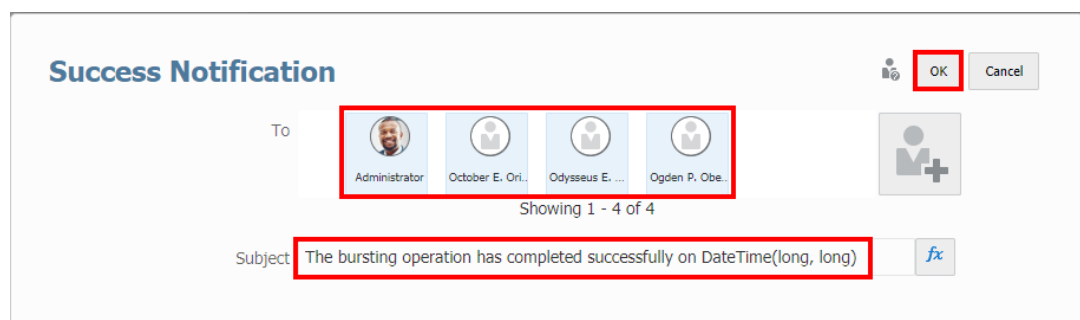
3. In the **Success Notification** dialog box, click  to launch the **Manage Users** dialog box.

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: DateTime, ArtifactName, and ArtifactDescription.

5. Click **OK** to close the Success Notification dialog box.



Success Notification

To: 
Administrator

 October E. Ori...

 Odysseus E. ...

 Ogden P. Obe...

Showing 1 - 4 of 4



Subject: The bursting operation has completed successfully on DateTime(long, long) 

OK Cancel

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...** .

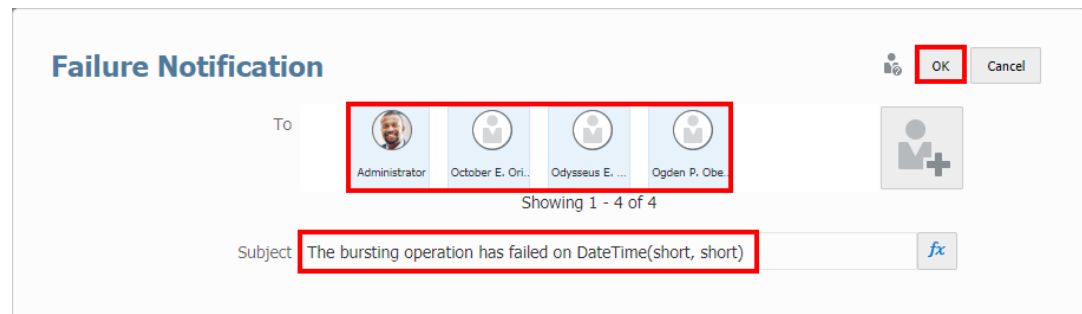
3. In the **Failure Notification** dialog box, click  to launch the **Manage Users** dialog box.

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.



The screenshot shows the 'Failure Notification' dialog box. The 'To' field contains four user avatars: Administrator, October E. Ori..., Odysseus E. ..., and Ogden P. Obe. The 'Subject' field contains the text 'The bursting operation has failed on DateTime(short, short)'. The 'OK' button is highlighted with a red box. The 'Cancel' button is also visible. The 'Add user' icon is also visible next to the 'To' field.

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.

5. To define the **Attachment Name**, you can use a combination of hard coded text and text functions.

- To insert a text function. Click  . The following text functions are supported:

- DateTime
- 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.

6. In **Bursting Email**, select **Edit...**
7. 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: MemberName, MemberAlias, DateTime, ArtifactName, and ArtifactDescription.

Bursting Email

OK Cancel

* Subject: Financial Reporting File Generated on DateTime(short, short) fx

Message: Hi All,
Review the attached Financial Reporting PDF files for your reference.
Thank you. fx

* Bursting Artifact: Sample Report 1

Bursting POV Dimension: Segments
BAS, HTAS, BB, PCD, ...

Global Dimension: Fiscal Calendar
Jun

Use Legacy Distribution File: ☐

Targeted Distribution File: bursting_file_segments.csv

Distribution Format: ☒ PDF ☐ Excel

Success Notification: Edit...

Failure Notification: Edit...

☑ Email

☐ Send all generated reports to all recipients in a single email

* Attachment Name: ArtifactDescription() - MemberAlias("Segments") fx

* Bursting Email: Edit...

Consolidate Attachments: ☒

ZIP Attachments: ☒

ZIP File Folder Path: ArtifactName() fx

8. *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**.

Note

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  . 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.

Untitled Bursting Definition

* Bursting Artifact [Sample Book 1.1](#)

Bursting POV Dimension **Fiscal Calendar**

Global Dimension

Use Legacy Distribution File ☐

Targeted Distribution File [Select...](#)

Distribution Format ☒ PDF

Success Notification [Edit...](#)

Failure Notification [Edit...](#)

☒ Email

* Distribution List

Administrator October E. Ori... Odysseus E. ... Ogden P. Obe...

Showing 1 - 4 of 4

* Attachment Name `ArtifactDescription()_MemberAlias("Fiscal Calendar")` [fx](#)

* Bursting Email [Edit...](#)

☒ Library

User List

quser3displa... quser6displa... quser9displa...

Showing 1 - 3 of 3

* Artifact Name `ArtifactDescription()_MemberAlias("Fiscal Calendar")` [fx](#)

* Root Folder [Samples](#)

Overwrite ☒

Path Hierarchy `ArtifactName()` [fx](#)

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](#)

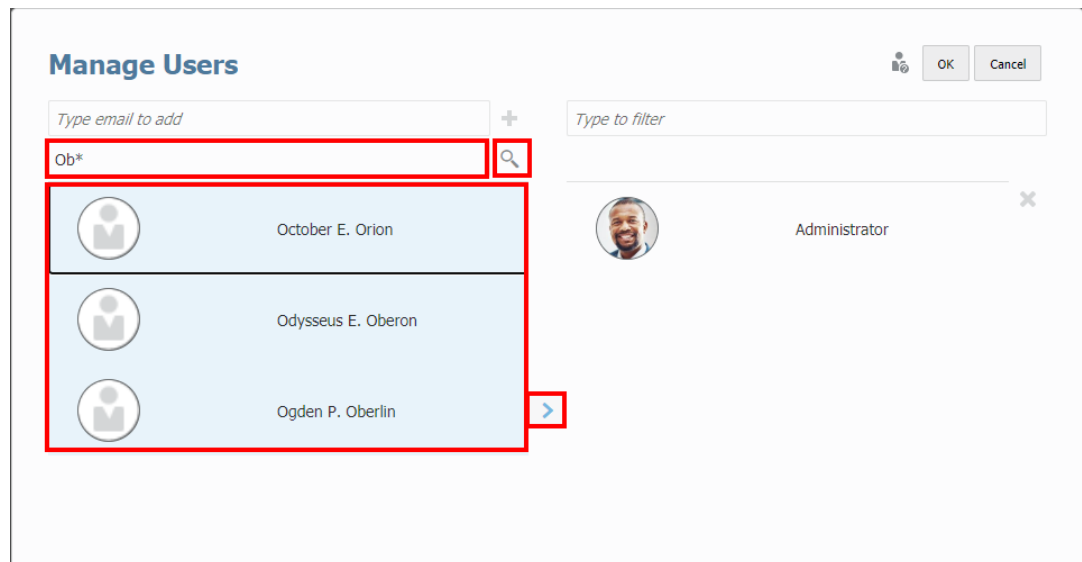
Managing Users

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:

1. 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.

The 'Manage Users' dialog box is shown. It has a title bar with 'Manage Users' and buttons for 'OK' and 'Cancel'. Below the title bar, there is a search bar with the text 'jane.q.public@company.com' and a red box around it. To the right of the search bar is a red '+' button. Below the search bar is a 'Type to search' input field. To the right of the search bar is a 'Type to filter' input field. Below the search bar, there are three rows of user information, each with a user icon and a name: 'October E. Orion', 'Odysseus E. Oberon', and 'Ogden P. Oberlin'. To the right of these rows is a red 'X' button.

4. **(Optional)** To remove a user, select the user, and then click **X**.

The 'Manage Users' dialog box is shown. It has a title bar with 'Manage Users' and buttons for 'OK' and 'Cancel'. Below the title bar, there is a search bar with the text 'Type email to add' and a red box around it. To the right of the search bar is a red '+' button. Below the search bar is a 'Type to search' input field. To the right of the search bar is a 'Type to filter' input field. Below the search bar, there are three rows of user information, each with a user icon and a name: 'October E. Orion', 'Odysseus E. Oberon', and 'Ogden P. Oberlin'. To the right of these rows is a red 'X' button. The user 'Odysseus E. Oberon' is selected, indicated by a blue highlight.

5. Click **OK** to close the Manage Users dialog box.

Saving the Bursting Definition

To save the Bursting Definition:

1. 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.

Save Bursting Definition Save Cancel

* Name

Description

* Save To Browse...

3. 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

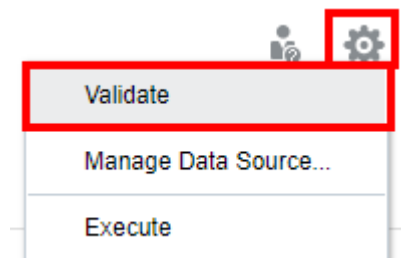
This action validates that the bursting definition configuration settings are valid.

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:

1. From the **Bursting Definition** page, click **Actions** - .
2. For all prompts within bursting definitions, ensure that you make the desired selection.
3. Click **Validate**.



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**.

The screenshot shows the 'All Email Distribution' section with three validation errors in a red box at the top:

- ✖ You must provide at least one or more Email addresses, Users, or Group information in the Email configuration settings.
- ✖ You must specify a File Name.
- ✖ When composing an email, you must ensure the subject field is not empty.

Below the errors are links for 'Success Notification Compose...' and 'Failure Notification Edit...'.

The 'Email' section is expanded, showing:

- ☒ Send all generated reports to all recipients in a single email
- ⚠ The Distribution File will not be used.
- * Distribution List: [User icon with plus sign]
- * Attachment Name: [Text input field]
- * Bursting Email: [Compose... button]

At the bottom, there is a 'Library' section with a 'Library' button.

Note

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.

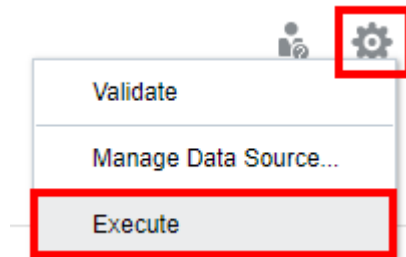
For more information, see the following links:

- [Reordering the Data Source](#)
- [Managing Alias tables in the Bursting Definition](#)

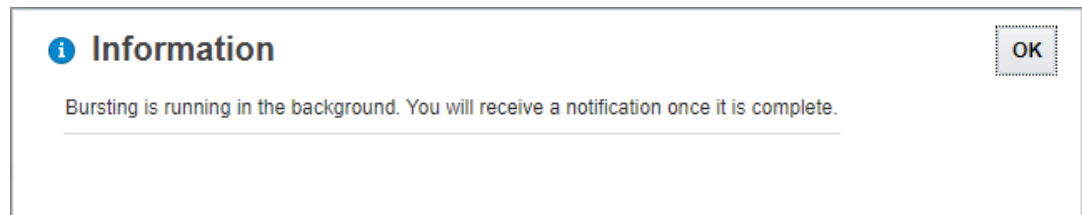
Executing the Bursting Definition

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.

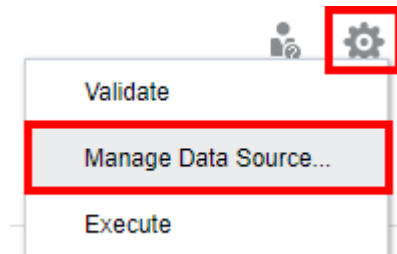
Reordering the Data Source

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.

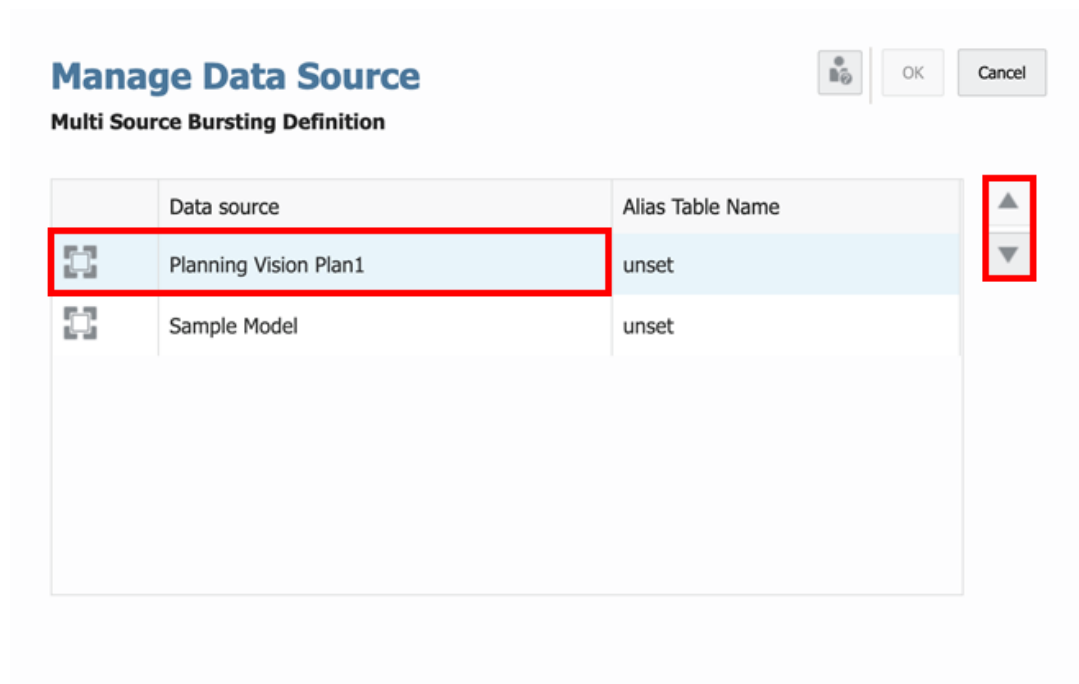
You can set the order of data sources used to display in the POV for common dimensions.

You can reorder the data sources.

1. 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.



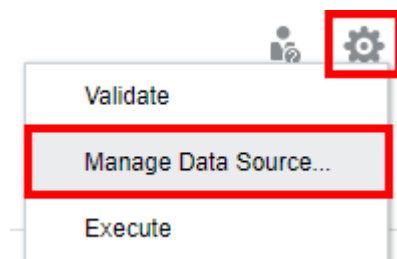
3. Click  or  to reorder the data source. Click **OK**.

Managing Alias tables in the Bursting Definition

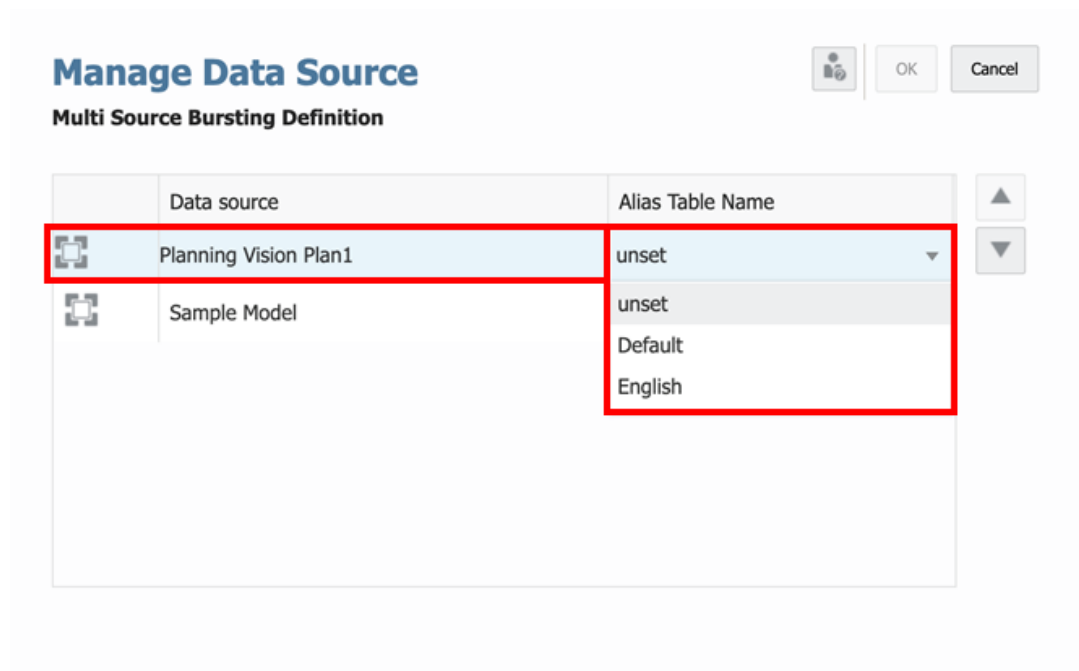
You can change the alias table used in the MemberAlias text functions for Bursting and any containing Report or Book which does not have a hard-coded alias table.

To manage the alias tables used in the Bursting Definition, perform an action:

1. 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

In Reports, you will find 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.

If a bursting definition contains a book in which one or more additional books are inserted into the primary book (the main book), the Excel output generated from the bursting definition includes only the reports contained directly within the main book. Inserted books are not included in the Excel output. However, the PDF output generated from the bursting definition includes the inserted books within the main book.

Using Prompts with a Bursting Definition

If a Report or Book contains prompts, you can specify prompt member selections at the bursting definition designer level (**Prompt For Value On Preview Disabled**) or allow the user executing the bursting definition to respond to the prompts (**Prompt For Value On Preview Enabled**).

Note

Prompts within bursting definitions will always be displayed in **Compact Mode**, which consolidates duplicate prompts (same dimension, prompt label, choice list, default selection, and Allow Multiple Selections setting for the same data source) across reports.

To define Prompt selections:

1. In the bursting definition, you will find the list of prompt selections displayed in the **Prompts** section, under the **Global Dimension** area:

The screenshot shows the 'Prompts' section in the Oracle Reports interface. At the top, it says '* Bursting Artifact Sample Book 6'. Below that, 'Bursting POV Dimension' is set to 'Not available' with a 'Default' link. Under 'Global Dimension', there is a 'Prompts' section with a 'Text Filter' box. Below the filter is a table with three columns: 'Selection', 'Actions', and 'Context'.

Selection	Actions	Context
Select a month <i>Prompt For Value On Preview</i>	☒	Artifact Name Multiple Data Source Sample Model
Select one or more Segments BAS,HTAS	☐	Artifact Name Multiple Data Source Sample Model Grid Multiple

- Filter the prompt list by entering filter criteria text into the **Text Filter** box.
 - Click **Reset All Prompt Selections** to reset any prompt selection changes to the original report prompt selection. This only applies if one or more prompts in the report have **Prompt For Value On Preview** disabled.
 - Click **Expand** to expand the Prompts window to full size.
2. You can configure each prompt:
 - The **Selection** column displays the prompt label and selection.
 - The **Actions** column allows disabling or enabling **Prompt For Value On Preview**; when enabled, it displays the prompt for the user executing the bursting definition. When disabled, the designer specifies the selection for the prompt by clicking **Select Members** to open the member selector.
 - You can also click **Reset All Prompt Selections** to reset any prompt selection changes to the original report prompt selection.
 - The **Context** column displays the data source and where the prompt is applied (for example, grid rows, POV, and so on).

To respond to prompts when executing a bursting definition:

1. The **Prompts** dialog will appear if there are prompts in the report(s) that have been configured with **Prompt For Value On Preview** enabled.

Note

All prompts within bursting definitions are displayed in Compact mode as combined prompts.

The screenshot shows the 'Prompts' dialog box with a 'Text Filter' field at the top. Below it is a table with two columns: 'Selection' and 'Context'.

