Oracle® Fusion Cloud EPM

Working with Oracle Smart View for Google Workspace

F56457-09

Oracle Fusion Cloud EPM Working with Oracle Smart View for Google Workspace,

F56457-09

Primary Author: EPM Information Development Team

Contents

9 Ad Hoc Analysis

13 Functions

14 Free-Form Mode

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Documentation Feedback

To provide feedback on this documentation, click the feedback button at the bottom of the page in any Oracle Help Center topic. You can also send email to epmdoc_ww@oracle.com.

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

Welcome to *Working with Oracle Smart View for Google Workspace*

This guide explains Oracle Smart View for Google Workspace features and options including concepts, processes, and examples.

Where to find Smart View documentation

The Smart View for Google Workspace documentation is available on the Oracle Help Center on the Oracle Cloud Enterprise Performance Management (EPM) page in the Books tab for your Oracle Fusion Cloud Enterprise Performance Management business process.

- To read this guide online in a browser, click the guide name link.
- To download a PDF file of this guide, click the PDF icon  next to the guide name. You can also download it from the online version by clicking  in the left panel next to the Table of Contents.

How to find information in this guide

To find information:

- From the online help, in the left frame of the browser window, use the Table of Contents to navigate to topics, or click the Search icon and enter a search term in the text box.
- From the PDF, navigate to topics from the table of contents, or use your reader's search functionality.

About this guide

This guide covers features and tasks related to multiple data sources that are supported in Smart View for Google Workspace. It may happen that some topics apply to all data sources and some apply only to specific data sources. The following document conventions are used to indicate the applicability of a topic to a data source.

- If a topic is applicable to a specific data provider only, then the provider name is mentioned at the start of the topic in the **Applies to:** section. For example: If a topic is applicable only for Planning: **Applies to:** Planning
- If a topic applies to all supported data providers listed in the Supported Data Source Providers topic, then the **Applies to:** section is not added to the topic.

3

Introduction to Smart View for Google Workspace

Related Topics

- Overview of Smart View for Google Workspace
  Oracle Smart View for Google Workspace provides a common Google Workspace interface designed specifically for Oracle Fusion Cloud Enterprise Performance Management business processes.
- Supported Data Source Providers
  Oracle Smart View for Google Workspace currently supports Oracle Fusion Cloud Enterprise Performance Management data source providers.
- Smart View for Google Workspace Components
  Learn about the basic components of Oracle Smart View for Google Workspace such as menus and panels that help you navigate and perform various tasks.
- Installing Smart View for Google Workspace Extension
  Oracle Smart View for Google Workspace is available as an add-on extension on the Google Workspace Marketplace for users to install in their Google Workspace.
- Access to Smart View Functionality
- Localization in Smart View for Google Workspace
  Oracle Smart View for Google Workspace supports localized versions of the user interface.

Overview of Smart View for Google Workspace

Oracle Smart View for Google Workspace provides a common Google Workspace interface designed specifically for Oracle Fusion Cloud Enterprise Performance Management business processes.

Smart View enables users of Google Workspace to access Cloud EPM data, work on forms, and perform ad hoc analysis in Google Sheets. Using Smart View, you can view, import, manipulate, distribute and share data in Google Sheets.

To use Smart View in Google Sheets, you need to install the Smart View add-on extension from Google Workspace Marketplace. The Smart View add-on extension enables Google Workspace users to take advantage of Smart View functionality in Google Sheets.

Video

Your Goal	Watch This Video
Learn how Smart View for Google Workspace enables Cloud EPM users to access Cloud EPM data, work on forms, and perform ad hoc analysis in Google Sheets.	 Introducing Smart View for Google Workspace

Supported Features

The following features are supported:

- Form operations such as Open and Refresh Forms, Submit Data from Forms, Copy Versions, and View Instructions
- Ad hoc analysis operations such as Zoom, Pivot, Keep/Remove Only, Insert Attribute, Cascade, and Save Ad Hoc Grids
- Multiple connections in one spreadsheet
- Smart View Options and Favorites Menu
- Cell Styles
- Member Selection
- Drill Through in Web Browser only
- Adjust, Grid Spread, and Mass Allocate
- Multiple-Grid Ad Hoc Sheet
- Flex Form
- User Variables
- Business Rules
- Functions: HsGetValue, HsSetValue, HsAlias, and HsGetSheetInfo
- Member Formulas
- Task List
- Approvals
- Job Console
- Accessibility

> **Note**
>
> Because Oracle Smart View for Google Workspace requires that additional processing takes place on Google's servers, you may observe slower than expected performance times for some operations.

Unsupported Features

The following features are currently not supported in Oracle Smart View for Google Workspace:

- Dashboards, Reports, and Books
- Operations like Spreading data for time periods, Drill through in new sheet, Undo and Redo, Copy and Paste, Save and Clear formatting, and Calc on the Fly
- Web launch
- Query Designer
- Google Docs and Google Slides
- Scripts
- Composite Forms: No future plans for support.
- Dimension Headers: No future plans for support.
- Save as Smart Form (Native mode): No future plans for support.

- Native mode for ad hoc operations: No future plans for support.
  Native mode is being phased out in favor of Standard mode, which offers enhanced features and is recommended for all users. To utilize Smart View effectively, Oracle advises you to configure your Cloud EPM applications to use the **Standard** mode option for the **Smart View Ad Hoc Behavior** setting. This ensures compatibility and access to the latest functionalities.

Supported Data Source Providers

Oracle Smart View for Google Workspace currently supports Oracle Fusion Cloud Enterprise Performance Management data source providers.

The following business processes of Cloud EPM are supported:

- Enterprise Profitability and Cost Management
- Financial Consolidation and Close
- FreeForm
- Planning
- Tax Reporting

Smart View for Google Workspace Components

Learn about the basic components of Oracle Smart View for Google Workspace such as menus and panels that help you navigate and perform various tasks.

The basic components are as follows:

- Smart View Menu
- Smart View Home Panel
- Search Box
- Favorites Menu
- Actions Menu
- Right-Click Menu

Smart View Menu

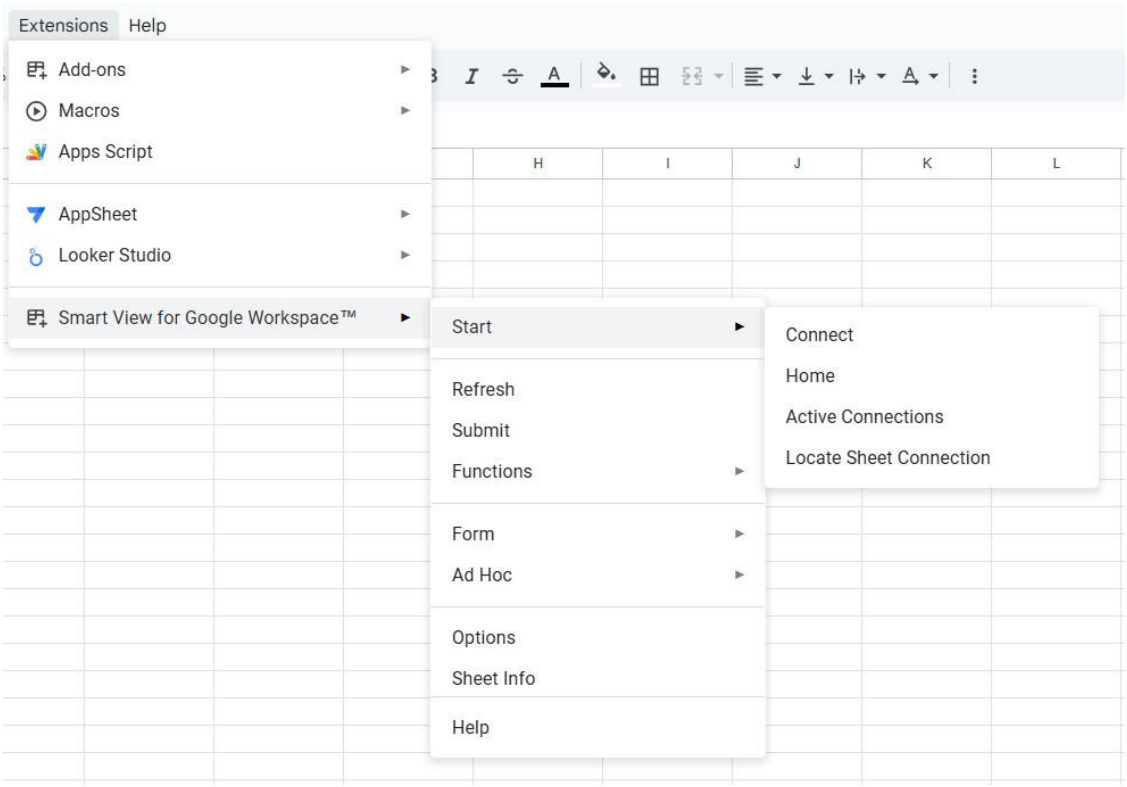
Smart View is an extension add-in to work on Oracle Fusion Cloud Enterprise Performance Management data in Google Sheets. So, the commands for launching Smart View-specific operations are located under the **Extensions** menu. The Smart View menu provides access to various Smart View operations required for connecting to data sources and working on forms and ad hoc grids.

To access Smart View-specific menu options, click **Extensions** and then click **Smart View for Google Workspace**.

- Common Smart View operations include creating connections, launching the Smart View Home panel, setting Smart View options, viewing sheet information, importing metadata, refreshing and submitting data, and launching forms and ad hoc grid operations.
- The **Form** menu provides all the operations that can be performed on forms. This includes launching POV, viewing instructions and member formula, running business rules and calculations, adjusting values, managing supporting details, adding cell comments and

attachments, copying versions, managing approvals, monitoring the job console, and so on.

- The **Ad Hoc** menu provides all the operations that can be performed on ad hoc grids. This includes zooming in and out, pivoting, viewing cell information, changing alias, inserting attributes, saving ad hoc grids, viewing comments, and so on.

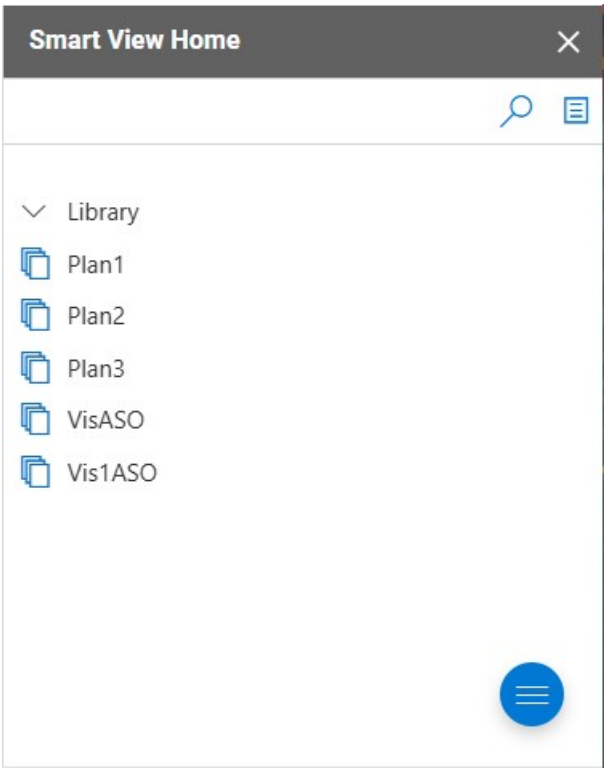


> **Note**
>
> - The user interface components of Oracle Smart View for Google Workspace, such as menu labels, messages, dialog boxes, panels and so on, are currently available only in the English language, irrespective of the language selected in the Language Settings of your Google Workspace account.
> - The menus in Oracle Smart View for Google Workspace always appear enabled in the **Smart View Menu** and the **Favorites Menu**, even if they are not relevant or supported for the form or ad hoc grid that you are working with. For such unsupported menus, you are alerted with a message stating that the operation is not supported. For example, you are working on an ad hoc grid and you click **Analyze** either from the **Smart View Menu** or the **Favorites Menu**, then an error message alerts you that *"This operation is not supported for an ad hoc sheet"*, since an ad hoc grid is already in the analyze mode.

Smart View Home Panel

The Smart View Home panel provides a tree view of the library of plans, forms, ad hoc grids, cubes, and other artifacts present in your data source. You can expand the folders and click an artifact name to open it.

When you first connect to Smart View, you can launch the Home panel directly from the **Connect** dialog by clicking **Launch Home**. You can also launch it from the menu. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Home**.



Using the Smart View Home panel, you can:

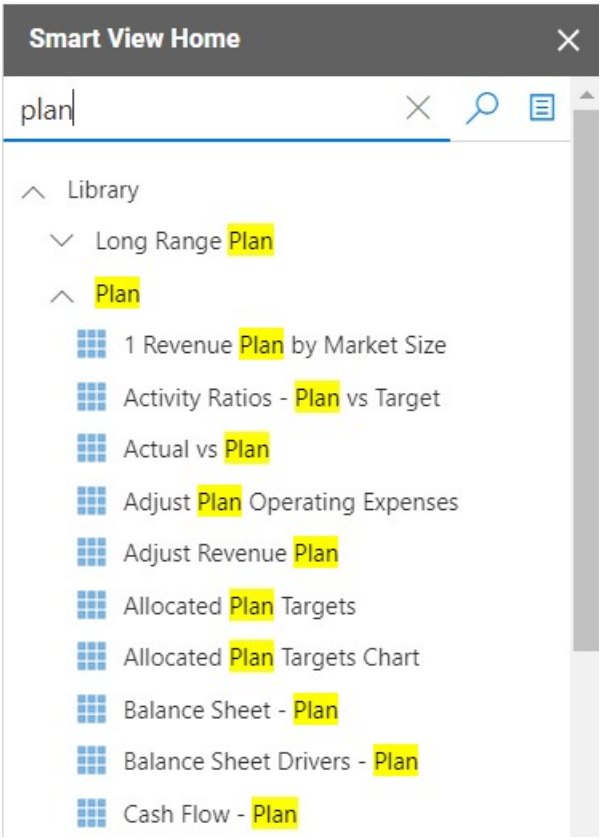
- Search for specific forms or grids.
- Open forms and ad hoc grids by clicking their names.
- Select forms and ad hoc grids without opening them by clicking their icon or the area next to their names.
- Open a form directly in ad hoc analysis mode by selecting it, right-clicking the form name, and then selecting **Ad Hoc Analysis**.
- Open an ad hoc grid directly as a form by selecting it, right-clicking the ad hoc grid name, and then selecting **Open Form**.
- Launch various actions and processes from the **Actions** menu. You can also select a form or ad hoc grid and right-click on its name to access these actions.
- Launch the Favorites menu by clicking the Favorites icon.

In addition to the Home panel, there are other panels such as Business Rules, Task List, Approvals, User Preferences, POV, and Favorites that open as overlays on the Home panel. You can close these panels to return back to the Home panel.

Search Box

The search box, located on the top in the Smart View Home panel, helps you find and access forms and other artifacts you need faster. As you start typing in the search box, the list of items in the Home panel gets filtered to show the names with the highlighted search term. For

example, if you search for "plan", then only the forms and artifacts with the letters "plan" in their names are displayed in the Home panel.



The search box supports case-insensitive search: For example, searching for "plan", "Plan", or "PLAN" fetches the same list of items which have this term in their names, irrespective of their case.

You can click an item's name to open it directly from the search results. You can also select and right-click an item in the search results to view the Right-Click menu options specific to the selected item.

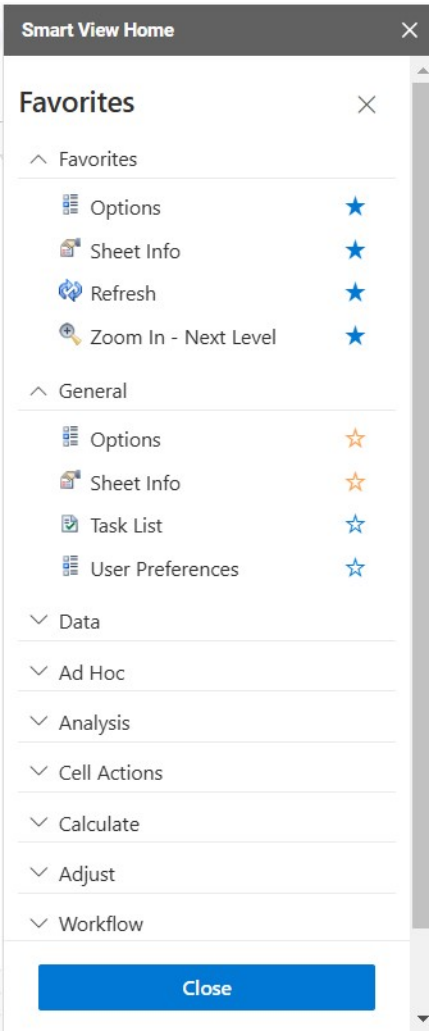
If there are no matching items for the searched term, the panel appears blank. You can clear the search box by clicking the Close icon.

Favorites Menu

An easy way to access Smart View commands is by marking them as favorite. You can select the commands that you use frequently and they appears pinned at the top of the **Favorites** panel. When you want to use a command, simply open the **Favorites** panel by clicking

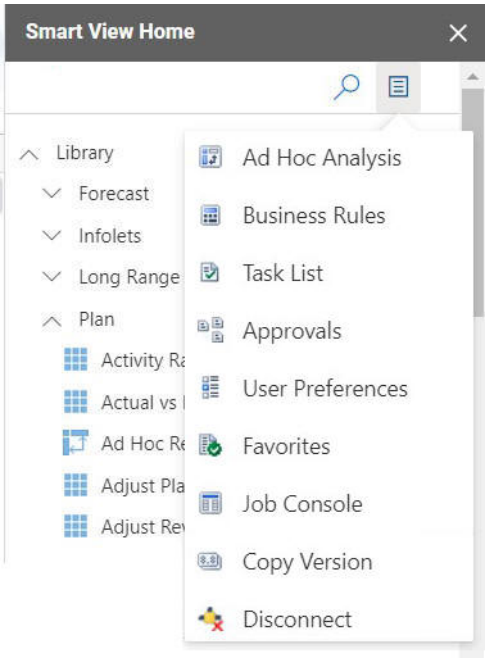
in the Smart View Home panel, and click a command, instead of navigating the **Extensions**, **Smart View for Google Workspace** menu to reach the command.

To add your favorite commands, see Adding Favorites.



Actions Menu

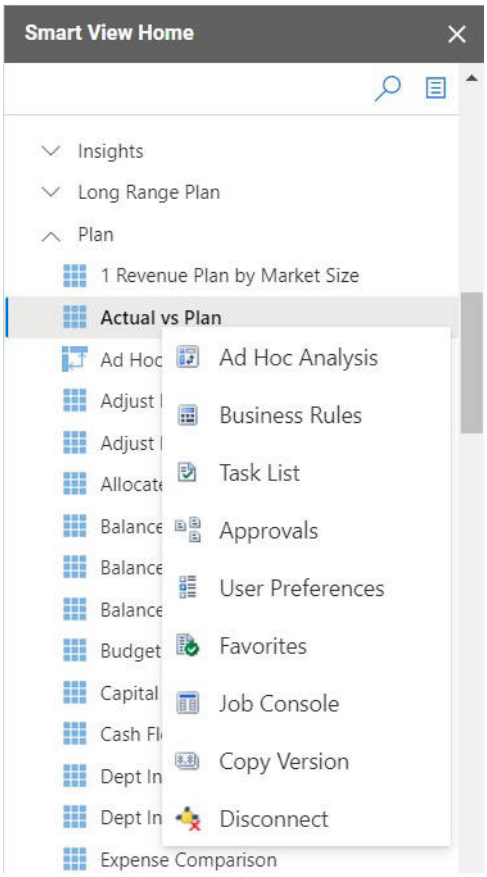
The Actions menu is located in the Smart View Home panel and is launched by clicking
. This menu gives you access to various features such as Job Console, Copy Version, Business Rules, Task List, Approvals, User Preferences, Favorites, and Disconnect.



Right-Click Menu

You can right-click on forms, ad hoc grids, and other artifacts in the Smart View Home panel to open the selected forms and ad hoc grids and to launch features such as Job Console, Copy Version, Business Rules, Task List, Approvals, User Preferences, and Disconnect. These options are additionally available under the Action menu in the Smart View Home panel.

In the following example, when you select the **Actual vs. Plan** form and right-click on it, you can use the **Ad Hoc Analysis** option to open the form directly in ad hoc analysis mode. Similarly, if you right-click on an ad hoc grid, you can use the **Open Form** option to open it as a form.



Installing Smart View for Google Workspace Extension

Oracle Smart View for Google Workspace is available as an add-on extension on the Google Workspace Marketplace for users to install in their Google Workspace.

For more information on Smart View extension and installation prerequisites, see *Getting Started with Oracle Smart View for Google Workspace*.

Video

Your Goal	Watch This Video
Learn how to set up Smart View for Google Workspace and enable Oracle Fusion Cloud Enterprise Performance Management users to access Cloud EPM data, work on forms, and perform ad hoc analysis in Google Sheets.	Setting Up Smart View for Google Workspace

Access to Smart View Functionality

Access to Smart View functionality depends on the access that Service Administrators set up for users in the business process.

Service Administrators: For more information, see Administering Access Control.

Localization in Smart View for Google Workspace

Oracle Smart View for Google Workspace supports localized versions of the user interface.

The localized versions of Smart View provide you with an improved non-English experience where you can switch to your desired language to work with the user interface, as required.

Supported languages are: Arabic, Chinese (Simplified and Traditional), Czech, Danish, Dutch, English, Finnish, French, French Canadian, German, Greek, Hebrew, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Portuguese (Brazilian), Romanian, Russian, Slovak, Spanish, Swedish, Thai, and Turkish

To use a localized version of Smart View, you can set the preferred language from your Google Workspace account settings.

Setting Preferred Language for Smart View

1. In the Google Sheets home page, open the main menu, click **Settings**, and view the currently set language in the **Language** section.
   For example, if English is your current language, then you see an **English** link in the **Language** section.
2. Click the language link to open the **Language** settings for your Google Workspace account.
   Alternatively, you can click **Manage your Google Account**, go to **Personal Information**, and click **Language** under **Other info and preferences for Google services**.
3. In the **Language** section, click **Edit** in the **Preferred Language** section.
4. Search and select your preferred language, and click **Save**.
   The content starts appearing in the selected language immediately.
5. If you use multiple languages, click **Add another language**, select the required language, and click **Save**.
   a. Click **Add another language**.
   b. Select the required language, and click **Save**. The language is added in the **Other Languages** section.
   c. Click the Up arrow next to the newly added language to move it from **Other Languages** to **Preferred Language**.
      The content starts appearing in the selected language immediately.
6. Open Google Sheets and refresh the page.
   When you navigate through the menus, open panels, launch dialog boxes, and receive confirmation messages, you can now read all the content in the selected language. For more information, see Google's documentation on Change your language on the web.

Guidelines on Supported Languages

Consider the following guidelines for using supported languages.

- Whenever you change the preferred language, always refresh the browser on which Google Sheets is opened to display the user interface content in the selected language.
- If you select a preferred language that is supported by Google Sheets but not by Smart View, the user interface for Smart View is displayed in the English language by default.
- If you are already connected to your business process in a particular language, and then you change the preferred language, the user interface content fetched from the business

process continues to appear in the previously connected language. For example, if you were connected to your business process in English, and changed the preferred language to French, the *Library* label in the Smart View Home panel continues to display in English, instead of French. To refresh such content and display it in the selected language, clear the current session and connect to your business process again using the Connect dialog. See Clearing Session.

4

Connecting to Data Sources

Connect to your business process through Oracle Smart View for Google Workspace using a Google Workspace-compatible browser like Chrome.

After installing the Smart View extension, you can connect to your business process from using your Google Workspace account in Smart View in the following ways:

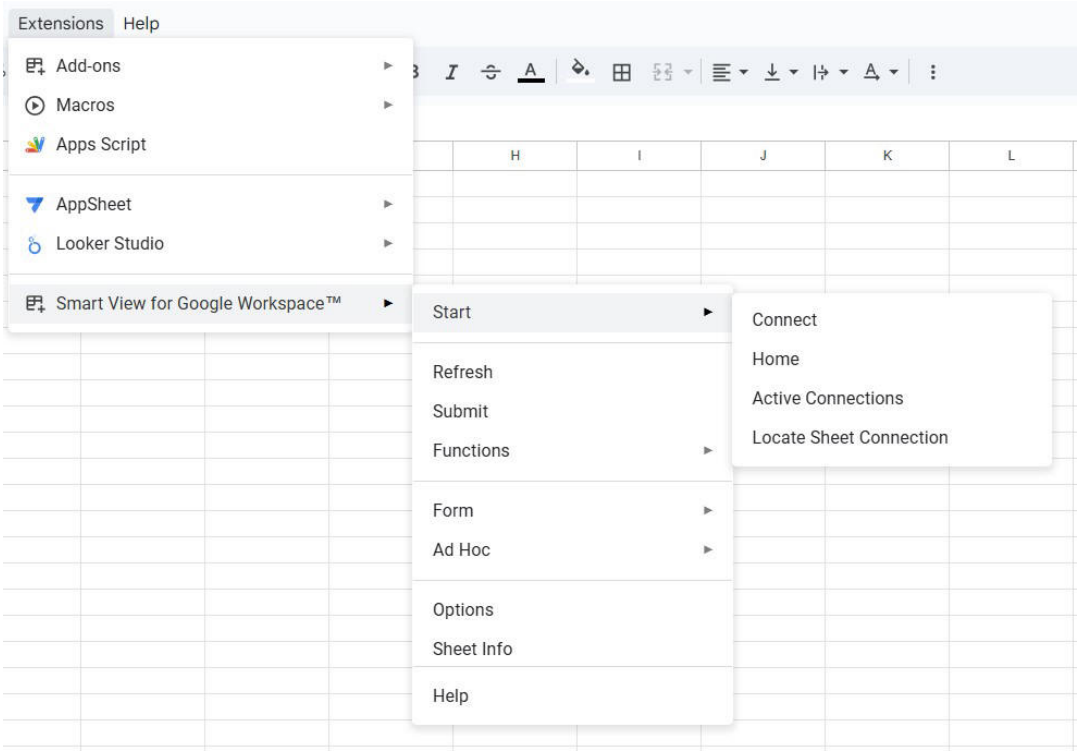
- Connecting Using Basic Authentication
- Connecting Using Company Sign In Credentials

> **Note**
>
> Ensure that the Smart View Extension for Google Sheets has been enabled in the web application settings for every business process that you want to connect through Smart View in Google Sheets. If not enabled, you cannot open the Smart View Home panel and submit or refresh data in saved sheets. For more information, see Enabling the Smart View Extension for Google Sheets in *Getting Started with Oracle Smart View for Google Workspace*.