Selection	Context
Select a month * Jun	Artifact Name Multiple Data Source Sample Model
Select an Entity * E01	Artifact Name Sample Report 14b (Prompt report2) Data Source Sample Model Grid Grid 1
Choose a reporting region * E01,E02	Artifact Name Sample Report 5 (Prompts) Data Source Sample Model
Select a Quarter * Q1	Artifact Name Sample Report 5 (Prompts) Data Source Sample Model Grid Revenue by Segment

2. For each prompt, click **Select Members**  to open the member selector and make the desired selection. You can also click **Reset All Prompt Selections**  to reset any prompt selection changes to the original report prompt selection.
3. Once all prompts have been selected, click **OK** to proceed with the preview.

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:

- **Sample Model 2:** 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:

- **Scenario** : **Actual** and **Plan** members are common. The Scenario dimension is used for the **Bursting POV Dimension**.
- **Entity** : **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.
- **Account** : 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.

Multi Source Report

Account: NI, HSP_View: BaseData, Year: FY15, Scenario: Plan, Version: Working, Entity: Total Entity, Years: FY18, Currencies: USD

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

340000

Narrative Reporting - Scenario: Plan

	Fiscal Calendar
Electronics	9,002,672
Services	86,731,551
All Segments	95,734,223

Annotations: Red arrows point from **Scenario** to **Common Dimension**, from **Version** to **Planning Only**, and from **Currencies** to **Sample Model 2 Only**.

- 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.

* Bursting Artifact Multi Source Report		
Bursting POV Dimension	Scenario Actual, Plan	
Global Dimension	Currencies USD	Version Working

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

This section outlines the control of access permissions for Bursting Definitions and functionality based on a user or group role.

The system administrator role can view and maintain all Bursting Definitions. There are three types of permissions that can be assigned to users:

Table 15-4 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 <i>Administer</i> permission
Report Administrator	- Create a Bursting Definition - Delete, Update, and View the Report
Viewer	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

Working with Generative AI in Reports

Generative AI (Gen AI) can bring more intelligence to reporting and analysis to aid decision-making in finance.

Reports provides the ability to utilize Generative AI (GenAI) for:

- **Using the Reporting Agent (Ask Oracle)** to interact with reports using natural-language search and grid-level report analysis.
- **Generating narrative summaries** in a text box or text rows or columns.
- **Summarizing Notes** either in a text box or as an end user action.

Gen AI in Reports is available in Narrative Reporting and across the Cloud EPM Platform, except for Notes summarization. The Large Language Model (LLM) used by Reports is the GPT OSS 120B model.

Reporting Agent

The Reporting Agent is available in the following:

- **Narrative Reporting Library:** In the Library, Ask Oracle appears as a natural-language search experience. You can ask for reports and reporting artifacts, retrieve report information, and ask report-related questions.
- **Report Preview (HTML Preview):** In a report preview, Ask Oracle appears as a chat panel next to the report. You can analyze report grids, summarize data, identify trends and variances, and gain insights from the selected grid context through conversational prompts.

The chat supports conversational follow-up questions and maintains context for the current report, selected grid, point of view, prompt selections, and browser-tab-specific conversation history. When you switch between grids, Ask Oracle displays the relevant chat history for the selected grid.

Note

Ask Oracle is available only when you enable the Generative AI settings and is currently supported only in HTML Preview.

For more information about Reporting Agents, see [Working with the Reporting Agent](#).

Generating Narrative Summaries

Generating Narrative Summaries can be used for the following three use cases:

- **Describe exceptions:** Describe the cell(s) where a condition is satisfied. For example, a grid cell that satisfies the variance threshold defined by the report designer as a condition.
- **Describe the causality for exceptions:** Examine one of the relevant cell dimensions where the condition was satisfied and describe the top or bottom contributors to it. You can also perform a causality analysis on a grid formula, such as a growth rate or variance percent to return the contributing analytic dimension members.

Optionally, you can specify either a secondary analytic dimension, or an additional member generation or level within the same dimension, to perform Zoom. This is referred to as `CausalityWith2LevelAnalysis`.

- **Do a comparative analysis:** Describe the comparison between two columns, you can either compare two Period dimension columns, two specified columns, formula and/or data columns.

Narrative summary generation within a report is implemented using the Conditional Text framework, together with corresponding Machine Learning (ML) template files for each use case. These ML templates provide examples and instructions used by GenAI to generate the narrative text. A Criteria Definition is created to capture the parameters for each of the three use cases. Lastly, conditional text is defined at the row, column, or cell level. When the condition is satisfied, the GenAI service returns the narrative text using the `ConditionalText` function.

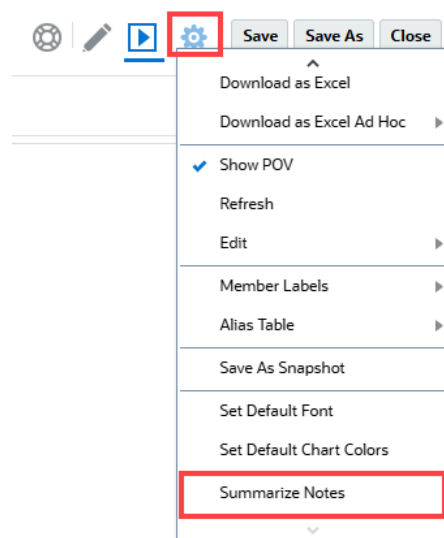
For more information on the conditional text framework, see [Working with Conditional Formatting, Text, and Suppression](#).

For more information on designing a report for generating narrative summaries, see [Creating a Report with Generative AI for Narrative Summaries](#).

Summarizing Notes

Gen AI can be used to summarize Notes sourced from either a Note segment or a Note text box. Notes summarization is available either in a text box (designer setup) or as an end user action.

- **Text Box:** using either the `Notes` or `GridNotes` text function (with an additional parameter) or the `SummarizeGridNotes` text function, the report designer can specify to have **Notes** summarized.
- **End User Action:** while previewing a report, you can select **Summarize Notes** from the **Actions** menu.



Shows pop-up with Summarize Notes dialog.

Summarize Notes

☐ Summarize Notes with context

Summarize

Copy Summary to Clipboard

No Note summaries to display

When using the SummarizeGridNotes function or the end user **Summarize Notes** action, you can choose to **Use Context**, which will include the data value for the member associated with the Note segment. For example:

Text Functions

Select

Cancel

Search

Left

MemberAlias

MemberName

MemberProperty

Mid

Notes

Right

SummarizeGridNotes

Note Segment

Column

Use Context

false

true

The main driver of higher other purchases and supplies expenses was additional contractor services, resulting in a 0.53% variance in Fees Outside Services. Finally, a minor decrease in facilities maintenance costs led to a 0.12% variance in Facilities Expenses.

For more information on designing a report for summarizing Notes, see [Creating a Report with Generative AI for Narrative Summaries](#)

Note

- The Reports GenAI feature is only currently available in Oracle Fusion Cloud Enterprise Performance Management Enterprise deployments for Narrative Reporting and the Cloud EPM business processes. It is not available in the Standard Cloud EPM licenses, nor legacy Enterprise Performance Reporting Cloud Service (EPRCS).
- The availability of Oracle AI is not yet available in all OCI regions. To view the regions where it is available, refer to Availability of Generative AI in *Operations Guide*.
- Narratives are generated only in English by default. However, you can translate the Gen AI text responses into other languages by updating the ML template files. For more information, see [How to Customize the Machine Learning Property Files](#).
- The Reports GenAI feature is a decision support tool. End users make any final decision regarding the interpretation of the information it provides. AI should be treated as a decision support tool only. Always review AI-generated content and verify its accuracy before using or relying on it.

**-- [Introducing GenAI Capabilities in Narrative Reporting](#)**

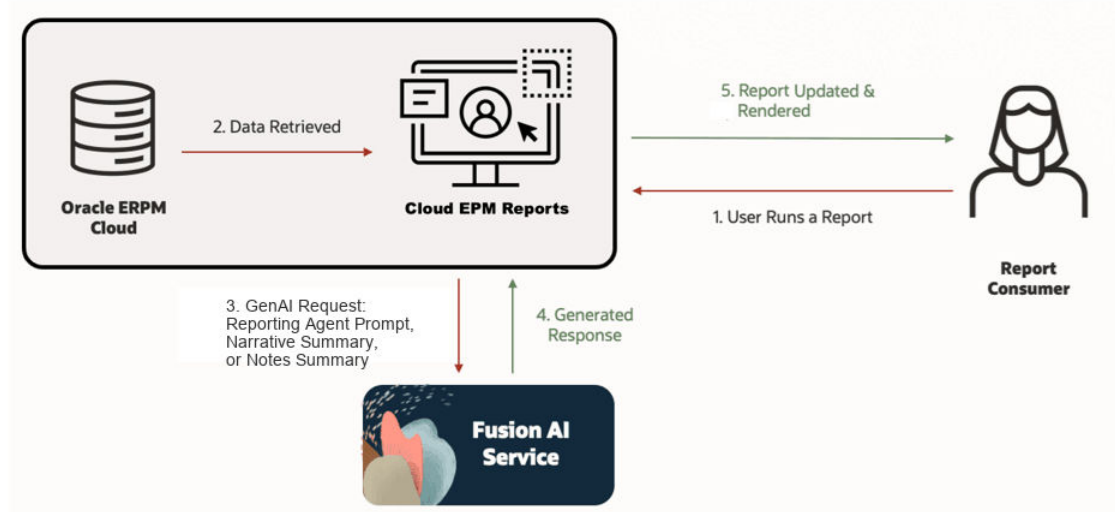
Learn about GenAI capabilities in Reports. Design Reports using conditional text and the AutoTextSummary that automatically renders a corresponding narrative using the Reports GenAI feature.

Related Topics

- [High-Level Architecture](#)
- [Enabling Generative AI in Narrative Reporting](#)
- [Creating a Report with Generative AI for Narrative Summaries](#)
- [Working with the Causality Criteria Type](#)
- [Creating a Report with Generative AI for Notes Summarization](#)
- [Working with the Generative AI Sample Reports](#)
- [Working with the Machine Learning Template Files](#)
- [Accessing and Managing the Machine Learning Property Files](#)
- [How to Customize the Machine Learning Property Files](#)
- [Generative AI Governors and Limitations](#)

High-Level Architecture

The following is the high-level architecture for Generative AI (GenAI) in Reports:



1. A user launches a report in Reports that either has "Conditional Text" defined with GenAI based `AutoTextSummary` function, "Notes Summarization" enabled, or accesses the Reporting Assistant (Ask Oracle) from the Library or Report Preview.
2. In the background, data is retrieved from the report's data source.
3. For the GenAI feature:
 - **Reporting Agent (Ask Oracle):** The user's natural-language question, along with the current report context or selected grid context and the available report data, is sent to the Fusion AI service.
 - **Generating Narrative Summaries:** The report grid data that meets the pre-defined conditions, as well as the prompt from the corresponding Reports machine learning property file, is sent to the Fusion AI service.
 - **Summarizing Notes:** The report grid data (if **Use Context** is enabled) and the **Notes**, as well as the prompt from the corresponding Narrative Reporting machine learning property file, are sent to the Fusion AI service.
4. The Fusion AI service generates a response and sends it back to the Reports instance.
5. The report is augmented with the generated response and is rendered to the user.

① Note

Due to the additional processing required and network traffic to the Fusion AI service, which exists on a different instance than Reports, reports will take additional processing time when utilizing the GenAI feature. If the conditional text is applied to a larger number of cells in the report, and/or if GenAI reports are included in **Books** or **Bursting** and run for multiple POVs, this could negatively impact report processing time. Thorough testing should be performed to ensure your process still meet any service level objectives you have for running reports for your users.

Enabling Generative AI in Narrative Reporting

Currently the Generative AI (GenAI) service is not available in all data centers. If GenAI is available in your data center, you can enable it from the **Tools > Settings** card.

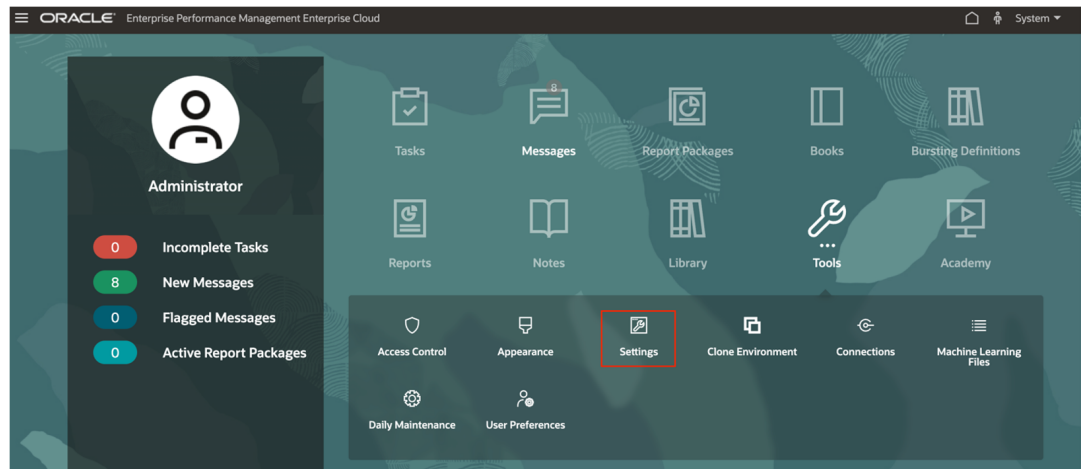
Note

To view the regions where it is available, please refer to the Availability of Generative AI in *Operations Guide*

To enable GenAI, follow these steps:

For Narrative Reporting Deployments:

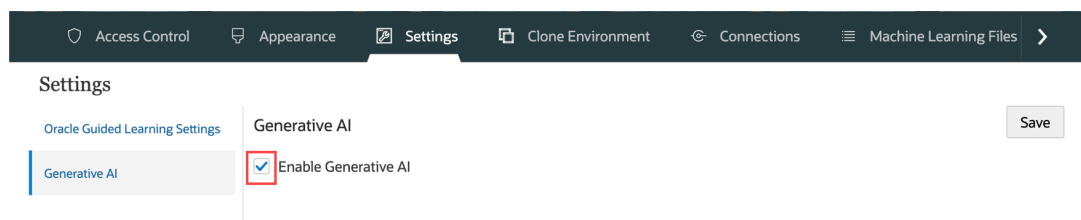
1. On the **Narrative Reporting Home Page**, select **Tools**, then select **Settings**.



2. In the **Settings** window, in the left panel, select **Generative AI**.

NOTE: If Generative AI is not available in your data center, the Generative AI panel will display "Generative AI is not available".

3. Select the **Enable Generative AI** checkbox, then click **Save**.

**For Enterprise Performance Management Cloud Deployments:**

1. From the Home Page, click **Application**, then click **Settings**.
2. In the **Enable AI** section, select **Generative AI**.
3. Click **Save**.

Insight summaries use GenAI. Output from GenAI may not always be factual, accurate, or appropriate. You are responsible for reviewing and using GenAI output at your discretion.

Note

The **Enable AI** option is available only for EPM Enterprise subscriptions and when Hybrid mode is enabled. For more information, see [Considerations for IPM Insights in Administering Planning](#).

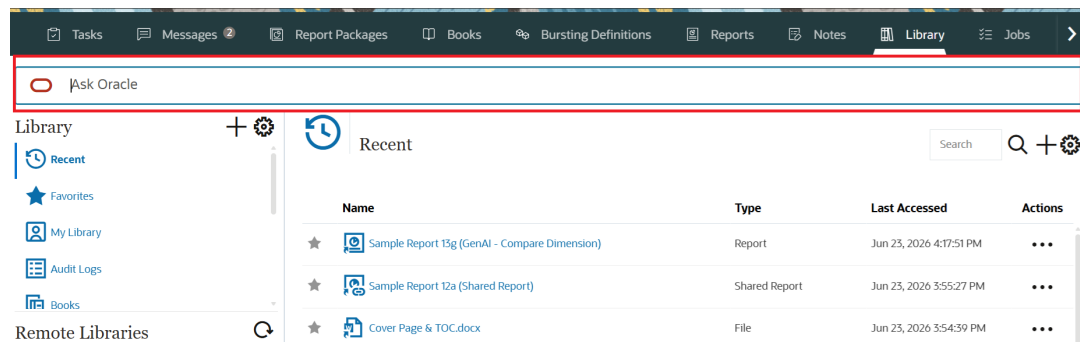
Working with the Reporting Agent

Reporting Agent, also known as Ask Oracle, is a GenAI-powered agent available in Narrative Reporting Library and Report Preview.

Using Ask Oracle to Search the Library

To search the Narrative Reporting library using Ask Oracle:

1. On the Narrative Reporting **Home Page**, select **Library**.
2. In the **Ask Oracle** search bar at the top of the library, enter a natural-language request, and then click **Search**.



A few examples of the library prompts are:

- **Find a report quickly:** Show me a list of Cash Flow reports → Ask Oracle returns matching reports from the Library.
 - **Handle an incomplete report name:** What is actual net revenue from Monthly P&L Report? → Ask Oracle prompts the user to select the intended matching report, then answers using that report context.
 - **Locate related artifacts:** Find reports that start with Income Statement or Show me books related to financial reporting → Ask Oracle returns relevant Library artifacts for the user to open or review.
3. Review the list of matching reports and artifacts returned by Ask Oracle and select the report or artifact that you want to open.
If Ask Oracle requires additional information to complete the request, respond to the clarification prompt. For example, if multiple reports match your request, Ask Oracle may ask you to select the report that you want.

Asking Questions About a Report Grid

To ask questions about a report grid using Ask Oracle:

1. Open a report in **HTML Preview** mode.

- By default, the Ask Oracle panel is displayed when opening a report in HTML preview for the first time in a session. Click



to open or close the Ask Oracle chat panel displayed next to the report. This selection is applied for any report opened within the same session.

- Select the grid you want to analyze, enter the question for the selected grid, and then press **Enter**.

	2024 Jun	2025 Jun	2026 Jun
Net Revenue	145,522	154,215	157,041
Cost of Sales	93,593	100,588	106,377
Gross Profit	51,929	53,627	50,664

A few examples of report preview prompts are:

- What is plan cost of sales?
- What are the top three operating expenses?
- Summarize this grid

Ask Oracle uses the selected report, grid, Point of View (POV), prompt selections, and recent conversation context when generating responses. The chat questions and responses are retained for each grid and report within the user's current session and up to 40 responses are retained for a session.

Limitations for Using Ask Oracle in Reports

Ask Oracle currently has the following limitations:

- You can use Ask Oracle only when Generative AI settings are enabled.
- Report chat is supported only in HTML Preview and is not available in PDF Preview.
- You can analyze report grids only. Ask Oracle does not support other report objects.
- Responses are based on the data available in the selected report grid and current report context. Ask Oracle does not retrieve data outside the active report context.
- You can use report chat with report previews and snapshot reports. You cannot use report chat with books, bursting, or report packages. Also, hidden grids can appear in the grid context selector.
- Ask Oracle stores chat history only for the current session. It does not retain chat history after you log out or your session ends.
- While Ask Oracle processes a request, you cannot submit another question or change the selected context.

Working on Generating Narrative Summaries

To design a report to use Generative AI (GenAI) for Narrative Summaries:

- **Create an Auto Text Summary Criteria definition:** Use the Auto Text Summary Criteria Manager to define the criteria used by the AutoTextSummary text function (for example: analytic dimension, top/bottom N for a Causality (Zoom) use case). Auto Text Summary Criteria Definition are configured per grid, stored within the report definition, and are not reusable across reports.
You can determine the criteria type to use for each use case using the following screenshot:

Use Case	Criteria Type	Description
Compare	Compare	Describe a column value compared to another column value – restricted to Period
	Compare Columns	Perform a comparison on specified columns – applies to data and formula columns
	Compare Column Dimension	Perform a comparison on a specified column dimension
Describe	Describe	Describe cells where conditions are met
Causality	Causality	Describe the top or bottom contributors to a cell value
	Causality Two Level	Perform a causality analysis to a second level

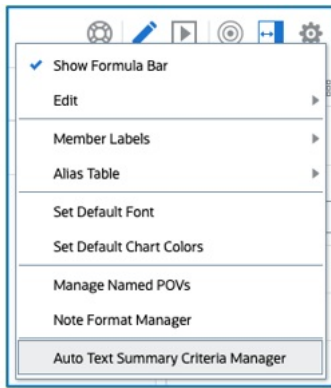
- **Define conditional text/formatting on the grid cells:** On the applicable cells, configure the AutoTextSummary text function and reference the appropriate Auto Text Summary Criteria Definition.
- **Render the output in the Report:** Insert the ConditionalText text function in a grid text segment or a text box, referencing the desired Auto Text Summary Criteria Definition.