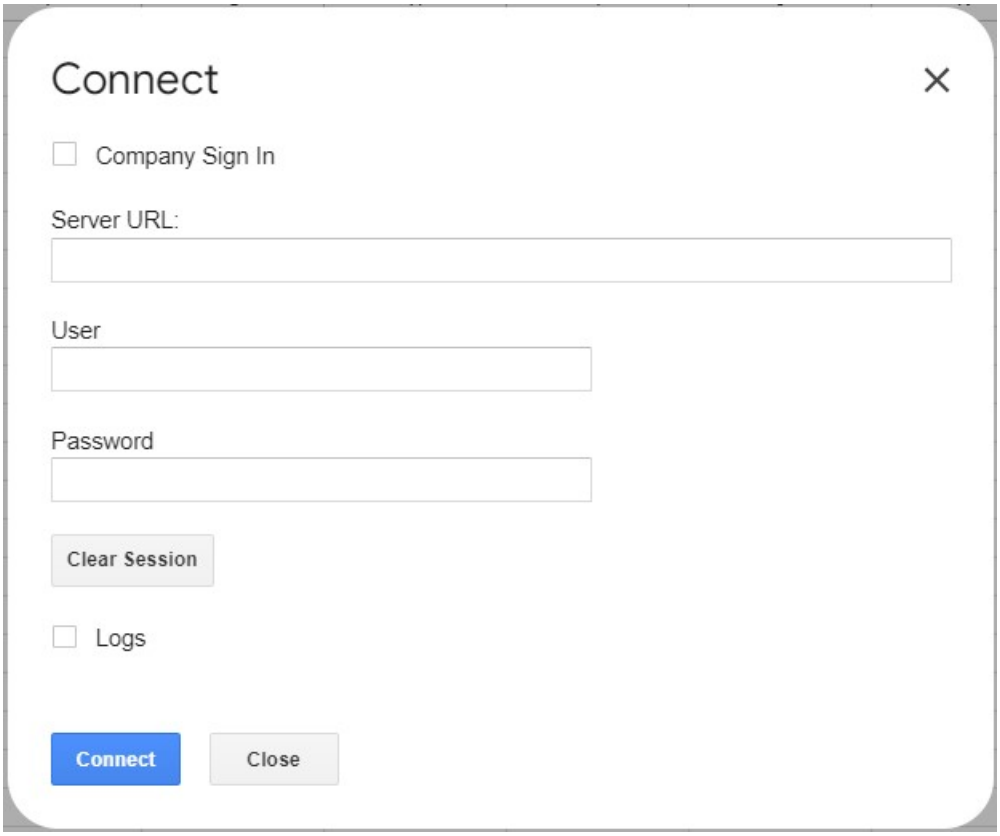
Connecting Using Basic Authentication

You can use basic authentication such as your user name and password to connect to your business process from Oracle Smart View for Google Workspace.

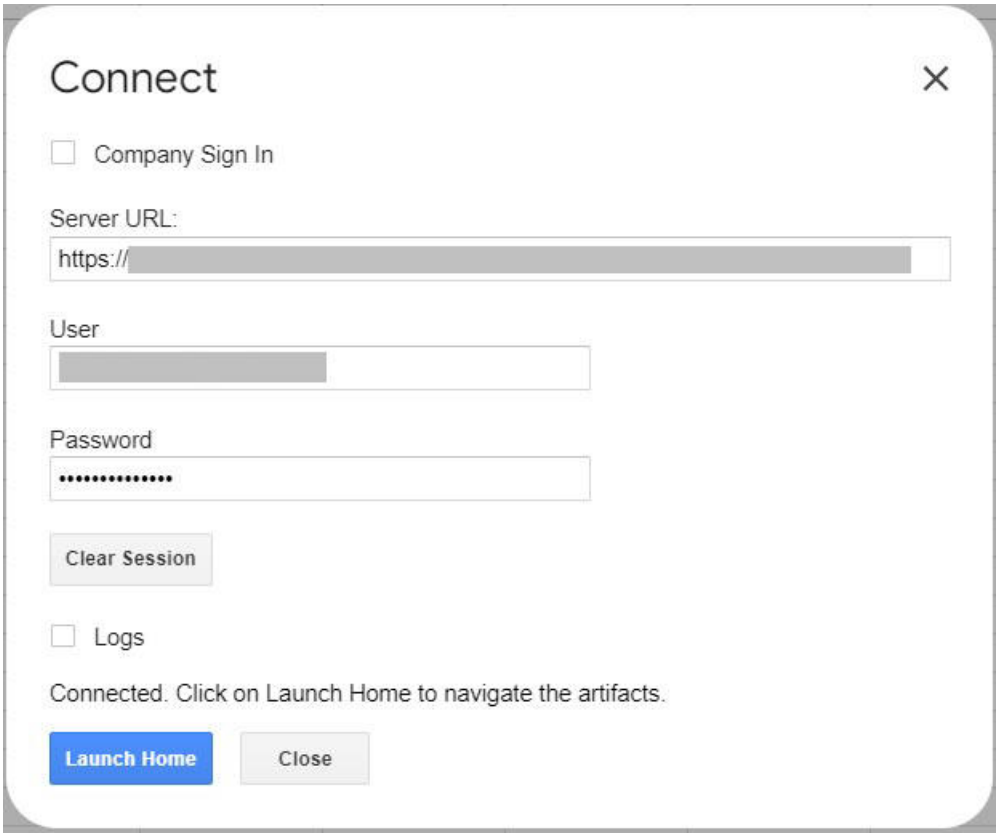
1. Sign in to Google Sheets using your Google Workspace credentials and open a new spreadsheet
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Connect** under **Start**.



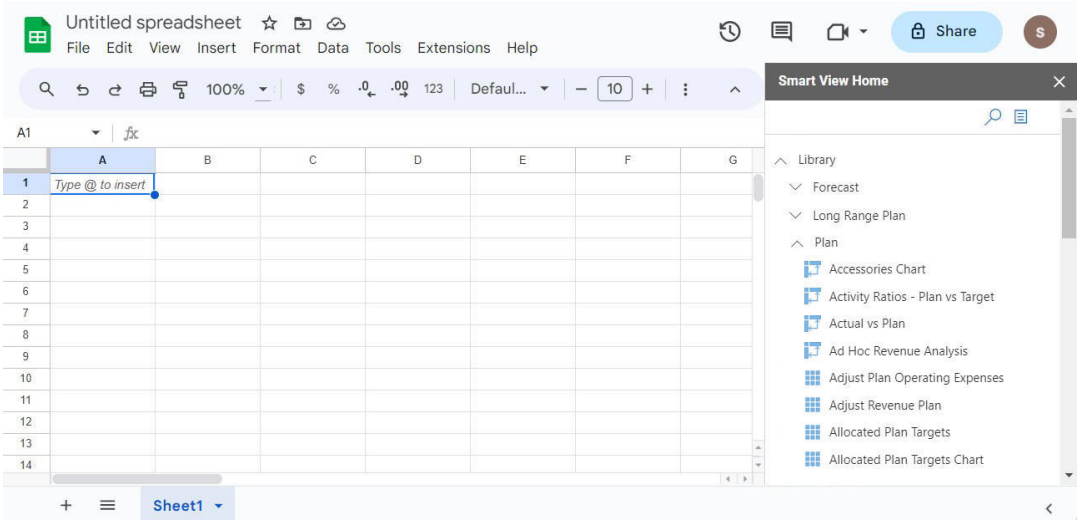
3. In the **Connect** dialog, enter the **Server URL** of your business process and then enter your user name and password in the **User** and **Password** fields.



4. Click **Connect**.
   Once connected, the **Launch Home** button appears in the **Connect** dialog. You are now connected to your business process from Google Sheets.
   - If you want to only establish the connection to your data source, you can click **Close** to close the **Connect** dialog. This is helpful when you are working with multiple data sources and want to keep active connections ready before setting a specific one for your sheet.
   - If you want to launch the Smart View Home panel and access the library of you data source, proceed with step 5.
5. Click **Launch Home** to open the Smart View Home panel.



In the Smart View Home panel, you can view the library and work on forms and ad hoc grids present in the business application.



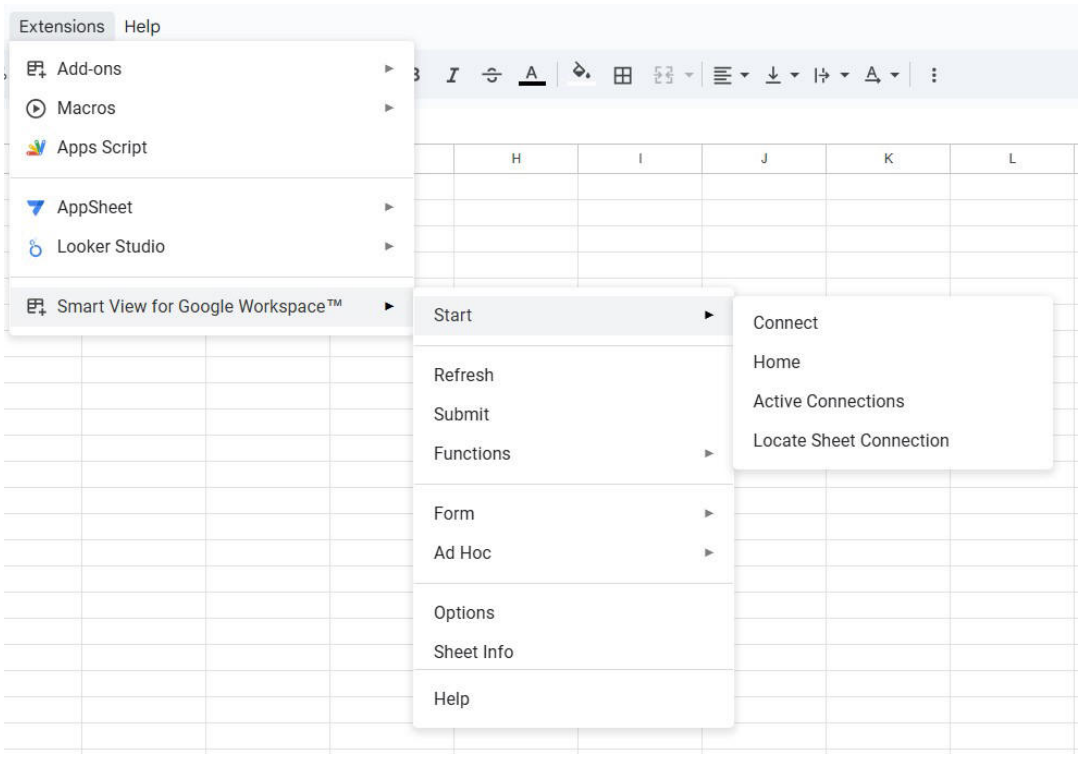
> **Note**
>
> When trying to open the Home panel, if you get an error message stating *"Administrator has not enabled Google Sheets support for this instance"*, then you cannot use Smart View in Google Sheets, even though you have installed the extension and connected to your business process.
>
> As a prerequisite, your Service Administrator needs to enable the Smart View Extension for Google Sheets in the web application settings for every business process that you want to connect through Smart View in Google Sheets. For more information, see Enabling the Smart View Extension for Google Sheets in *Getting Started with Oracle Smart View for Google Workspace*.

Connecting Using Company Sign In Credentials

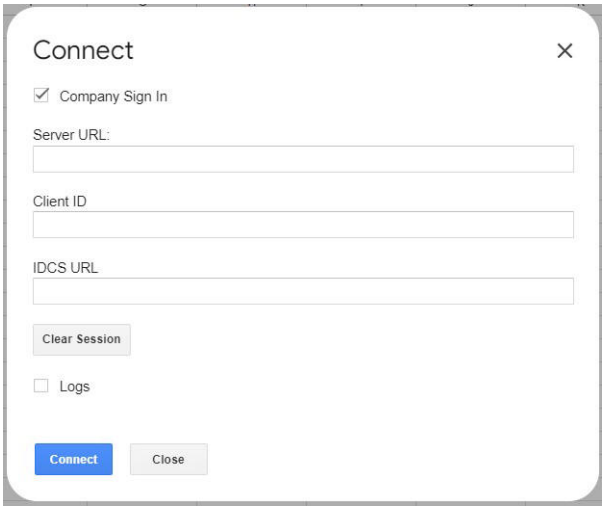
You can sign in to your business processes from Oracle Smart View for Google Workspace using your organisation's sign in credentials.

Before you start, ensure that you have the connection credentials provided by your Service Administrator for **Client ID** and **IDCS URL**. For more information, see Creating an Oracle Identity Cloud Service (IDCS) Application in *Getting Started with Oracle Smart View for Google Workspace*.

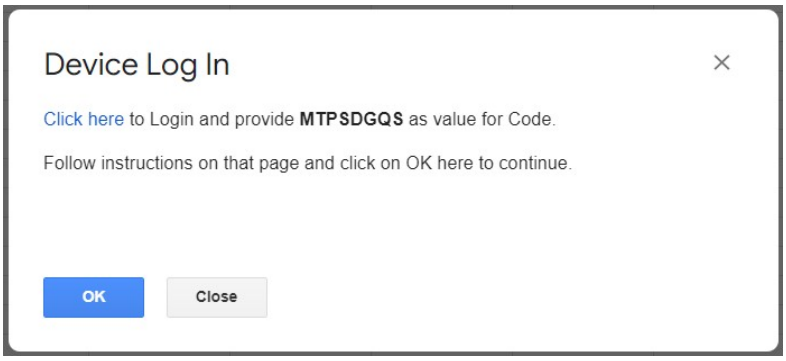
1. Sign in to Google Sheets using your Google Workspace credentials and open a new spreadsheet.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Connect** under **Start**.



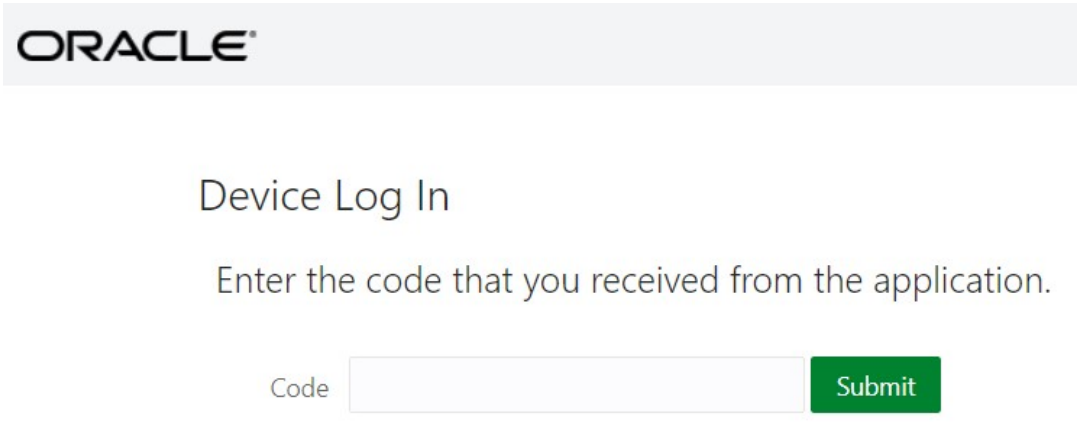
3. In the **Connect** dialog box, select the **Company Sign In** check box.
4. Enter your connection credentials. Contact your Service Administrator for these details.
   - **Server URL**: This refers to the web application link of your Oracle Fusion Cloud Enterprise Performance Management business process. Modify the web application link to remove "/epmcloud" and add "/HyperionPlanning" towards the end of the link.
   - **Client ID**: This is generated as part of the IDCS application creation process. To find the Client ID in the IDCS Console, go to **Identity domains** and click **Integrated applications**. Click your IDCS application link and, in the **General Information** section, see the value in the **Client ID** field.
   - **IDCS URL**: This is the URL that you get on the Sign In page when you open your Cloud EPM web application. Modify the link to retain it till "identity.oraclecloud.com" and remove the characters after this part. For example, https://idcs-<instanceID>.identity.oraclecloud.com.



5. Click **Connect**.
6. In the **Device Log In** dialog box, copy the displayed code to clipboard. You will need to enter this code in the next step.

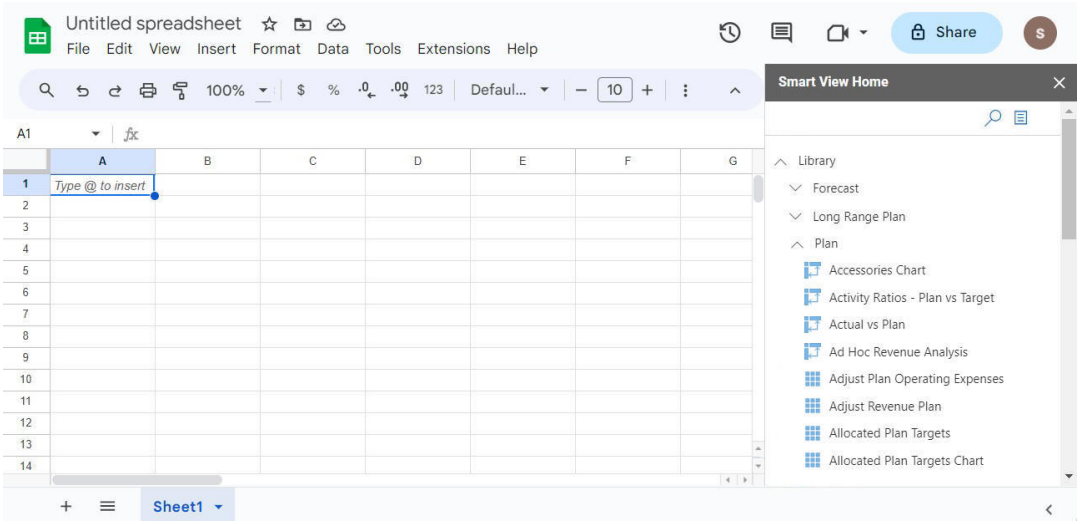


7. Click the **Click Here** link, and after you authenticate using your cloud credentials, enter the copied code in the **Code** field on the **Device Log In** page.



8. Click **Submit**. Once you get a confirmation message stating you have access to your application, you can close the tab and return to the tab where Google Sheets is open.

9. In Google Sheets, click **OK** in the **Device Log In** dialog box. A toast message appears stating that you have got the access token. You are now connected to your business process from Google Sheets.
10. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Home**.
    In the Smart View Home panel, you can view the library and work on forms and ad hoc grids present in the business application.



> **Note**
>
> When trying to open the Home panel, if you get an error message stating *"Administrator has not enabled Google Sheets support for this instance"*, then you cannot use Smart View in Google Sheets, even though you have installed the extension and connected to your business process.
>
> As a prerequisite, your Service Administrator needs to enable the Smart View Extension for Google Sheets in the web application settings for every business process that you want to connect through Smart View in Google Sheets. For more information, see Enabling the Smart View Extension for Google Sheets in *Getting Started with Oracle Smart View for Google Workspace*.

Connecting to Multiple Data Sources

You can connect to multiple data sources from the same spreadsheet.

Using multiple connections, you can do the following:

- Connect to different data sources from different sheets within the same spreadsheet.
  For example, you can connect to a form from Planning in one sheet and to an ad hoc grid from Financial Consolidation and Close in another sheet in the same spreadsheet.
- Place multiple grids from multiple connections in the same sheet.
  You can work with multiple ad hoc grids from different data sources in the same sheet by establishing connections to multiple data sources. For more information, see Creating Multiple-Grid Sheets.

- Create and work on multiple functions from different data sources in the same sheet. You can create a function sheet by adding functions from different cubes and data sources. For more information, see Creating Functions from Multiple Connections.

To connect to multiple connections:

1. Sign in to Google Sheets using your Google Workspace credentials and open a new spreadsheet. Sheet 1 opens by default.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Connect** under **Start**.
3. Connect to your first data source and open the Smart View Home panel.
   In the Smart View Home panel, you can view the library and open the required form or ad hoc grid present in the business application.
4. At the bottom of the sheet next to the Sheet1, click
   
   to open a new sheet, say Sheet2, to connect to a different data source.
5. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Connect** under **Start**.
6. Connect to your second data source and open the Smart View Home panel.
   In the Smart View Home panel, you can now view the library of the second data source and open any form or ad hoc grid present in the business application.

> **Note**
>
> After connecting to the second data source, the Smart View Home panel, if open, continues to display the library from the previously open sheet, that is the Home panel of the data source connected in Sheet1. You need to close the Home panel and launch it again to view the library for the second data source.

7. **Optional:** Use **Active Connections** to view a list of servers that you have already connected to in the **Server URL** list and select the required one to set as an active connection for a sheet. For more information, see Setting Active Connection for a Sheet
   This option is also useful while placing grids from multiple connections on the same sheet. For more information, see Creating Multiple-Grid Sheets.
8. **Optional:** Use **Locate Sheet Connection** to open the Home panel for the connection that is set on the currently active sheet. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Locate Sheet Connection** under **Start**.

Guidelines on Working with Multiple Connections

Consider the following guidelines when working with multiple connections.

- Every time you switch between sheets connected to different data sources, the **Smart View Home panel** and the **Smart View for Google Workspace** menu works in the following ways:
  - **Smart View Home panel:** The Smart View Home panel does not reload automatically. If you switch sheets or open a new sheet, the last opened Smart View Home panel continues to display in the new sheet. You must launch the Home panel again from the **Smart View for Google Workspace** menu to view the library contents relevant to the sheet's connected data source.

  - **Smart View for Google Workspace menu:** Unlike the Home panel, the **Smart View for Google Workspace** menu is always in sync with the active sheet. The operations you perform using this menu are performed on the active sheet in context.

- The actions in the **Smart View for Google Workspace** menu apply only to the active sheet that is currently open.

  For example, if you are submitting or refreshing data, only the data from the currently active sheet is submitted or refreshed. If you want to submit or refresh the data from another sheet having the same or a different connection, open that sheet and use the **Submit** or **Refresh** option from the **Smart View for Google Workspace** menu to submit or refresh data on that sheet.

- To know about the connection for a particular sheet, you can open **Sheet Info** and view the server and URL details. For more information, see Sheet Information.

Setting Active Connection for a Sheet

You can connect to different data source providers on the different sheets within the same spreadsheet by setting the active connection for each sheet.

The **Active Connections** dialog displays the list of connections that are active in the session. Using active connections, you can select the required connection and take the following actions:

- **Launch Home:** Establish a connection for a new sheet and launch the Home panel for exploring and viewing its artifacts. See Setting Active Connection for a New Sheet.
- **Set Connection for Sheet:** Change the current connection on a existing sheet to a new connection for performing grid-related operations. See Setting Active Connection for an Existing Sheet.

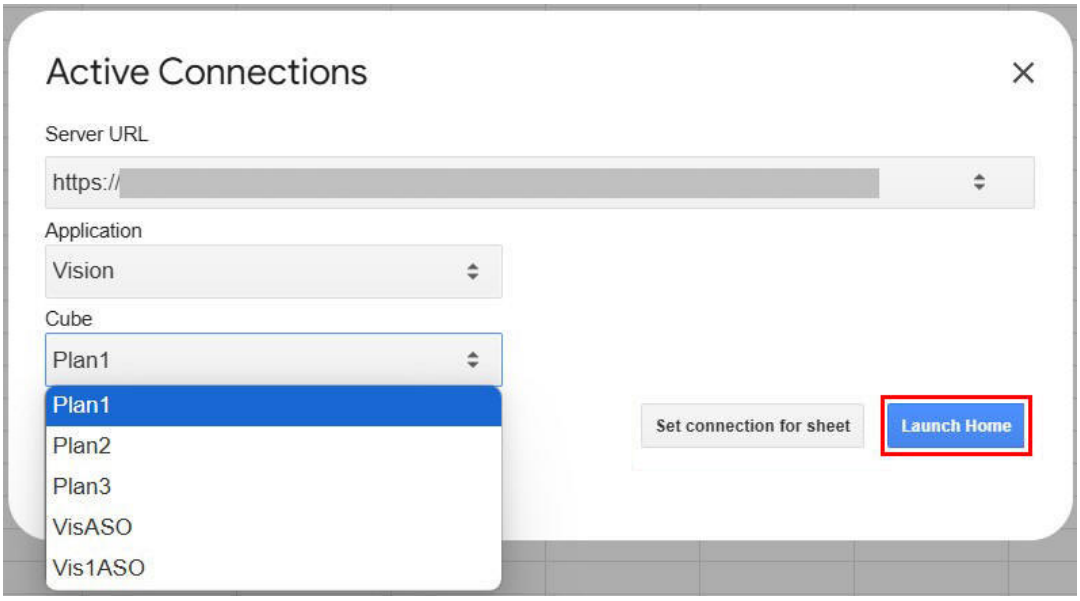
> **Note**
>
> - Before you begin, establish connections to all the data sources that you want to work with in the spreadsheet so that they appear in the **Active Connections** list.
> - If you clear a session by clicking **Clear Session** in the **Connect** dialog, the list of connections active in that session and seen in the **Active Connections** list also get cleared.

Setting Active Connection for a New Sheet

You can establish a connection on a new sheet by selecting one from the list of already active connections. The **Launch Home** option helps you set the active connection and launch the Home panel to view its library contents.

To set active connection for a new sheet:

1. Open a new sheet.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Active Connections** under **Start**.
3. In the **Active Connections** dialog box, click the **Server URL** list to view the list of active connections and select the required one.



4. In the **Application** field and the **Cube** field, select the required application and cube that you want to connect to.
5. Click **Launch Home**.
   The connection is established and the Smart View Home panel opens to display the library contents of the connected data source.

Setting Active Connection for an Existing Sheet

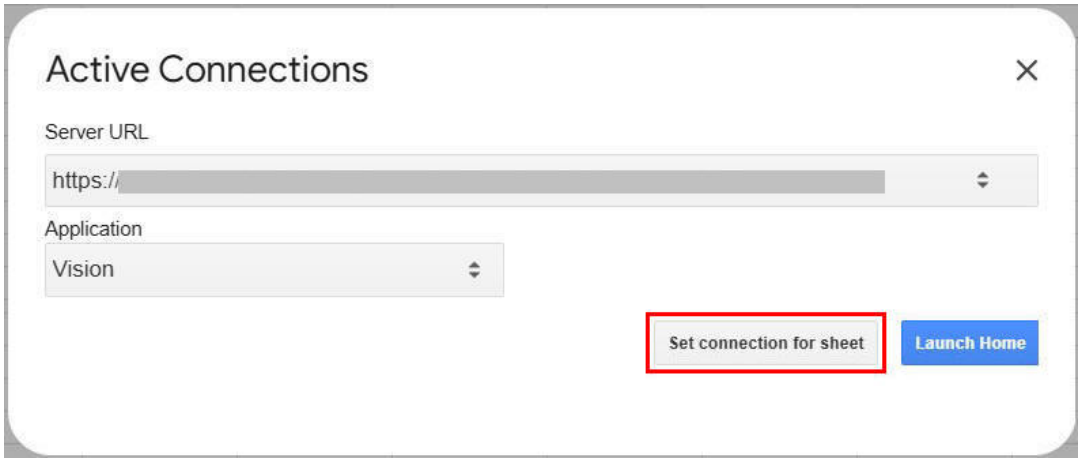
You can change the current connection on an existing sheet by setting a different connection from the already active connections and continue grid operations on the grid data fetched from the new connection.

For example, your sales data for different regions is located in different data sources. You are already connected to the North and South region's data sources in the current session. On Sheet 1, you are reviewing the *Actual Monthly Sales* form containing the sales data for the North region and are connected to the North region's data source. Now you want to see the same data for the South region. Instead of opening a new sheet and opening the relevant form again from the library, you can switch the connection on the existing sheet to display the data from the South region's data source in the same form.

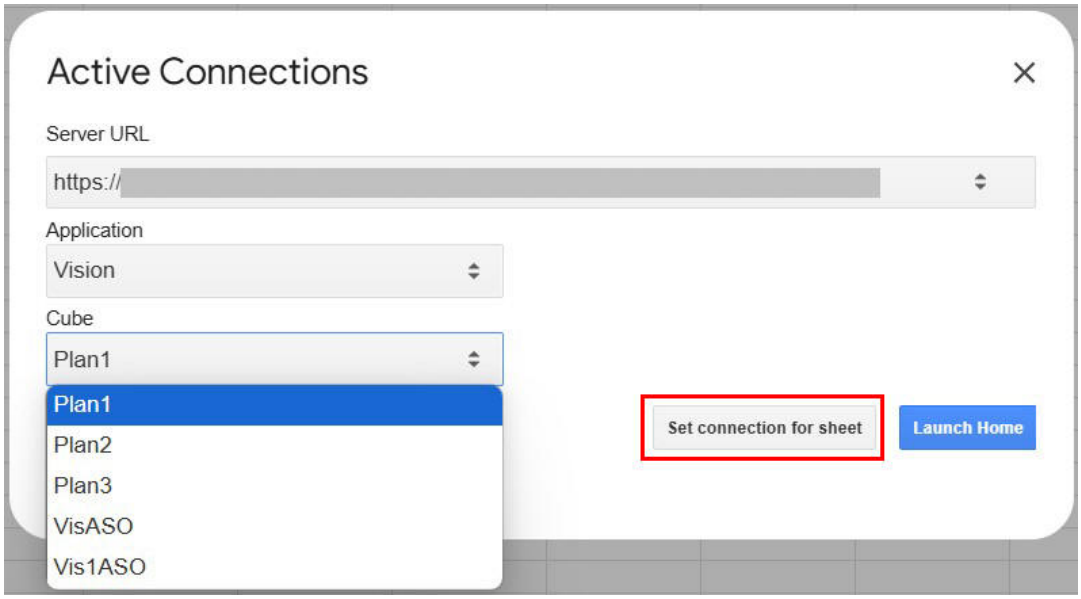
The **Set Connection for Sheet** option helps you set active connection for performing grid operations. This option is also useful while placing grids from multiple connections on the same sheet. For more information, see Creating Multiple-Grid Sheets.

To set active connection for an existing sheet:

1. Open the existing sheet containing the form or ad hoc grid for which you want to change the connection to one of the active connections.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Active Connections** under **Start**.
3. In the **Active Connections** dialog box, click the **Server URL** list to view the list of active connections and select the required one.



4. **Optional:** If you are setting the active connection for a form, then the application name that you are connecting to is displayed in the **Application** field. You can select the required application in the **Application** field.
5. **Optional:** If you are setting the active connection for an ad hoc grid, the application name and the cube name that you are connecting to are displayed in the **Application** field and the **Cube** field respectively. You can select the required application and cube that you want to connect to in the **Application** field and the **Cube** field.



6. Click **Set Connection for Sheet**.
   A message appears stating *"You have applied a new connection to a grid that was associated with a different connection. Do you want to continue?"*.

   Click **Yes** in the message. The sheet is now connected to the selected active connection.
7. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Refresh** to refresh the form or grid on the existing sheet with data from the selected active connection.

Disconnecting from Data Sources

Use the **Disconnect** command in the **Actions** menu or **Right-Click** menu to disconnect from the connected data source on a sheet.

To disconnect from a connected data source:

1. Open the sheet for which you want to disconnect the data source connection.
   In case you have multiple sheets in the spreadsheet connected to different data sources, ensure that you open the correct sheet and have its corresponding Smart View Home panel open in context.

   > **Tip**
   >
   > Use **Locate Sheet Connection** to open the Smart View Home panel for the connection that is set on the currently active sheet.

2. In the Smart View Home panel, click the **Actions** menu.
   Alternatively, you can right-click on any item in the library to launch the right-click menu.
3. Click **Disconnect**.
   This action disconnects the connected data source from the sheet.

Clearing Session

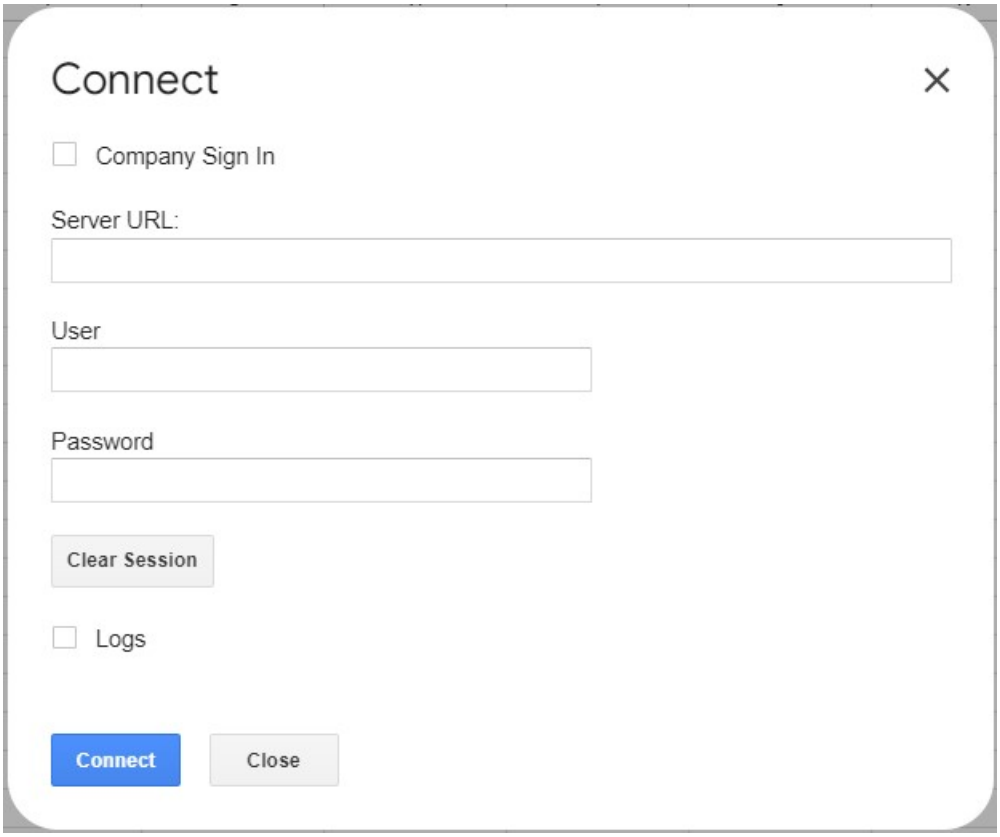
When you connect to data source provider, Smart View stores the connection credentials and other cached details. You can clear such cached information by clearing the session.

By clearing session, you can start with new connections afresh, without any unwanted stored details.

> **Note**
>
> When you clear a session, the list of connections active in that session and seen in the **Active Connections** list also get cleared.

To clear session:

1. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Connect** under **Start**.
2. In the **Connect** dialog, click **Clear Session**.



Any stored cache about previously connected data sources and user sessions gets cleared.

3. To connect to a data source provider, enter the credentials and click **Connect**.

5

Smart View Options

Related Topics

- Setting Smart View Options
  Set options for displaying data, members, formatting, and advanced settings using the Smart View Options.
- Advanced Options
  Set Advanced Options for administrative and other advanced tasks.
- Data Options
  Set Data options to control the display of data cells.
- Member Options
  Set Member options to define how members are displayed in forms and ad hoc grids.
- Formatting Options
  Set Formatting options to control the textual display of members and data.
- Cell Styles
  Set Cell Styles to control the display of members and data with respect to cell background color and precedence.

Setting Smart View Options

Set options for displaying data, members, formatting, and advanced settings using the Smart View Options.

In the **Options** dialog, you can set global options in the **Advanced** tab. You can set sheets options, including display and formatting options, in the **Data**, **Members**, and **Formatting** tabs.

To summarize:

- **Global options** apply to the entire current spreadsheet, including any new sheets added to the current spreadsheet, and to spreadsheets that are created later. Changes to global options also affect existing sheets and spreadsheets. The options that appear on the **Advanced** tab of the **Options** dialog are generally global options.
- **Sheet options** are specific to the sheet for which they are set. The options that appear on the **Data**, **Members**, and **Formatting** tabs of the **Options** dialog are generally sheet options.

  You can also save sheet options as the default for any new content that you import from a data source by using the **Save Current Options as Default** command in the **Advanced** tab of the **Options** dialog.

Advanced Options

Set Advanced Options for administrative and other advanced tasks.

Options in the **Advanced** tab are global options that apply to the entire current spreadsheet, including new sheets added to the current spreadsheet, and become the default for all existing and new spreadsheets.

The **Advanced** tab of the **Options** dialog is always available. You can access the **Advanced** tab before performing operations, such as performing ad hoc, opening a form, setting the active connection for the sheet, or setting the connection for functions.

To set advanced options:

1. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Options**.
2. In the **Options** dialog, select the **Advanced** tab.
3. Make selections in the **Advanced** tab as described in Advanced Options.
4. **Optional:** Continue making changes to options in the **Data**, **Members,** or **Formatting** tabs.
5. Click **OK** to save the changes.

Advanced Options

Table 5-1 Advanced Options

Option	Description
General	**General**
Save Current Options as Default	Select to save your modified option selections in the **Data**, **Member**, and **Formatting** tabs. After saving, your options selections become the default for any new content that you import from a data source.
Logging	**Logging**
Enable diagnostics	Select to enable diagnostics.
Enable client logging	Select to enable client logging.
Show Log	Click to display the Smart View log in a separate window. You can view the log in the window or download it to a file.
Clear Storage	Click to clear the storage cache. The storage cache include any previously-selected options on the **Advanced** tab, as well as on the **Data**, **Members**, and **Formatting** tabs.
User-Defined Function	**User-Defined Function**
Missing Label	Specify a value for missing data in user-defined functions.

> **Note**
>
> Changes made in the **Advanced** tab automatically become the default settings. You do not need to select the **Save Current Options as Default** command to save the **Advanced** options.

Data Options

Set Data options to control the display of data cells.

To set data options:

1. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Options**.

2. In the **Options** dialog, select the **Data** tab.
3. Make selections in the **Data** tab as described in Data Options.
4. **Optional:** To save your **Data** tab selections as the default selections for any new content that you import from a data source, select the **Advanced** tab, and then click **Save Current Options as Default**.
5. Click **OK** to save the changes.

Data Options

Table 5-2 Data Options

Option	Description
Row Suppression	To streamline the grid, you can suppress rows that contain types of data that you do not need to view.
Zero	Suppress rows that contain only zeroes.
Invalid	Suppress rows that contain only invalid values.
Missing	Suppress rows that contain only cells for which no data exists in the database. No data is not the same as zero. Zero is a data value.
Underscore	Suppress rows that contain underscore characters in member names.
Column Suppression	To streamline the grid, you can suppress columns that contain types of data that you do not need to view.
Zero	Suppress columns that contain only zeroes.
Invalid	Display actual data even if it is invalid, rather than **#Invalid**/**Meaningless** or other replacement text. If no data exists, the cell is left blank.
Missing	Suppress columns that contain cells for which no data exists in the database No data is not the same as zero. Zero is a data value. If you later clear **No Data**/**Missing,** suppressed values are returned only from that point on. You must zoom out and then zoom in on a member to retrieve values that were suppressed while this option was selected.
Underscore	Suppress columns that contain underscore characters in member names.
Block Suppression	**Block Suppression**
Suppress Missing Blocks	Suppress blocks of cells for which no data exists in the database.
Replacement	**Replacement**
Missing/No Data Label No Access Label	Data cells may contain missing data or data that you do not have permission to view. In such cells, by default, Smart View displays #Missing or #No Access, respectively, but you can change these labels. The #Missing replacement label enables you to clear data values from cell intersections. For example, to clear the sales data for New York, manually type #Missing in the cell where Sales and New York intersect, and click **Submit**. This clears the data value from the database. Subsequent queries on that database will show #Missing at the intersection of Sales and New York. To change the labels, in any of these fields, enter the text of your choice (or leave the default). Text labels have the advantage of being descriptive, but they cause Google Sheets functions to fail. In the #Missing field, you can enter #NumericZero to specify numeric zero (0) replacement labels. With #NumericZero, you can use functions, but you cannot submit zeroes to the database (even if the zeroes are actual zeroes and not replacement labels) unless you select the **Submit Zero** check box. Calculations that are dependent on a cell with a numeric zero label compute correctly and take the value of the cell as zero.

Table 5-2 (Cont.) Data Options

Option	Description
Submit Zero	If you chose #NumericZero for the **#Missing** label above, select this option if you want to be able to submit zeroes to the database.
Ad Hoc Mode	**Ad Hoc Mode**
Navigate Without Data	Speeds up operations such as **Pivot**, **Zoom**, **Keep Only**, and **Remove Only** by preventing the calculation of source data while you are navigating. When you are ready to retrieve data, clear **Navigate Without Data**.

Member Options

Set Member options to define how members are displayed in forms and ad hoc grids.

To set member options:

1. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Options**.
2. In the **Options** dialog, select the **Members** tab.
3. Make selections in the **Members** tab as described in Member Options.
4. **Optional:** To save your **Members** tab selections as the default selections for any new content that you import from a data source, select the **Advanced** tab, and then click **Save Current Options as Default**.
5. Click **OK** to save the changes.

Member Options

Table 5-3 Member Options

Option	Description
General	**General**
Ancestor Placement	Select one of the following to specify ancestor position in hierarchies: • **Top** to display hierarchies in order from highest to lowest level • **Bottom** to display hierarchies in order from lowest to highest level
Indentation	Apples to ad hoc only. Select one of the following to specify how hierarchy levels are to be indented: • **None** • **Subitems** to indent descendants. Ancestors are left-justified in the column.
Member Name Display	Select one of the following to specify how to display member names in cells: • **Member Name or Alias** to display member names only or, if an alias table is being used, alias names only. • **Member Name and Alias** to display member names and their aliases. • **Distinct Member Name Only** to display fully qualified names.
Format Members as Text	Select one of the following to specify how to format members as text: • **Single Quote** • **None**

Table 5-3 (Cont.) Member Options

Option	Description
Member Retention	**Member Retention** For ad hoc grids only.
Include Selection	Display the selected member and the members retrieved as a result of the operation.
Within Selected Group	Perform ad hoc operations only on the selected group of cells, leaving unselected cells as is. This setting is meaningful only when there are two or more dimensions down the grid as rows or across the grid as columns for **Zoom**, **Keep Only**, and **Remove Only**.
Remove Unselected Groups	For **Zoom In** or **Zoom Out**, remove all dimensions and members except the selected member and the members retrieved as a result of zooming.
Comments and Formula	**Comments and Formula**
Preserve Formulas and Comments in Ad Hoc	Preserves formulas and comments in ad hoc grids. If you clear this option, the formulas and comments are removed from the grid. **Note** Only Refresh operations are supported when **Preserve Formulas and Comments in Ad Hoc** is selected. Other ad hoc operations, such as **Zoom In** or **Keep Only**, are not supported.
Preserve Comments and Unknown Members	Preserves comments and unknown members in ad hoc grids. **Note** Only Refresh operations are supported when **Preserve Comments and Unknown Members** is selected. Other ad hoc operations, such as **Zoom In** or **Keep Only**, are not supported.
Flex Forms: Preserve Grid on POV and User Variable Change	Retains modified members on a flex form after a POV or user variable change. If this option is not selected, any added rows or columns in the flex form will be removed upon a POV or user variable change. For more information, see Retaining Modified Members on Flex Forms After POV or User Variable Change.

Formatting Options

Set Formatting options to control the textual display of members and data.

Note

- Most formatting options apply to both forms and ad hoc grids. Exceptions are noted in Table 1.
- Formatting options are sheet-level options that are specific to the sheet for which they are set. Formatting options can also be saved for any new content that you import from a data source using the Save Current Options as Default command.
- Formatting options are saved when a spreadsheet is saved. You will see the saved formatting options when you reopen the spreadsheet.

To set formatting options:

1. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Options**.
2. In the **Options** dialog, select the **Formatting** tab.
3. Make selections in the **Formatting** tab as described in Formatting Options.
4. To set cell styles, see Cell Styles.
5. **Optional:** To save your **Formatting** tab selections as the default selections for any new content that you import from a data source, select the **Advanced** tab, and then click **Save Current Options as Default**.
6. Click **OK** to save the changes.

Formatting Options

Table 5-4 Formatting Options

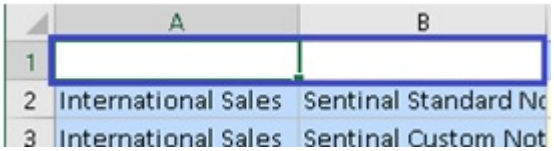
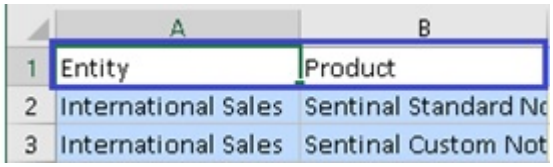
Option	Description
Dimension Headers	For ad hoc grids only. Print headers above row dimensions in the grid. For example, with Dimensions Headers not selected:  With Dimension Headers selected: 

Table 5-4 (Cont.) Formatting Options

Option	Description
Repeat Member Labels	For forms only. Facilitates the readability of forms by allowing member names to appear on each row of data. In forms where repeated members are merged into one cell, member names may be out of the screen view, necessitating much back and forth scrolling between the member names and the row data. Selecting **Repeat Member Labels** helps make forms easier to read and use.
Use Thousands Separator	Use a comma or other thousands separator in numerical data.
Number of Decimal Places	Applies to ad hoc and forms. Overrides the setting defined in the form definition. Specify a decimal scale for the data values. For example, in Smart View, assume the decimal option selected is "1". All values will change one decimal place to the right. If the original value is 50.56, then after refresh the value will be displayed as 50.6. Similarly, if the option selected is "3", then the displayed value will be 50.560.
Adjust Column Width	Adjusts the column width to fit cell contents automatically. **Note** Sometimes, even after selecting this option, full content may not be visible in the column due to a limitation in Google Sheets. To view the full content, you can double click the divider of the column header to expand the column's width.
Use Cell Styles	For ad hoc grids only. Use background color formatting that you define for member styles, data styles, and miscellaneous styles (where applicable). Overrides any user or Google Sheets formatting. You can set different cell styles for forms and ad hoc grids. For example, in forms, you can set the member background color to green, and in ad hoc grids, you can set the member background color to blue. **Note** By default, when you start ad hoc analysis, **Use Cell Styles** is not enabled. So a form may display styles, but the same may seem to disappear if you open it as an ad hoc grid. See Using Smart View Formatting (Cell Styles) for working with cell styles in ad hoc grids.

Table 5-4 (Cont.) Formatting Options

Option	Description
Apply Styles	For forms only. Once a form is rendered within Smart View, select an option to view the formatting on the sheet: • **None**—Applies no styles (Google Sheets formatting or Smart View cell styles) to the sheet. Though cell styles or custom styles may exist on the sheet, neither are shown when selecting this option. They are preserved, however, if you want to display them later using the **Cell styles**, **Custom styles**, or **Custom and cell styles** options. • **Cell styles**—Applies only Smart View cell styles to the sheet, as described in this table. • **Custom styles**—Applies only custom user-defined native Google Sheets formatting to the sheet. • **Custom and cell styles**—Applies both Google Sheets formatting and Smart View cell styles to the sheet. Note that when you select **Custom and cell styles**, cell styles take precedent over custom Google Sheets formatting. After making a selection, refresh the sheet.
Cell Styles	**Cell Styles**
Member Styles	Set the background color for the following member styles: • Member • Formula (forms only)
Data Styles	Set the background color for the following data styles: • Dirty • Locked (forms only) • Cell Text (these are cell comments in Oracle Fusion Cloud Enterprise Performance Management) • Attachment • Drill-through • Supporting Details • Read-only • Data
Miscellaneous Styles	Set the background color for the following miscellaneous styles: • Dimension Header (ad hoc only) • Comment (these are comments placed outside the grid) • Custom Label • Excel Formula in Form (forms only)

Cell Styles

Set Cell Styles to control the display of members and data with respect to cell background color and precedence.

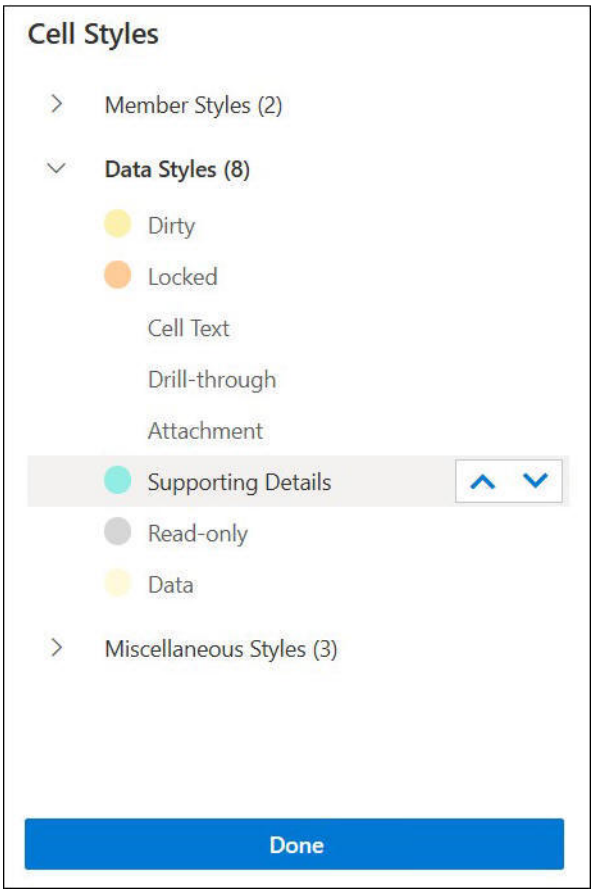
Cell Styles control the Smart View formatting for forms and ad hoc grids.