Creating a Report with Generative AI for Narrative Summaries

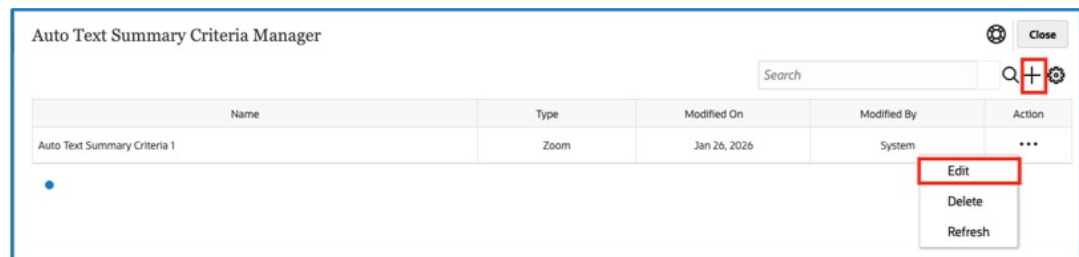
Creating an Auto Text Summary Criteria Definition

To create an Auto Text Summary Criteria Definition:

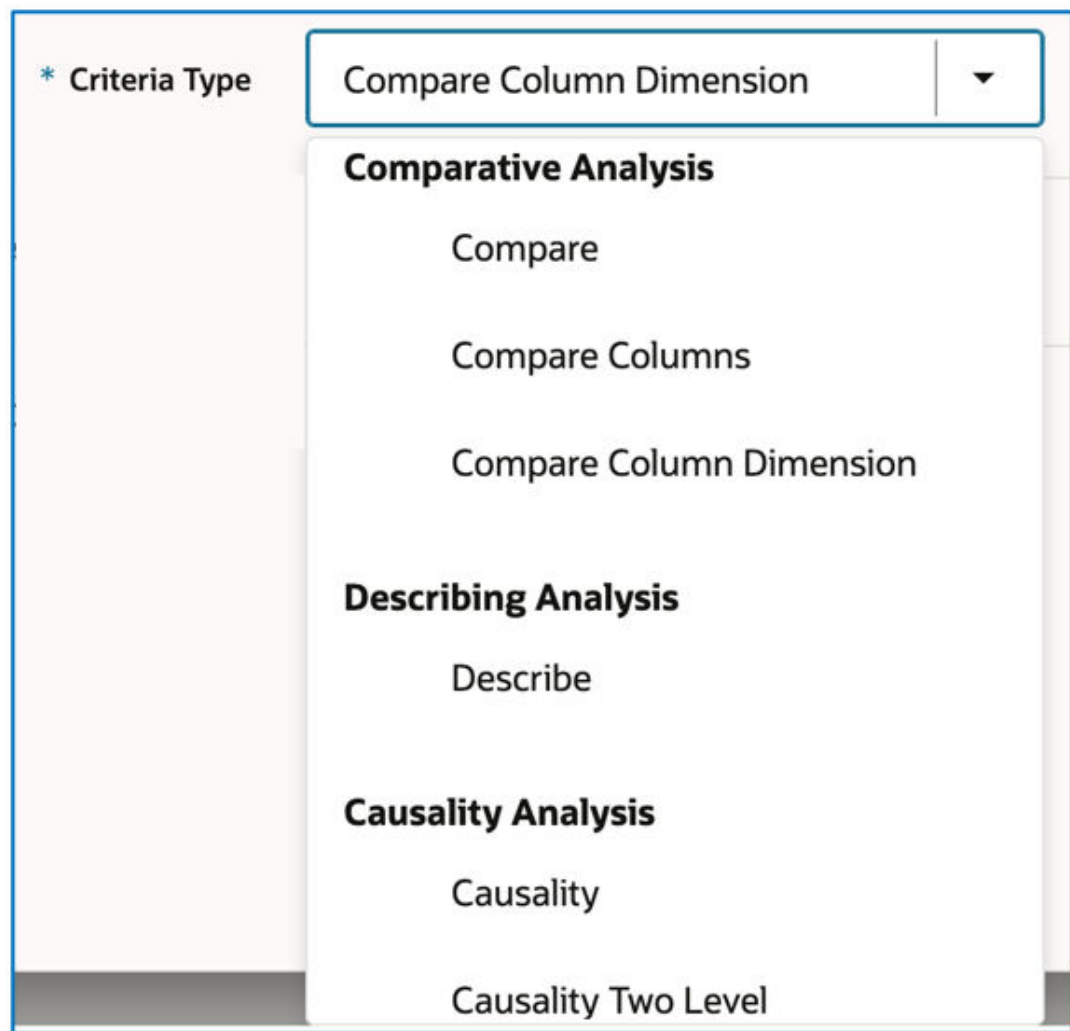
1. In the Grid Designer select **Actions**, and then select **Auto Text Summary Criteria Manager**.



2. In the Auto Text Summary Criteria Manager, you can create a new Criteria Definition or edit an existing Criteria Definition.



3. In the Criteria Definition Editor, specify a name for the definition and select one of the following **Criteria Type**:
- Compare
 - Compare Columns
 - Compare Column Dimension
 - Describe
 - Causality
 - Causality Two Level



4. If one of the **Causality Analysis** criteria type is selected, additional parameters need to be selected.
For more information, see [Working with the Causality Criteria Type](#).
If one of the **Compare** criteria types is selected, additional parameters need to be selected. For more information, see [Working with the Compare Criteria Type](#).
5. If there are user-customized Machine Learning (ML) templates, select a Machine Learning Template. Only the custom templates associated with the use case defined for Criteria Type will be displayed. For example, if the Criteria Type is Compare, only the ML templates for Compare use case will be displayed.
6. Click **OK**.

Creating Conditional Format/Text Definition

To create a conditional format/text definition:

1. Edit a report grid and select the rows, columns, and/or cells to which you want to apply the conditional text.

Note

You can define conditional text on grids that have merged column header cells and column cells with custom heading labels. The resulting Generative AI text returns the underlying column member names or aliases.

2. Create a condition to apply the conditional text against the selected rows, columns, and/or cells.

Note

- The **Describe the causality for exceptions** and the **comparative analysis** use cases can only be applied to data cells and not formula cells. For more information on creating a condition, see [Creating a Condition](#) in the *Designing with Reports* guide.
- For the **Describe the causality for exceptions** use case, in the conditional definition, the **Operator** field in the condition needs to be one of the following: "greater than", "greater than equal to", "less than" or "less than equal to". Any other conditions will not return the proper result.
- If the GenAI use case is **Describe exceptions**, you can define the condition to test for the desired exception. For example, Scenario variance greater than **10%**.
- If the GenAI use case is either **Describe the causality for exceptions** or **Do a comparative analysis**, and you don't have a specific condition to test for (you just want to generate narrative text via GenAI without a condition applied), you can set the condition to test for the current member name or the data value being "not equal to zero".

3. In the **Add Conditional Format/Text** dialog, in the **Conditional Text** tab, using the  button, select the AutoTextSummary function. Select the desired **Auto Text Summary Criteria Definition**.
4. Click **OK** to close the **Add Conditional Format/Text** dialog.

Inserting the ConditionalText Function to a Text Box, Row, Column or Cell

To insert the ConditionalText function to a text box, row, column or cell, select the  button to open the text function wizard. Select the ConditionalText text function and select the grid, row and/or column parameters, where applicable.

For more information on the ConditionalText function, see [ConditionalText](#) in the *Designing with Reports* guide.

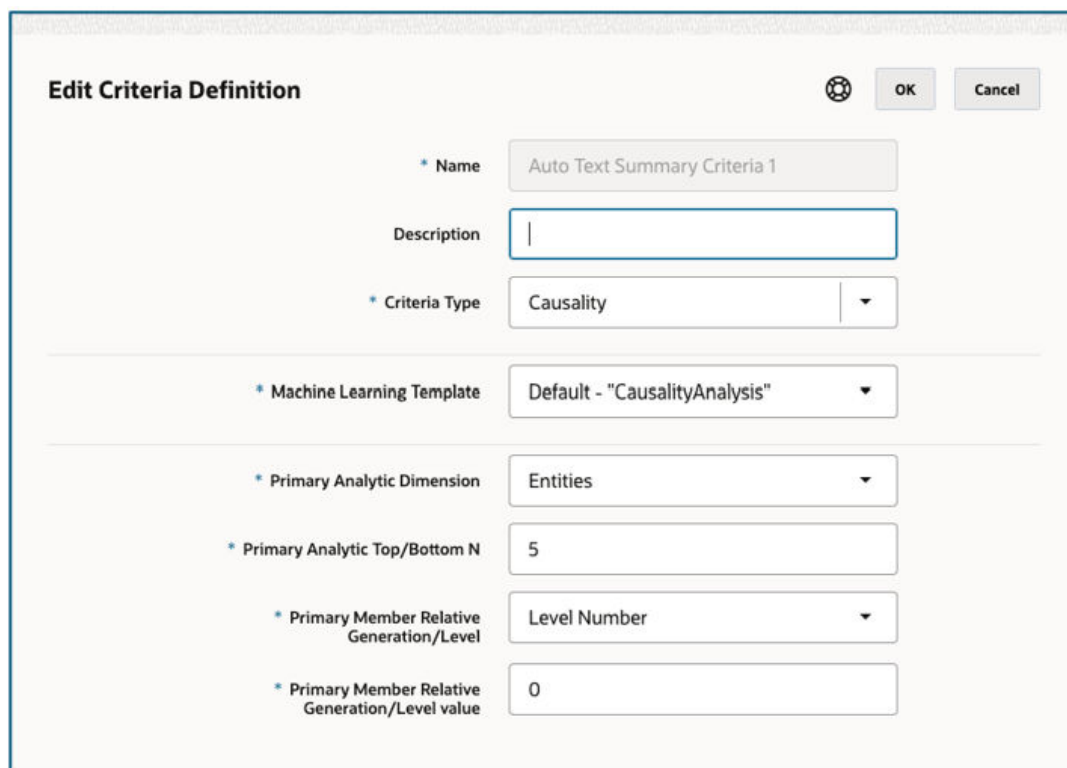
Note

- To restrict the POV members that are displayed in the GenAI generated narrative text, the inclusion of POV dimensions is controllable by hiding any POV dimensions that should not be displayed. This does not apply to the Notes Summarization feature.
- When previewing a report where GenAI is utilized to generate narrative text, you must manually verify the accuracy of the resulting text.

Working with the Causality Criteria Type

For the `AutoTextSummary` text function, the Causality use cases have additional parameters that must be defined for the Generative AI (GenAI) narrative results. These parameters are specified in the Criteria Definition after selecting a Criteria Type of either **Causality** or **Causality Two Level**.

- **Primary Analytic Dimension:** This service must internally Zoom in on a dimension to retrieve relevant data values. Select an **Analytic Dimension**, which is typically the row dimension in the grid.
- **Primary Analytic Top/Bottom N:** Specifies how many contributors are returned. The default selection is 3.
- **Primary Member Relative Generation/Level:** Select **Default (Children)**, or select **Relative Generation** or **Level**, and then specify the corresponding number.
- **Primary Member Relative Generation/Level value:** Select the **Relative Generation** (offset) or **Level Number** used to return contributors. **Relative Generation** is the generation number relative to the generation of the member being analyzed. If **Primary Member Relative Generation/Level** is set to **Default**, no additional value needs to be selected.
For example, if the Analytic Dimension member being analyzed is in generation 4 and a **Relative Generation** of 2 is specified, the system returns contributors from generation 6.



Edit Criteria Definition

* Name: Auto Text Summary Criteria 1

Description:

* Criteria Type: Causality

* Machine Learning Template: Default - "CausalityAnalysis"

* Primary Analytic Dimension: Entities

* Primary Analytic Top/Bottom N: 5

* Primary Member Relative Generation/Level: Level Number

* Primary Member Relative Generation/Level value: 0

If the **Criteria Type** is **Causality Two Level**, define these additional parameters:

- **Secondary Dimension or Additional Member Relative Generation/Level:** Select **Secondary Analytic Dimension** or **Additional Level**.
If you select **Secondary Analytic Dimension**, define the following parameters:
 - **Secondary Analytic Dimension:** Select the second dimension used for the analysis.
 - **Secondary Analytic Top/Bottom N:** Specify the number of contributors to return. The default selection is 3.
 - **Secondary Member Relative Generation/Level:** Select **Default (Children)**, **Relative Generation**, or **Level**.
 - **Secondary Analytic Member Relative Generation/Level Value:** Select the **Relative Generation number** or **Level number** to use. If **Secondary Member Relative Generation/Level** is set to **Default**, no value is required.
- If you select **Additional Level**, define the following additional parameters:
 - **Additional Relative Generation/Level Top/Bottom N:** Specifies how many contributors are returned. The default selection is 3.
 - **Additional Member Relative Generation/Level Value:** If **Additional Member Relative Generation/Level** is set to **Relative Generation** or **Level**, select the **Relative Generation number** or **Level number** used to return contributors. If it is set to **Default**, no value is required.

Edit Criteria Definition

OK

Cancel

* Name

Auto Text Summary Criteria 1

Description

* Criteria Type

Causality Two Level

* Machine Learning Template

Default - "CausalityWith2LevelAnaly"

* Primary Analytic Dimension

Entities

* Primary Analytic Top/Bottom N

3

* Primary Member Relative Generation/Level

Default

Primary Member Relative Generation/Level value

0

* Secondary Dimension or Additional Member Relative Generation/Level

Secondary Analytic Dimension

* Secondary Analytic Dimension

Segments

* Secondary Analytic Top/Bottom N

3

* Secondary Member Relative Generation/Level

Level Number

* Secondary Analytic Member Relative Generation/Level value

0

If you select **Additional Level**, define the following additional parameters:

- **Additional Relative Generation/Level Top/Bottom N:** Specifies how many contributors are returned. The default selection is 3.
- **Additional Member Relative Generation/Level Value:** If **Additional Member Relative Generation/Level** is set to **Relative Generation** or **Level**, select the **Relative Generation number** or **Level number** used to return contributors. If it is set to **Default**, no value is required.

Edit Criteria Definition

OK

Cancel

Name

Auto Text Summary Criteria 2

Description

Additional Level

Criteria Type

Causality Two Level

Machine Learning Template

Default - "CausalityWith2LevelAnaly:

Primary Analytic Dimension

Segments

Primary Analytic Top/Bottom N

3

Primary Member Relative Generation/Level

Default

Primary Member Relative Generation/Level value

0

Secondary Dimension or Additional Member Relative Generation/Level

Additional Level

Additional Relative Generation/Level Top/Bottom N

2

Additional Member Relative Generation/Level value

1

Working with the Compare Criteria Type

For the AutoTextSummary text function, the Compare use cases require additional parameters to be defined for the Generative AI (GenAI) narrative results. These parameters are specified in the Criteria Definition after selecting a Criteria Type of **Compare Columns** (perform a comparison on specified columns, applies to data and formula columns) or **Compare Column Dimension** (perform a comparison on a specified column dimension).

Compare Columns

The Criteria Type of **Compare** is limited to comparing values based primarily on time dimensions (e.g. prior period). **Compare Column** allows users to:

- Compare any two columns, independent of their position or relationship.
- Perform comparisons between different column types:
 - Data vs. Data
 - Data vs. Formula
 - Formula vs. Formula
- Apply comparisons across multiple dimensions. For example, Scenario, Year, Version and not just Period.

- Define comparisons that are independent of where the conditional text is applied.

To define a column comparison:

1. In the Criteria Definition, select **Compare Columns** as the Criteria Type.
2. Select the columns that you want to compare, and then click **Add**.

Edit Criteria Definition

* Name: Auto Text Summary Criteria 1

Description:

* Criteria Type: Compare Columns

* Machine Learning Template: Default - "ComparativeColumnAnaly"

Search Primary and Secondary columns and click Add button

Primary Column:

Secondary Column:

Add

Selected Column Pairs

A, D

Compare Column Dimension

Use Compare Column Dimension to compare two data columns based on a specified dimension instead of the default Period dimension.

To define a dimension-based comparison:

1. In the Criteria Definition, select **Compare Column Dimension** as the Criteria Type.
2. Select the desired **Dimension Name**.
3. Click **OK**.

Working with Generative AI Notes Summarization

In Narrative Reporting, you can use Generative AI (GenAI) to summarize Notes sourced from a Note segment or a Note text box, as an end-user action.

To summarize Notes in a report using GenAI, perform the following steps:

1. Preview a report that contains Notes in a Note box and/or Note segment (row or column).
2. From the Actions menu, select **Summarize Notes**.
3. **Optional:** In the Summarize Notes dialog:
 - Select **Summarize Notes with context**, which includes the data value for the member associated with the Note segment; applies to Note segments only, not Notes boxes).
 - Select a **Machine Learning Template** to use for the Note summarization.
4. Click **Summarize Notes**.
5. **Optional:** Click **Copy Summary to Clipboard** to copy the generated summary.

Creating a Report with Generative AI for Notes Summarization

You can summarize Notes in a text box using either the Notes or GridNotes text functions (with an additional parameter) or the SummarizeGridNotes text function.

Notes Text Function

To use the Notes text function to summarize Notes:

1. You can either edit a report with an existing **Note** text box or create a new **Note** text box in a report, in the Notes text function, set the **Summarize Notes** parameter to **True**. For example: `Notes("P&L Named POV", "P&L Note Format", "P&L Variance", true)`
2. If **Summarize Notes** = true, then the Notes in the Note Text box results will be summarized using GenAI.

If **Summarize Notes** = false or if the **Use Context** parameter is not included, the Note text box will display as defined, without any GenAI summarization.

For example:

- **Summarize Notes** = false

Fiscal Calendar: Jun, Years: FY26,
Segments: AS
 Accounts: 410000
 Last minute sales deal was postponed by the customer
 Accounts: 450000
 Unexpected increase in supplier pricing
 Accounts: 501100
 Variance was due to unplanned quarter end bonus promotion
 Accounts: 501200
 Additional bonus paid out due to quarter end sales promotion
 Accounts: 502000
 we saw an increase in travel fees related to higher airfare.
 Accounts: 503000
 Additional freight and shipping costs related to higher international shipping costs.
 Accounts: 506000
 Additional contractor services was a driving factor of higher other purchases and supplies expenses.
 Accounts: 509000
 Minor decrease in facilities maintenance costs

- **Summarize Notes** = true

The June 2026 financial performance for the Audio Systems segment experienced variances due to several factors. A last-minute sales deal was postponed by the customer, impacting the Net Revenue with a variance of (0.44%). Unexpected increases in supplier pricing led to a 0.27% variance in Cost of Sales. Unplanned quarter-end bonus promotions resulted in a (0.12%) variance in Salaries and Wages, while additional bonuses paid out for the quarter-end sales promotion caused a (0.10%) variance in Taxes and Benefits. An increase in travel fees, particularly airfare, contributed to a 0.39% variance in Travel expenses. Higher international shipping costs led to additional freight and shipping costs, impacting General Supplies with a (0.10%) variance. The main driver of higher other purchases and supplies expenses was additional contractor services, resulting in a 0.53% variance in Fees Outside Services. Finally, a minor decrease in facilities maintenance costs led to a 0.12% variance in Facilities Expenses.

Note

Use Context is not available for the summarized Notes using the Note text function because the underlying data values for the Notes are not available.

For more information on the Note text box and Notes text function, refer to the following topics:

- [Using the Notes Text Function](#).
- [Notes](#) text function syntax.