- For forms, you can directly set the cell styles as explained in this topic.
- For ad hoc grids, you need to first enable cell styles. See Using Smart View Formatting (Cell Styles) for enabling cell styles in ad hoc grids.

To set cell styles:

1. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Options**.
2. In the **Options** dialog, select the **Formatting** tab.
3. In the **Formatting** tab, click **Cell Styles**.
4. Set the desired cell styles:
   a. Expand a cell style group.

      Note the three groupings of cell styles: Member Styles, Data Styles, and Miscellaneous Styles. In this example, the Data Styles group is expanded to show the available data types to which you can apply styles or change them. The example show these available cell styles: Dirty, Cell Text, Attachment, Drill-through, Supporting Details, Read-only, and Data.

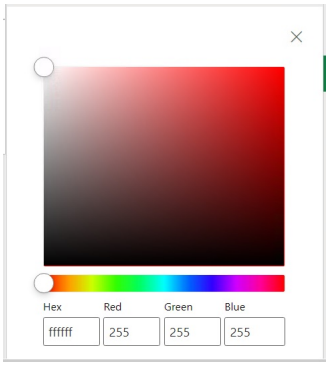


   b. Click a cell style to change.

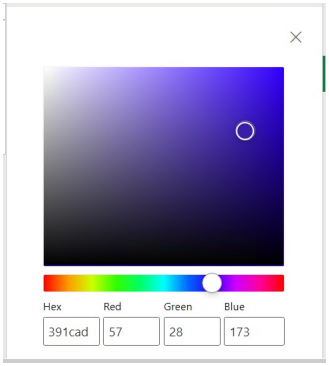
      A color picker control opens

   c. Drag the color controls (the circles in the top left corner of each color block) till you arrive at the color you want.

      Following is the default color control. Move the bottom circle to choose a color category and move the top circle to choose a color shade within that category:



Following is an example of changing the color to a category and shade of blue:



d. When finished, click the **X** in the top right corner to close the pane and return to the **Cell Styles** dialog.

5. In the **Cell Styles** dialog, click **Done** to return to the **Options** dialog.
6. To re-order precedence of cell styles, use the **Move Up** and **Move Down** buttons

or drag and drop the cell styles at the desired position.

> **Note**
>
> - If a cell belongs to multiple member or data types, then the order of precedence determines the style that is applied to the cell. For example, a cell is an editable data cell and also contains supporting details. The Data cell style color is set as Orange, whereas the Supporting Details cell style color is set as Blue. If the Supporting Detail style appears above the Data style in the Cell Style dialog, then the Supporting Data style takes precedence and the cell appears in Blue color. Conversely, if you move the Data style up and place it above the Supporting Details style, then the Data style takes precedence and the cell appears in Orange color.
> - The **Move Up** and **Move Down** buttons appear on hovering over a cell style.

7. Click **OK** to save the changes.

6

Dimensions and Members

Related Topics

- About Dimensions and Members
  Dimensions are data categories used to organize business data for retrieval and preservation of values.
- Displaying Point of View Dimensions
  Using the POV panel, you can display POV dimensions, select members from a POV dimension, and move them to and from the grid.
- Selecting Members
  In Smart View, you select members to use in ad hoc grids and Oracle Fusion Cloud Enterprise Performance Management forms.
- Working with Aliases and Alias Tables
  Aliases are alternate names for database members.
- Viewing Qualified Member Names
  You can view the qualified member names of members having non unique or identical names for better understanding and identification.

About Dimensions and Members

Dimensions are data categories used to organize business data for retrieval and preservation of values.

Dimensions usually contain hierarchies of related *members* grouped within them. For example, a Year dimension often includes members for each time period, such as quarters and months.

Displaying Point of View Dimensions

Using the POV panel, you can display POV dimensions, select members from a POV dimension, and move them to and from the grid.

The Point of View (POV) is the default starting point for dimensions in a data source connection. You can select members and filters for the dimensions that you want to include in the grid and move members to and from the grid.

> **Note**
>
> For non-unique or shared members, the POV displays the qualified name, instead of the display name or member alias.

Displaying POV for Forms

To display point of view dimensions in forms:

1. Open a form.
   To open a form, see Opening Forms in Google Sheets

2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form**.
3. Select **Data**, and then select **POV**.
   The **POV** panel opens on top of the Smart View Home panel. It displays the sheet name and the POV dimensions related to the form. To close the **POV** panel, click the
   
   .

Displaying POV for Ad Hoc Grids

To display point of view dimensions in ad hoc grid:

1. Display a grid in ad hoc mode.
   To open a grid, see Starting Ad Hoc Analysis.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
3. Select **Data**, and then select **POV**.
   The **POV** panel opens on top of the Smart View Home panel. It displays the sheet name and the POV dimensions related to the ad hoc grid. To close the **POV** panel, click the
   
   .

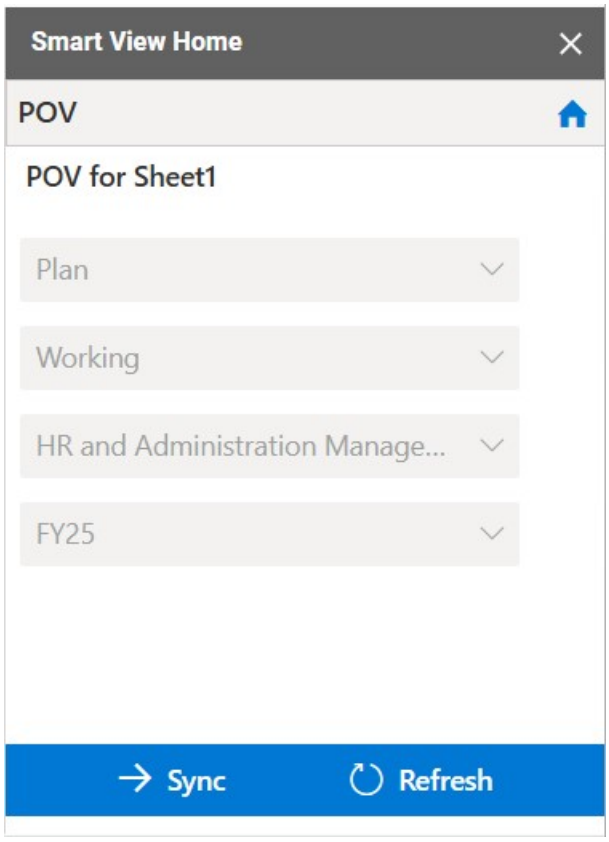
Launching the POV Panel from Favorites

In addition to launching the POV panel from the menu navigation as explained in the above sections, you can open the POV panel faster from the **Favorites** menu in Oracle Smart View for Google Workspace. In the Smart View Home panel, click

, expand the **Data** section and click **POV**. You can mark it as favorite so that it appear in the **Favorites** section at the top of the list.

When you launch the **POV** panel from the **Favorites** menu, the panel opens within the Smart View Home panel. You can click

to close the panel and return to the Smart View Home panel.



Syncing the POV Panel with the Active Sheet

In Smart View, you can work on multiple forms and ad hoc grids across sheets in the same spreadsheet. The **Sync** and **Refresh** buttons in the POV panel help you maintain the context of the POV panel to the active sheet.

These buttons are useful in the following scenarios:

- **Switching between sheets:** When you are working on a form or a grid and open the POV panel, it displays the sheet name and the POV for the currently open form or grid. If you switch to another form or grid in another sheet tab, the POV panel does not sync automatically to display the POV dimensions as per the contents of the new sheet. It continues to display the sheet name and POV of the previous sheet.
  - To display the respective POV dimensions for the active form or grid, click **Sync**. The POV panel now displays the name of the active sheet and the POV dimensions related to the form or grid.
  - To refresh the data on the active sheet and sync the POV panel with the sheet, click **Refresh**. The sheet is refreshed and the POV panel now displays the name of the active sheet and the POV dimensions related to the form or grid.
- **Inserting attributes:** While inserting attributes, when you select an attribute from the **Member Selector** and click **Insert**, the attribute dimension is not automatically listed in the POV panel. Click **Sync** to display the newly added attribute dimension in the POV panel.

> **Note**
>
> Refreshing a form or ad hoc grid from the POV panel refreshes the sheet but not the cell value that has been edited and kept in edit mode.
>
> For example, in a form or ad hoc grid, you edit a data value, keep the cell in edit mode, and then change the POV from the POV panel. When you click Refresh in the POV panel, the sheet refreshes to display the data as per the changed POV, but the cell in edit mode does not refresh. It continues to display the value as per the earlier POV.

Related Topics:

- To select members from a POV dimension, see Selecting Members from a Point of View Dimension.
- To pivot dimensions and members back and forth between the grid and the POV, see Pivoting Dimensions or Members between the Grid and the POV.

Selecting Members

In Smart View, you select members to use in ad hoc grids and Oracle Fusion Cloud Enterprise Performance Management forms.

Related Topics

- Selecting Members from the Member Selector
  You can use the Member Selector dialog to select members for a variety of purposes: working on ad hoc grids, selecting and adding members to functions, displaying and changing dimensions in POV, and so on.
- Selecting Members from a Point of View Dimension
  You can select members and filters for the dimensions that you want to include in the grid and move members to and from the grid.
- Entering Members in Free-Form Mode
  If you are familiar with the dimensions and members of your database, you can enter their names directly into cells using the free-form mode.

Selecting Members from the Member Selector

You can use the Member Selector dialog to select members for a variety of purposes: working on ad hoc grids, selecting and adding members to functions, displaying and changing dimensions in POV, and so on.

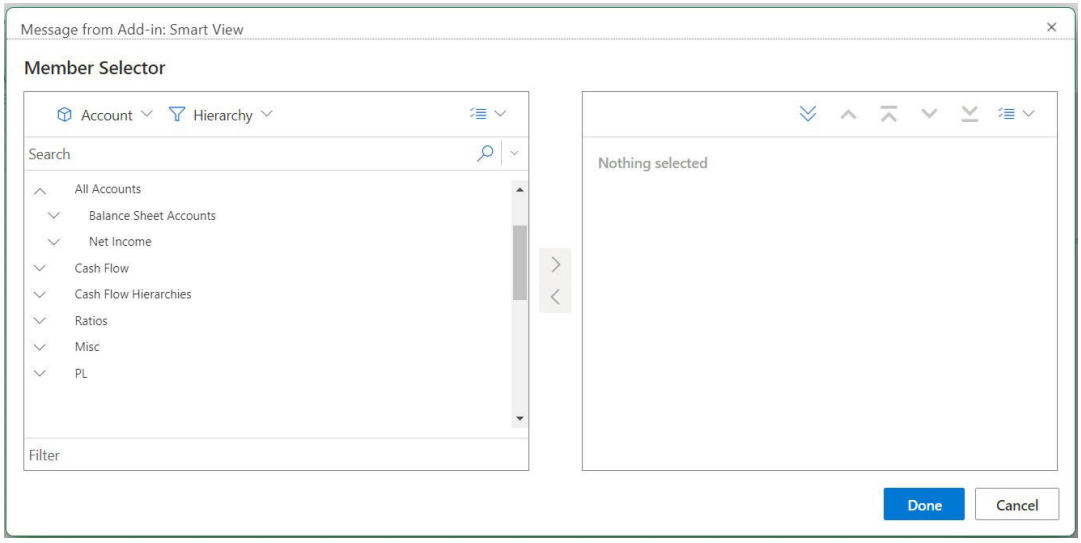
There are multiple ways to launch the **Member Selector** dialog. For example:

- **From an ad hoc grid:**
  In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**. Select **Analysis**, and then select **Member Selection**.
- **From the POV panel:**
  In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**. Select **Data**, and then select **POV**. Click next to a POV dimension, and select **Member Selector** from the drop-down list.

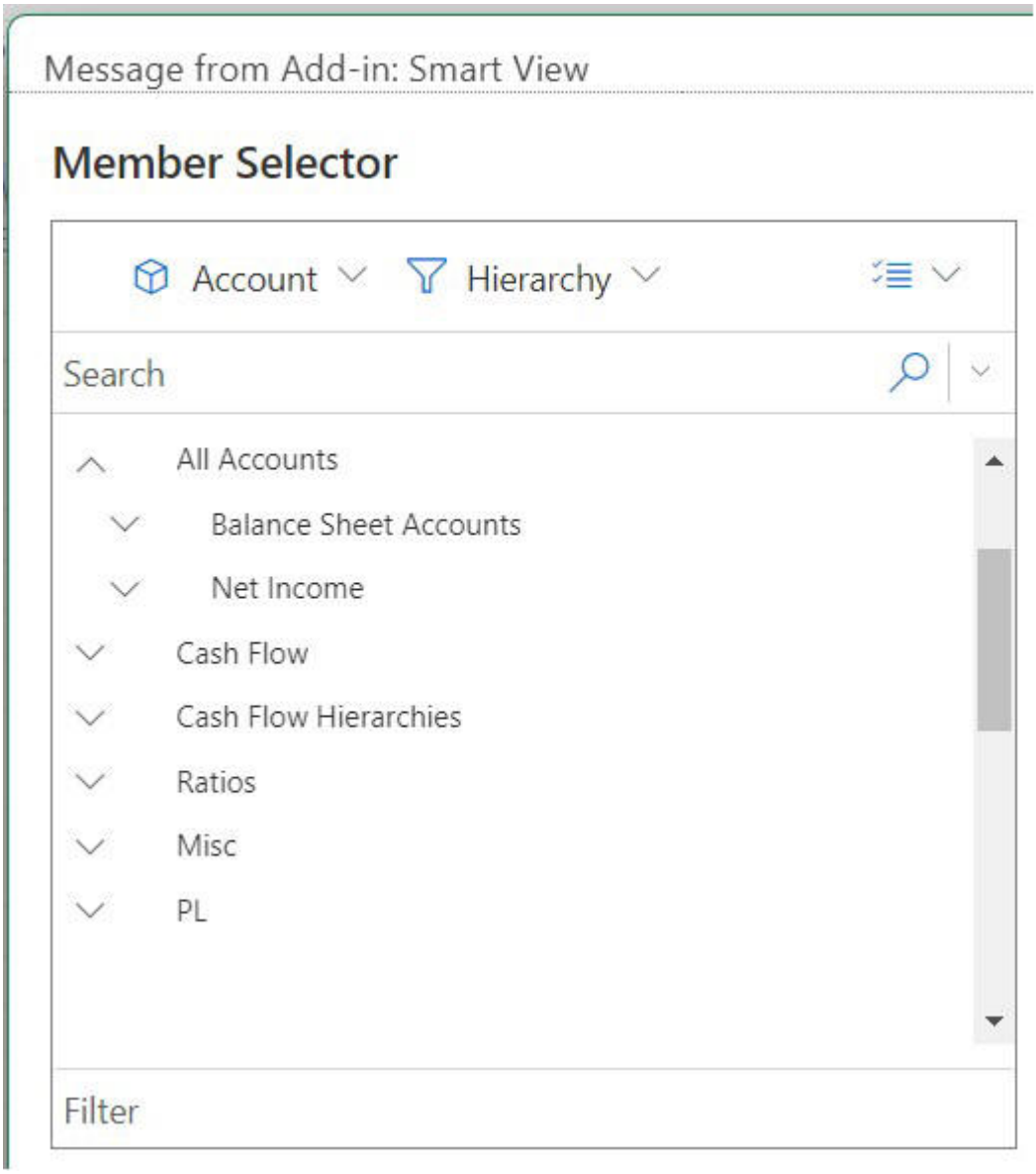
  For more information, see Selecting Members from a Point of View Dimension.

To select members:

1. Launch the **Member Selector** dialog.
   The Members List is displayed in the left and the Selection List is displayed on the right. In the below example, the Selection List appears empty as no member has been selected yet.

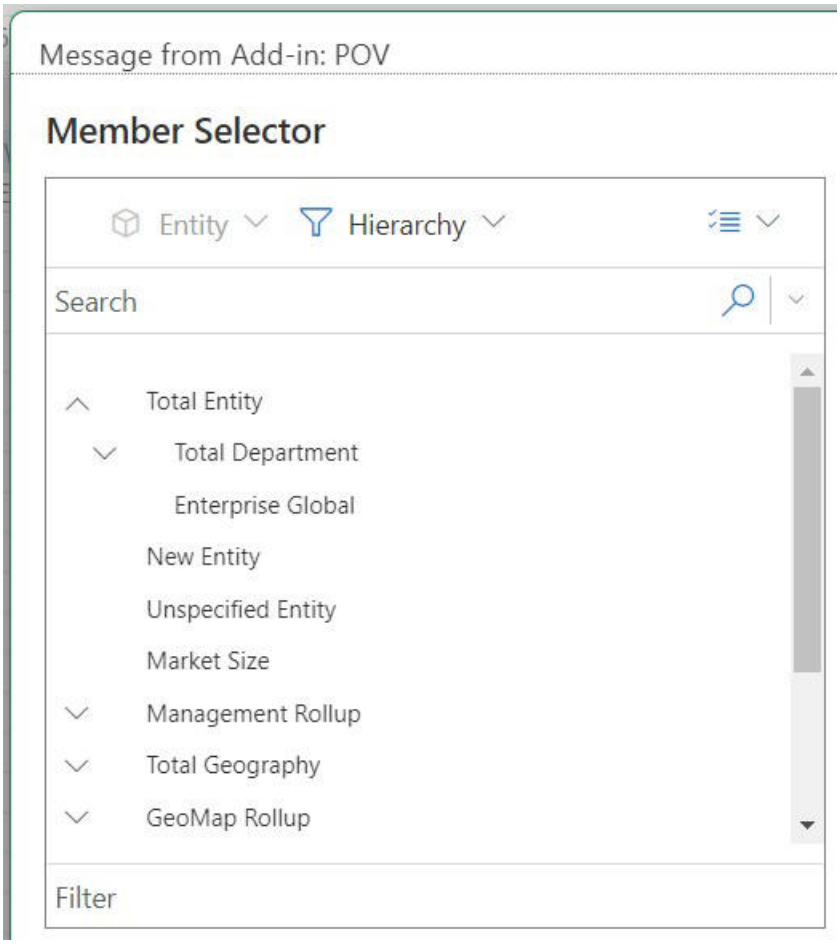


2. In the **Member Selector** dialog, click the dimension selector drop-down, (at the top left of the dialog box above the Members list), and select a dimension. The members belonging to the selected dimension are displayed in the Members list. In the below example, the Members List displays all the member belonging to the Account dimension.



If you accessed the **Member Selector** from a POV dimension in the **POV** panel, then the dimension next to which you clicked

is automatically displayed in the drop-down, and you are not able to select another dimension. In the below example, the Entity dimension is disabled for selection.



3. **Optional.** To retrieve a specific set of members, use the **Hierarchy** drop-down,

   (accessed from the ellipsis button, ..., next to the dimension selector at the top left of the dialog).

   The member set filter will be applied to the highlighted member. To highlight a member, click on the member name so that the name is highlighted. If no member is highlighted, the filter will be applied to the dimension selected in the dimension selector drop-down.

   Filter options, which may vary by data source type, are:

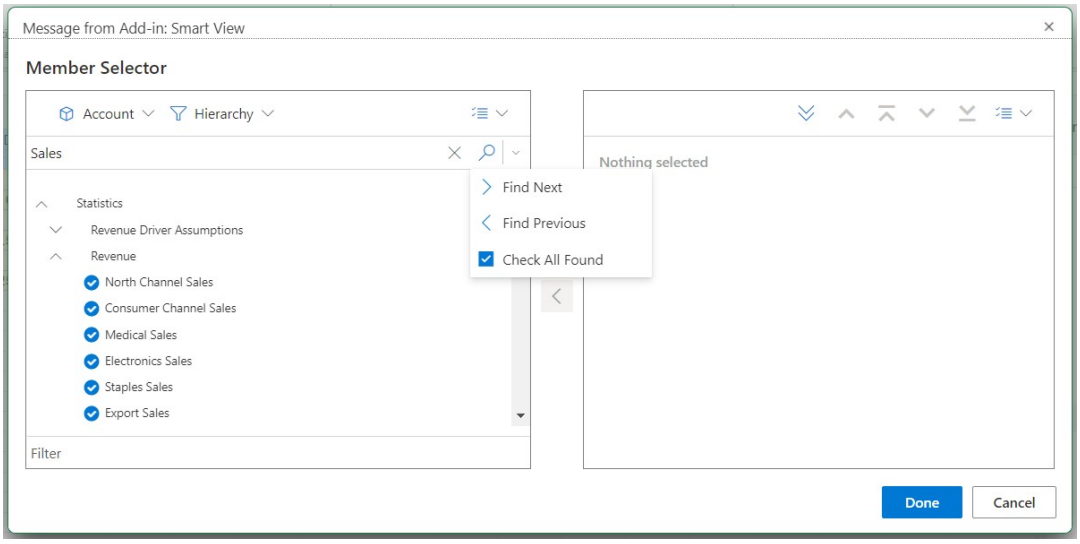
   - **Hierarchy** to select all the members in the hierarchy
   - **Descendants** to select all descendants of the selected member
   - **Descendants Inclusive** to include the selected member and all descendants of the selected member
   - **Children** to select only the children of the selected member
   - **Children Inclusive** to include the selected member and the children of the selected member
   - **Siblings** to select all siblings of the selected member
   - **Siblings Inclusive** to include the selected member and all siblings of the selected member
   - **LSiblings** to include only the members that appear before the selected member with the same parent

- **LSiblings Inclusive** to include the selected member and its left siblings
- **RSiblings** to include only the members that appear after the selected member with the same parent
- **RSiblings Inclusive** to include the selected member and its right siblings
- **Parent** to select only the parent of the selected member
- **Parent Inclusive** to include the selected member and the parent of the selected member
- **Ancestors** to select all the ancestors of the selected member
- **Ancestors Inclusive** to include the selected member and all the ancestors of the selected member
- **Level 0 Descendants** to display all descendants of the selected member that have no children
- **Level** to display the **Filter Argument** dialog box, where you select one level in the hierarchy of members
- **Generation** to display the **Filter Argument** dialog box, where you select one generation in the hierarchy of members
- **UDA** to display the **Filter Argument** dialog box, where you select a user-defined attribute (available only if defined by the administrator)
- **Attribute** to display the **Filter Argument** dialog box, where you select an attribute name and attribute value (available only if defined by the administrator)

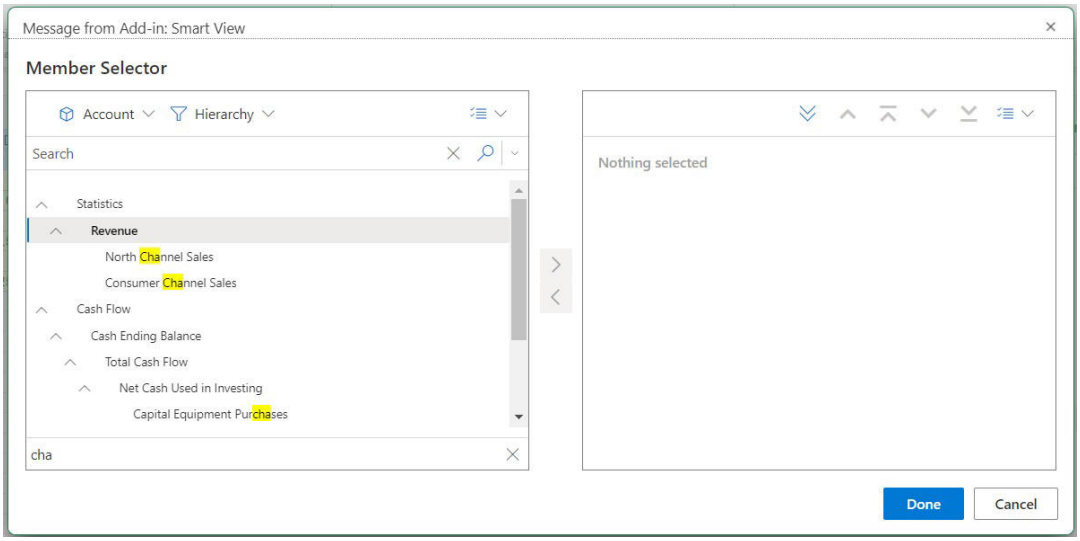
4. **Optional.** To search for members in the Members List, type the required word or letters in the Search box.
   The search results are displayed in the actual member hierarchy. You can take the following actions on the search results using the menu next to the search icon.

   - **Find Next and Find Previous**: Navigate to the next search result and previous search result. You can also keep clicking the search icon to navigate to the next search result.
   - **Check All Found**: Select all the search results in a single action for moving it across to the Selection list.

   In the below example, the term "Sales" is searched and the search results are displayed in the Members list. Further, the Check All Found option is selected so that a check mark appears next to all the search results



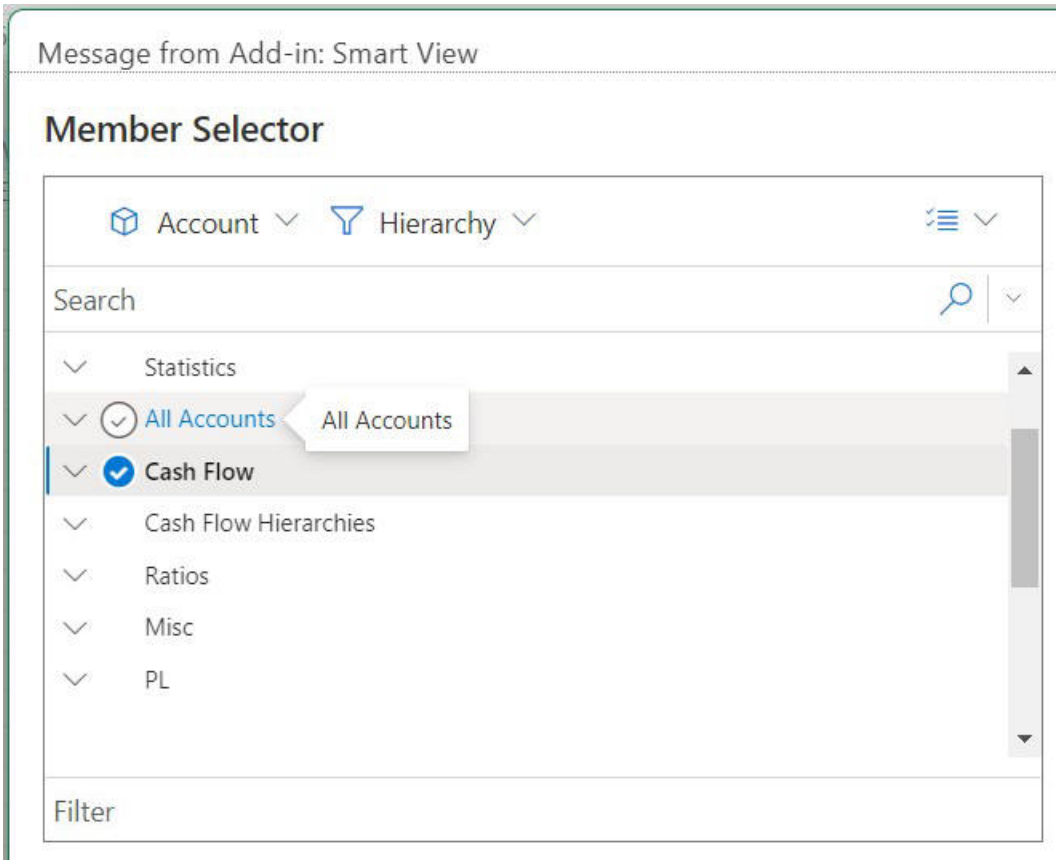
5. **Optional.** To filter the retrieved list of members in the Members List, start typing in the Filter box, present below the Members List. As you type, the list of members is filtered simultaneously, and the typed letters are highlighted in yellow color for easy identification. In the below example, members containing letters "cha" entered in the filter are highlighted and displayed in the Members list.



6. To choose members for selection, hover directly to the left of a member name and click the check box.

> **Note**
>
> The check box next to member names is hidden until the mouse hovers over it.

The figure below shows that for the "Cash Flow" member, the check box is blue, meaning the member has been chosen for selection. For the "All Accounts" member, the check box is gray, meaning the member has not yet been chosen but the cursor is hovering next to it.



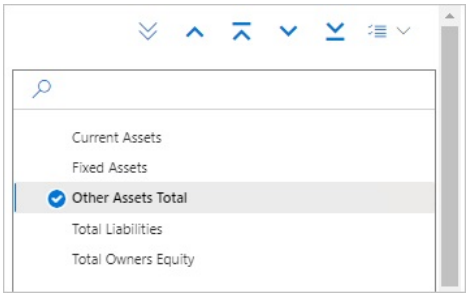
You can also:

- Click directly on a member name to choose a single member for selection.
- Use the mouse to drag a rectangle over a group of members to choose multiple members for selection.

7. **Optional.** In the Members List, select the **Actions** drop-down menu, , to perform these action:
   - **Check Children**, **Check Descendants**, and **Check Base Members** to place a check in the check box next to the applicable members, that is children, descendants, or base members of a selected member.
   - **Clear Checks** to clear all check marks.
   - **Expand All** and **Collapse All** to view the member hierarchy in expanded or collapsed form.
   - **Member Information** to view information about a selected member from the Members list.
   - **Alias Table** to view alias table information, if available, and change the alias table
8. Click the **Add** button, , to move the checked members to the Selection list at the right of the dialog.

Conversely, use the **Remove** button,  , to move members from the Selection list back to the Members list (the list on the left in the dialog).

9. **Optional.** In the Selections list, use the **Move Up**, **Move to Top**, **Move Down**, or **Move to Bottom** buttons to arrange the selected members in the order you want to them to appear on the sheet.
   The buttons that are enabled depend on the member you select in the Selections list. In the following example, five members appear in the Selections list and the middle member is selected. Therefore, all buttons are enabled since the middle member could be moved up or down..



10. **Optional.** Toggle the arrows above the Selection list to select how to insert the members in the grid:

inserts the selected members horizontally in a column

inserts the selected members vertically in a row

11. **Optional.** In the Selection list, select the **Actions** drop-down menu,  , to perform these actions:
    - **Select Dimension** to add the dimension you selected in the dimension selector drop-down (the first drop-down in the dialog box) to the Selection list.
    - **Remove All** to remove all the selected members
    - **Check All** and **Clear Checks** to add or remove checks from all the members in the Selection list.
12. Click **Done** to close the dialog box and add the selected members to the grid, or click **Cancel** to close the dialog box without saving any changes.
13. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Refresh** to update the data to correspond to the selected members.

Selecting Members from a Point of View Dimension

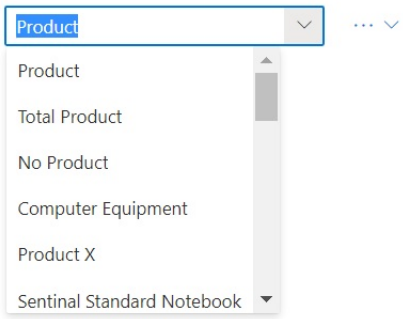
You can select members and filters for the dimensions that you want to include in the grid and move members to and from the grid.

Each connection is associated with only one POV; however, the same connection to different sheets within a spreadsheet may have different POVs.

To select a member to add to the POV drop-down list:

1. Open an ad hoc grid.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
3. Select **Data**, and then select **POV**.
4. In the **POV** panel, click the ellipsis button next to a POV dimension, and from the drop-down menu, choose **Member Selector**.
5. Select members in the **Member Selector**, and move them from the left to the right side of the dialog. For more information, see Selecting Members from the Member Selector.

   The selected members will appear in the drop-down menu for the dimension in the POV. For example, in the Vision application, if we select every member in the Product dimension, this would be a partial view of the resulting drop-down list:



Related Topics:

- To select members from the Member Selector, see Selecting Members from the Member Selector.
- To pivot a member or dimension from the POV to the grid, see Pivoting Dimensions or Members between the Grid and the POV.

Entering Members in Free-Form Mode

If you are familiar with the dimensions and members of your database, you can enter their names directly into cells using the free-form mode.

You can use aliases from the alias table associated with the current grid in free-form mode. In ad hoc grid, if you enter an alias from a different alias table, it will revert to the alias from the current alias table

After connecting to a data source, you can enter member names as follows:

- By entering a member name in a blank cell
- By replacing a member name in a cell with a different member from the same dimension

You can still use the POV, member selection, and other ad hoc operations in free-form grids.

Working with Aliases and Alias Tables

Aliases are alternate names for database members.

Related Topics

- About Aliases
- Selecting Alias Tables

About Aliases

Database member names are often stock numbers or product codes; their aliases can be more descriptive.

For example, in the PBCS Vision Plan1 cube, the alias name for the "P_TP1" member in the "Product" dimension is "Computer Equipment". Aliases are stored in *alias tables* as part of a database. Dimensions can be associated with multiple alias tables.

Selecting Alias Tables

If an administrator has created alias tables in the database, you can select an alias table for the current worksheet. The alias table selected applies only to the current worksheet and not to future connections.

To select an alias table for the current worksheet:

1. Select a member in an ad hoc grid.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
3. Select **Analysis**, and then select **Change Alias**.
4. In the dialog box that is displayed, select an alias table, and then click **OK**.

> **Note**
>
> If you enter a name from an alias table that is not associated with the current grid, its corresponding alias from the alias table that *is* associated with the current grid is displayed after you refresh. For example, if you enter QTR1 into a grid that is associated with the Long Names alias, the after you refresh, Quarter1 is displayed.

Viewing Qualified Member Names

You can view the qualified member names of members having non unique or identical names for better understanding and identification.

Different members or member aliases may have identical names. For example, a database may have two members named "New York," one for New York City and one for New York State. Both members can appear as "New York" in the grid, but if you want to distinguish between them, you can display their qualified names instead. Qualified names include the member name and the names of its ancestors to the level that uniquely defines the member. For example, [Market].[New York].

Following are the ways in which you can view the qualified names of identical members:

Viewing Qualified Names in Cell Information

You can view qualified names of identical members in the Cell Information dialog. For more information, see Viewing Member Cell Information.

To view the qualified names:

1. Select a member cell in the grid.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
3. Select **Analysis**, and then select **Cell Information**.
4. In the **Member Information** dialog, select the **Alias** tab to view the qualified name of the selected member.

Displaying Qualified Names on the Sheet

You can display the qualified names on the sheet using Smart View Options.

To display the qualified names of identical members on the sheet:

1. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Options**.
2. In the **Options** dialog, select the **Members** tab.
3. From the **Member Name Display** drop-down menu, select **Distinct Member Name Only**.
4. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Refresh**.
   The grid on the sheet is refreshed with the qualified names.

Viewing Qualified Names in Cell Notes

In Google Sheets, the qualified names appear in cell notes for the relevant members, when the **Distinct Member Name Only** option is not selected in the **Member Name Display** drop-down menu in Smart View Options. Cell notes are indicated with a triangle in the corner of a cell. You can hover on the cell to view the qualified name. When a member cell with cell note is cut or copied and pasted elsewhere on the sheet, or sorted within the grid, the note is also carried along with the member to its new cell location.

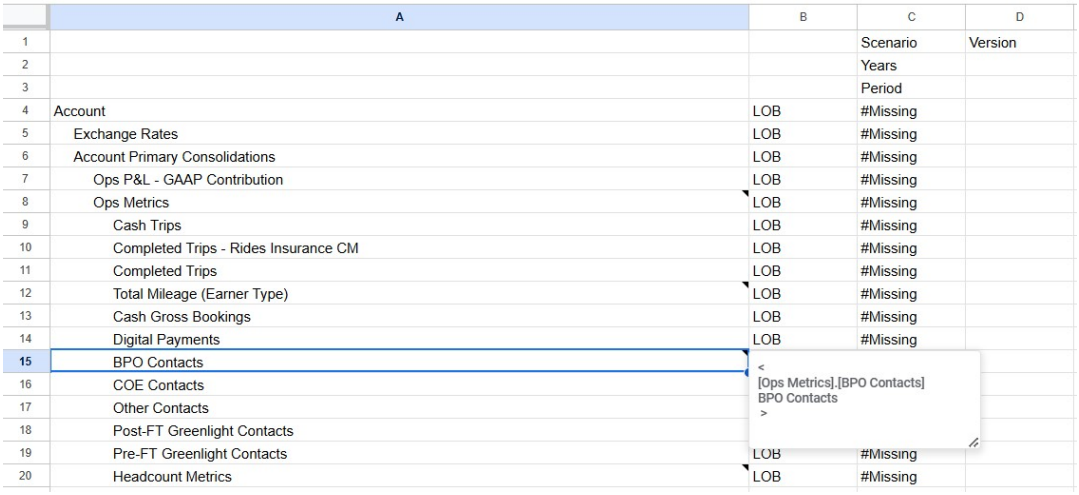
> **Note**
>
> - It is strongly recommended not to add, delete, or change the text in the note, even though it appears editable. Any change in the note text may result in loss of metadata and may affect the context of the member on the sheet.
> - Cell notes added manually by users using Google Sheet's Insert Note option are not preserved on refreshing the grid.
> - Qualified member names can be viewed in cell notes only in single ad hoc grid sheets. These are not currently supported in multiple ad hoc grid sheets.
> - In flex forms, cell notes displaying qualified member names appear only for members with alias names present.

To view the qualified names of identical members:

1. On the sheet, locate the member cell for which you want to see the qualified member name.

> **Note**
>
> Cells with qualified member names appear with a triangle in the corner indicating the presence of a note.

2. Hover on the cell to view the qualified name in a note that appear as a tooltip.



The first line displays the qualified name. For example, [Ops Metrics].[BPO Contacts].

The second line displays the name that appears on the sheet. For example, BPO Contacts.

7

Data and Data Cells

Related Topics

- Refreshing Data
  You can retrieve and refresh data for the current sheet in the spreadsheet.
- Submitting Data
  You can update any type of data in the data source by submitting changed data from forms and ad hoc grids.
- Calculating Data
  After you submit new or changed data, you need to calculate the data in the database to reflect your changes.
- Working with Cell Actions
  Expand and collapse cells, view underlying member formulas, view detailed member information, attach files and URLs, and review comments and cell history.
- Working with Supporting Details
  You can enter supporting details for ad hoc grids and for writable cells in forms.
- Adjusting Values in Data Cells
  You can adjust the value of one or more data cells by a specified number or percentage if the cells contain numerical data.
- Spreading Values using Mass Allocation
  Using mass allocation, you can spread data to all descendants of a source cell and across all dimensions.
- Spreading Values using Grid Spread
  If your administrator has enabled Grid Spread, you can specify an amount or percentage to increase or decrease values across multiple dimensions on the grid, based on the existing values in the target cells.
- Viewing Member Cell Information
  You can view detailed information about any member cell on the grid.
- Working with Drill-Through Reports
  Predefined by administrators, drill-through reports are available to users from specified individual data cells.
- Working with Smart Lists
  You can enter data using custom drop-down selection lists called Smart Lists, which are accessed from data cells in forms and ad hoc grids.
- Resolving Data Validation Errors
  If Service Administrators have set up any data validation rules, then users can view the outcomes of these rules in Smart View and fix errors directly in the form.

Refreshing Data

You can retrieve and refresh data for the current sheet in the spreadsheet.

Refreshing applies to entire current sheet, and includes data in forms, ad hoc grids, and functions.

In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Refresh** to refresh the current sheet.

Alternatively, you can also use the **Refresh** option available in the **Favorites** menu. Refreshing is also part of some specific actions, such as the **Refresh** button in the **POV** panel that is used to refresh the sheet after changing the POV.

Notes about Refreshing

- If you have multiple sheets in your spreadsheet, open each sheet and click **Refresh** to refresh them separately. Refreshing all sheets in a spreadsheet at the same time is not supported.
- On ad hoc sheets, Google Sheets filters are retained after refreshing.
- Selected POV members are reverted to dimension members after deleting some columns and refreshing a sheet. To avoid this, click the POV button to hide the POV dimensions, and ensure that you do not delete the column that contains the Page members.
- When working with multiple grids from multiple data sources in the same sheet, you can refresh grid data for all connections at the same time.
  For example, you are working on a sheet with Grid 1 and Grid 2 connected to Planning and Grid 3 connected to Tax Reporting. When you click **Refresh** from the **Smart View for Google Workspace** menu, all grids—Grid 1, Grid 2, and Grid 3—are refreshed at the same time in a single operation.
  - To refresh all grids together, select any cell outside the ranges of the grids and click **Refresh**.
  - To refresh only a particular grid, select any cell within the range of the grid and click **Refresh**. This is saves the time taken to refresh data, especially when the sheet contains a lot of grids.
- If support for Google Sheets is not enabled and, after connecting to a data source from Smart View, you reopen a saved sheet and try to refresh or submit the saved sheet, update and submit data in grids, or refresh functions in the sheet, a message appears stating *"This operation is not supported by the provider. Contact your Administrator to enable support for Google Sheets"*. You cannot proceed further with submitting or refreshing data, unless the support for Google Sheets is enabled by your Service Administrator.
- Refreshing a form or ad hoc grid from the POV panel or the Favorites panel refreshes the sheet but not the cell value that has been edited and kept in edit mode.

  For example, in a form or ad hoc grid, you edit a data value, keep the cell in edit mode, and then change the POV from the POV panel. When you click Refresh in the POV panel, the sheet refreshes to display the data as per the changed POV, but the cell in edit mode does not refresh. It continues to display the value as per the earlier POV.

Submitting Data

You can update any type of data in the data source by submitting changed data from forms and ad hoc grids.

To submit data:

1. Connect to the data source and open a plan or a form in the grid.
2. Modify the data as needed.
3. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Submit**.

Ensure that your cursor is somewhere in the grid when you submit data. All dirty cells on the sheet are submitted. When the submit operation is complete, a toast message appears stating "Done".

Submitting Data without Refreshing

This option allows users to submit all data from the sheet.

Submit Without Refresh includes all data cells that you have explicitly modified (made dirty) and those that were not modified. All data cells are marked dirty and submitted.

> **Note**
>
> To help you identify modified cells, set a cell style for dirty cells.

To submit data without first refreshing:

1. Connect to the data source and open an ad hoc grid.
2. Modify the data as needed.
3. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
4. Select **Data**, **Submit**, and then select **Submit Without Refresh**.
   Data for all cells on the sheet is submitted, whether or not the cells are dirty.

Calculating Data

After you submit new or changed data, you need to calculate the data in the database to reflect your changes.

To calculate data, you must have security access rights to the data.

There are two methods that you can use to calculate data on Oracle Fusion Cloud Enterprise Performance Management forms in Google Sheets:

- **Business Rules** allows you to select a business rule to apply to the form.

  See Applying a Business Rule to a Cloud EPM Form.
- **Rules on Form** is created for each form to calculate subtotals.

  See Calculating Subtotals on a Cloud EPM Form.

You can also run business rules on forms designed to calculate rules after submitting data. See Applying a Business Rule On Forms Defined to Run Rules When Submitting Data.

Applying a Business Rule to a Cloud EPM Form

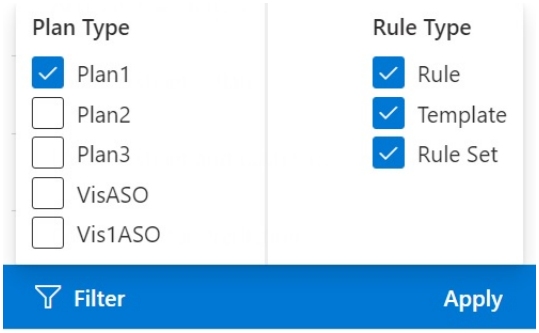
To apply a business rule to a form:

1. Open a form.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form**.
3. Select **Calculate**, and then select **Business Rules**.

   The business rules associated with the form are displayed in the Smart View panel.

4. **Optional:** Click the **Filter** button at the bottom of the Business Rules panel to filter rules by cube and rule type. All cubes and rule type options are selected by default. To narrow the search, clear the check boxes for cubes and rule types that you do not need to see, and then click **Apply**. The list is filtered according to your selections. In this example, we would see business rules of all types that apply to only the Plan1 cube.

Figure 7-1 Business Rule Filtering Options



5. Select a business rule to launch it.
6. Enter any applicable runtime prompts, and then click **Run**.
7. A dialog box is displayed to let you know whether the business rule completed successfully; click **Close** to close the dialog box.

   If the calculation is successful, the values in the database reflect the results of the calculation.

Calculating Subtotals on a Cloud EPM Form

To calculate the subtotals on a form:

1. Open a form.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form**.
3. Select **Calculate**, and then select **Rules on Form**.

> **Note**
>
> Click the **Filter** button at the bottom of the Business Rules panel to filter rules by cube and rule type. All cubes and rule type options are selected by default. To narrow the search, clear the check boxes for cubes and rule types that you do not need to see, and then click **Apply**. The list is filtered according to your selections.

4. In the Smart View panel, select the rule to calculate the subtotals.

   Any data that is not saved on the spreadsheet is lost when you launch the business rule.
5. A dialog box is displayed to let you know whether the business rule completed successfully; click **Close** to close the dialog box.

   If the calculation is successful, the values in the database reflect the results of the calculation.

Applying a Business Rule On Forms Defined to Run Rules When Submitting Data

Some forms are designed to run business rules when you submit data. In the web application, this is referred to as "Run After Save."

To run business rules on a form designed to run rules when you submit data (also referred to as Run After Save):

1. Open a form.
2. Make the changes you require in the form.
3. Click **Submit**.

   The business rules associated with the form are displayed in a dialog page.
4. Enter any applicable runtime prompts, and then click **Save**.

Working with Cell Actions

Expand and collapse cells, view underlying member formulas, view detailed member information, attach files and URLs, and review comments and cell history.

Adding Cell Comments

You can add one or more comments per data cell.

Each data cell can contain comments from multiple users. You can also add the same comment in a range of contiguous data cells. Cells that contain comments can be associated with a cell style.

The character limit set in Oracle Fusion Cloud Enterprise Performance Management is applied.

Depending on the permission level assigned to you by the administrator, you may be able to do any of the following in a data cell:

- Add comments
- Add same comment to contiguous or adjacent cell ranges at the same time.
- View the comments that you and other users have added
- Delete comments that you have entered.

> **Note**
>
> You cannot delete comments entered by other users.
>
> When you delete a comment, a dialog box asking you to confirm the deletion is *not* displayed.

To add comments to a data cell:

1. In an ad hoc grid or a form, select a data cell or a range of data cells.

   Use the **Shift** key to select a range of data cells. Do not use the **Ctrl** key to select cell ranges.

2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form** or **Ad Hoc**.
3. Select **Data**, **Cell Actions**, and then select **Cell Actions**.
4. In the **Cell Actions** dialog box, select **Text**, and enter your comment.
5. If you have selected a range of cells, you can either enter comments for one cell at a time or apply the comment to all selected cells.
   - To enter a comment for one cell, select the cell from the drop-down menu and enter the comment.
   - To enter a comment for all selected cells, select **Apply to all selected cells**.
6. Click **Post** to save the comment.
7. Click **Close** to close the dialog box.

Adding Attachments

Documents can be attached to individual data cells by way of URLs or files.

Each data cell can contain multiple documents attached by one or more users. Depending on the permission level assigned to you by the administrator, you may be able to do any of the following in a data cell:

- Attach documents by way of URLs or files.
- Attach same document as a URL to contiguous or adjacent cell ranges at the same time.

> **Note**
>
> You cannot attach same document as a file to cell ranges at the same time. You can attach files to one cell at a time.

- View the documents that you and other users have attached.
- Edit and delete documents that you have attached. You cannot edit or delete documents attached by other users.

Cells that contain attachments can be associated with a cell style.

To attach documents to a data cell:

1. In an ad hoc grid or a form, select a data cell or a range of data cells.

   Use the **Shift** key to select a range of data cells. Do not use the **Ctrl** key to select cell ranges.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form** or **Ad Hoc**.
3. Select **Data**, **Cell Actions**, and then select **Cell Actions**.
4. In the **Cell Actions** dialog box, select **Attachments** and do any of the following:
   - To attach a URL, enter the title and URL for the document that you want to attach.

> **Note**
>
> If you have selected a range of cells, you can either attach URLs to one cell at a time or attach the same URL to all selected cells.
>
> – To attach a URL to one cell in the range, select the cell from the drop-down menu and attach the URL.
>
> – To attach the same URL to all selected cells in the range, select **Apply to all selected cells**.

- To attach a file, click , navigate to the file that you want to attach, select it, and click **Open**.

5. Click **Post** to save your attachment selections.
6. Click **Close** to close the dialog box.

> **Note**
>
> To define a background color for cells that have attachments, in Smart View **Options**, click **Formatting** and then click **Cell Styles**. Expand **Data Styles** and select **Attachment** to set the color.

Expanding and Collapsing Cells

As you are working in forms, you can expand and collapse parent cells on the grid.

To expand or collapse a parent cell in a form:

1. Select a cell in a form.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form** or **Ad Hoc**.
3. Select **Data**, **Cell Actions**, and then select **Expand/Collapse**.

Working with Supporting Details

You can enter supporting details for ad hoc grids and for writable cells in forms.

Supporting details serve as a built-in calculator for developing data that is not in the member outline. Supporting details can include text, values, and operators that define how data aggregates.

Adding Supporting Details

You can enter supporting details for ad hoc grids cells and in writable cells in forms.

> **Note**
>
> - Supporting details cannot be added to non-level zero period, to read-only cells, and to locked cells.
> - When submitting supporting details,if the form is associated with rules set to **Run on Save**, the Business Rules dialog appears.

To add supporting details:

1. In a form or ad hoc grid, select the cells in which you want to add the supporting details.

   You can select one cell or a range of contiguous cells in a row or column. The selection cannot include a combination of rows and columns. Select cells that are in the local currency so that you can write to them.

2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form** or **Ad Hoc**.

3. Select **Data**, **Cell Actions**, and then select **Supporting Details**.

   The **Supporting Details** dialog reflects your cell selection.

4. Enter a description over the initial "untitled" text.

   The text and its associated operator must be unique among children of the same parent. By default, you can enter up to 1,500 characters.

5. Use the buttons to set or change the indented hierarchy to reflect the desired structure and calculations.

   For example, click **Add Child** to add a line item directly below the selected item.

   For more information, see Setting Hierarchy in Supporting Details.

6. Set the mathematical relationships among the line items by selecting an operator for each of them.

   Select from these operators:

Operator	Function
+	Add
-	Subtract
*	Multiple
/	Divide
~	Ignore

7. Enter data to set or calculate.

   Enter numbers using the same scaling that was set up for the form.

8. Click **Submit**.

   Values are dynamically calculated and aggregated before the data is submitted. Data on the form is also submitted.

Setting Hierarchy in Supporting Details

The supporting details hierarchy should reflect the type of information that supports the cell values and the mathematical operators that create the relationships. You can set and change this hierarchy.