GridNotes Text Function

To use the GridNotes text function to summarize Notes:

1. You can **Edit** a report with a text segment (row or column) or text box in a report. Either edit an existing or insert a new GridNotes text function. Set the **Summarize Notes** parameter to true.

For example: `GridNotes(D, "P&L GridNote Format", "P&L Variance", true)`

2. If **Summarize Notes** = true, then the GridNotes function will be summarized using GenAI.

If **Summarize Notes** = false or if the **Use Context** parameter is not included, then the GridNotes function will display just the Notes, without any GenAI summarization.

For example:

- **Grid Designer mode:**

D	E	F	G	H
Variance %		Variance Explanation		Gen AI Summary
###%		GridNotes(D, "P&L GridNote Format", "P&L Variance", false)		GridNotes(D, "P&L GridNote Format", "P&L Variance", true)
###%		GridNotes(D, "P&L GridNote Format", "P&L Variance", false)		GridNotes(D, "P&L GridNote Format", "P&L Variance", true)
###%				
###%		GridNotes(D, "P&L GridNote Format", "P&L Variance", false)		GridNotes(D, "P&L GridNote Format", "P&L Variance", true)
###%				

- **Report Preview mode:**

Variance %	Variance Explanation	Gen AI Summary
(0.44%)		
0.27%	Unexpected increase in supplier pricing	The company is facing a challenge due to an unexpected increase in supplier pricing, which may impact its financial performance and operations.
(0.78%)		
(0.12%)	Increase in hourly cost for temporary staff.	The company has experienced an increase in hourly costs for temporary staff, which may impact overall operational expenses.
(0.10%)	Additional bonus payout for quarter end promotion	The company has implemented an additional bonus payout as part of a quarter-end promotion, which is expected to boost employee morale and performance.
0.39%	Ongoing increase in airfare expenses	The company is experiencing a continuous rise in airfare expenses, which is a cause for concern and may impact its financial performance.
(0.10%)	Ongoing increase of shipping and freight rates	The shipping and freight rates are experiencing a continuous increase.
(0.14%)	Minor increase due to additional web conference usage	The increase in revenue is attributed to the additional usage of web conferences, which has had a minor positive impact on the overall financial performance.
(0.07%)		
0.52%	Unplanned marketing promotion and related printing and advertising costs	The company incurred unexpected marketing promotion expenses, including printing and advertising costs, which were not initially planned for in the budget.

For more information on the GridNotes text function, see [GridNotes](#).

SummarizeGridNotes Text function

The SummarizeGridNotes text function can be inserted into a text box and used to summarize Notes that appear in a Note segment in a grid (inline grid Note entry).

This function is only available in a text box and not a text row or column. It also requires a grid with a Note segment to be present in the report.

To use the SummarizeGridNotes text function to summarize Notes:

- Insert the SummarizeGridNotes into a text box on the report and specify the row or column reference for the Note segment and if you want to add parameter **Use Context**.
- For example: SummarizeGridNotes(F, true), where **F** refers to a **Note** column and the **Use Context** parameter is set to true.
- **Report Preview** mode:

The June 2026 financial performance for the Audio Systems segment experienced variances due to several factors. A last-minute sales deal was postponed by the customer, impacting the Net Revenue with a variance of (0.44%). Unexpected increases in supplier pricing led to a 0.27% variance in Cost of Sales. Unplanned quarter-end bonus promotions resulted in a (0.12%) variance in Salaries and Wages, while additional bonuses paid out for the quarter-end sales promotion caused a (0.10%) variance in Taxes and Benefits. An increase in travel fees, particularly airfare, contributed to a 0.39% variance in Travel expenses. Higher international shipping costs led to additional freight and shipping costs, impacting General Supplies with a (0.10%) variance. The main driver of higher other purchases and supplies expenses was additional contractor services, resulting in a 0.53% variance in Fees Outside Services. Finally, a minor decrease in facilities maintenance costs led to a 0.12% variance in Facilities Expenses.

- For more information on the SummarizeGridNotes text function, see [SummarizeGridNotes](#).

Working with the Machine Learning Template Files

There are seven built-in Machine Learning (ML) template files, related to each of the three use cases for generating Narrative Summaries, which have a total of six criteria types, and one file for Notes Summarization, which provide examples of ideal inputs and outputs to guide the Generative AI (GenAI) narrative generation.

❗ Note

Gen AI Notes Summarization is not available for Reports in the Cloud EPM Platform.

The system supports both built-in (product-shipped) and user-customized templates for various ML-driven use cases, such as Note summarization, causality analysis, and comparative analysis. Built-in templates remain static and cannot be customized. You can create custom templates for any required changes for any of the use cases.

You can create, modify, download, upload, and set defaults for custom templates. Different templates can be used in different reports, as defined by the Report Designer.

In Narrative Reporting, the Machine Learning template files are managed in **Tools > Machine Learning Files**, where you can download, modify (in a text editor) and upload each of the files. You can also reset each file to the default shipped version of the file.

In Reports in the Cloud EPM Platform, the Gen AI ML template files are accessible in **Application Settings > Report Settings**:

Settings Close

Fonts | Machine Learning Template

Machine Learning Files

Search Q ⚙

☐	Feature ⌵	Default	Name ⌵	Description ⌵	Customized	Modified On ⌵	Modified By
☐	Compare	✓	ComparativeAnalysis	Describe a cell value compare...		6/22/26 2:54 PM	System
☐	Compare Columns	✓	ComparativeColumnAnalysis	Perform a comparison on spe...		6/22/26 2:54 PM	System
☐	Compare Column Dimension	✓	ComparativeMultiDimColumnAnalysis	Perform a comparison on a sp...		6/22/26 2:54 PM	System
☐	Describe	✓	DescribingAnException	Describe cells where conditio...		6/22/26 2:54 PM	System
☐	Causality	✓	CausalityAnalysis	Describe the top or bottom co...		6/22/26 2:54 PM	System
☐	Causality Two Level	✓	CausalityWith2LevelAnalysis	Perform a second-level Causa...		6/22/26 2:54 PM	System

Related Topics

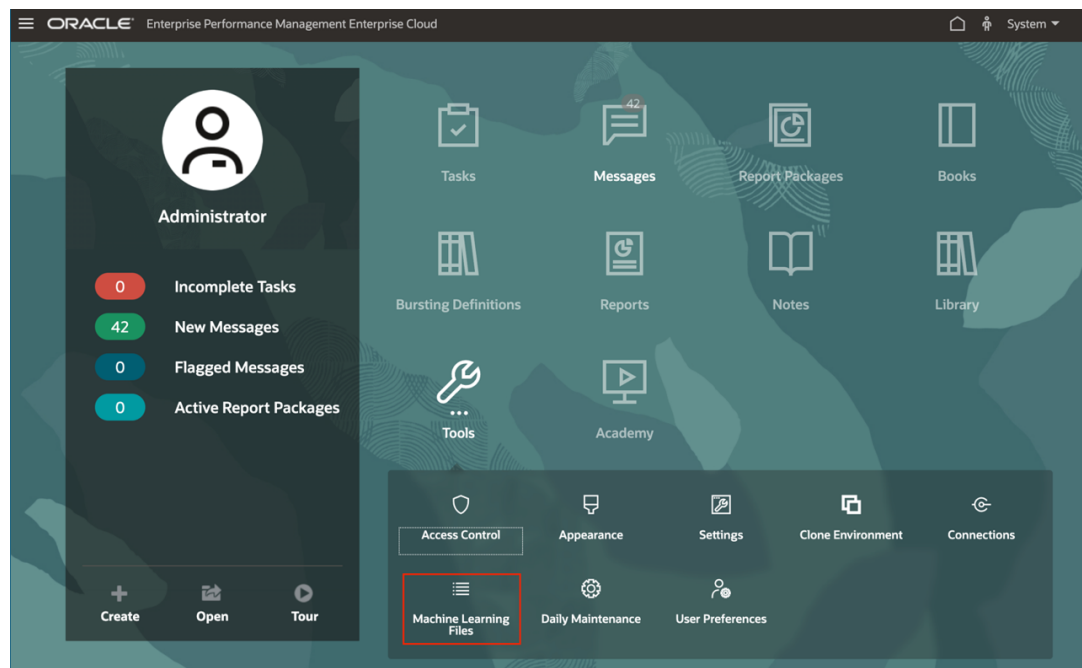
- [Accessing and Managing the Machine Learning Property Files](#)
- [How to Customize the Machine Learning Property Files](#)

Accessing and Managing the Machine Learning Property Files

To access the machine learning properties files:

For Narrative Reporting Deployments:

1. On the Narrative Reporting **Home** Page, select **Tools**, then select **Machine Learning Files**.



2. In the **Machine Learning Files** page, seven built-in (product-shipped) machine learning (ML) template files, related to each of the three use cases for generating Narrative Summaries, which have a total of six criteria types, and one file for Notes Summarization, which provide examples of ideal inputs and outputs to guide the Generative AI (GenAI) narrative generation.

Machine Learning Files						
Search						
☐ Feature	Default	Name	Description	Customized	Modified On	Modified By
☐ Compare	✓	ComparativeAnalysis	Describe a cell value compare...		May 4, 2026 8:38:34 PM	System
☐ Compare Columns	✓	ComparativeColumnAnalysis	Perform a comparison on spe...		May 4, 2026 8:38:34 PM	System
☐ Compare Column Dimension	✓	ComparativeMultiDimColumnAnalysis	Perform a comparison on a sp...		May 4, 2026 8:38:34 PM	System
☐ Describe	✓	DescribingAnException	Describe cells where conditio...		May 4, 2026 8:38:34 PM	System
☐ Causality	✓	CausalityAnalysis	Describe the top or bottom co...		May 4, 2026 8:38:34 PM	System
☐ Causality Two Level	✓	CausalityWith2LevelAnalysis	Perform a causality analysis t...		May 4, 2026 8:38:34 PM	System
☐ Notes Summary	✓	NoteSummarization	Summarize Notes sourced fro...		May 4, 2026 8:38:34 PM	System

For Enterprise Performance Management Cloud Deployments:

1. From the Home Page, click **Application**, and then click **Report Settings**.
2. In the Settings dialog, select **Machine Learning Templates**.

Settings						
Fonts Machine Learning Template						
Machine Learning Files						
Search						
☐ Feature	Default	Name	Description	Customized	Modified On	Modified By
☐ Compare	✓	ComparativeAnalysis	Describe a cell value compare...		6/22/26 2:54 PM	System
☐ Compare Columns	✓	ComparativeColumnAnalysis	Perform a comparison on spe...		6/22/26 2:54 PM	System
☐ Compare Column Dimension	✓	ComparativeMultiDimColumnAnalysis	Perform a comparison on a sp...		6/22/26 2:54 PM	System
☐ Describe	✓	DescribingAnException	Describe cells where conditio...		6/22/26 2:54 PM	System
☐ Causality	✓	CausalityAnalysis	Describe the top or bottom co...		6/22/26 2:54 PM	System
☐ Causality Two Level	✓	CausalityWith2LevelAnalysis	Perform a second-level Caus...		6/22/26 2:54 PM	System

How to Customize the Machine Learning Property Files

In the **Machine Learning Files** page, you can download one or more of the properties files, modify them in a text editor and upload them back to the service.

When customizing the machine learning properties files, you must keep the following guidelines in mind:

- Include 2-3 examples of high-quality responses.
- Ensure examples cover different scenarios relevant to your use case.
- If possible, try to use close to real data with sensitive information anonymized.
- Ensure no sensitive information is provided in the prompt.
- **NOTE:** You must not rename the downloaded file. Uploaded file must match the downloaded file name.

Example file format

Example1:

Data:


```
<<Dimension/Headers/Keys>>
<<Members/data_values/Values>>
or
<<Dimension/Headers/Keys>>
<<Members/data_values/Values>>
<<Calculations>>
or
<<Dimension/Headers/Keys>>
<<Members/data_values/Values>>
<<Top Contributors data>>
Response:
<<Expected Narrative>>
```

Note

- If any of the Machine Learning properties files have been customized, the new default properties files need to be modified to include the previously made changes.
- There will be a notification with a warning icon next to the properties file in the Machine Learning files window.

Example for Compare

Data1:

```
[Account, Entity, Period, Years, Scenario, Property, Currency,
Country, Version, Union Code, Component, value]
```

```
[EquityPerShare, Discover Bank, Qtr4, 2001, Fcst vs Bud,
OWP_CYTD(Prior), EUR, Britain, V1, Total Union, Total Component,
1032.6]
```

```
[EquityPerShare, Discover Bank, Qtr3, 2001, Fcst vs Bud,
OWP_CYTD(Prior), EUR, Britain, V1, Total Union, Total Component,
987.4]
```

Change in amount = 45.2

% Change = 4.58%

Response:

In Qtr4 2001, the Fcst vs Bud EquityPerShare for Discover Bank, Britain was EUR 1032.6 for Total Union and Total Component of OWP_CYTD(Prior) Property. It was EUR 987.4 in Qtr3, indicating an increase of EUR 45.2 or 4.58%.

Using Comments in the ML Template Files

You can add comments to the ML template files by enclosing the comments in `/*` and `*/`, such as:

```
/* This is a comment on the example */
```

Translating Gen AI Responses into Different Languages

You can have the Gen AI textual responses translated into different languages by updating the ML template files. At the bottom of each template file, you can change the desired language in the commented section:

```
/* Language instruction (optional): Use the exact same verbatim.  
Respond in {your preferred language}, e.g. "Respond in French" */
```

Language instruction: Respond in English

① Note

- The translation is generated directly by the Large Language Model (LLM) rather than by Reports. As a result, any translation issues, inconsistencies, or variations cannot be modified or corrected.
- The translation is performed directly on the generated text, dimension and member names/aliases are not treated any differently than the surrounding text, from a translation standpoint.
- The modified ML template file for language selection is selected by the report designer in the Criteria Definition for a report grid, which applies to all users accessing the report. Different language translations cannot be presented based on a user's locale.
- The LLM supports translation in 14 primary languages: English, French, German, Italian, Spanish, Portuguese, Dutch, Finnish, Russian, Ukrainian, Arabic, Bengali, Chinese, and Japanese.

Working with the Generative AI Sample Reports

Narrative Reporting includes seven Generative AI (GenAI) sample reports, one for each of the three use cases for generating narrative summaries and four for Notes summarization. This topic reviews the report design and resulting report output.

For more information on deploying the Narrative Reporting samples, see *Installing Samples in Administering Narrative Reporting*.

① Note

The generated narrative text for the sample reports may slightly differ between runs, the text can also differ if the machine learning property files have been edited. The generated narrative text in the sample report screenshots below may differ from when you run the report on your Narrative Reporting instance.

About Sample Report 13a (GenAI - Describe Exception)

This report contains one simple grid with regions (**Entities**) in the rows with **Actual**, **Plan**, and **Variance** in the columns, with a hidden "Percent of Sales" formula column, and a text box in the report to display the GenAI narrative summary. The purpose of the narrative summary is to describe an exception as specified in the conditional text definition, which is a percent of Sales over **10%** of total and a negative Variance. The narrative summary is displayed in a text box at the bottom of the report.

Grid Design View:

		A	B	C	D
		Actual	Plan	t vs Plan Var	% of Total
1					
2	Intersect([Descendant	#	#	#.##%	=#.##%
3					
4	Total Entities	#	#	#.##%	=#.##%

Criteria Definition:

Edit criteria object

OK Cancel

* Name Auto Text Summary Criteria 1

Description

* Criteria Type DescribingAnException

* Machine Learning Template Default - "DescribingAnExcepti...

The conditional text is applied to all **Entity** rows, except for the **Total Entities** and to the **Variance** column. The condition is defined as follows:

Edit Conditional Format/Text

OK Cancel

Name * Significant Sales Contribution

Applies To 2C

Define condition to be met for conditional format to be applied

Column Value D greater than Value 10

AND

Column Value C less than Value 0

Conditional Text

☐ Enable Analytics

T fx

AutoTextSummary("Auto Text Summary Criteria 1")

Where if the **Percent of Sales** (Column D) is greater than **10%** AND the **Variance** (Column C) is negative, the background color for the variance data cell will be set to **Gray** (not shown in the screenshot) and the AutoTextSummary() function is inserted into the **Conditional Text** panel on the right.

Note that the AutoTextSummary function contains the Criteria Definition Name.

Previewing the Report:

When executing the report, based on the examples in the machine learning property files, the results are as follows, where the **USA** and **Europe** "Percent of Sales" values AND the negative Variance meet the defined conditions, hence the data values are colored gray and the conditional text in the text box below the grid used GenAI to describe the exceptions.

vision

All Segments | January 2023

Vision Corporation
Revenue Variance by Territory

Run Date: 21-Aug-24 10:24:09 AM
By System

	Actual	Plan	Variance %
USA	51,507,709	58,948,596	-12.6%
Canada	2,482,299	2,808,258	-11.6%
Brazil	2,810,150	2,788,253	0.8%
Europe	42,819,661	48,503,319	-11.7%
China	4,964,598	5,573,493	-10.9%
Hong Kong	3,723,449	4,187,249	-11.1%
Japan	2,482,299	2,758,140	-10.0%
Total Entities	125,016,551	141,041,842	(11.4%)

Major revenue contributors with a variance below Plan:

Net Revenue's Variance % for USA in January 2023 was -12.6%.
Net Revenue variance % for Europe in January 2023 was -11.7%.

About Sample Report 13b (GenAI - Comparative Analysis)

This report contains one simple grid with two summary P&L accounts across four quarters, and a text box to display the GenAI narrative summary. The purpose of the narrative summary is to do a comparative analysis between **Q1** through **Q4** as specified in the conditional text definition. The narrative summary is displayed in a text box at the bottom of the report.

Grid Design View:

		A	B	C	D
		Q1	Q2	Q3	Q4
1					
2	400000	#	#	#	#
3	500000	#	#	#	#

Criteria Definition:

Edit criteria object

OK
Cancel

* Name
Auto Text Summary Criteria 1

Description

* Criteria Type
ComparativeAnalysis

* Machine Learning Template
Default - "ComparativeAnalysis"

The conditional text is applied to the **Gross Profit** row and to all four quarter columns. The condition is defined as follows:

Edit Conditional Format/Text

OK
Cancel

Name
Comparative analysis

Applies To
Row 2 Data Cells

Define condition to be met for conditional format to be applied

Current Cell Value
not equals
Value
0

Conditional Text

☐ Enable Analytics

T
fx

AutoTextSummary("Auto Text Summary Criteria 1")

Where if the cell value is not equal to zero, the text font color will be set to **Red** (not shown in the screenshot) and the AutoTextSummary (COMPARE) function is inserted into the **Conditional Text** panel on the right.

Note

The AutoTextSummary function contains the Criteria Definition Name.

Previewing the Report:

When executing the report, based on the examples in the machine learning property files, the results are as follows, where the **Gross Profit** data values in **Q1** through **Q4** meet the "value is

not equal to zero" condition, hence the data values are colored red and the conditional text in the text box below the grid used GenAI to describe the exceptions.

vision Total Entities All Segments 2026		Vision Corporation Summary P&L			
		Run Date: 18-Feb-26 3:39:32 PM By System			
	Actual	Forecasted Plan			
	Q1	Q2	Q3	Q4	
Gross Profit	133,887,256	154,212,929	153,556,348	151,920,493	
Operating Expenses	91,560,328	106,573,793	108,848,162	103,861,946	
The Gross Profit for All Segments under the 'Actual' scenario in Q1, 2026 was 133,887,256 for Total Entities. The Gross Profit for all entities and segments in Quarter2, 2026 was 154,212,929, under the Actual scenario. This represents an increase of 20,325,673 or 15.18% compared to Quarter1 of the same year, where the Gross Profit was 133,887,256. The Gross Profit for All Segments under the 'Plan' scenario in Q3, 2026 was 153,556,348 for Total Entities. The Gross Profit for Total Entities in Quarter4, 2026 under the 'Plan' scenario was 151,920,493. It was 153,556,348 in Quarter3, indicating a decrease of 1,635,855 or -1.07%.					