To set hierarchy in supporting details:

1. In a form or ad hoc grid, select the cells with supporting details.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form** or **Ad Hoc**.
3. Select **Data**, **Cell Actions**, and then select **Supporting Details**.

   The **Supporting Details** dialog reflects your cell selection.
4. Set or change the rows that provide the details in the required hierarchy by putting the cursor on an item and clicking the options in this table:

Table 7-1 Supporting Details options and their results

Option	Result
Add Child	Adds an item one level below the selected cell. You can add an unlimited number of children, but consider its potential performance impact.
Add Sibling	Adds an item at the same level as the selected cell. You can add an unlimited number of siblings, but consider its potential performance impact.
Delete	Removes the selected item
Delete All	Simultaneously removes all supporting details
Promote	Moves the selected item to the next-higher level
Demote	Moves the selected item to the next-lower level
Move Up	Moves the selected item to before its sibling predecessor
Move Down	Moves the selected item to after its sibling successor
Duplicate Row	Adds a row below the selected item, duplicating its structure (text, operator, and values)
Fill	For rows, copies the data from the current cell to the cells to its right
Refresh	Gets the latest stored database values, restoring the previously saved values, and possibly overwriting changes you just made.

5. Click **Submit**.

Viewing and Changing Supporting Details

You can view and change the supporting details added in a cell.

Cells with supporting details can be indicated using cell styles so that they can be easily identified in a grid. To define a background color for cells with supporting details, in Smart View **Options**, click **Formatting**, and then click **Cell Styles**. Expand **Data Styles** and select **Supporting Details** to set the color.

To view or change supporting details:

1. In a form or ad hoc grid, select the cells for which to view or add supporting details.

   You can select one cell or a range of contiguous cells in a row or column. The selection cannot include a combination of rows and columns. Select cells that are in the local currency so that you can write to them.

2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form** or **Ad Hoc**.

3. Select **Data**, **Cell Actions**, and then select **Supporting Details**.

   The **Supporting Details** dialog reflects your cell selection.

4. View the details or change the line items or calculations that aggregate the data in the selected cells.

> **Note**
>
> Supporting details must be edited only in the **Supporting Details** dialog box, and not in the grid. If you try to edit the cells with supporting details in the grid itself, then an error message appears stating "Data entry is not allowed for cells with supporting details".
>
> In Google Sheets, if you edit a cell containing supporting details in the grid, and submit the cell while in edit mode, the error message is correctly displayed. However, the edited value still gets submitted. This results in a mismatch of values appearing in the grid and in the **Supporting Details** dialog box. To avoid this erroneous scenario, always edit supporting details value from the **Supporting Details** dialog box

Adjusting Values in Data Cells

You can adjust the value of one or more data cells by a specified number or percentage if the cells contain numerical data.

To adjust values, you can select a single cell or a range of multiple cells, including continuous or discontinuous cell ranges. However, while selecting a range, if you select a read-only cell, a cell with supporting details, a cell with string or non-numeric values, or a cell outside the grid, then relevant error messages inform you that the adjust operation cannot be performed and prompt you to modify your selection.

> **Note**
>
> Data cannot be adjusted over time periods, as spreading data for time periods is not supported. For example, adjusting data in a Quarterly data cell does not adjust the values in the corresponding Monthly data cells.

To adjust data values:

1. In a form or ad hoc grid, click the data cell that contains the value to adjust.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form** or **Ad Hoc**.
3. Select **Data**, **Adjust**, and then select **Adjust**.
4. In **Adjust Data**, select an option and then enter the number or percentage by which you want to adjust the value of the cell.

   Available options are:

   - **Add fixed value to selected cell(s)**
   - **Subtract fixed value from selected cell(s)**
   - **Multiply selected cell(s) by a fixed value**
   - **Divide selected cell(s) by a fixed value**
   - **Increase selected cell(s) by a fixed percentage**
   - **Decrease selected cell(s) by a fixed percentage**
5. Click **Adjust Data**.

Spreading Values using Mass Allocation

Using mass allocation, you can spread data to all descendants of a source cell and across all dimensions.

Spreading by mass allocation spreads data to cells not displayed on the grid and does not require that you have access to the target cells.

When using mass allocation, keep in mind the following points:

- Mass allocation is available only for forms, which must be enabled for mass allocation by the administrator.
- You must be provisioned with the Mass Allocate role to use mass allocation.
- Mass allocation cannot be undone.

To spread values by mass allocation:

1. Open a form.
2. Position the cursor in the Total or Subtotal cell whose value you want to spread.
3. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form**.
4. Select **Data**, **Adjust**, and then select **Mass Allocate**.
5. Enter a new value in **Spread Value** to replace the current value, or from the drop-down menu, select one of the following options:

- **Value** to increase or decrease values by a specified amount
- **Percentage** to increase or decrease values by a percentage

6. Select **Increase By** or **Decrease By** and enter a value or percentage.
7. In **Spread Value**, enter the actual spread value that you want.

   For example, if the **Current Value** is 100 and you want the spread value to be 125, enter 125 directly in **Spread Value** and do nothing with the **Increase By** and **Decrease By** options.

   Alternatively, you can enter 25 in **Increase By**, and 125 will be displayed in **Spread Value**.

   Entering a value in **Spread Value** has no effect on the **Increase By** and **Decrease By** text box. But when you enter a value in **Increase By** and **Decrease By**, the spread value is reflected in the **Spread Value** text box.
8. Select the **Spread Type** for allocating the specified value or percentage across the target cells:

   - **Proportional Spread** to spread the value proportionally, based on the existing values in the target cells (the default)
   - **Evenly Split** to spread the value evenly among the target cells
   - **Fill** to replace the value in all target cells
   - **Relational Spread** to spread into the selected cells based on values that exist in a different source location. Selecting this option displays the currently selected member for each dimension in both the **Current Relation** and **Choose Relation** columns. Double-clicking on any row opens **Member-Selection** You can now select any one member for that dimension, which appears afterwards in the **Choose Relation** column.

   Your administrator can add other spreading patterns.
9. Click **Spread**.

   The new values are automatically saved.

Spreading Values using Grid Spread

If your administrator has enabled Grid Spread, you can specify an amount or percentage to increase or decrease values across multiple dimensions on the grid, based on the existing values in the target cells.

When calculating the spread data, read-only and locked cells and cells having supporting detail are ignored. Data integrity is ensured because values can be spread only to cells to which you have access.

> **Note**
>
> - Grid spreading is supported in flex forms only in cases where the Period dimension is not flex enabled. If the Period dimension is in a column, then flex form should not be enabled on columns. Similarly, if the Period dimension is in a row, then flex form should not be enabled on rows.
> - If the **Show invalid members for flex form** option is enabled in a form where flex form is enabled only on rows, the rows contain any dimension other than Period, and the Period dimension in columns is not flex enabled, then grid spreading may work once, but does not work for subsequent spreading operations. While designing such forms, ensure that the **Show invalid members for flex form** check box, under **Smart View Options** in the **Layout** tab, is not selected so that grid spreading works in flex forms.

To spread values using Grid Spread:

1. Open a form or an ad hoc grid.
2. Position the cursor in the Subtotal or Total source cell whose value you want to spread to target cells.
3. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form** or **Ad Hoc**.
4. Select **Data**, **Adjust**, and then select **Grid Spread**.
5. From the drop-down menu, select one of these options:
   - **Value** to increase or decrease values by a specified amount
   - **Percentage** to increase or decrease values by a percentage
6. Select **Increase By** or **Decrease By** and enter a value or percentage.
7. In **Spread Value**, enter the actual spread value that you want.

   For example, if the **Current Value** is 100 and you want the spread value to be 125, enter 125 directly in **Spread Value** and do nothing with the **Increase By**/**Decrease By** options or text box in the previous step.

   Alternatively, you can enter 25 in **Increase By**, and 125 will be displayed in **Spread Value**.

   > **Note**
   >
   > Entering a value in **Spread Value** has no effect on the **Increase By**/**Decrease By** text box. But when you enter a value in **Increase By**/**Decrease By**, the spread value is reflected in the **Spread Value** text box.

8. Select a spreading pattern:
   - **Proportional Spread** to spread the value proportionally, based on the existing values in the target cells (the default)
   - **Evenly Split** to spread the value evenly among the target cells
   - **Fill** to replace the value in all target cells

   Your administrator can add other spreading patterns.

9. Click **Spread**. The specified value or percentage is spread across the target cells, replacing former values with new ones.
10. To save the new values, submit the sheet.

Viewing Member Cell Information

You can view detailed information about any member cell on the grid.

The information displayed depends on the data source type to which you are connected.

To view cell information:

1. Select a member cell in the grid.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
3. Select **Analysis**, and then select **Cell Information**.
4. View the information displayed in the following tabs. Only the tabs that are applicable to the member and connection are displayed.
   - **Information:** A list of general information about the member such as dimension, level, generation, parent member name, and so on. These properties may vary based on the selected member and dimension type.
   - **Aliases:** A list of alias tables and corresponding aliases associated with the member
   - **Attributes:** A table of the dimensions, members, and types of attributes associated with the member
   - **Formula:** The formula associated with the member
   - **Comments:** A list of comments associated with the member
   - **User Defined Attributes:** A list of user defined attributes (attributes of the member defined by the administrator)
5. Click **OK** to return to the grid.

Working with Drill-Through Reports

Predefined by administrators, drill-through reports are available to users from specified individual data cells.

Using drill-through reports, you can drill through to the detailed data in a database from Smart View. Drill-through helps you to understand the source of a data value and get a granular level of detail for a value. For example, when you drill down on the Period dimension member Q4, you may see values for Jan, Feb and Mar.

Drill-through reports can be launched in a web browser from Smart View. Support for launching drill-through reports in a new sheet will be made available in a future release.

Guidelines for Working with Drill-Through Reports

Consider these guidelines when working with drill-through reports:

- Cells that contain drill-through reports can be indicated on the grid by a cell style. For more information on setting cell styles, see Formatting Options.
- The data displayed in a drill-through report is dynamic.

- You cannot use alias names for drill-through; you must use member names.

Accessing Drill-Through Reports

To access a drill-through report:

1. Select a data cell associated with a drill-through report.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form** or **Ad Hoc**.
3. Select **Data** and then select **Drill-Through**.
4. If there are multiple drill-through reports associated with the cell, select a report from the list and click **Launch**.

   If only one drill-through report is associated with the cell, the drill-through report launches directly.

Enabling Pop-ups in Chrome for Using Drill-Through

To enable pop-ups in Chrome for using the drill-through feature, follow these steps:

1. Click the Chrome menu (the three dots icon

) on the browser toolbar, and select **Settings**.
2. Scroll down the page and click the arrow next to **Advanced** to see more settings.
3. In the **Privacy and Security** section, select **Content Settings**.
4. Select **Pop-ups and Redirects**.
5. In **Allow**, click **Add**.
6. In the **Add Site** dialog box, enter the URL for your environment, up to the port number; for example:

   https://<serviceURL>.oraclecloud.com
7. Click **Add**.

   The URL should appear in the list under **Allow**.

Working with Smart Lists

You can enter data using custom drop-down selection lists called Smart Lists, which are accessed from data cells in forms and ad hoc grids.

A Smart List is a drop-down selection list displayed in a form or ad hoc grid cell as an alphanumeric text description, but stored in the database as a number. For example, an integer Smart List for a reporting cycle may have the values 1-5, for Yearly (1), Quarterly (2), Monthly (3), Daily (4), and Hourly (5). The values that are displayed on the form or ad hoc grid are Yearly, Quarterly, Monthly, Daily, and Hourly. When you select one of these values on the form or ad hoc grid, and submit the data, the number associated with it is stored in the database. This means that you do not have to remember the numeric values associated with each time period in the reporting cycle.

In Smart View, you access Smart Lists from custom drop-down lists in form or ad hoc grid cells. When clicking into cells whose members are associated with a Smart List, you click the down arrow that appears directly to the right of the cell, then select a drop-down list option instead of typing data; in fact, you cannot type in a cell that contains a Smart List.

For example, a data form may contain a Smart List called Justification that provides selections for Research, Customer Feedback, and Expansion. When you click into Account cells named Reason (whose members are associated with the Justification Smart List), a down arrow is displayed. When you click the down arrow, it expands into a drop-down list with the following selections:

- Research
- Customer Feedback
- Expansion

You then select one of the Smart List options as the value for the cell.

To enter a Smart List value in a form or ad hoc grid cell:

1. Open a form or ad hoc grid.
2. In the form or ad hoc grid, click into the data cell for which you want to select a Smart List option.

   A down arrow is displayed to the right of the cell.

   > **Note**
   >
   > Only cells whose members are associated with Smart Lists contain Smart List drop-down lists.

3. Click the down arrow for the cell.

   The down arrow expands into a Smart List drop-down list with options from which you can choose.

4. From the Smart List, select an option.

   The option you select is entered into the data cell.

   After selecting a value, the cell becomes "dirty" and the data is ready to submit.

Guidelines for Working with Smart Lists

- You can hand-type a Smart List value in cells that contain Smart Lists and perform a Submit for both forms and ad hoc grids. However, if you type in an incorrect Smart List value, then you will see this error message, "The value you entered is not valid."
- In forms containing Smart Lists, after deleting all values in a row in order to enter and submit new data, the Smart Lists in that row are empty.

  Workaround: Remove row values, and then perform a **Submit** (that is, you submit #Missing values) or a **Refresh**. The Smart List drop-down arrows are then displayed properly. Now, you can enter new values for the same row.
- Smart Lists are supported with the HsGetValue and HsSetValue functions. However, with functions, you will not see the Smart List drop-down options. Instead:
  - HsGetValue - Simply retrieves the Smart List value as a string value.
  - HsSetValue - Submits the value as a string value.
- While working on Smart Lists in forms and ad hoc grids, if you press the **Delete** key in a Smart List cell, then the cell value is cleared but the Smart List is retained in the cell.

> **Note**
>
> If you are working on an ad hoc sheet in free-form state, then the Smart List values are not retained on pressing the **Delete** key. As a workaround, you have to refresh the sheet to get the Smart List values back in the drop-down list.

- Smart Lists must be set up and enabled by an administrator before you can use them in Smart View. For more information on enabling Smart Lists for forms and ad hoc grids, see the information Smart Lists in the relevant administration guide; for example see Administering Smart Lists in *Administering Planning*.

Resolving Data Validation Errors

If Service Administrators have set up any data validation rules, then users can view the outcomes of these rules in Smart View and fix errors directly in the form.

Administrators can set up data validation rules to ensure that data meets company guidelines. While setting the rules, they can set:

- Criteria for the data you enter
- Background colors to call your attention to data validation errors
- Messages that tell you what the criteria is

For more information on how to set up data validation rule, see the Administration Guide for your business process.

If the data in a form does not meet the criteria in the data validation rules, the cells with errors are displayed with the assigned background color. Smart View users can also use the **Data Validation** panel, which lists the cells containing validation errors, grouped by validation rule. When you click a cell from this list, it gets highlighted in the form and the message associated with the rule appears in a tool tip.

To resolve data validation errors:

1. Open a form with errors and hover your cursor over the cell having a non-default colored background to view the validation message.

   Your administrator typically calls your attention to cells having data validation rule errors by displaying them with a colored background.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form**.
3. Click **Data** and then click **Data Validation**.
4. In the **Data Validation** panel, expand the validation rule and review the list of cells with errors.
5. Click each data cell that has validation errors and resolve each error based on the instructions in the data validation message.

   As you resolve errors, those cells are removed the list.
6. When you have resolved all errors, submit the data.

   The background color and validation messages are cleared from the cells. If you open the **Data Validation** panel now, it too appears blank.

8

Data Forms

You can work with Oracle Fusion Cloud Enterprise Performance Management forms to view and modify data.

Related Topics

- Working with Forms in Google Sheets
  Forms are grid displays in which you can enter data into the database from Google Sheets and view and analyze data or related text. Certain dimension member values are fixed, giving you a specific view into the data.
- Opening Forms in Google Sheets
  You can open Oracle Fusion Cloud Enterprise Performance Management forms in Google Sheets.
- Copying Versions
  You can copy data from one bottom-up or target version of a selected scenario to another bottom-up or target version within the same scenario.
- Viewing Member Formulas
  You can view the underlying formula in dimension member cells that contain a formula.
- Google Sheets Formulas in Forms
  Consider the guidelines in this topic while using Google Sheets formulas in forms.
- Working with Flex Forms
  Flex forms are a form type that provides flexible row management in Smart View.

Working with Forms in Google Sheets

Forms are grid displays in which you can enter data into the database from Google Sheets and view and analyze data or related text. Certain dimension member values are fixed, giving you a specific view into the data.

Using Oracle Smart View for Google Workspace, you can work with Oracle Fusion Cloud Enterprise Performance Management forms in Google Sheets.

Guidelines for Forms Opened in Smart View

Consider the following guidelines for forms opened in Smart View:

- You can modify data values but not the form structure in forms.
- If you try to edit something on the sheet that is not allowed, then Google Sheets displays a Heads Up warning message and asks if you want to proceed editing anyways. It is recommended to click **Cancel** in the warning message to avoid editing and causing any undesirable impact on the sheet.
- Values submitted to the database from Google Sheets must be non-formatted data.
- If a form is currently loaded in Google Sheets and the administrator changes the form definition on the server, you should close the form and reload it. This action ensures that the newest form definitions are displayed.

- Customizations made to forms are preserved when you save or refresh only if they are made outside the grid or if they are made to thousands and decimal separators.
- If you collapse a form on the web, and then open the form in Smart View, the form will be displayed as fully expanded.
- If you remove a value in a cell, either by pressing backspace or by typing over the existing cell value, and enter the same value again, the cell is not marked as dirty and you will not be able to submit the same value again. However, if you press the Delete key for removing the value, then it is marked as dirty and you will be able to submit the value.
- Composite forms are not supported. Starting in 21.05, Cloud EPM no longer officially supports composite forms.

Guidelines for Smart Forms

You can open an *existing* Smart Form in Smart View; however, note the following:

- You cannot change the view type. Currently, whatever view is set through the web application is used for display.
- User-defined functions (UDFs) are not supported.
- You cannot create a *new* Smart Form.
- When a Smart Form is opened as an ad hoc grid in a multiple-grid sheet, the formula cells appear blank since the layout changes and formula references are not retained.

Opening Forms in Google Sheets

You can open Oracle Fusion Cloud Enterprise Performance Management forms in Google Sheets.

To open a form:

1. Connect to a data source.
2. In the Smart View Home panel, expand the library tree list.
   Depending on the data source provider, you may see different artifacts indicated by the following icons:
   -  — Form
   -  — Flex Form
   -  — Smart Form
   -  — Saved Ad Hoc Grid
3. Do any of the following:
   - To select a form without opening it, click its icon or the area next to its name.
   - To open a form, click the form's name.
   - To open a form directly in ad hoc analysis mode, that is as an ad hoc grid, first select it, right-click on it, and then select the **Ad Hoc Analysis** option in the menu.

- To open an ad hoc grid as a form, first select it, right-click on it, and then select the **Open Form** option in the menu.
- To open a flex form, click the flex form's name.
- To open a flex form as a simple form or ad hoc grid, right-click the flex form icon, or the space after the flex form name and select the **Open Form** or **Ad Hoc Analysis** option.

4. **Optional:** View instructions associated with the form.
   a. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form**.
   b. Select **Data**, **More**, and then select **Instructions**.

Copying Versions

You can copy data from one bottom-up or target version of a selected scenario to another bottom-up or target version within the same scenario.

For example, you can create a Best Case version and copy some or all the data in that version to a Worst Case version to quickly create a starting point for the new version.

You can copy between bottom-up and target versions.

- When you copy to a bottom-up version, only the selected level 0 members are copied.
- When you copy to a target version, all selected members are copied.
- To protect data in approved planning units, copying a version does not copy to approved planning units.

> **Note**
>
> - To successfully copy data, when specifying the copy data criteria, you must select at least one member for the Scenario, Account, Entity, Period, and Version dimensions.
> - The Copy Version action is available based on role for authorized users like Service Administrators.

To copy a version at application level:

1. From the Actions Menu in the Smart View Home panel, click **Copy Version**.

   Alternatively, you can right-click in the Smart View Home panel and click **Copy Version**.
2. In **Scenario**, select the scenario to copy.
3. In **Copy From**, select the source version.
4. In **Copy To**, select the destination version.
5. Click **Go** to display the available entities (planning units) for the selected source version.
6. Use the arrow keys to move entities from **Available Entities** to **Selected Entities**.

   You can copy entities with a process status of *not started* or *first pass*.
7. **Optional:** To copy associated information, select these options:
   - **Copy Account Annotations**

Only annotations for selected entities are copied. If you are copying to a bottom-up version, only level 0 entities (and their annotations) are copied.

- **Copy Cell Comments and Annotations**
- **Copy Supporting Details**

8. Click **Copy Data**.

> **Note**
>
> Wait for the message indicating that the copy data operations was successful before loading another Web page.

Viewing Member Formulas

You can view the underlying formula in dimension member cells that contain a formula.

To view member formulas:

1. Open a form.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form**.
3. Select **Data**, **More**, and then select **Member Formula**.

   The list of members containing formulas for the selected dimension are displayed in the **Member Formula** dialog.
4. Select a member from the displayed list to view its formula in the **Member Formula** dialog.

Google Sheets Formulas in Forms

Consider the guidelines in this topic while using Google Sheets formulas in forms.

- You can create Google Sheets formulas in form cells inside or outside the grid if the cells are not read-only or locked.
- Cells that contain cell text can contain Google Sheets formulas, but cells containing supporting detail (such as Oracle Fusion Cloud Enterprise Performance Management cells) cannot.
- Formulas are preserved in forms when you refresh the form even without saving the data.
- If you move a referential formula, its cell references are updated to reflect the new location.
- A cell with formula displays the dirty cell style if the value in the cell reference, present either in the same sheet or another sheet, is updated. On submitting, the updated value in the formula cell also gets submitted.
- In forms, you are prompted to save the spreadsheet as an Google Sheets file if you do any of the following (but you temporarily lose access to the form):
  - Change the current page
  - Select a different form
  - Connect to a different data source

Working with Flex Forms

Flex forms are a form type that provides flexible row management in Smart View.

Related Topics

- About Flex Forms
  Flex forms are a form type that provides flexible row and column management in Smart View.
- Best Practices for Working with Flex Forms
  Contains best practices and guidelines for working with flex forms.
- Working with Flex Forms in Smart View
  With flex forms, you can rearrange row and column dimensions, and insert valid members or aliases from corresponding dimensions.
- Opening a Flex Form in Ad Hoc Mode and Submitting Data
  You can open a flex form in ad hoc mode, just like any regular form, use ad hoc analysis to modify the grid layout, and submit data.

About Flex Forms

Flex forms are a form type that provides flexible row and column management in Smart View.

Flex forms retain all regular form properties and features, such as running business rules attached to the flex form. However, using flex forms, and depending on the flex form design, you can rearrange row and column members. Modified row or column order is maintained on refresh and during submit.

In the web application, during form definition, Service Administrators select **Enable flex form on rows**, **Enable flex form on columns**, or both options, under **Smart View Options** in the **Layout** tab to enable flex form-specific features. Depending on those selections, dimension and member row cells and all data cells in a flex form are unprotected. For example, if only **Enable flex form on rows** is enabled, then column members are protected. If only **Enable flex form on columns**, then row members are protected. If both are enabled, then only the top left blank cells are protected.

In Smart View, the **Sheet Info** dialog displays the **Sheet Type** for flex forms as "Flex form". Flex forms can be part of task lists and you can open them as flex forms from a task list.

> **Note**
>
> Flex forms are used only in Smart View and not in the web application.

Best Practices for Working with Flex Forms

Contains best practices and guidelines for working with flex forms.

Related Topics

- General Guidelines for Flex Forms
- Selecting Members in Flex Forms
- Sorting in Flex Forms

- Using Suppression Options in Flex Forms
- Working with Shared Members and Suppression Options in Flex Forms
- Flexing Beyond the Form Definition
- Retaining Invalid Members on Flex Forms
- Retaining Formula, Label, and Comment Rows and Columns on Flex Forms
- Retaining Modified Members on Flex Forms After POV or User Variable Change
- Unsupported Features on Flex Forms

General Guidelines for Flex Forms

- You can modify both row and column members in flex forms.
- Any modification to a flex form will not be persisted between sessions.
  When a user modifies a flex form, the modified grid layout will only be persisted in the context of the current session. Reopening a flex form reverts the flex form layout to its original state.
- You may insert and delete member rows and columns in a flex form using the **Insert** and **Delete** actions using the right-click menu of Google Sheets.
  Depending on whether the options **Enable flex form for rows**. **Enable flex form for columns**, or both, are enabled, you can insert or delete rows or columns within and outside of the flex form grid.

  Service Administrators: In the form definition, choose either or both of the following options:

  – To allow users to insert or delete rows, select **Enable flex form for rows**
  – To allow users to insert or delete columns, select **Enable flex form for columns**
- It is not recommended to insert new rows above column dimensions as this impacts the structure of the grid. Similarly, new columns should not be inserted to the left of row dimensions.
- Access permission settings are honored in flex forms.
- Valid intersections are honored in flex forms.
- Business rules may be run on flex forms.
- When a flex form with a business rule or Groovy rule to add a new dimension member (member on-the-fly) is executed from the form, the new member will not appear on the flex form after a refresh. To see the new member on the flex form, you must reopen the flex form.
- There is limited support for grid spreading in flex forms.
  – Grid spreading is supported in flex forms only in cases where the Period dimension is not flex enabled. If the Period dimension is in a column, then flex form should not be enabled on columns. Similarly, if the Period dimension is in a row, then flex form should not be enabled on rows.
  – If the **Show invalid members for flex form** option is enabled in a form where flex form is enabled only on rows, the rows contain any dimension other than Period, and the Period dimension in columns is not flex enabled, then grid spreading may work once, but does not work for subsequent grid spreading operations. While designing such forms, ensure that the **Show invalid members for flex form** check box, under **Smart View Options** in the **Layout** tab, is not selected so that grid spreading works in flex forms.

- You may delete rows and columns using the **Delete** key. However, when deleting rows or columns containing multiple dimensions, be sure to select all the dimension members in the row or column before pressing **Delete**.
  In the following example, there are three row dimensions on a flex form, Accounts, Market, and Year:

  D-Acc US Market FY18

  D-Acc US Market FY19

  D-Acc US Market FY20

  To remove the row for FY18 using the Delete key, be sure to select all three dimension members, D-Acc, US Market, and FY18 using the Ctrl key or Shift key, then press Delete.
- Under the Dimension Properties, if **Flex beyond form definition** is not selected for the flex form, then copy and paste is limited to the scope of the form definition. Flex forms must adhere to the hierarchies as defined in the form. Therefore, you cannot have any flex form members that are not part of the defined row or column members of the form.
  To allow adding members outside of the form definition, either by hand-typing or using copy and paste, the **Flex beyond form definition** option must be selected. For more information, see Flexing Beyond the Form Definition.
- Subtotaling calculation scripts and currency conversion calculation scripts will be generated and executed based on the original form definition.
- In the form definition, if **Enable flex form for rows**, **Enable flex form for columns**, or both, are selected, a flex form opened as a simple form can preserve comments in cells outside the form after refresh.
  However, when opened as a flex form:
  - If both the **Enable flex form for rows** and **Enable flex form for columns** options are selected, then comments are not preserved.
  - If only the **Enable flex form for rows** option is selected, then comments entered to the right of the form are preserved after refresh. Comments are not preserved if they are entered directly below the form.
  - If only the **Enable flex form for columns** option is selected, then comments entered below the form are preserved after refresh. Comments are not preserved if they are entered to the right of the form.
- Both member and alias display is not supported for flex forms:
  - In the Application Settings for the business process, in **Display Member Label as**, neither the **Member Name:Alias** or the **Alias:Member Name** option is supported.
  - During form definition, in **Dimension Properties**, selecting both the **Member name** and **Alias** options is not supported for flex forms. Select either **Member name** or **Alias**.
- When working with flex forms with multiple dimensions on rows or columns (where two or more dimensions with multiple members are placed on a row or columns):
  - Rows and columns appear expanded by default.
  - During form definition, to place dimensions members on separate rows or columns, in **Member Selection** on the flex form, choose **Place selection in separate rows** or **Place Selection in Separate Columns**. See the documentation on selecting members for forms in your business process administration guide; for example, for Planning, see Selecting Members for Forms in *Administering Planning*.
- When entering numeric member names or shared members on a flex form, enter a single quotation mark (') before the member name.

For example, for a numeric member name, such as 4077, enter:

'4077

For shared members, enter member names in the format:

'[Parent].[Shared Member]

For example:

'[Sales Director 2].[410]

'[Default_Sales Director 2].[Default_International Sales]

- User variables, dynamic user variables, dynamic user variables with attributes, and substitution variables are supported on flex form rows and columns. Users should change variables on the POV and perform a refresh for the rows and columns to update them to the new members.
- Excluded members may be entered on flex form rows or columns. Members that are excluded in the form definition can be entered on flex form rows and users are able to enter values and submit.
- In the form definition, when **Enable flex form for rows**, **Enable flex form for columns** or both are enabled, then the Segment properties **Hide** and **Read-only** are not supported for either rows or columns. **Hide** and **Read-only** are supported only in simple forms.
- In flex forms, cell notes displaying qualified member names appear only for members with alias names present.

Selecting Members in Flex Forms

You can select row or column members to add to a flex form using the **Member Selection** dialog box. The **Member Selection** option is available only on flex forms, and not on simple forms.

To launch the **Member Selection** dialog:

1. Select the member cell.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form**.
3. Select **Analysis** and then select **Member Selection**.

Use the **Member Selection** dialog to add row or column members to a flex form, similar to adding members to an ad hoc grid. The members you can add depend on the underlying form definition for the row or column dimensions:

- If the **Dimension Properties** setting, **Flex beyond form definition**, is selected, users may select members outside those specified in the form definition. For example, suppose a form includes only the Computer Accessories members from the Product dimension. If **Flex beyond form definition** is selected for the Product dimension, then users may add other members from Product, such as Notebooks or Tablets, to the flex form. These members will be retained upon refresh. For more information, see Flexing Beyond the Form Definition.
- In the form definition of a flex form, if specific members are not part of a dimension, then, even though you may be able to select and add those members in the **Member Selection** dialog, those members will be removed upon refresh.

> **Note**
>
> To add members outside the form definition, enable **Flex beyond form definition** on the applicable dimensions.

Member Selection uses the default alias table defined at the application level. When members are inserted on the grid, the members are displayed as member names until a Refresh is performed, and then aliases are displayed corresponding to the application setting.

Sorting in Flex Forms

- Sorting disables submitting of data as it changes member order in the column. After sorting you must refresh to submit data.
- Sorting can sometimes change the position of the column header member if the grid structure is not correct. Users need to ensure that sorting such a grid does not impact the integrity of the grid.

  To avoid undesirable sorting results, do not apply sorting to an entire column. Instead, select the grid members to sort, and then use Sort commands, Sort A to Z or Sort Z to A, or perform a custom sort.

Using Suppression Options in Flex Forms

- In the form designer, the **Use database suppression** option is not supported; however, the **Suppress missing blocks**, **Suppress missing data - Rows**, and **Suppress missing data - Columns** options are supported.

  > **Note**
  >
  > Groovy rules are not supported in flex forms when suppression options are enabled.

- The **Suppress missing blocks**, **Suppress missing data - Rows**, and **Suppress missing data - Columns** options defined in the web for a flex form are applied only when first opening the flex form in Smart View. Depending on the form definition, flex form users can enter members on columns or rows even though the suppression options are enabled in web form. Users can also enter data and submit data for the suppressed members.
  If the suppression options in Smart View Options, **Data Options** tab, for **Suppress Missing Blocks**, **Suppress Missing Rows**, and **Suppress Missing Columns** are selected, they are applied to the flex form. Users can uncheck these options and then add members (by typing them on the sheet or using **Member Selection**), enter data, submit data, and refresh the flex form.

Working with Shared Members and Suppression Options in Flex Forms

Consider the following scenario in form design, where:

1. Shared members are on the row, column, or both
2. **Drill on shared members** is enabled
3. **Suppress missing blocks** and **Suppress missing data** are enabled

When opening the form, shared members are converted to base member, and query is based on the base members.

When opened as a flex form (**Enable flex form for rows**, **Enable flex form for columns**, or both are selected), since the base member is beyond the form definition, if it is the only member in the flex form row or column, this error is shown: "Flex form cannot be refreshed or saved without valid members on Account dimension."

If there are other valid members on the row or column, and the **Show invalid members for flex form** option is enabled, then the base members will become comments.

Workarounds: To avoid this error, use one or both of the following workarounds:

- Enable the **Flex beyond form definition** option.
- Clear the **Drill on shared members** option.

Flexing Beyond the Form Definition

During form definition, when the **Flex beyond form definition** property is applied to row or column dimensions in flex forms, Smart View users may enter members outside the form definition for dimensions within the row or column axis of the form. This allows flex form users to enter data for members that are not displayed on the flex form. Users must have access to the valid members that they enter.

For example, using the Vision application, suppose the Product dimension is placed as a row dimension in a flex form. During form definition, only the Sentinal Standard Notebook and Sentinal Custom Notebook members in the Product dimension have been selected for display on the form. By enabling the **Flex beyond form definition** option for the Product dimension, Smart View users may enter other products from the Product dimension, such as Mouse or Keyboard, in the rows in the flex form. As long as they have access to those members, users can either add rows for additional members to the existing flex form or replace existing Product members with the Product members they require. To illustrate, note the following hierarchy:

```
Product
  Notebooks  <<this hierarchy is displayed in flex form)
    Sentinal Standard Notebook
    Sentinal Custom Notebook
  Computer Accessories  <<this hierarchy is not displayed in flex form)
    Keyboard
    Mouse
```

In a flex form with **Flex beyond form definition** disabled (not selected), users cannot add Computer Accessories or its descendants. Users can add Notebooks and its descendants.

In a flex form with **Flex beyond form definition** enabled (selected), users can add Computer Accessories and its descendants as well as Notebooks and its descendants.

During form definition, note the following when enabling the **Flex beyond form definition** property:

- In **Dimension Properties**, the **Flex beyond form definition** option will only be visible if either the **Enable flex form for rows** or **Enable flex form for columns** option, or both, is selected in **Smart View Options**.
- When there are multiple dimensions on the form rows, Oracle recommends that you select the **Flex beyond form definition** property for each applicable row or column dimension individually. You may use the **Dimension Properties** option, **Apply to all row | column | page dimensions**, to apply the **Flex beyond form definition** property to all dimensions; however, use with care as all other dimension property selections will also be applied to all other dimensions.

See Designing Flex Forms in *Administering Planning*.

Retaining Invalid Members on Flex Forms

In flex forms, you can retain invalid members on the sheet after a refresh.

When entering member names in a flex form, errors may occur; for example, you may:

- Mistype or misspell a name, creating an invalid member in the cell
- Make an error when copying and pasting member names from one sheet to another, or within the same sheet, resulting in invalid members
- Enter a member name that is beyond the form definition, resulting in an invalid member

If **Show invalid members for flex form** is not enabled, then when the above situations occur, the rows or columns with invalid members are removed from the sheet upon refresh, making it difficult to know what the issue is, and forcing you to reenter member names.

The flex form can retain any invalid members on the form after refresh if the Oracle Fusion Cloud Enterprise Performance Management Service Administrator enables the **Show invalid members for flex form** check box under **Smart View Options** in the **Layout** tab of the form definition, described in Enabling the Invalid Member Option.

Related Topics:

Retaining and Resolving Invalid Members

Example of Misspelled Member Name

Example of Missing Member Name on Multi-Dimension Row

Example of Member Name Entered that is Outside of Form Definition

Enabling the Invalid Member Option

Retaining and Resolving Invalid Members

To retain and resolve invalid members:

1. In the flex form, add the rows, columns, or both, as you require.
2. Type or copy member names into the new rows, columns, or both.
3. Perform a refresh.
   Any invalid member cells are highlighted and #InvalidMember is displayed in the corresponding data cells.
4. Review the invalid member cells and correct any mistyped or missing members, and then refresh.
5. Repeat the previous step until all invalid members are corrected.

> **Note**
>
> - In rows and columns containing multiple dimensions, if even a single member is invalid, all members on the row or column are highlighted as invalid. For example, if a row contains the *Tablet* and *Current* members, and you type *Tablet* correctly, but type *Currnt* in error, both the Tablet and Currnt members will be highlighted as invalid. You should examine all the highlighted member names and correct those that are typed incorrectly.
> - After inserting a blank row or column into the flex form and performing a refresh, if no member names were entered, then the inserted row or column is highlighted as an invalid member row or column and remains on the flex form as a blank row or column.
> - Attempting to delete an entire row or column by selecting the invalid member cells of a row or column and pressing the **Delete** key will result in invalid members in the member cells upon refresh. To delete entire rows or columns on a flex form, use the **delete entire row** or **delete entire column** operations in Google Sheets.

Following are some example scenarios that show you how to work with invalid members on the sheet.

Example of Misspelled Member Name

For example, based on the Vision application form, HR Expenses, you open the form as a flex form. The Service Administrator has enabled the Smart View options, "Enable flex form for rows" and "Show invalid members for flex form."

Figure 8-1 Flex Form Containing No "7690: Meals" Member

	A	B	C	D	E
1		Jan	Feb	Mar	Q1
2	7110: Advertising	187156	191410	177586	556152
3	Total Office Expenses	187215	192258	177605	557078
4	7640: Airfare	#Missing	#Missing	#Missing	#Missing
5	7650: Car Rental	#Missing	#Missing	#Missing	#Missing
6	7660: Shipping	26549	27707	25176	79432
7	7670: Accommodation	#Missing	#Missing	#Missing	#Missing
8	7699: Miscellaneous Travel Expenses	108	108	36	252
9	Total T&E Expenses	26657	27815	25212	79684
10	Total Operating Expenses	213872	220073	202817	636762
11	7310: Existing Depreciation	35819	35819	35819	107457
12	Total Depreciation & Amortization	35819	35819	35819	107457
13	OpEx before Allocations	249691	255892	238636	744219

You notice that the "7690: Meals" member is not present on the form so you set out to add it. You insert a row on the grid and begin typing, but make a spelling error. After refreshing, Smart View calls out the row for you with the member cells highlighted and the data cells displaying #InvalidMember.

Figure 8-2 Flex Form with Invalid Member Row Highlighted

	A	B	C	D	E
1		Jan	Feb	Mar	Q1
2	7110: Advertising	187156	191410	177586	556152
3	Total Office Expenses	187215	192258	177605	557078
4	7640: Airfare	#Missing	#Missing	#Missing	#Missing
5	7650: Car Rental	#Missing	#Missing	#Missing	#Missing
6	7660: Shipping	26549	27707	25176	79432
7	7670: Accommodation	#Missing	#Missing	#Missing	#Missing
8	7690: Maels	#InvalidMember	#InvalidMember	#InvalidMember	#InvalidMember
9	7699: Miscellaneous Travel Expenses	108	108	36	252
10	Total T&E Expenses	26657	27815	25212	79684
11	Total Operating Expenses	213872	220073	202817	636762
12	7310: Existing Depreciation	35819	35819	35819	107457
13	Total Depreciation & Amortization	35819	35819	35819	107457
14	OpEx before Allocations	249691	255892	238636	744219

After fixing the spelling error, perform a refresh and note that the flex form is displayed correctly, with the valid member names and data.

Figure 8-3 Flex Form with Error Corrected and Valid Members Displayed

	A	B	C	D	E
1		Jan	Feb	Mar	Q1
2	7110: Advertising	187156	191410	177586	556152
3	Total Office Expenses	187215	192258	177605	557078
4	7640: Airfare	#Missing	#Missing	#Missing	#Missing
5	7650: Car Rental	#Missing	#Missing	#Missing	#Missing
6	7660: Shipping	26549	27707	25176	79432
7	7670: Accommodation	#Missing	#Missing	#Missing	#Missing
8	7690: Meals	#Missing	#Missing	#Missing	#Missing
9	7699: Miscellaneous Travel Expenses	108	108	36	252
10	Total T&E Expenses	26657	27815	25212	79684
11	Total Operating Expenses	213872	220073	202817	636762
12	7310: Existing Depreciation	35819	35819	35819	107457
13	Total Depreciation & Amortization	35819	35819	35819	107457
14	OpEx before Allocations	249691	255892	238636	744219

Example of Missing Member Name on Multi-Dimension Row

#InvalidMember is displayed on the flex form in Smart View when a row or column has multiple members and you miss entering a member on a member cell in that row or column. In the following example, there are two dimensions on the rows. You added two rows after row 14. The members from the Product dimension in Column A, rows 15 and 16, were typed correctly. But you did not type any entries in the same rows in Column B. Those cells are missing the member name from the Entity dimension. This is the result after performing a refresh.

Figure 8-4 Flex Form with Missing Member Names in Column B, Rows 15 and 16

	A	B	C	D	E	F
1			FY23	FY23	FY23	FY23
2			Jan	Feb	Mar	Q1
3	Product X	Sales East	#Missing	#Missing	#Missing	#Missing
4	Product X	International Sales	#Missing	#Missing	#Missing	#Missing
5	Sentinal Standard Notebook	Sales East	#Missing	#Missing	#Missing	#Missing
6	Sentinal Standard Notebook	International Sales	#Missing	#Missing	#Missing	#Missing
7	Sentinal Custom Notebook	Sales East	#Missing	#Missing	#Missing	#Missing
8	Sentinal Custom Notebook	International Sales	#Missing	#Missing	#Missing	#Missing
9	Envoy Standard Netbook	Sales East	#Missing	#Missing	#Missing	#Missing
10	Envoy Standard Netbook	International Sales	#Missing	#Missing	#Missing	#Missing
11	Envoy Custom Netbook	Sales East	#Missing	#Missing	#Missing	#Missing
12	Envoy Custom Netbook	International Sales	#Missing	#Missing	#Missing	#Missing
13	Other Computer	Sales East	#Missing	#Missing	#Missing	#Missing
14	Other Computer	International Sales	#Missing	#Missing	#Missing	#Missing
15	Tablet Computer		#InvalidMember	#InvalidMember	#InvalidMember	#InvalidMember
16	Tablet Computer		#InvalidMember	#InvalidMember	#InvalidMember	#InvalidMember
17	Computer Equipment	Sales East	#Missing	#Missing	#Missing	#Missing
18	Computer Equipment	International Sales	#Missing	#Missing	#Missing	#Missing

To correct this issue, add the correct members, "Sales East" and "International Sales". in Column B, rows 15 and 16, and then perform a refresh.

Example of Member Name Entered that is Outside of Form Definition

#Invalidmember is displayed on the flex form in Smart View when you enter a member that is beyond the form definition.

For example, suppose that in the form, the Year dimension is limited to FY16. But in the application outline, the dimension contains many more members, such as FY17, FY18, and FY19.

When designing a flex form, if the Service Administrator has selected the "Flex beyond form definition" option for the Year dimension, then you may add members that are outside of the form definition, such as FY17. If the "Flex beyond form definition" option is not selected, then adding a member that is outside of the form definition will result in invalid members, even though the members exist in the outline.

In the following case, the "Flex beyond form definition" option was not selected for the Year dimension on the column. You add four columns and enter FY17 in the first row, and Jan, Feb, Mar, and Q1 in the second row, and then refresh. Note below that columns F through I now contains invalid members.

Figure 8-5 "Flex beyond form definition" Is Not Selected and Member Is Outside of Form Definition

	A	B	C	D	E	F	G	H	I
1		FY16	FY16	FY16	FY16	FY17	FY17	FY17	FY17
2		Jan	Feb	Mar	Q1	Jan	Feb	Mar	Q1
3	Product X	#Missing	#Missing	#Missing	#Missing	#InvalidMember	#InvalidMember	#InvalidMember	#InvalidMember
4	Sentinal Standard Notebook	#Missing	#Missing	#Missing	#Missing	#InvalidMember	#InvalidMember	#InvalidMember	#InvalidMember
5	Sentinal Custom Notebook	#Missing	#Missing	#Missing	#Missing	#InvalidMember	#InvalidMember	#InvalidMember	#InvalidMember
6	Envoy Standard Netbook	#Missing	#Missing	#Missing	#Missing	#InvalidMember	#InvalidMember	#InvalidMember	#InvalidMember
7	Envoy Custom Netbook	#Missing	#Missing	#Missing	#Missing	#InvalidMember	#InvalidMember	#InvalidMember	#InvalidMember
8	Other Computer	#Missing	#Missing	#Missing	#Missing	#InvalidMember	#InvalidMember	#InvalidMember	#InvalidMember
9	Tablet Computer	#Missing	#Missing	#Missing	#Missing	#InvalidMember	#InvalidMember	#InvalidMember	#InvalidMember
10	Computer Equipment	#Missing	#Missing	#Missing	#Missing	#InvalidMember	#InvalidMember	#InvalidMember	#InvalidMember

To remedy this, your Service Administrator should select the **Flex beyond form definition** option for the Year dimension. With this option selected for the form, you may enter the members that are outside of the form definition, perform a refresh, and retain the members on the flex form.

Enabling the Invalid Member Option

Service Administrators: Enabling the new **Show invalid members for flex form** check box lets users easily see, understand, and correct any error they may have made in entering member names in flex forms.

To retain invalid members on a flex form, a Service Administrator performs these steps from the Cloud EPM web interface:

1. From the Navigator, under **Create and Manage**, select **Forms**.
2. Select an existing form to edit or, in the **Form and Ad Hoc Grid Management** page, click the **Actions** drop-down menu and select **Create Simple form**.
3. In the form definition page, under **Smart View Options** in the **Layout** tab, select the **Enable flex form for rows** and **Enable flex form for columns** check boxes, as you require. You may select one or both of these options.
4. Select the **Show invalid members for flex form** check box.

> **Tip**
>
> The **Show invalid members for flex form** check box is enabled only when **Enable flex form for rows** or **Enable flex form for columns**, or both, are selected, as described in the previous step.

5. **Optional:** For individual rows or columns, in **Dimension Properties**, enable the **Flex beyond form definition** option, as you require.
6. Save the form.

For more information on setting this option, see:

- *Administering FreeForm*
  - Designing Flex Forms
  - Setting Smart View Form Options
  - Setting Dimension Properties
- *Administering Planning*
  - Designing Flex Forms
  - Setting Smart View Form Options
  - Setting Dimension Properties

Retaining Formula, Label, and Comment Rows and Columns on Flex Forms

You can retain formula rows and columns on flex forms by enabling the "Show invalid members for flex form" option during form definition. When a Service Administrator enables this option, formula rows and columns are retained on the flex form after a refresh or a submit.

> **Note**
>
> Formula rows and columns are also referred to as *label* or *comment* rows and columns.

After a refresh or submit operation, all members and data on a formula row or column are highlighted using the same cell style as used for invalid members, described in Retaining Invalid Members on Flex Forms.

> **Note**
>
> Attempting to delete an entire row or column by using the **Delete** key to delete only the member cells of a row or column will result in invalid members in the member cells upon refresh. To delete entire rows or columns on a flex form, select the entire row or column, right-click, and then select **Delete** from the Google Sheets context menu.

Enabling the **Show invalid members for flex form** option gives users the versatility of flex forms when working with forms containing formula rows and columns.

Retaining Modified Members on Flex Forms After POV or User Variable Change

To retain modified members on a flex form after a POV or user variable change, you enable **Flex Forms: Preserve Grid on POV and User Variable Changes** in the **Options** dialog, **Members** tab.

If this option is not selected, any added rows or columns in the flex form will be removed upon a POV or user variable change.

To retain added members on a flex form after a POV or user variable change:

1. Follow the procedure in Member Options to launch the **Options** dialog, **Members** tab.
2. Select the **Flex Forms: Preserve Grid on POV and User Variable Changes** check box.
3. Save your selection and close the **Options** dialog.
   Use the procedure in Member Options to choose an option for saving your selection.
4. **Optional:** Add or delete members in the flex form, and click **Refresh**.
5. Perform these tasks as you require:
   - Change a POV member and click **Refresh**
   - Change a user variable; the flex form refreshes automatically.

   Your modified members are retained. You can now enter and submit data against the modified POV and user variables in any of the members in the flex form, including any newly-added members.
6. **Optional:** Change the POV or any user variable again and refresh, and then continue entering data against the updated POV and user variables.

See also:

- Working with Flex Forms in Smart View
- Member Options

Unsupported Features on Flex Forms

The following form features are not supported for flex forms:

- Using Segment Properties: Hide, Read-only, Enable drop-down for dimensions (row dimension drop-down member selectors), Suppress Hierarchy

  > **Note**
  >
  > After rows are rearranged or sorted, segment properties are not retained.

- Spreading data for time periods
- Filtering data in columns
- Using formulas in rows or columns
- Using the **Member Name and Alias** option
- Using flex forms inside composite forms
- Enabling **Show Currency** for the Entity dimension.
- Data validation rules within forms are not supported when using flex forms. Instead, convert data validation rules to Groovy rules.

Flex forms are not supported for:

- Dashboards
- Smart Forms
- Task Manager extension

Working with Flex Forms in Smart View

With flex forms, you can rearrange row and column dimensions, and insert valid members or aliases from corresponding dimensions.

Perform a refresh prior to submitting data in the modified form in Smart View. Upon refresh, invalid members, comments, and empty rows or columns are removed and submitting of data is enabled.

To work with a flex form:

1. Connect to a data source.
2. In the Smart View Home panel, click a flex form name to open it.

   By default, when you click the flex form name, it opens as a flex form.

   Flex forms are indicated by the

   icon.

   You can choose to open the flex form as a simple form or ad hoc grid by right-clicking the flex form and selecting the **Open Form** or **Ad Hoc Analysis** option.
3. Modify the data as per your requirements.

   For example, some actions you may perform are:

   - Rearrange or move row and column members

- Insert rows and columns
- Delete rows and columns
- Add members. You can add members using **Member Selection** or hand-typing member names.
- Run a business rule

> **Note**
>
> - Submitting of data is disabled when you edit row members.
> - In the Smart View **Options** dialog, **Formatting** tab, the **Repeat Member Labels** check box is required to be enabled for flex forms. You may attempt to clear the check box, but upon refresh, the check box will again be selected and the **Repeat Member Labels** option will be enabled.
> - The operations you can perform on rows and columns depend on the selections made by your Service Administrator or form designer during form definition. To perform operations on rows, the **Enable flex form on rows** option must be selected. To perform actions on columns, the **Enable flex form on columns** option must be selected. These options are described in Setting Smart View Form Options in *Administering Planning*.

4. **Optional:** To retain added members on a flex form after a POV or user variable change, select the **Flex Forms: Preserve Grid on POV and User Variable Changes** check box in the **Options** dialog, **Members** tab.

   For more information, see Retaining Modified Members on Flex Forms After POV or User Variable Change.