About Sample Report 13c (GenAI - Causality for Exceptions)

This report contains one simple grid with **Entity** region members in the rows across four quarters with **Net Revenue** as the **Account** POV, and a text column to display the GenAI narrative summary. The purpose of the narrative summary is to "Describe a Causality for Exceptions" as specified in the conditional text definition.

Grid Design View:

		A	B	C	D
		Q1	Q2	Q3	Q4
1					
2	E01, E02, E03, E04	#	#	#	#

Criteria Definition:

In the Criteria Definition:

- The **Primary Analytic Dimension** is set to **Entities** since this is the row dimension in the grid that needs to be analyzed.
- **Primary Analytic Top/Bottom Causality** is set to 5, which defines the number of contributors (top or bottom, based on the selected direction) are returned in the results.
- **Level Number** indicates that a level number will be used to determine which members are returned.
- **0** is the selected level number that is used to return the result.

The conditional text is applied to all **Entity** rows and the **Q4** column. The condition is defined as follows:

Where if the cell value is greater than **120,000,000**, the text font color will be set to **Red** (not shown in the screenshot) and the `AutoTextSummary(ZOOM)` function is inserted into the Conditional Text panel on the right.

Note

The `AutoTextSummary` function contains the Criteria Definition Name.

Previewing the Report:

When executing the report, based on the examples in the machine learning property files, the results are as follows, where the **North America** and **EMEA** data values in **Q4** meet the "value is greater than 120,000,000" condition, hence the data values are colored red and the conditional text in the text box below the grid used GenAI to describe the exceptions.

vision Net Revenue All Segments 2025					Vision Corporation Major Market Summary Report	
					Run Date: 19-Feb-26 6:29:34 AM	
					By System	
	Q1	Q2	Q3	Q4		
North America	169,815,985	189,356,600	194,477,098	185,193,996	In Quarter4, 2025, the Net Revenue for All Segments in North America was \$185,193,996. The top 5 contributing entities were NY with \$45,778,291, CA with \$41,616,628, MA with \$29,131,640, MN with \$14,565,820, and CO with \$12,484,988.	
Latin America	20,988,493	23,403,625	24,036,495	22,889,146		
EMEA	139,287,269	155,314,964	159,514,923	151,900,693	In Quarter4, 2025, the Net Revenue for All Segments was 151,900,693 for EMEA. The top 5 contributing entities were France Sales with 49,939,954, Italy with 29,131,640, Denmark with 24,969,977, Germany with 20,808,314, and United Kingdom with 12,484,988.	
APAC	51,517,209	57,445,261	58,998,670	56,182,448		

About Sample Report 13d (GenAI - CausalityWith2LevelAnalysis)

This report contains two grids, **Entity Analysis** illustrating a Secondary Analytic Dimension, and **Segment Analysis** illustrating an Additional Level. The narrative summary is displayed in a text box at the bottom of the report.

Entity Analysis Grid

This grid displays **Entity** members in the rows and four quarters in the columns, with **Gross Revenue** as the **Account** POV. The purpose of the narrative summary is to "Describe a Causality for Exceptions", using **Entities** as the primary analytic dimension and **Segments** as the secondary analytic dimension.

Grid Design View

		A	B	C	D
		Q1	Q2	Q3	Q4
1					
2	E01, E02, E03, E04	#	#	#	#

Criteria Definition:

The screenshot shows the 'Criteria Definition' dialog box for 'Auto Text Summary Criteria 1'. The fields are as follows:

- Name:** Auto Text Summary Criteria 1
- Description:** (empty)
- Criteria Type:** CausalityWith2LevelAnalysis
- Machine Learning Template:** Default - "CausalityWith2Level..."
- Primary Analytic Dimension:** Entities
- Primary Analytic Top/Bottom N:** 3
- Primary Member Relative Generation/Level:** Default
- Primary Member Relative Generation/Level value:** 1
- Secondary Dimension or Additional Member Relative Generation/Level:** Secondary Analytic Dimension
- Secondary Analytic Dimension:** Segments
- Secondary Analytic Top/Bottom N:** 3
- Secondary Member Relative Generation/Level:** Level Number
- Secondary Analytic Member Relative Generation/Level value:** 0

In the Criteria Definition:

- The **Primary Analytic Dimension** is set to **Entities**, since this is the row dimension in the grid that needs to be analyzed.
- **Primary Analytic Top/Bottom N** is **3**, which defines the number of contributors returned in the results.
- **Primary Member Relative Generation/Level** is set to **Default**, which returns the top three children of the selected analytic-dimension member.
- **Secondary Dimension or Additional Member Relative Generation/Level** is set to **Secondary Analytic Dimension**.
- The **Secondary Analytic Dimension** is set to **Segments**.
- **Secondary Analytic Top/Bottom N** is **3**, which defines the number of contributors returned in the results.
- **Secondary Member Relative Generation/Level** is set to **Default**, which returns the top three children of the selected analytic-dimension member.

The conditional text is applied to all **Entity** rows and the **Q4** column. The condition is defined as follows:

The screenshot shows the 'Edit Conditional Format/Text' dialog box. The fields are as follows:

- Name:** Causality - Second Analytic dimension
- Applies To:** 2D
- Define condition to be met for conditional format to be applied:**
 - Current Cell Value greater than Value 120000000
- Conditional Text:**
 - ☐ Enable Analytics
 - Font color: T (Red)
 - Formula: AutoTextSummary("Auto Text Summary Criteria 1")

Where if the cell value is greater than 120,000,000, the text font color will be set to Red (not shown in the screenshot) and the `AutoTextSummary()` function is inserted into the Conditional Text panel on the right. Note that the `AutoTextSummary` function contains the Criteria Definition Name.

Grid Preview:

Note that in Q4, the **North America** and **EMEA** Entities met the conditional format criteria (highlighted in red).

Secondary Analytic Dimension - Entity Analysis

	Q1	Q2	Q3	Q4
North America	188,325,928	209,996,469	215,675,102	205,380,141
Latin America	23,276,238	25,954,620	26,656,473	25,384,062
EMEA	154,469,581	172,244,295	176,902,050	168,457,869
APAC	57,132,585	63,706,794	65,429,525	62,306,335

Gen AI Generated Text:

Since the generated text appears in the report's text box, the text relevant to this grid is shown below:

In Quarter4, 2025, Gross Revenue for All Segments in North America amounted to 205,380,141, driven primarily by entities USA 191,534,289, Canada 9,230,568, and Mexico 4,615,284:

- USA at 191,534,289 and the top contributing Segments within USA were:
 - Installation with 19,356,683
 - Service Contracts with 17,070,977
 - DVD Player with 16,741,020
- Canada with 9,230,568 and the top contributing Segments within Canada were:
 - Installation with 932,852
 - Service Contracts with 822,698
 - DVD Player with 806,796
- Mexico with 4,615,284 and the top contributing Segments within Mexico were:
 - Installation with 466,426
 - Service Contracts with 411,349
 - DVD Player with 403,398

In Quarter4, 2025, Gross Revenue for All Segments in EMEA amounted to 168,457,869, driven primarily by entities Europe 159,227,301, Middle East 4,615,284, and Africa 4,615,284:

- Europe at 159,227,301 and the top contributing Segments within Europe were:
 - Installation with 16,091,700
 - Service Contracts with 14,191,535
 - DVD Player with 13,917,234
- Middle East with 4,615,284 and the top contributing Segments within Middle East were:
 - Installation with 466,426
 - Service Contracts with 411,349
 - DVD Player with 403,398
- Africa with 4,615,284 and the top contributing Segments within Africa were:
 - Installation with 466,426
 - Service Contracts with 411,349
 - DVD Player with 403,398

Segment Analysis Grid:

This grid displays **Segment** members in the rows and four quarters in the columns, with **Gross Revenue** as the **Account** POV. The purpose of the narrative summary is to Describe a Causality for Exceptions, using **Segments** as the primary analytic dimension, with an Additional Level returned in the generated narrative text.

Grid Design View:

		A	B	C	D
		Q1	Q2	Q3	Q4
1					
2	Seg01, Seg02	#	#	#	#

Criteria Definition:

* Name	Auto Text Summary Criteria 2
Description	Additional Level
* Criteria Type	CausalityWith2LevelAnalysis
* Machine Learning Template	Default - "CausalityWith2Level..."
* Primary Analytic Dimension	Segments
Primary Analytic Top/Bottom N	3
Primary Member Relative Generation/Level	Default
Primary Member Relative Generation/Level value	1
* Secondary Dimension or Additional Member Relative Generation/Level	Additional Level
Additional Relative Generation/Level Top/Bottom N	2
Additional Member Relative Generation/Level value	1

In the Criteria Definition:

- The **Primary Analytic Dimension** is set to **Entities** since this is the row dimension in the grid that needs to be analyzed
- **Primary Analytic Top/Bottom Causality** is **3**, which is the top/bottom number, which defines the number of contributors that are returned in the result.
- **Primary Member Relative Generation/Level** is **Default**, which will return the top 3 children of the analytic dimension member.
- **Secondary Dimension or Additional Member Relative Generation/Level** is set to **Additional Level**.
- **Secondary Analytic Top/Bottom N** is **2**, which is the top/bottom number, which defines the number of contributors that are returned in the result.

The conditional text is applied to the **Segment** rows and the **Q4** column. The condition is defined as follows:

Edit Conditional Format/Text

Name: Causality

Applies To: 2D

Define condition to be met for conditional format to be applied

Current Cell Value greater than Value 120000000

Conditional Text

☐ Enable Analytics

T fx

AutoTextSummary("Auto Text Summary Criteria 2")

Where if the cell value is greater than **120,000,000**, the text font color will be set to **Red** (not shown in the screenshot) and the AutoTextSummary() function is inserted into the Conditional Text panel on the right. Note that the AutoTextSummary function contains the Criteria Definition Name.

Grid Preview:

Additional Level - Segment Analysis				
	Q1	Q2	Q3	Q4
Electronics	288,133,743	333,262,479	353,135,929	339,132,477
Services	135,070,588	138,639,699	131,527,221	122,395,931

Note that in Q4, both Segments met the conditional format criteria (highlighted in red).

Gen AI Generated Text:

Since the generated text is displayed in the report's text box, the text pertinent to this grid is displayed below:

In Quarter4, 2025, Gross Revenue for Total Entities in Electronics amounted to 339,132,477, driven primarily by segments Digital Video 134,126,895, Audio Systems 106,318,031, and Televisions 98,687,551:

- Digital Video at 134,126,895 and the top contributing Segments within Digital Video were:
 - DVD Player with 40,339,808
 - Portable DVD with 34,031,944
- Audio Systems with 106,318,031 and the leading contributing Segments were:
 - Audio on the Go with 64,774,303
 - Home Audio with 41,543,728
- Televisions with 98,687,551 and the top contributing Segments within Televisions were:
 - Smart TV with 28,487,128
 - Plasma TV with 25,299,283

In Quarter4, 2025, the Gross Revenue for Services was 122,395,931 for Total Entities. The top 3 contributing segments were Installation with 46,642,610, Service Contracts with 41,134,885, and Repair with 34,618,436.

About Sample Report 13e (GenAI - Causality with Formulas)

This report contains one simple grid with **Entity** region members in the rows, with the **Scenarios** Actual and Plan in the columns with two grid column formulas for variance and variance %. with selected Income Statement accounts in the **Account** POV, and a text box to

display the GenAI narrative summary. The purpose of the narrative summary is to perform a causality analysis on a grid formula, as specified in the conditional text definition.

Grid Design View:

D1	 Column Formula	VARIANCEPERCENT([A],[B])			
		A	B	C	D
		Actual	Plan	Variance	Variance %
1	Children of Total Entities	#	#	=#	=#.##%
2					
3	Total Entities	#	#	=#	=#.##%

Criteria Definition:

Edit Criteria Definition


* Name

Description

* Criteria Type ▼

* Machine Learning Template ▼

* Primary Analytic Dimension ▼

* Primary Analytic Top/Bottom N

* Primary Member Relative Generation/Level ▼

Primary Member Relative Generation/Level value

In the Criteria Definition:

- The **Primary Analytic Dimension** is set to **Entities** since this is the row dimension in the grid that needs to be analyzed.
- Primary Analytic Top/Bottom Causality** is set to 3, which defines the number of contributors (top or bottom, based on the selected direction) are returned in the results.

- **Primary Member Relative Generation/Level** is set to **Default**, which returns the top three children of the selected analytic-dimension member.

The conditional text is applied to the **Children of Total Entities** rows and the **Variance %** formula column. The condition is defined as follows:

Edit Conditional Format/Text

Name * Causality with Formulas

Applies To 1D

Define condition to be met for conditional format to be applied

Column Value D greater than Value 0

Conditional Text
Report viewers can perform analytics on this conditional text.
☐ Enable Analytics

AutoTextSummary("Auto Text Summary Criteria 1")

Where if the cell value is greater than 0 (variance percent is positive), the shading color will be Yellow (not shown in the screenshot) and the AutoTextSummary() function is inserted into the Conditional Text panel on the right. Note that the AutoTextSummary function contains the Criteria Definition Name.

Grid Preview:

Note that the Entities Latin America and APAC met the conditional format criteria (highlighted in yellow).

Accounts	Years	Fiscal Calendar		
410000	FY26	Jun		
	Actual	Plan	Variance	Variance %
North America	69,883,327	70,782,846	-899,519	(1.27%)
Latin America	8,637,265	8,526,252	111,013	1.30%
EMEA	57,320,032	57,508,812	-188,780	(0.33%)
APAC	21,200,560	20,912,914	287,646	1.38%
Total Entities	157,041,184	157,730,824	-689,640	(0.44%)

Gen AI Generated Text:

Since the generated text appears in the report's text box, the text relevant to this grid is shown below:

In June 2026, Variance % Net Revenue for Latin America amounted to 1.30%. The top 3 contributing Entities were Brazil at 2.43%, Peru at 2.30%, and Venezuela at 1.49%.
In June 2026, Variance % for APAC for Net Revenue amounted to 1.38%. The top 3 contributing Entities were South Korea at 2.64%, China at 2.14%, and Japan at 2.01%.

About Sample Report 13f (GenAI - Compare Formula)

This report contains one grid with **Operating Expense** Account members in the rows, with the **Scenario**, **Year** and **Fiscal Calendar** dimensions in the columns, in addition to two formula columns.

Grid Design View:

The columns are defined as follows:

- (A) Actual, FY25, Total periods: essentially Actual and full year 2025.
- (B) Hidden column with Actual, FY26, months January – June: actual data for 2026 for the first half of the year.
- (C) Hidden column with Plan, FY26, months July – December: plan data for 2026 for the second half of the year.
- (D) Formula column that sums columns B and C to return full year 2026, split between Actual and Plan.
- (E) Formula column to calculate the percent of total for the Operating Expenses in the rows.

		A	B	C	Σ	Σ
		Actual	Actual	Plan	Act + Plan	% of
		FY25	FY26	FY26	Total FY26	Total
		Fiscal Calendar	from Jan	from Jul to		
1						
2	Children of 500000	#	#	#	=#	=#%
3	500000	#	#	#	=#	=#%

Criteria Definition:

Edit Criteria Definition

* Name: Auto Text Summary Criteria 1

Description:

* Criteria Type: Compare Columns

* Machine Learning Template: Default - "ComparativeColumnAnaly"

Search Primary and Secondary columns and click Add button

Primary Column:

Secondary Column:

Add

Selected Column Pairs

A, D

In the Criteria Definition:

The **Criteria Type** is **Compare Columns** and columns A and D are selected.

The conditional text is applied to the **% of Total** cell, the condition is applied as follows:

Edit Conditional Format/Text

Name: Column compare

Applies To: 2E

Define condition to be met for conditional format to be applied

Current Cell Value greater than Value 6

Conditional Text

Report viewers can perform analytics on this conditional text.

☐ Enable Analytics

AutoTextSummary("Auto Text Summary Criteria 1")

Where if the **% of Total** result is $> 6\%$, the shading color will be Yellow (not shown in the screenshot) and the `AutoTextSummary()` function is inserted into the Conditional Text panel on the right. Note that the `AutoTextSummary` function contains the Criteria Definition Name.

Grid Preview:

Note that three of the accounts have their **% of Total** above 6% and are highlighted in yellow.

	Actual 2025	Act + Plan Total FY26	% of Total
Total Compensation	115,044,037	113,774,407	28%
Travel	8,538,343	8,195,591	2%
General Supplies	6,373,636	6,203,297	2%
Telecommunications	11,252,299	10,951,016	3%
Equipment Maintenance	27,091,755	25,969,273	6%
Fees Outside Services	215,300,939	176,812,831	43%
Employee HR	11,761,480	11,308,832	3%
Facilities Exp	25,039,623	22,670,214	6%
Utilities	4,538,727	3,751,339	1%
Depreciation and Amort	37,932,886	31,207,428	8%
Operating Expenses	462,873,725	410,844,228	100%

Gen AI Generated Text:

Since the generated text appears in the report's text box, the text relevant to this grid is shown below:

In 2025, Actual Total Compensation was 115,044,037 compared to Act + Plan, Total FY26 of 113,774,407, showing an increase of 1,269,630 or 1.12%.
 In 2025, Actual Fees Outside Services was 215,300,939 compared to Act + Plan, Total FY26 of 176,812,831, showing an increase of 38,488,108 or 21.77%.
 In 2025, Actual Depreciation and Amort was 37,932,886 compared to Act + Plan, Total FY26 of 31,207,428, showing an increase of 6,725,458 or 21.55%.

About Sample Report 13g (GenAI - Compare Dimension)

This report contains one grid with select **P&L Account** members in the rows, with 3 columns with 3 different year members and the month **June** selected.

The purpose of the narrative summary is to perform a compare analysis on a dimension other than the time dimension, in this example the **Year** dimension is being compared.

Grid Design View:

		A	B	C
		FY24	FY25	FY26
		Jun	Jun	Jun
1				
2	410000	#	#	#
3	450000	#	#	#
4	400000	#	#	#
5	500000	#	#	#
6	340000	#	#	#

Criteria Definition:

Edit Criteria Definition

OK
Cancel

* Name

Auto Text Summary Criteria 1

Description

* Criteria Type

Compare Column Dimension

* Machine Learning Template

Default - "ComparativeMultiDimCol

* Dimension Name

Years

In the Criteria Definition, the **Criteria Type** is **Compare Column Dimension** and the **Dimension Name** of **Years** is selected.

Edit Conditional Format/Text

OK
Cancel

Name *

Compare column

Applies To

2B-6B, 2C-6C

Define condition to be met for conditional format to be applied

Current Cell Value

greater than

Value

0

Conditional Text

Report viewers can perform analytics on this conditional text.

☐ Enable Analytics

AutoTextSummary("Auto Text Summary Criteria 1")

Conditional text is applied to the **FY25** and **FY26** columns, where if the cell value > 0, the AutoTextSummary will be applied, essentially all cells in the last two columns will have the condition applied. The AutoTextSummary() function is inserted into the Conditional Text panel on the right. Note that the AutoTextSummary function contains the Criteria Definition Name.

Grid Preview:

	2024	2025	2026
	Jun	Jun	Jun
Net Revenue	145,522	154,215	157,041
Cost of Sales	93,593	100,588	106,377
Gross Profit	51,929	53,627	50,664
Operating Expenses	36,557	37,981	39,048
Net Income	7,437	7,402	3,168

Gen AI Generated Text:

Since the generated text appears in the report's text box, the text relevant to this grid is shown below:

In Jun 2025, Net Revenue was 154,215 compared to 145,522 in Jun 2024, showing an increase of 8,693 or 5.97%.
 In Jun 2026, Net Revenue was 157,041 compared to 154,215 in Jun 2025, showing an increase of 2,826 or 1.83%.
 In Jun 2025, Cost of Sales was 100,588 compared to 93,593 in Jun 2024, showing an increase of 6,995 or 7.47%.
 In Jun 2026, Cost of Sales was 106,377 compared to 100,588 in Jun 2025, showing an increase of 5,789 or 5.76%.
 In Jun 2025, Gross Profit was 53,627 compared to 51,929 in Jun 2024, showing an increase of 1,698 or 3.27%.
 In Jun 2026, Gross Profit was 50,664 compared to 53,627 in 2025, showing a decrease of 2,963 or 5.53%.
 In Jun 2025, Operating Expenses was 37,981 compared to 36,557 in Jun 2024, showing an increase of 1,424 or 3.90%.
 In Jun 2026, Operating Expenses was 39,048 compared to 37,981 in Jun 2025, showing an increase of 1,067 or 2.81%.
 In Jun 2025, Net Income was 7,402 compared to 7,437 in 2024, showing a decrease of 35 or 0.47%.
 In Jun 2026, Net Income was 3,168 compared to 7,402 in Jun 2025, showing a decrease of 4,234 or 57.20%.

About Sample Reports 15a – 15d

These reports illustrate the Generative AI-based summarization of Notes. All four reports contain the same grid layout, with Income Statement accounts in the Rows and Scenarios with associated variances in the columns. Additionally, there is a Note column for Variance Explanation that contains commentary for some of the account rows.

Grid Design View:

Years	Fiscal Calendar	Entities	Segments	Currencies			
FY26	Jun	Total Entities	AS,DV,TV	USD			
A1	Separator						
		A	B	C	D	E	F
		Actual	Plan	Variance	Variance %		Variance Explanation
1							
2	410000	\$#	\$#	\$#	###%		
3	450000	#	#	#	###%		
4	400000	#	#	#	###%		
5							
6	Bottom Members of 500000	#	#	#	###%		
7	500000	#	#	#	###%		
8							
9	311000	#	#	#	###%		
10	312000	#	#	#	###%		
11	310000	#	#	#	###%		

Grid Partial Preview:

	Actual	Plan	Variance	Variance %	Variance Explanation	
Net Revenue	\$ 52,635,837	\$ 52,865,824	\$ (229,986)	(0.44%)		
Cost of Sales	35,299,560	35,394,121	94,561	0.27%	Unexpected increase in supplier pricing	
Gross Profit	17,336,277	17,471,703	(135,426)	(0.78%)		
Salaries and Wages	3,781,892	3,777,237	(4,655)	(0.12%)	Increase in hourly cost for temporary staff.	
Taxes and Benefits	289,380	289,102	(279)	(0.10%)	Additional bonus payout for quarter end promotion	
Travel	81,347	81,663	317	0.39%	Ongoing increase in airfare expenses	
General Supplies	76,305	76,229	(76)	(0.10%)	Ongoing increase of shipping and freight rates	
Telecommunications	234,266	233,943	(323)	(0.14%)	Minor increase due to additional web conference usage	
Equipment Maintenance	640,241	639,803	(439)	(0.07%)		
Fees Outside Services	5,420,719	5,449,272	28,553	0.52%	Unplanned marketing promotion and related printing and advertising costs	
Employee HR	176,179	176,190	11	0.01%		
Facilities Exp	622,927	623,689	762	0.12%		
Utilities	93,140	93,455	316	0.34%		

Sample Report 15a (Gen AI Notes End User)

This report illustrates how end users can summarize Notes within the grid. When previewing the report, users can select **Summarize Notes** from the **Action** menu. A pop-up **Summarize Notes** dialog will appear, allowing the user to choose **Include Context** and copy the summary to the clipboard.

Summarize Notes

Close

Select Template
Default - "NoteSummarization"

Summarize
Copy Summary to Clipboard

☒ Summarize Notes with context

Note summary for Grid: Grid 1 - Column F, Note Template: P&L Variance

The June 2026 financial performance for the Audio Systems segment in USD currency experienced variances across various accounts. The Net Revenue account saw a decrease of 0.44% due to a last-minute sales deal postponement by the customer. The Cost of Sales increased by 0.27% due to an unexpected rise in supplier pricing. Salaries and Wages decreased by 0.12% as a result of an unplanned quarter-end bonus promotion. Taxes and Benefits also decreased by 0.10% due to an additional bonus paid out for the quarter-end sales promotion. Travel expenses increased by 0.39% due to higher airfare costs. General Supplies saw a decrease of 0.10% attributed to additional freight and shipping costs related to international shipping. Fees Outside Services increased by 0.53% due to additional contractor services, impacting other purchases and supplies expenses. Lastly, Facilities Expenses saw a minor decrease of 0.12% in facilities maintenance costs.

Sample Report 15b (Gen AI Notes SummarizeGridNotes)

This report illustrates how to use the **SummarizeGridNotes** text function to summarize the Notes that appear in the Note segment in a grid (inline grid Note entry).

	Actual	Plan	Variance	Variance %
410000	\$#	\$#	\$#	###%
450000	#	#	#	###%
400000	#	#	#	###%
Bottom Members of 500000	#	#	#	###%
500000	#	#	#	###%
511000	#	#	#	###%

SummarizeGridNotes(F, true)

Report Preview view:

vision Audio Systems June 2026		Vision Corporation Income Statement Act vs Plan Run Date: 08-Jul-25 9:35:25 AM By System			
	Actual	Plan	Variance	Variance %	Variance Explanation
Net Revenue	\$ 37,641,890	\$ 37,807,646	\$ (165,755)	(0.44%)	Last minute sales deal was postponed by the customer
Cost of Sales	27,725,691	27,799,963	74,272	0.27%	Unexpected increase in supplier pricing
Gross Profit	9,916,199	10,007,683	(91,484)	(0.91%)	
Salaries and Wages	2,939,875	2,936,276	(3,599)	(0.12%)	Variance was due to unplanned quarter end bonus promotion
Taxes and Benefits	224,292	224,076	(216)	(0.10%)	Additional bonus paid out due to quarter end sales promotion
Travel	63,480	63,727	247	0.39%	we saw an increase in travel fees related to higher airfare.
General Supplies	54,115	54,061	(54)	(0.10%)	Additional freight and shipping costs related to higher international shipping costs.
Telecommunications	175,188	174,946	(242)	(0.14%)	
Equipment Maintenance	489,452	489,117	(335)	(0.07%)	
Fees Outside Services	4,162,360	4,184,346	21,986	0.53%	Additional contractor services was a driving factor of higher other purchases and supplies expenses.
Employee HR	137,744	137,753	9	0.01%	
Facilities Exp	487,030	487,626	596	0.12%	Minor decrease in facilities maintenance costs
Utilities	72,820	73,067	247	0.34%	
Depreciation and Amort	757,861	755,023	(2,838)	(0.38%)	
Operating Expenses	9,564,217	9,580,018	15,801	0.16%	
Pretax Income From Operations	351,982	427,665	(75,683)	(17.70%)	
Other Exp (Inc)	(1,118,092)	(1,130,489)	(12,397)	(1.10%)	
Total Pretax Income	(766,110)	(702,824)	(63,285)	(9.00%)	
Net Income	\$ (1,730,924)	\$ (1,676,431)	\$ (54,493)	(3.25%)	

The June 2026 financial performance for the Audio Systems segment experienced variances due to several factors. A last-minute sales deal was postponed by the customer, impacting the Net Revenue with a variance of (0.44%). Unexpected increases in supplier pricing led to a 0.27% variance in Cost of Sales. Unplanned quarter-end bonus promotions resulted in a (0.12%) variance in Salaries and Wages, while additional bonuses paid out for the quarter-end sales promotion caused a (0.10%) variance in Taxes and Benefits. An increase in travel fees, particularly airfare, contributed to a 0.39% variance in Travel expenses. Higher international shipping costs led to additional freight and shipping costs, impacting General Supplies with a (0.10%) variance. The main driver of higher other purchases and supplies expenses was additional contractor services, resulting in a 0.53% variance in Fees Outside Services. Finally, a minor decrease in facilities maintenance costs led to a 0.12% variance in Facilities Expenses.

Sample Report 15c (Gen AI Notes Text Box)

This report illustrates the use of a Note text box with an additional optional parameter to Summarize Notes.

Report Design view:

	Actual	Plan	Variance	Variance %
410000	\$#	\$#	\$#	#.###%
450000	#	#	#	#.###%
400000	#	#	#	#.###%
Bottom Members of 500000	#	#	#	#.###%
500000	#	#	#	#.###%
211000	#	#	#	#.###%
Notes("P&L Named POV", "P&L Note Format", "P&L Variance", true)				

Report Preview view:

	Actual	Plan	Variance	Variance %	Variance Explanation
Net Revenue	\$ 52,635,837	\$ 52,865,824	\$ (229,986)	(0.44%)	
Cost of Sales	35,299,560	35,394,121	94,561	0.27%	Unexpected increase in supplier pricing
Gross Profit	17,336,277	17,471,703	(135,426)	(0.78%)	
Salaries and Wages	3,781,892	3,777,237	(4,655)	(0.12%)	Increase in hourly cost for temporary staff.
Taxes and Benefits	289,380	289,102	(279)	(0.10%)	Additional bonus payout for quarter end promotion
Travel	81,347	81,663	317	0.39%	Ongoing increase in airfare expenses
General Supplies	76,305	76,229	(76)	(0.10%)	Ongoing increase of shipping and freight rates
Telecommunications	234,266	233,943	(323)	(0.14%)	Minor increase due to additional web conference usage
Equipment Maintenance	640,241	639,803	(439)	(0.07%)	
Fees Outside Services	5,420,719	5,449,272	28,553	0.52%	Unplanned marketing promotion and related printing and advertising costs
Employee HR	176,179	176,190	11	0.01%	
Facilities Exp	622,927	623,689	762	0.12%	
Utilities	93,140	93,455	316	0.34%	
Depreciation and Amort	969,329	965,699	(3,630)	(0.38%)	
Operating Expenses	12,385,725	12,406,282	20,556	0.17%	
Pretax Income From Operations	4,950,552	5,065,421	(114,869)	(2.27%)	
Other Exp (Inc)	(1,430,075)	(1,445,931)	(15,856)	(1.10%)	
Total Pretax Income	3,520,477	3,619,490	(99,013)	(2.74%)	
Net Income	\$ 2,266,163	\$ 2,374,217	\$ (108,055)	(4.55%)	

The fiscal year FY26, particularly the month of June, witnessed several unexpected and ongoing cost increases across various segments and accounts. These include an unexpected rise in supplier pricing, an increase in hourly costs for temporary staff, additional bonus payouts for a quarter-end promotion, ongoing higher airfare expenses, ongoing elevated shipping and freight rates, a minor increase due to additional web conference usage, and unplanned marketing promotion costs, including printing and advertising. These factors collectively contributed to a challenging financial environment during this period.

Sample Report 15d (Gen AI Notes GridNotes)

This report illustrates using the **GridNotes** text function to display and summarize Notes. Two text columns are shown, one displays the original Notes, and the other summarizes the Notes using Gen AI.

Report Design view:

H2 Custom Text		GridNotes(D, "P&L GridNote Format", "P&L Variance", true)						T	
		A	B	C	D	E		F	G
		Actual	Plan	Variance	Variance %			Variance Explanation	Gen AI Summary
1									
2	410000	\$#	\$#	\$#	#.#%			GridNotes(D, "P&L GridNote Format", "P&L Variance", false)	GridNotes(D, "P&L GridNote Format", "P&L Variance", true)
3	450000	#	#	#	#.#%			GridNotes(D, "P&L GridNote Format", "P&L Variance", false)	GridNotes(D, "P&L GridNote Format", "P&L Variance", true)
4	400000	#	#	#	#.#%				
5									
6	Bottom Members of 500000	#	#	#	#.#%			GridNotes(D, "P&L GridNote Format", "P&L Variance", false)	GridNotes(D, "P&L GridNote Format", "P&L Variance", true)
7	500000	#	#	#	#.#%				
8									
9	311000	#	#	#	#.#%				
10	312000	#	#	#	#.#%				
11	310000	#	#	#	#.#%				
12									
13	340000	\$#	\$#	\$#	#.#%				

Report Preview view:

	Actual	Plan	Variance	Variance %	Variance Explanation	Gen AI Summary
Net Revenue	\$ 52,635,837	\$ 52,865,824	\$ (229,986)	(0.44%)		
Cost of Sales	35,299,560	35,394,121	94,561	0.27%	Unexpected increase in supplier pricing	The company is facing a challenge due to an unexpected increase in supplier pricing, which may impact its financial performance and operations.
Gross Profit	17,336,277	17,471,703	(135,426)	(0.78%)		
Salaries and Wages	3,781,892	3,777,237	(4,655)	(0.12%)	Increase in hourly cost for temporary staff.	The company has experienced an increase in hourly costs for temporary staff, which may impact overall operational expenses.
Taxes and Benefits	289,380	289,102	(278)	(0.10%)	Additional bonus payout for quarter end promotion	The company has implemented an additional bonus payout as part of a quarter-end promotion, which is expected to boost employee morale and performance.
Travel	81,347	81,663	317	0.39%	Ongoing increase in airfare expenses	The company is experiencing a continuous rise in airfare expenses, which is a cause for concern and may impact its financial performance.
General Supplies	76,305	76,229	(76)	(0.10%)	Ongoing increase of shipping and freight rates	The shipping and freight rates are experiencing a continuous increase.
Telecommunications	234,266	233,943	(323)	(0.14%)	Minor increase due to additional web conference usage	The increase in revenue is attributed to the additional usage of web conferences, which has had a minor positive impact on the overall financial performance.
Equipment Maintenance	640,241	639,803	(438)	(0.07%)		
Fees Outside Services	5,420,719	5,449,272	28,553	0.52%	Unplanned marketing promotion and related printing and advertising costs	The company incurred unexpected marketing promotion expenses, including printing and advertising costs, which were not initially planned for in the budget.
Employee HR	176,179	176,190	11	0.01%		
Facilities Exp	622,927	623,689	762	0.12%		
Utilities	93,140	93,455	316	0.34%		
Depreciation and Amort	969,329	965,699	(3,630)	(0.38%)		
Operating Expenses	12,385,725	12,406,282	20,556	0.17%		
Pretax Income From Operations	4,950,552	5,065,421	(114,869)	(2.27%)		
Other Exp (Inc)	(1,430,075)	(1,445,931)	(15,856)	(1.10%)		
Total Pretax Income	3,520,477	3,619,490	(99,013)	(2.74%)		
Net Income	\$ 2,266,163	\$ 2,374,217	\$ (108,055)	(4.55%)		

Generative AI Governors and Limitations

The Generative AI (GenAI) narrative generation has the following limitations and governors.

Governors

Please note that these governors cannot be increased.

Note

A single conditional text GenAI evaluation on a single cell requires one call to the Fusion GenAI service.

- A maximum of **150** calls within a single request is allowed. If a report has over **150** conditions applied to cells in a grid, GenAI narrative text results will not be generated when this limit is reached.
- A maximum of **5** threads can be used for calls to the Fusion GenAI service, if a large **Report**, **Book** or **Bursting Definition** is being run and all thread are being used up, additional **Report**, **Book** or **Bursting Executions** will have to wait until the threads are freed up.
- A maximum of 25 cells with a single AutoTextSummary() condition applied is allowed. If a grid has over 25 cells with a single AutoTextSummary() conditional format/text applied, an error will be received and the number of cells that the condition is applied to will need to be reduced.

Limitations

- The comparative analysis use case can only be applied to a **Period** dimension and but not on other dimension types. It also can only be used with members in the same **Period** dimension generation, such as months or quarters only, and not mixed generations, such as months and quarters in the columns. This also applies to zoom enabled on **Period** dimension members; for example, with zoom enabled on **Quarter** members may result in quarters and months in the columns, which is not supported.
- There are separate timeout governors for both the Fusion AI and the actual prompt request process connection (both 15000 milliseconds). If your request has reached timeout, then the default error message will display in the text box instead of generated text.
- The **describe the causality for exceptions** and the **comparative analysis** use cases can only be applied to data cells and not formula cells.

Working with the Job Console for Reports

The Job Console provides the ability to schedule various Jobs, allowing you to automate service activities, such as executing bursting definitions or refreshing report package data sources.

The Job Console also allows you to define additional job owners for a scheduled job.

Note

You can assign only individual users as job owners, groups cannot be added.

You can schedule Jobs to run immediately or at a later date. You can also view and manage pending jobs and recent activity in the Job console.

Note

Bursting Definitions should not be scheduled to run concurrently or in rapid succession. Adequate wait time between executions is necessary to prevent excessive use of server resources, which can degrade service response times—especially for bursting definitions that require longer processing times. In addition, parallel bursting definition executions by the same user can also affect performance due to resources being shared between executions.

Related Topics:

- [Accessing the Job Console in *Administering Narrative Reporting*](#)
- [Scheduling Jobs in *Administering Narrative Reporting*](#)
- [Managing Jobs in *Administering Narrative Reporting*](#)
- [Security - Roles and Access for the Job Console in *Administering Narrative Reporting*](#)

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 Oracle Fusion Cloud Enterprise Performance Management 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 Cloud EPM 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

① Note

The ability to suppress missing blocks is available for Cloud EPM 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.
- Inserting a larger number of grids in a report, where each grid is medium to large sized, may result in slower report retrieval performance. It is recommended to split a report with multiple larger grids across multiple reports.

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 Cloud EPM 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.

		A	B	C
		Q2		Q2
1				
2	111000	#		#
3	112000	#		#
4	113000	#		#
5	114000	#		#
6	110000	#		#

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	173,545,723	173,546
Accounts Receivable - Net	384,188,475	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.

	MemberName("Fiscal Calendar", A)	<i>fx</i>	ROUND([A],-3)	
		A	B	C
		Q2		Name("Fiscal Calendar")
1				
2	111000		#	=#
3	112000		#	=#
4	113000		#	=#
5	114000		#	=#
6	110000		#	=#

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.

C6	Custom Formula	[7] - SUM([2:4])		
		A	B	C
		Q2		rName("Fiscal Calendar")
1				
2	111000		#	=#
3	112000		#	=#
4	113000		#	=#
5	114000		#	=#
6	Prepaid Expenses		=#	=#
7	110000		#	=#

Also, a Custom Heading of "*Prepaid Expenses*" was specified for the formula row header:

Prepaid Expenses	
Use Formula for Heading	
✓ Custom Heading	
1	
2	111000
3	112000
4	113000
5	114000
6	Prepaid Expenses
7	110000

Next, **Column A** and row 5 are hidden from display:

		A	B
		Q2	rName("Fiscal Calen
1			
2	111000	#	=#
3	112000	#	=#
4	113000	#	=#
5	114000	#	=#
6	Prepaid Expenses	=#	=#
7	110000	#	=#

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	<u>904,570</u>

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 (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 in <i>Operations Guide</i>
Unresponsive server	Managing the Environment When the Server is Down	Dealing with Down Environments in <i>Operations Guide</i>
Clone Environment	Cloning Issues	Clone Environment Issues in <i>Operations Guide</i>

Category	Troubleshooting Topics For	See this Section
EPM Automate	Fixing EPM Automate Issues	Resolving EPM Automate Issues in <i>Operations Guide</i>
REST API	Identifying REST API Problems	Diagnosing REST API Issues in <i>Operations Guide</i>
Access Control	Fixing Problems with User, Role, and Group Management	Resolving User, Role, and Group Management Issues in <i>Operations Guide</i>
Reports Performance Issues	Performance Issues with Reports	Troubleshooting Reports Issues in <i>Operations Guide</i>
Smart View	Fixing Problems with Smart View	Fixing Smart View Issues in <i>Operations Guide</i>

Frequently Asked Questions about Cloud EPM

This FAQ provides links to resources for frequently asked questions about administrative tasks in Oracle Fusion Cloud Enterprise Performance Management

Frequently Asked Questions (FAQs) in Cloud EPM 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. There may be some features in Financial Reporting that either don't exist in Reports or were implemented and exposed differently. Given the differences between the two solutions, the migration process may not migrate **100%** of the Financial Reporting (FR) report features and design; you may have to modify certain elements after the report has been migrated to produce a report that is equivalent or close to the original report. See [Differences between Financial Reporting and Reports](#)

Note

- Only Financial Reporting (dynamic) reports can be migrated to Reports. Migrating Financial Reporting (FR) Snapshot reports is currently not supported.
- 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 Oracle Fusion Cloud Enterprise Performance Management 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](#).

Note

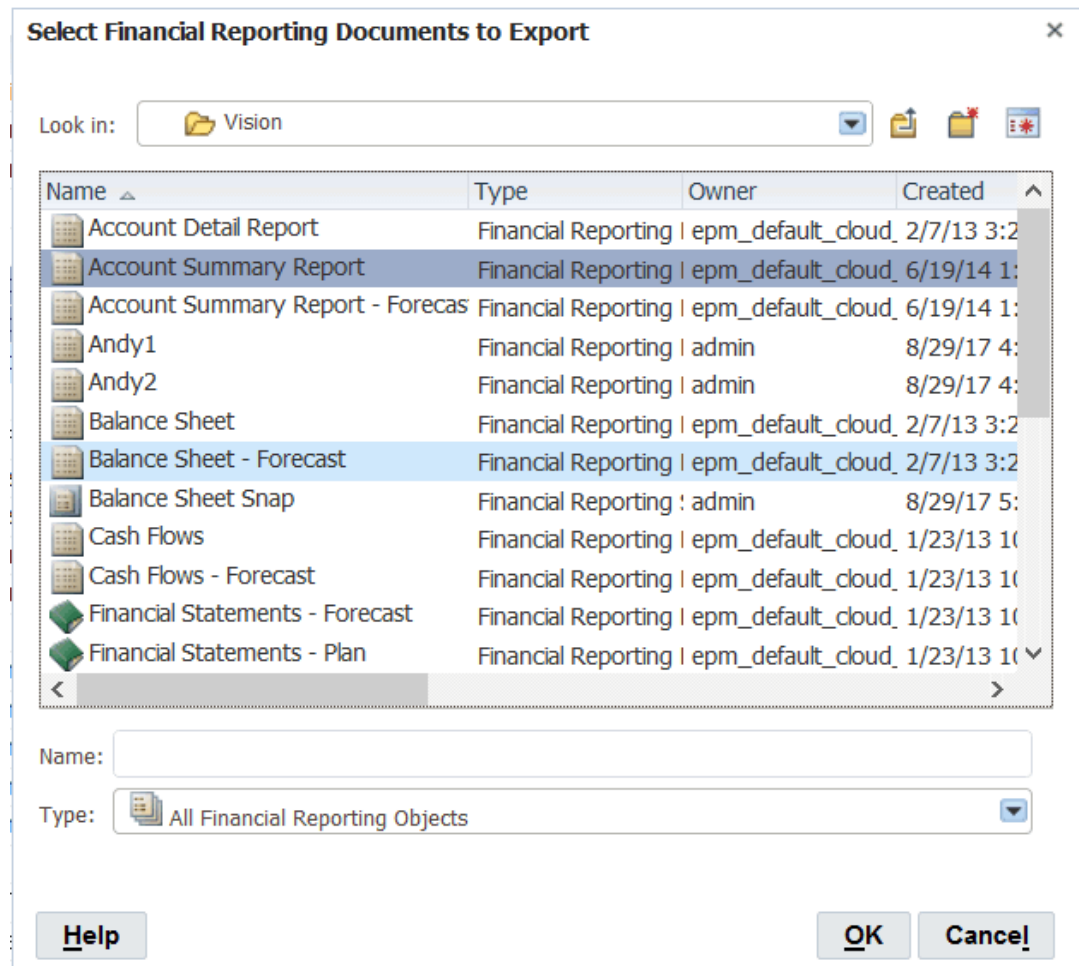
- You can migrate reports and objects that were created in Financial Reporting Oracle Fusion Cloud Enterprise Performance Management, and on-premises version 11.1.2.4 and later.
- Only Financial Reporting (dynamic) reports can be migrated to Reports. Migrating Financial Reporting (FR) Snapshot reports is currently not supported.

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). 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:

1. 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) 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:

1. 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**.

The image shows a dialog box titled "Import". In the top right corner, there are two buttons: "OK" and "Cancel". Below the title, there are three radio buttons labeled "File", "Library", and "Local", with "Local" being selected. Underneath, the text "Reports.zip" is displayed next to an "Update..." button. Further down, under the heading "Import Location", there are two radio buttons: "Same as Export Location" (which is selected) and "Current Folder (Library/ID)". At the bottom, under the heading "Options", there are two checked checkboxes: "Overwrite Existing Objects" and "Include Access Permissions".

4. Click **OK** on the message that the import is running.
5. 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 include the chart definition in the chart object export file.

Migrating Financial Reporting in Cloud EPM

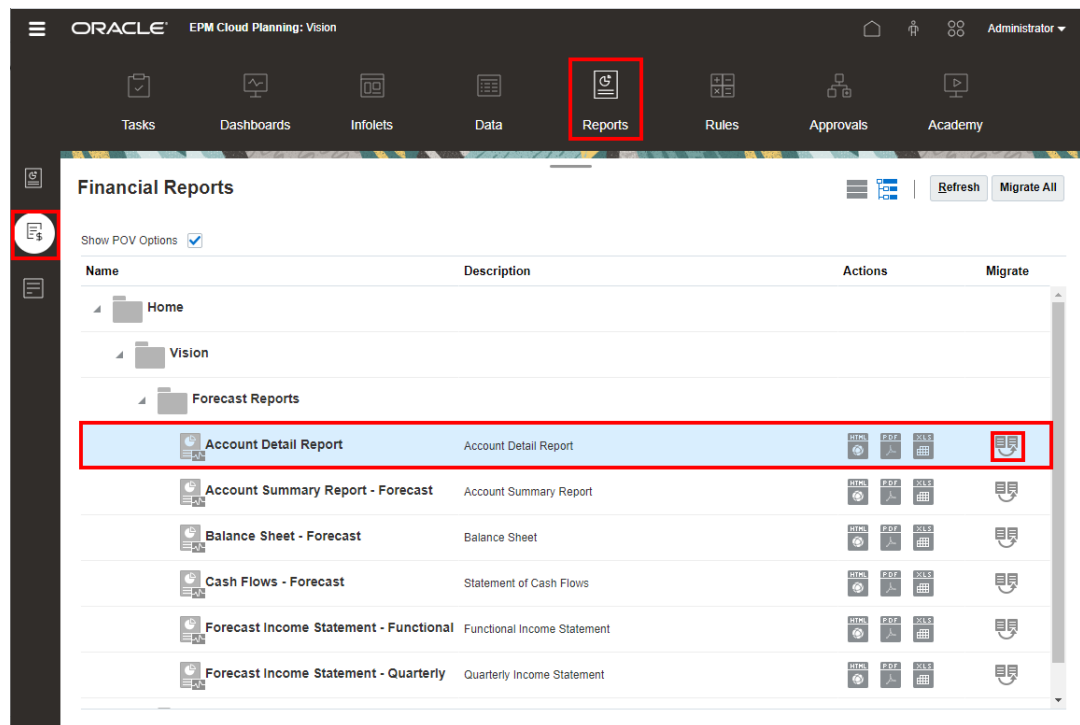
You can migrate either with in-place migration where you can migrate all or individual reports, or by importing Financial Reporting report files that were exported locally from the Explore Repository.

Note

- In-place migration simply migrates one or more Financial Reports to Reports. The migrated Financial Reports will still remain in their respective repository.
- The Service Administrator role is required to migrate Financial Reporting reports to Reports. The Power User role does not have migration access.
- Only Financial Reporting (dynamic) reports can be migrated to Reports. Migrating Financial Reporting (FR) Snapshot reports is currently not supported.

To perform in-place migration from Financial Reporting:

1. From an Oracle Fusion Cloud Enterprise Performance Management 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

Migrate Financial Report icon.

From the **Migrate** dialog, optionally enter a file name, and then select the destination folder to migrate the report.

Migrate

* Name Balance Sheet - Forecast

Select the destination folder

Library

Forecast

FS Folder

Infolets

Long Range Plan

Plan

Cancel

3. To migrate all reports, in the top right of the panel, click on **Migrate All**.

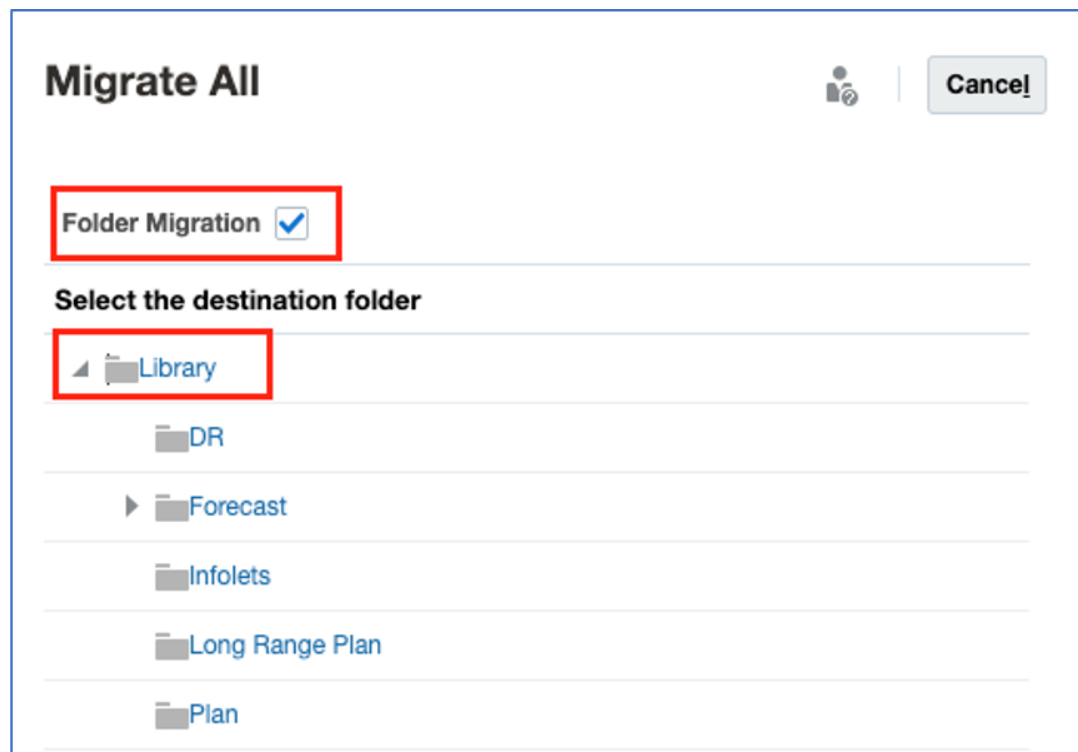
Tasks Dashboards Infolets Data Reports Rules Approvals Academy

Financial Reports

Show POV Options ☒

Name	Description	Actions	Migrate
Home			
Vision			
Forecast Reports			
Account Detail Report	Account Detail Report		
Account Summary Report - Forecast	Account Summary Report		

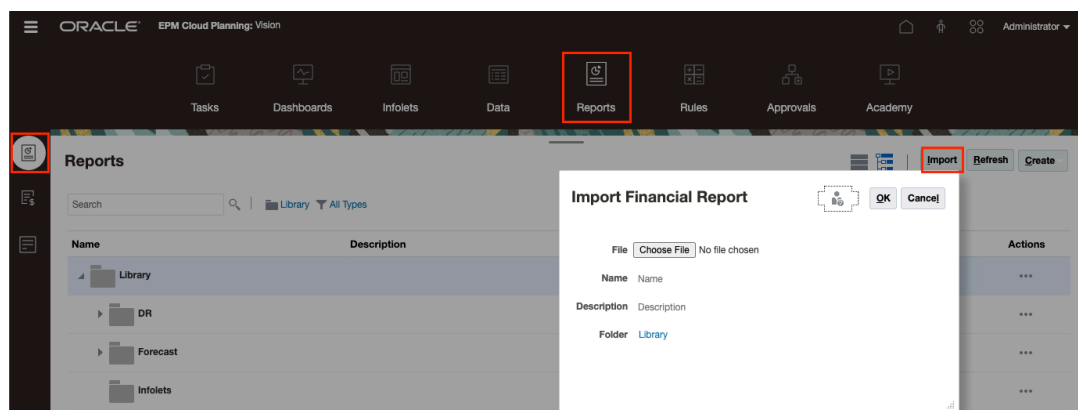
From the **Migrate All** dialog, optionally select **Folder Migration** to also migrate the folder structure, then select the destination folder to migrate the reports.



4. The migrated reports are saved in the respective location.

To import Financial Reporting report files that were exported locally from the Explore Repository:

1. 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.
2. 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.

Import Financial Report**OK****Cancel**File Sample Planning.des **Update...**

Name Sample Planning

Description Description

Folder Library

Note

Currently, you can only import single DES files and not ZIP files which contain multiple reports.

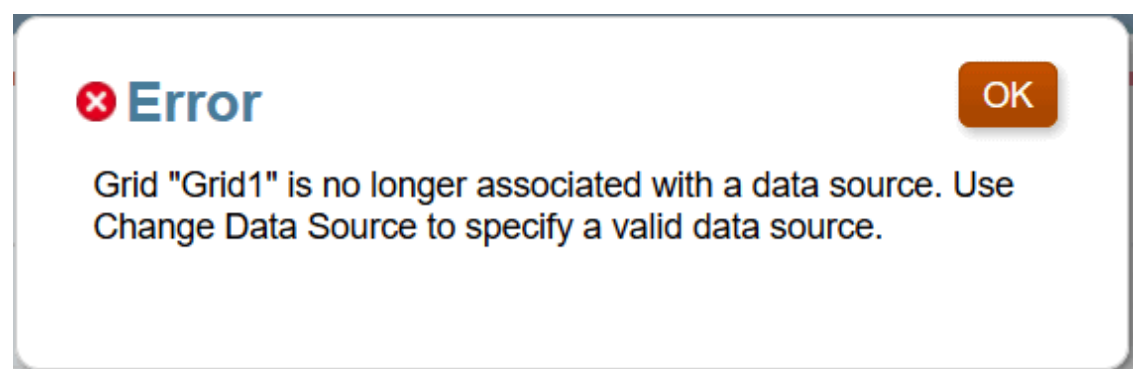
4. Click **OK**.

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 Oracle Fusion Cloud Enterprise Performance Management 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 Cloud EPM 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 through 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.

Note

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	
HFMCurrency	

Table B-1 (Cont.) Financial Reporting Functions and Reports Equivalents

Financial Reporting Function	Reports Equivalent
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 enable "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-by-segment 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, if the Grid property **Hide Grid Border in HTML** is set to false, which it is by default, displays light gray cell borders in the HTML preview, unless other border formatting is specified by the report designer. This is a 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:

Note

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 on-premises 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.
- In Financial Reporting, when using a prompt as a parameter for another member selection function (for example, Children or Descendants), end user selection of multiple members was permitted. Reports only supports multi-select prompts when the prompt is used as a parameter for the **Children**, **Descendants**, and **Bottom** member selection functions.

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**.
- In Financial Reporting Web Studio, you can define a conditional formatting condition to test for "Auto Calculation" and "Auto Calculation Group Heading". Neither of these conditions are supported in Reports with Grouping.
- Upon migration of a Financial Reporting (FR) report that contains the same conditional formatting definition applied to multiple cells, the duplicate conditional formats will be migrated and merged into single conditional formats in Reports.
- In Financial Reporting (FR), basic suppression (suppressing no data, zero, or error) is always combined with conditional suppression in a way that if either condition is met, the row or column is suppressed (basic suppression OR conditional suppression is applied).
In Reports, basic suppression operates separately from conditional suppression. Reports gives users control to decide how basic suppression (no data or zero or error) works with conditional expressions whether the data is suppressed only if both conditions are met, or if either condition is met. This allows for more flexible and customizable suppression behavior compared to Financial Reporting (FR).

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
- POV Dimensions with **Print All Selections** enabled will always output to **Excel** on different worksheets for each member and not a single worksheet with all members.

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

Note

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 Oracle Fusion Cloud Enterprise Performance Management 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 Cloud EPM 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.
- When applying formatting to a report, the entire grid's format is applied first, and the grid title's formatting is applied last. In Excel, the border that is applied last will override the border applied before it. In some cases, the result in Excel may not match the results in the HTML or PDF version of the report.
- 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 indentation 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.

D

Working with Sample Report Content

Narrative Reporting provides samples to help you learn how to use Reports, Books, and Bursting Definitions.

Related Topics

- [Reviewing the Sample Reports](#)
Narrative Reporting provides samples to help you learn how to use Reports.
- [Reviewing the Sample Books](#)
Narrative Reporting provides samples to help you learn how to use Books.
- [Reviewing the Sample Bursting Definition Files](#)
Narrative Reporting provides samples to help you learn how to use Bursting Definitions.

Reviewing the Sample Reports

Narrative Reporting provides samples to help you learn how to use Reports.

Note

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 in *Administering Narrative Reporting*), 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. Summarized Notes via Generative AI is also displayed in a Note text box.
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 (Gauge Charts)	Contains <i>nine</i> gauge charts driven by a hidden grid with a single data cell. 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 (Grouping)	Contains a grid with Accounts, Entities, and Segments in the rows and 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 (Note Box Input)	Contains a simple grid and chart with two Note templates inserted: 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.
Sample Report 9b (Note Text Box)	Contains a simple grid and a data source enabled text box with a Notes text 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 (Inline Grid Note Entry)	Contains a simple grid with a Note column segment which uses the Entity Variance Description Note template. The Segments dimension is 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 (GridNotes Text Function)	Contains a simple grid with a text column with the GridNotes text function. The text function refers to Notes attached in Column A, it uses a Note Format (Grid Cell Note Format) and it returns Notes for the Performance Summary Note template. The Entities dimension is changeable in the POV.
Sample Report 10 (Butterfly Report)	Contains a grid with Accounts in the rows and Fiscal Calendar in the columns. 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 (Saved Selections)	Contains two grids with the Fiscal Calendar dimension in the columns, where 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 (Shared Report)	Contains two grids and a chart, spread across two sheets, as well as three text 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.
Sample Report 13a (GenAI - Describe Exception)	This report contains one simple grid with regions (Entities) in the rows with Actual, Plan and Variance in the columns, with a hidden "Percentage of Sales" formula column, and a text box in the report to display the GenAI narrative summary. The purpose of the narrative summary is to describe an exception as specified in the conditional text definition, which is a "Percentage of Sales" over 10% of total and a negative Variance. For more information, see Working with the Generative AI Sample Reports topic.
Sample Report 13b (GenAI - Comparative Analysis)	This report contains one simple grid with two summary Profit & Loss accounts across four quarters, and a text box to display the GenAI narrative summary. The purpose of the narrative summary is to do a comparative analysis between Quarter 1 through Quarter 4 as specified in the conditional text definition. For more information, see Working with the Generative AI Sample Reports topic.
Sample Report 13c (GenAI - Causality for Exceptions)	This report contains one simple grid with Entity region members in the rows across four quarters with "Net Revenue" as the Account POV, and a text column to display the GenAI narrative summary. The purpose of the narrative summary is to describe a causality for exceptions as specified in the conditional text definition. For more information, see Working with the Generative AI Sample Reports topic.
Sample Report 13d (GenAI - CausalityWith2LevelAnalysis)	This report contains two grids: Secondary Analytic Dimension: with Entity region members in the rows across four quarters with "Gross Revenue" as the Account POV, for a "Secondary Analytic Dimension" example. Additional Level: with the two main Segment members in the rows across four quarters with "Gross Revenue" as the Account POV, for an "Additional Level" example. The text box at the bottom of the report displays the Gen AI narrative summaries for both grids. The purpose of the narrative summary is to describe a causality for exceptions, for both the "Secondary Analytic Dimension" and "Additional Level" use cases, as specified in the conditional text definition. For more information, see Working with the Generative AI Sample Reports topic.

Table D-1 (Cont.) List of all the Sample Reports

Report Names	Descriptions
Sample Report 13e (GenAI - Causality with Formulas)	This report contains one simple grid with Entity region members in the rows, with the Scenarios Actual and Plan in the columns with two grid column formulas for variance and variance %. with selected Income Statement accounts in the Account POV, and a text box to display the GenAI narrative summary. The purpose of the narrative summary is to perform a causality analysis on a grid formula, as specified in the conditional text definition. For more information, see Working with the Generative AI Sample Reports topic.
Sample Report 13f (GenAI - Compare Formula)	This report contains one grid with Operating Expense Account members in the rows, with the Scenario, Year and Fiscal Calendar dimensions in the columns, in addition to two formula columns. The purpose of the narrative summary is to perform a compare analysis on specified grid columns, one data and one formula column on a grid formula, as specified in the conditional text definition. For more information, see Working with the Generative AI Sample Reports topic.
Sample Report 13g (GenAI - Compare Dimension)	This report contains one grid with select P&L Account members in the rows, with 3 columns with 3 different year members and the month June selected. The purpose of the narrative summary is to perform a compare analysis on a dimension other than the time dimension, in this example the Year dimension is being compared. For more information, see Working with the Generative AI Sample Reports topic.
Sample Report 14a (Prompt report1) Sample Report 14b (Prompt report2)	Both reports contain a single grid with two prompts. Both reports are used in Sample Book 6 to illustrate the end-user respond to prompts feature.
Sample Report 15a (Gen AI Notes End User) Sample Report 15b (Gen AI Notes SummarizeGridNotes) Sample Report 15c (Gen AI Notes Text Box) Sample Report 15d (Gen AI Notes GridNotes)	All four reports contain the same grid layout, with Income Statement accounts in the rows and Scenarios with variances in the columns, along with a Note column that contains commentary for some of the account rows. These reports illustrate the Generative AI summarization of Notes. The Sample Report 15d report has two text columns using the GridNotes text function to display and summarize Notes, instead of having a Note column like the other reports. For more information, see Working with the Generative AI Sample Reports topic.

Reviewing the Sample Books

Narrative Reporting provides samples to help you learn how to use 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 in Administering Narrative Reporting*.

Use the samples as a guideline to create your own Book and report structure.

Overview of Cover Page and Table of Contents

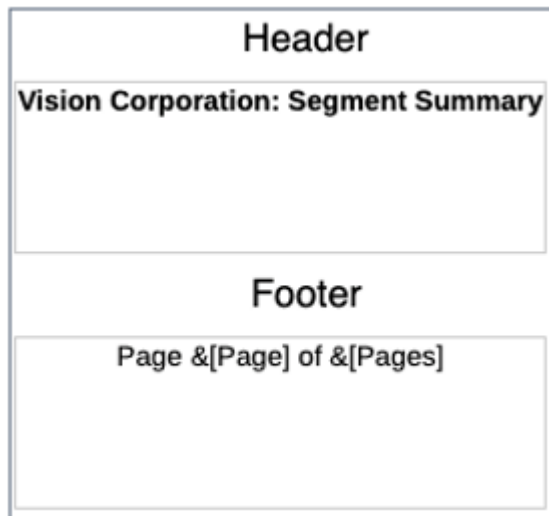
When you add a document to a book, it references a link to the library. The actual document will not be copied to the book. The Word document has a static cover page for the fictitious example Vision Corporation. The TOC is inserted in the Word Template as a TOC definition. The inserted TOC definition 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

Sample Book 1.1			
Fiscal Calendar			
Jun			
Name		POV	
Sample Book 1.1	▼		
Cover Page & TOC.docx	▼		
Segment Reports	▼		
Sample Report 1	▼	Segments Seg01,Seg02	
Sample Report 3	▼	Segments Children of Seg01,C...	
Sample Report 4	▼	Entities E01,E02	Segments AllSegments
			Fiscal Calendar CurrentPOV

TOC Preview

Table of Contents

Segment Reports	1
Sample Report 1: Electronics.....	1
Sample Report 1: Services	2
Sample Report 3: Audio Systems	3
Sample Report 3: Digital Video	4
Sample Report 3: Televisions	5
Sample Report 3: Installation	6
Sample Report 3: Service Contracts	7
Sample Report 3: Repair	8
Sample Report 4: North America, All Segments	9
Sample Report 4: Latin America, All Segments	10

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

Sample Book 1.2

Fiscal Calendar
Jun

Name		POV
Sample Book 1.2	▼	
Cover Page & TOC.docx	▼	
Sample Report 1	▼	Segments Seg01,Seg02
Sample Report 3	▼	Segments Children of Seg01,C...
Sample Report 4	▼	Entities E01,E02 Segments AllSegments Fiscal Calendar CurrentPOV

TOC Preview

Table of Contents

Sample Report 1: Electronics.....1

Sample Report 1: Services2

Sample Report 3: Audio Systems3

Sample Report 3: Digital Video4

Sample Report 3: Televisions.....5

Sample Report 3: Installation6

Sample Report 3: Service Contracts.....7

Sample Report 3: Repair8

Sample Report 4: North America, All Segments.....9

Sample Report 4: Latin America, All Segments.....10

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 Headings

+
×

Heading		
ArtifactName():	<i>fx</i>	▲
MemberAlias("Segments")	<i>fx</i>	▼

TOC Preview

Table of Contents	
Sample Report 1:	1
Electronics	1
Services	2
Sample Report 3:	3
Audio Systems	3
Digital Video	4
Televisions	5
Installation	6
Service Contracts	7
Repair	8
Sample Report 4:	9
North America, All Segments	9
Latin America, All Segments	10

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

Heading	
ArtifactName(): MemberAlias("Segments")	<i>fx</i>

Sample Report 4

Heading	
ArtifactName()	<i>fx</i>
MemberAlias("Entities"), MemberAlias("Segments")	<i>fx</i>

Book Designer View

Sample Book 2.1			
Fiscal Calendar Jun			
Name		POV	
Sample Book 2.1 Cover Page & TOC.docx Segments Sample Report 1 Sample Report 4	▼ ▼ ▼ ▼ ▼	Segments Seg01, Seg02 Segments CurrentPOV Entities E01, E02 Segments CurrentPOV Fiscal Calendar CurrentPOV	

TOC Preview

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: Services4

Sample Report 4:5

North America, Services5

Latin America, Services6

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

Fiscal Calendar		Segments	
Jun		AllSegments,Seg01...	
Name		POV	
Sample Book 2.2			
Cover Page & TOC.docx			
Segments		Segments Children of CurrentP...	
Sample Report 1		Segments CurrentPOV	
Sample Report 4		Entities E01,E02	Fiscal Calendar CurrentPOV

TOC Preview with **AllSegments** selected in the Book POV

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
Sample Report 1: All Segments	7
Sample Report 4:	8
North America, All Segments	8
Latin America, All Segments.....	9

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

Sample Book 3		
Fiscal Calendar		
Jun		
Name		POV
Sample Book 3		
Cover Page & TOC.docx		
Segments		Segments Children of AllSegme...
Sample Report 1		Segments CurrentPOV
SKU		Segments Children of CurrentP...
Sample Report 3		Segments CurrentPOV
Item		Segments Children of CurrentP...
Sample Report 4		Entities E01,E02
		Segments CurrentPOV
		Fiscal Calendar CurrentPOV

TOC Preview

Table of Contents	
Segments.....	1
Sample Report 1: Electronics.....	1
SKU	2
Sample Report 3: Audio Systems	2
Item	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	5
Sample Report 4: Latin America, Audio on the Go	6
Sample Report 3: Digital Video	7
Item	8
Sample Report 4: North America, DVD Player	8
Sample Report 4: Latin America, DVD Player	9
Sample Report 4: North America, DVD Recorder	10
Sample Report 4: Latin America, DVD Recorder	11
Sample Report 4: North America, Portable DVD	12
Sample Report 4: Latin America, Portable DVD	13
Sample Report 4: North America, DVD/VCR Combo	14
Sample Report 4: Latin America, DVD/VCR Combo	15
Sample Report 4: North America, Smart Set-Top box	16
Sample Report 4: Latin America, Smart Set-Top box	17
Sample Report 3: Televisions	18
Item	19
Sample Report 4: North America, High Definition TV	19
Sample Report 4: Latin America, High Definition TV	20
Sample Report 4: North America, Smart TV	21
Sample Report 4: Latin America, Smart TV	22
Sample Report 4: North America, Projection TV	23
Sample Report 4: Latin America, Projection TV	24
Sample Report 4: North America, Plasma TV	25
Sample Report 4: Latin America, Plasma TV	26
Sample Report 1: Services	27
SKU	28
Sample Report 3: Installation	28
Sample Report 3: Service Contracts	29
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

Fiscal Calendar		
Bottom Members o...		
Name		POV
Sample Book 4	▼	
Cover Page & TOC (TC...	▼	
Sample Report 1	▼	Segments Segments
Segment Summary	▼	
Segment Summary I...	▼	
Sample Book 1.2	▼	Fiscal Calendar CurrentPOV
Summary and closing c...	▼	

TOC View:

Table of Contents

Total Company Summary	1
Segment Summary	2
Introduction.....	2
Segment Summary Financials	3
Summary and Closing Comments	15

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)

Name		POV								
Sample Book 5 (All Reports)										
Cover Page & TOC.docx										
MANAGEMENT REPORTS		<table><tr><th>Fiscal Calendar</th><th>Years</th><th>Entities</th><th>Segments</th></tr><tr><td>Jun</td><td>FY23</td><td>Total Entities</td><td>AllSegments</td></tr></table>	Fiscal Calendar	Years	Entities	Segments	Jun	FY23	Total Entities	AllSegments
Fiscal Calendar	Years	Entities	Segments							
Jun	FY23	Total Entities	AllSegments							
Sample Report 0 (Executive Summary)		<table><tr><th>Entities</th></tr><tr><td>CurrentPOV</td></tr></table>	Entities	CurrentPOV						
Entities										
CurrentPOV										
Sample Report 1		<table><tr><th>Fiscal Calendar</th><th>Segments</th></tr><tr><td>CurrentPOV</td><td>CurrentPOV</td></tr></table>	Fiscal Calendar	Segments	CurrentPOV	CurrentPOV				
Fiscal Calendar	Segments									
CurrentPOV	CurrentPOV									
Sample Report 2a (Basic Charts)										
Sample Report 2b (Advanced Charts)		<table><tr><th>Entities</th></tr><tr><td>CurrentPOV</td></tr></table>	Entities	CurrentPOV						
Entities										
CurrentPOV										
Sample Report 3		<table><tr><th>Fiscal Calendar</th><th>Segments</th></tr><tr><td>CurrentPOV</td><td>CurrentPOV</td></tr></table>	Fiscal Calendar	Segments	CurrentPOV	CurrentPOV				
Fiscal Calendar	Segments									
CurrentPOV	CurrentPOV									
Sample Report 4a (RelativeMember)		<table><tr><th>Entities</th><th>Segments</th><th>Fiscal Calendar</th></tr><tr><td>CurrentPOV</td><td>CurrentPOV</td><td>CurrentPOV</td></tr></table>	Entities	Segments	Fiscal Calendar	CurrentPOV	CurrentPOV	CurrentPOV		
Entities	Segments	Fiscal Calendar								
CurrentPOV	CurrentPOV	CurrentPOV								
Sample Report 4b (PeriodOffset)		<table><tr><th>Fiscal Calendar</th><th>Years</th></tr><tr><td>CurrentPOV</td><td>CurrentPOV</td></tr></table>	Fiscal Calendar	Years	CurrentPOV	CurrentPOV				
Fiscal Calendar	Years									
CurrentPOV	CurrentPOV									

Name		POV
Sample Report 5 (Prompts)	▼	
Sample Report 6 (Cond. Format & Suppression)	▼	
Sample Report 7 (Zoom and Drill)	▼	
Sample Report 8 (Grouping)	▼	
Sample Report 10 (Butterfly Report)	▼	Entities CurrentPOV
▲ NOTES REPORTS	▼	
Sample Report 9a (Note Box Input)	▼	Entities E01_101 Segments AS,DV,TV
Sample Report 9b (Note Text Box)	▼	Entities E01
Sample Report 9c (Inline Grid Note Entry)	▼	Segments AS
Sample Report 9d (GridNotes Text Function)	▼	Entities E01_101

TOC View:

Table of Contents

MANAGEMENT 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
NOTES 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.....	22
Sample Report 9b (Note Text Box): North America	23
Sample Report 9c (Inline Grid Note Entry): Audio Systems.....	24
Sample Report 9d (GridNotes Text Function): USA.....	25

About Sample Book 6

This Book contains three reports with prompts, the book is used to show the end user respond to prompt feature.

Book Designer View:

Name		POV
Sample Book 6		
Cover Page & TOC.docx		
Sample Report 14a (Prompt report1)		
Sample Report 14b (Prompt report2)		
Sample Report 5 (Prompts)		

Note

All prompts in all reports have **Prompt for Value Upon Preview** enabled.

Properties

General

Name Sample Report 5 (Prompts)

Type Report

Path Library/Samples/Reports/Sample Re...

Data Sources

No data to display.

Prompts

Text Filter

Selection	Actions	Context
Choose a reporting region Prompt For Value On Preview	☒	Data Source Sample Model Report POV
Select one or more Segments Prompt For Value On Preview	☒	Data Source Sample Model Grid Revenue by Segment AXIS Rows

Preview:

Note that upon preview, **Compact** mode in the Prompts dialog combines the common prompts across reports.

Prompts OK Cancel

Compact shows a consolidation of prompts while Full shows all the prompts that exist in the book. Please choose Compact or Full view and proceed to make member selections. Member selections are only applicable to the prompts in the view where the selections were made.

Compact **Full**

Text Filter × 🔍

Selection		Context
Select a month * Jun	🔍	Data Source: Sample Model Artifact Name: Multiple
Select one or more Segments * BAS,HTAS	🔍	Data Source: Sample Model Artifact Name: Multiple Grid: Multiple
Select an Entity * E01	🔍	Data Source: Sample Model Artifact Name: Sample Report 14b (Prompt report2) Grid: Grid 1
Choose a reporting region * E01,E02	🔍	Data Source: Sample Model Artifact Name: Sample Report 5 (Prompts)
Select a Quarter * Q1	🔍	Data Source: Sample Model Artifact Name: Sample Report 5 (Prompts)

Reviewing the Sample Bursting Definition Files

Narrative Reporting provides samples to help you learn how to use Bursting Definitions.

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 *Installing Samples in Administering Narrative Reporting*.

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	
BB	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.

member	user_names	group_names	external_emails	user_emails	group_emails
--------	------------	-------------	-----------------	-------------	--------------

- 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:

The screenshot displays the configuration for 'Sample Report 1'. Key settings include:

- Bursting Artifact:** Sample Report 1
- Bursting POV Dimension:** Segments (with a list of members: BAS, HTAS, BB, PCD, M...)
- Global Dimension:** Fiscal Calendar (with a value of Jun)
- Use Legacy Distribution File:** ☐
- Targeted Distribution File:** bursting_file_segments.csv
- Distribution Format:** ☒ PDF, ☐ Excel
- Success Notification:** [Edit...](#)
- Failure Notification:** [Edit...](#)
- Email Channel:**
 - ☒ Email
 - ☐ Send all generated reports to all recipients in a single email
 - * Attachment Name:** ArtifactDescription() - MemberAlias("Segments")
 - * Bursting Email:** [Edit...](#)
- Library Channel:**
 - ☒ Library
 - ☐ Assign all permissions to the generated reports
 - * Artifact Name:** ArtifactDescription() - MemberAlias("Segments")
 - * Root Folder:** Samples
 - Overwrite:** ☐
 - Path Hierarchy:** ArtifactName()

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:

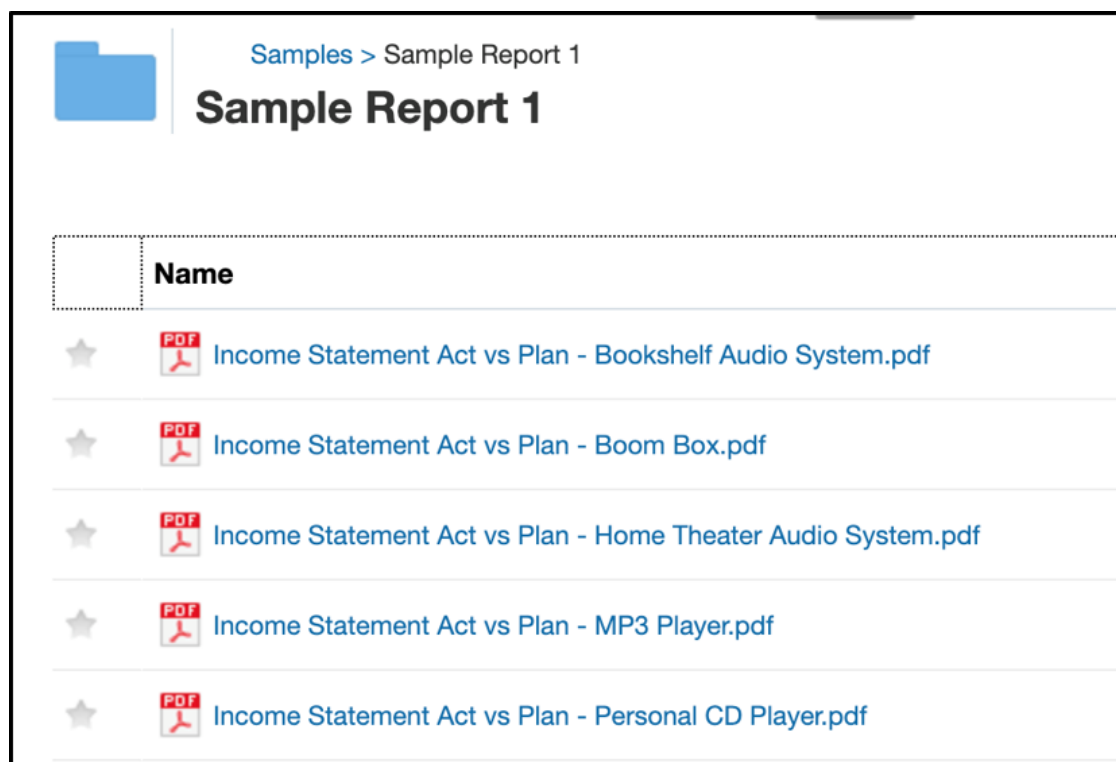
- The output file is generated for the five **Segments** selected in the Bursting POV Dimension.
- For the **Email** channel, the email addresses in the distribution file listed for each member, in both the `external_emails` and `user_emails` columns, the respective users will be emailed their corresponding 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:

* Bursting Artifact [Sample Report 1](#)

Bursting POV Dimension **Segments**
BAS, HTAS, BB, PCD, M...

Global Dimension **Fiscal Calendar**
Jun

Use Legacy Distribution File ☐

Targeted Distribution File [bursting_file_segments.csv](#) ⚠ The Distribution File will not be used.

Distribution Format ☒ PDF ☐ Excel

Success Notification [Edit...](#)

Failure Notification [Edit...](#)

✚ ✓ Email

☒ Send all generated reports to all recipients in a single email ⚠ The Distribution File will not be used.

* Distribution List 

* Attachment Name [ArtifactDescription\(\) - MemberAlias\("Segments"\)](#) [fx](#)

* Bursting Email [Edit...](#)

✚ ✓ Library

☒ Assign all permissions to the generated reports ⚠ The Distribution File will not be used.

User List 

* Artifact Name [ArtifactDescription\(\) - MemberAlias\("Segments"\)](#) [fx](#)

* Root Folder [Samples](#)

Overwrite ☐

Path Hierarchy [ArtifactName\(\)](#) [fx](#)

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.

 Note

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:

* Bursting Artifact [Sample Book 1.1](#)

Bursting POV Dimension ⋮

Global Dimension **Fiscal Calendar**
Jun

Use Legacy Distribution File ☐

Targeted Distribution File [Select...](#)

Distribution Format ☒ PDF

Success Notification [Edit...](#)

Failure Notification [Edit...](#)

✚ ☒ Email

* Distribution List

 zachary.s...
 jane.q.pu...


Showing 1 - 2 of 2

* Attachment Name [ArtifactName\(\) - MemberName\("Fiscal Calendar"\)](#) [fx](#)

* Bursting Email [Edit...](#)

✚ ☒ Library

User List 

* Artifact Name [ArtifactName\(\) - MemberName\("Fiscal Calendar"\)](#) [fx](#)

* Root Folder [Samples](#)

Overwrite ☐

Path Hierarchy [ArtifactName\(\)](#) [fx](#)

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.

 Note

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.