5. **Optional:** If your Service Administrator has enabled the **Show invalid members for flex form** option when designing the form, you may enter member names and then click **Refresh** to view and correct any invalid member names.

   For more information, see Retaining Invalid Members on Flex Forms.

6. **Optional:** To run a business rule, select a cell in the form. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form**. Select **Data**,**Calculate**, and then select **Business Rules**. Select a business rule to launch it.

7. Click **Refresh**.

   On refresh, Smart View maintains modifications you have made to the form.

   If **Show invalid members for flex form** is enabled for the form, the invalid members are retained; if this option is not enabled, then the **Refresh** action removes invalid members.

   > **Note**
   >
   > Data can be submitted only after refreshing it. However, the modified form layout is not stored on the server; it is maintained only in the context of the current session.

8. To submit the changed data, click **Submit.**

   Data can be submitted only after it is refreshed first.

9. To revert to the original flex form layout, reopen the flex form.

The modified form is not stored on the server; it is maintained only in the context of the current session. Reopening the flex form reverts the flex form layout to its original state.

Opening a Flex Form in Ad Hoc Mode and Submitting Data

You can open a flex form in ad hoc mode, just like any regular form, use ad hoc analysis to modify the grid layout, and submit data.

To open a flex form in ad hoc mode and submit data:

1. Connect to a data source.
2. In the Smart View panel, expand the tree list and locate the flex form to open in ad hoc mode.
3. Right-click the selected flex form and select **Ad Hoc Analysis**.
4. Modify data and grid layout per your requirements.
5. Click **Submit**.
6. Go back to the sheet with the flex form.
7. Click **Refresh**.

   The original layout and modified data appears in the flex form.

9

Ad Hoc Analysis

Related Topics

- Starting Ad Hoc Analysis
  You can start ad hoc analysis from a cube and from an Oracle Fusion Cloud Enterprise Performance Management form.
- Formatting Ad Hoc Grids
  You can use either Smart View (cell styles) or Google Sheets to control grid formatting.
- Zooming In and Out
  Zoom in on members in the grid to display data for their children and descendants and zoom out for a high level view.
- Pivoting
  Pivoting changes the orientation of the data on the worksheet. You can move dimensions between rows and columns and between the grid and the POV.
- Inserting Attribute Dimensions
  When performing ad hoc analysis, you can insert attribute dimensions or members into a worksheet.
- Keeping and Removing Members from Ad Hoc Grids
  You can keep or remove members and their associated data from ad hoc grids.
- Cascading Reports
  You can create separate reports for any or all of the members of one or more dimensions in a report based on an ad hoc grid.
- Saving Ad Hoc Grids
  You can save ad hoc grids as forms.
- Preserving Google Sheets Formulas in Ad Hoc Operations
  You can associate Google Sheets formulas and comments with members and data cells in ad hoc grids and set cell styles to identify such cells. By default, formulas are preserved when you perform ad hoc operations with the exception of Pivot.
- Running a Query Report
  You can display all member combinations across dimensions by running a query sheet as a report.
- Working with Comments and Unknown Members
  You can easily access and edit comments and unknown members in an ad hoc grid using the Comment Edit dialog that opens from the View Comments ribbon command.
- Working with Multiple-Grid Sheets
  In Smart View, you can retrieve multiple ad hoc grids on one sheet. The grids can all be connected either to the same data source or to different data sources.

Starting Ad Hoc Analysis

You can start ad hoc analysis from a cube and from an Oracle Fusion Cloud Enterprise Performance Management form.

To start an ad hoc analysis grid, use either of the following methods:

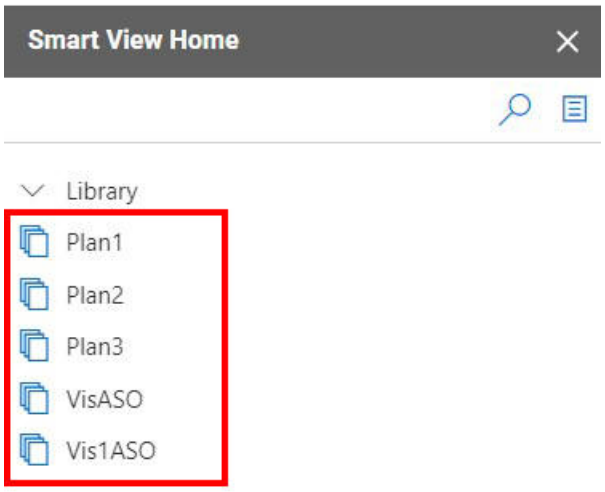
- Starting Ad Hoc Analysis from a Cube
- Starting Ad Hoc Analysis from a Cloud EPM Form

> **Note**
>
> When you start ad hoc analysis, cell styles are not enabled by default. See Using Smart View Formatting (Cell Styles) for information on the **Use Cell Styles** setting.

Starting Ad Hoc Analysis from a Cube

To start ad hoc analysis from a cube, select a cube from the Smart View Home panel.

In the following example for Cloud EPM, there are five cubes from which you can select (Plan1, Plan2, Plan3, VisASO, and Vis1ASO).



When you select a cube, the data is placed on the grid in ad hoc mode, and you can immediately start ad hoc analysis.

Starting Ad Hoc Analysis from a Cloud EPM Form

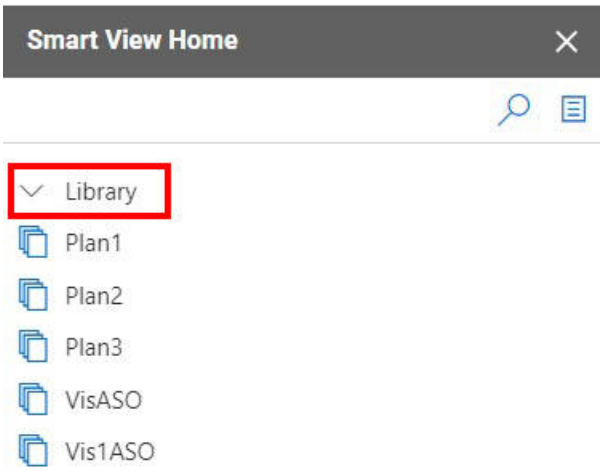
If you have been assigned the ad hoc user role by an administrator, you can perform ad hoc analysis on Cloud EPM forms that have been enabled for ad hoc by the administrator.

To start ad hoc analysis for a Cloud EPM form:

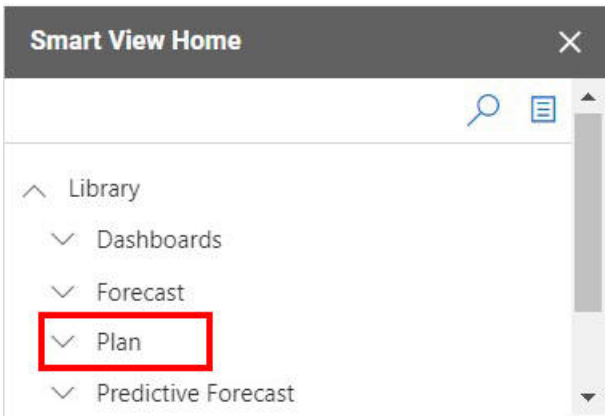
1. From the Smart View Home panel, select a Cloud EPM form.

   For example, in the following **Smart View** panel:

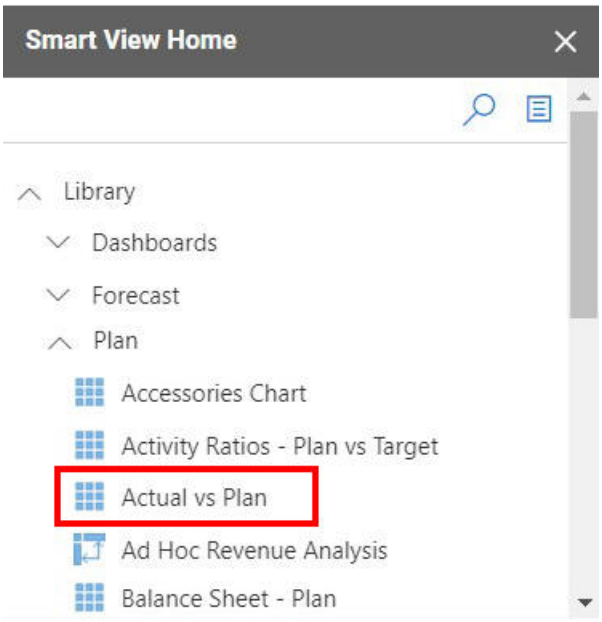
   a. Select **Library**.



b. Select **Plan** to display all the Cloud EPM forms saved under the **Plan** folder.



c. Select a Cloud EPM form; for example, you could select the **Actual vs Plan** Cloud EPM form.



When you select a Cloud EPM form, the data for that form is placed on the grid; however, it is not initially in ad hoc mode.

2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form**.
3. Select **Ad Hoc** and then select **Analyze** to open a second sheet that contains the ad hoc grid created from the form.
4. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**. The **Ad Hoc** menu provides various options to perform ad hoc analysis.

> **Tip**
>
> To open a form directly in ad hoc analysis mode, that is as an ad hoc grid, first select it, right-click on it, and then select the **Ad Hoc Analysis** option in the menu.

Formatting Ad Hoc Grids

You can use either Smart View (cell styles) or Google Sheets to control grid formatting.

Related Topics

- Using Smart View Formatting (Cell Styles)
- Using Google Sheets Formatting

Using Smart View Formatting (Cell Styles)

Smart View formatting, or *cell styles*, consists of formatting selections made in the **Formatting** tab in the Smart View **Options** dialog. If you do not enable cell styles for ad hoc grids, then Google Sheets formatting is applied (see Using Google Sheets Formatting).

To set Smart View formatting options:

1. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Options**.
2. In the **Options** dialog, select the **Formatting** tab.
3. In the **Formatting** tab, select the **Use Cell Styles** check box.
4. Click **Cell Styles** and set the desired cell styles and precedence order. For more information on setting cell styles and precedence order, see Cell Styles.

Using Google Sheets Formatting

When you use Google Sheets formatting, your formatting selections, including conditional formatting, are applied and retained on the grid when you refresh or perform ad hoc operations.

When you use Google Sheets formatting, Smart View does not reformat cells based on your grid operations, and it does not mark cells as dirty when you change data values. Smart View does preserve the formatting on the worksheet between operations.

Using Google Sheets formatting is generally preferable for highly formatted reports, and you must use Google Sheets formatting for data sources whose application-specific colors are not supported by the Google Sheets color palate.

Google Sheets formatting is used by default, unless you select the **Use Cell Styles** option in the **Formatting** tab in the **Options** dialog. See Using Smart View Formatting (Cell Styles) for more information.

Zooming In and Out

Zoom in on members in the grid to display data for their children and descendants and zoom out for a high level view.

Related Topics

- Zooming In
  You can zoom in on members in the grid to display data for their children and descendants.
- Zooming Out
  You can zoom out to collapse the view to the next upper level or top level.
- Selecting Members to Display when Zooming
  You can set options to specify which members are retained and displayed as you zoom in and out.

Zooming In

You can zoom in on members in the grid to display data for their children and descendants.

To zoom in on a member:

1. Select a member in the grid.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
3. Select **Analysis** and then select **Zoom In**.
4. From the **Zoom In** option, select the required option:
   - **Next Level** to retrieve data for the children of the selected members

- **All Levels** to retrieve data for all descendants of the selected members
- **Bottom Level** to retrieve data for the lowest level of members in a dimension

Zooming Out

You can zoom out to collapse the view to the next upper level or top level.

To zoom out:

1. Select a member in the grid.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
3. Select **Analysis** and then select **Zoom Out**.
4. From the **Zoom Out** options, select the required option:
   - **Next Level** to zoom out to the next level of data
   - **Top Levels** to zoom out to the top level of data

Selecting Members to Display when Zooming

You can set options to specify which members are retained and displayed as you zoom in and out.

To set member display options for zooming:

1. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Options**.
2. In the **Options** dialog, select the **Members** tab.
3. Under **Member Retention**, select the required option:
   - **Include Selection** to display both the selected member and the members retrieved as a result of zooming.

     For example, zooming in on the selected member Qtr1 retrieves data for Jan, Feb, Mar, and Qtr1. If not selected, only the members retrieved as a result of the zoom are displayed; in this example, Jan, Feb, and Mar.
   - **Within Selected Group** to zoom in only on the selected group of cells, leaving the unselected cells as is.

     This setting is meaningful only when there are two or more dimensions down the grid as rows or across the grid as columns. This setting also applies to **Keep Only** and **Remove Only**.

Pivoting

Pivoting changes the orientation of the data on the worksheet. You can move dimensions between rows and columns and between the grid and the POV.

Related Topics

- Pivoting Dimensions between Rows and Columns
  You can pivot a dimension or members between rows and columns.

- Pivoting Dimensions or Members between the Grid and the POV
  You can select to pivot a dimension out of the ad hoc grid to the Point of View (POV), or out of the POV to the grid. You can also pivot a member. When you pivot a member, the other members in its dimension are also pivoted.
- Rearranging Dimensions on the Grid
  You can rearrange dimensions on the grid by moving dimensions up or down, and to the right or the left.

Pivoting Dimensions between Rows and Columns

You can pivot a dimension or members between rows and columns.

There must be two or more dimensions, or members from two or more dimensions in the row or column that contains the dimension that you want to pivot. That is, you cannot pivot the last row dimension or the last column dimension on a grid.

When you pivot a member, the other members in its dimension are also pivoted.

When you pivot between rows and columns, Smart View moves the selected dimension to the outermost row or column on the opposite axis. For example, when you select to pivot a dimension to a row, the system moves the dimension to the top of the grid.

To pivot a dimension or member from a row to a column or from a column to a row:

1. Select a dimension or member in the grid.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
3. Select **Analysis**, **Pivot**, and then select **Pivot**.
4. Observe the change in the grid.
   - Row dimensions are pivoted to the top most column dimension.
   - Column dimensions are pivoted to the left most row dimension.

> **Note**
>
> When you use Google Sheets formatting, member and numeric formats may unexpectedly change after pivot operations. For example, member names may be centered and numeric values may be left-justified. You can reset the grid to the proper format using the Google Sheets formatting options. See Formatting Ad Hoc Grids.

Pivoting Dimensions or Members between the Grid and the POV

You can select to pivot a dimension out of the ad hoc grid to the Point of View (POV), or out of the POV to the grid. You can also pivot a member. When you pivot a member, the other members in its dimension are also pivoted.

Pivoting a Dimension from the Grid to the POV

To pivot a dimension from the grid to the POV:

1. Select the dimension in the grid.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.

3. Select **Analysis**, **Pivot**, and then select **Pivot to POV**.
4. Open the **POV** panel.
   a. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
   b. Select **Data**, and then select **POV**.

   The dimension is displayed in the **POV** panel.

Pivoting a Dimension from the POV to the Grid

To pivot a dimension from the POV to the grid:

1. Open the **POV** panel.
   a. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
   b. Select **Data**, and then select **POV**.
2. To pivot a dimension from the POV to a column in the grid:

   In the **POV** panel, click the ellipsis button

   to the right of the dimension, and then select **Pivot to Column**.
3. To pivot a dimension from the POV to a row in the grid:

   In the **POV** panel, click the ellipsis button

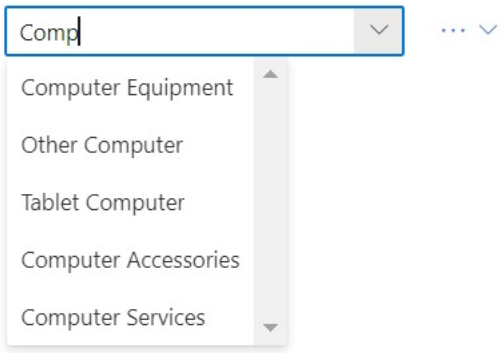
   to the right of the dimension, and then select **Pivot to Row**.

Pivoting a Member from the POV to the Grid

To pivot a member from the POV to the grid:

1. Open the **POV** panel.
   a. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
   b. Select **Data**, and then select **POV**.
2. Ensure that you have added members to the drop-down list by completing the procedure in Selecting Members from a Point of View Dimension.
3. Click the drop-down arrow for the dimension to view the list of available members, and select a member from the list.

   For long member lists, you can filter members by typing part of the member name in the dimension text box. For example, using the Vision Product dimension, begin typing Computer. The drop-down list filters on members with Computer in the name:



4. To pivot the selected member from the POV to a column in the grid:

   In the **POV** panel, click the ellipsis button

   to the right of the dimension, and then select **Pivot to Column**.

5. To pivot the selected member from the POV to a row in the grid:

   In the **POV** panel, click the ellipsis button

   to the right of the dimension, and then select **Pivot to Row**.

Guidelines on Pivoting Dimensions and Members

Consider the following guidelines while pivoting:

- You can leave any number of dimensions in the POV.
- After pivoting the last dimension from the POV to the grid, the POV panel is hidden. You can always reopen the POV panel to display it again.
- The grid must always contain at least two dimensions: one row dimension, and one column dimension. When there is only one row dimension and one column dimension on a grid, you must first pivot the replacement dimension on to the grid before you can pivot a dimension out of the grid.

  For example, if you want to pivot the row dimension off of the grid, then you must first pivot the replacement row dimension on to the grid, and then pivot the unwanted row dimension off of the grid.
- When you pivot a member from the grid to the POV, the member selected on the grid becomes the POV for that dimension. For example, if you pivot Qtr2 of the Year dimension from the grid to the POV, then Qtr2 becomes the POV for the Year dimension.
- You can manually type a dimension or member name to replace a dimension or member name in the grid or the POV.

  Similarly, you can delete a dimension or member from the grid, refresh the grid, and the deleted dimension or member is moved from the grid and will display on the POV.
- You can pivot members by selecting them from the POV, as described in Selecting Members from a Point of View Dimension.
- While switching between multiple sheets, you can use **Sync** or **Refresh** to sync the POV dimensions specific to the currently active sheet. For more information, see Syncing the POV Panel with the Active Sheet.

Rearranging Dimensions on the Grid

You can rearrange dimensions on the grid by moving dimensions up or down, and to the right or the left.

To rearrange the dimensions on an ad hoc grid:

1. Select a dimension or member on the grid.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
3. Select **Analysis**, and then select **Pivot**.
4. Select one of the following options:
   - **Move Up**
   - **Move Down**
   - **Move Left**
   - **Move Right**

Inserting Attribute Dimensions

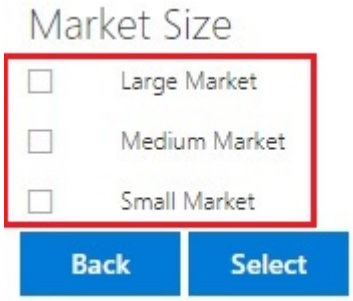
When performing ad hoc analysis, you can insert attribute dimensions or members into a worksheet.

To insert attribute dimensions or members:

1. Open an ad hoc grid.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
3. Select **Analysis**, and then select **Insert Attribute**.
4. In the **Insert Attribute** dialog box, select the attribute dimensions to add to the sheet.
5. **Optional:** To further define an attribute member, click ... next to the attribute to open the **Member Selector** and select the required member.

   For example, click ... next to Market Size.

   Select *Large Market*, *Medium Market*, or *Small Market*.



6. Select **Insert** to add the selected attribute dimensions to the grid.
7. To view the selected attribute dimension in the POV panel, click **Reload POV**.

Guidelines for Inserting Attribute Dimensions

When inserting attributes, consider the following guidelines:

- If an attribute is already present on the grid, then it will not be available for selection in the **Insert Attributes** dialog box.
- The grid must be in a refreshed state. If the grid is in free-form state prior to refresh, then you are prompted to refresh manually.
- When the attributes are inserted on the grid, the grid is automatically refreshed.
- In the **Insert Attributes** dialog box:
  - You can select to insert the entire attribute dimension, or one attribute member from a dimension.
  - If a member name is left blank in the attribute text box, then that dimension is in a deselected state and will not be inserted.
- If you have inserted a single attribute member using the **Insert Attributes** command and dialog box, you can use **Member Selection** to add other members from the same attribute dimension to the grid.
- When filtering on attributes at the Generation 3 level in an attribute dimension, Smart View only displays members up to the Generation 2 level.
- An attribute dimension must be present in the grid before it can be deleted. For more information, see Pivoting Dimensions or Members between the Grid and the POV.

Keeping and Removing Members from Ad Hoc Grids

You can keep or remove members and their associated data from ad hoc grids.

Selecting Members to Keep

To select members on the grid to keep:

1. On an ad hoc grid, select the members cells you want to keep.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
3. Select **Analysis** and then select **Keep Only**.
   All other members in the grid are removed.

Selecting Members to Remove

To select members on the grid to remove:

1. On an ad hoc grid, select the members cells you want to remove.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
3. Select **Analysis** and then select **Remove Only**.
   All selected members in the grid are removed.

Examples on Keep and Remove

The results of **Keep Only** and **Remove Only** depend on how the selected group is evaluated within the grid. A group consists of two or more dimensions down the grid as rows or across the grid as columns.

To use the **Keep Only** or **Remove Only** command, the selected member must have a group of members associated with it. Members do not have to be from the same dimension to be considered a group. The selected member shouldn't be the lowest or last member of the group.

For example, you could think of New York, Florida, Connecticut, and New Hampshire as individual groups that all contain the January member. We want to keep the data for January for those four states. Yet, when we select Jan, and then click **Keep Only**, the grid doesn't change. This is because Jan is not its own group; it's actually a member of a group originating with the Market dimension, and also belongs to the New York, Florida, Connecticut, and New Hampshire groups.

Figure 9-1 Grid with Market Members in Column A, Year Members in Column B

	A	B	C	D
1			Product	Scenario
2			Measures	
3	New York	Jan	8722	
4	Florida	Jan	336	
5	Connecticut	Jan	321	
6	New Hampshire	Jan	44	
7	West	Feb	2394	
8	South	Year	13238	
9	Central	Year	38262	
10	Market	Year	213522	
11				

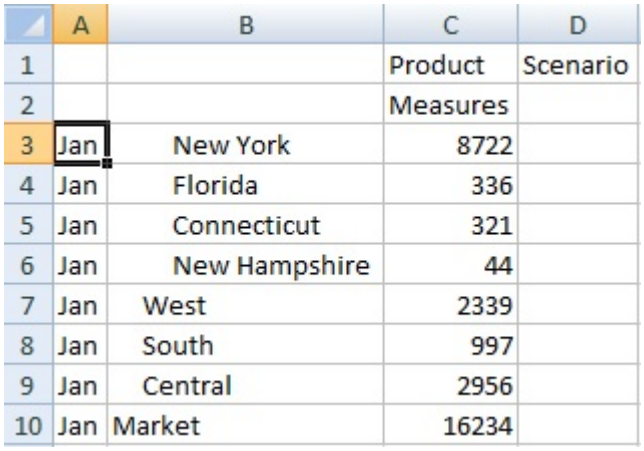
Move Jan to reposition it so that Jan is now a group, and the members New York, Florida, Connecticut, and New Hampshire belong to the Jan group.

Figure 9-2 Grid with Year Members in Column A, Market Members in Column B

	A	B	C	D
1			Product	Scenario
2			Measures	
3	Jan	New York	8722	
4	Jan	Florida	336	
5	Jan	Connecticut	321	
6	Jan	New Hampshire	44	
7	Jan	West	2339	
8	Jan	South	997	
9	Jan	Central	2956	
10	Jan	Market	16234	
11	Feb	New York	99955	
12	Feb	Florida	361	
13	Feb	Connecticut	309	
14	Feb	New Hampshire	74	
15	Feb	West	2394	
16	Feb	South	1046	
17	Feb	Central	3063	
18	Feb	Market	107700	
19	Year	New York	116202	
20	Year	Florida	5029	
21	Year	Connecticut	3093	
22	Year	New Hampshire	1125	
23	Year	West	29861	
24	Year	South	13238	
25	Year	Central	38262	
26	Year	Market	213522	

Now select a Jan cell and click **Keep Only**. The resulting layout shows only the Market dimension members grouped under Jan.

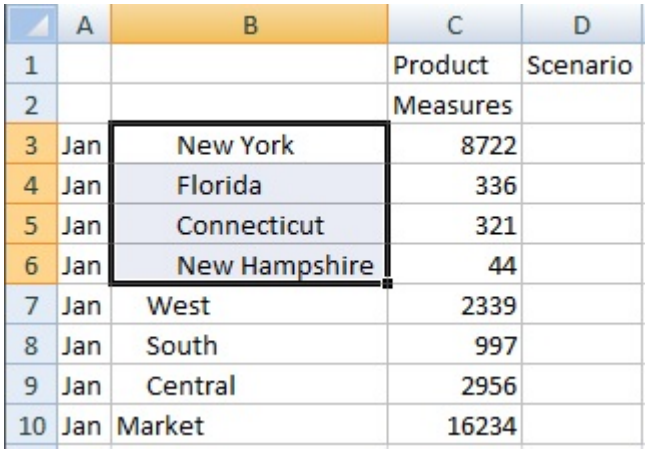
Figure 9-3 Grid with Only Jan Group Members



	A	B	C	D
1			Product	Scenario
2			Measures	
3	Jan	New York	8722	
4	Jan	Florida	336	
5	Jan	Connecticut	321	
6	Jan	New Hampshire	44	
7	Jan	West	2339	
8	Jan	South	997	
9	Jan	Central	2956	
10	Jan	Market	16234	

You can further refine the report to show only the New York, Florida, Connecticut, and New Hampshire members. Select those members in the grid.

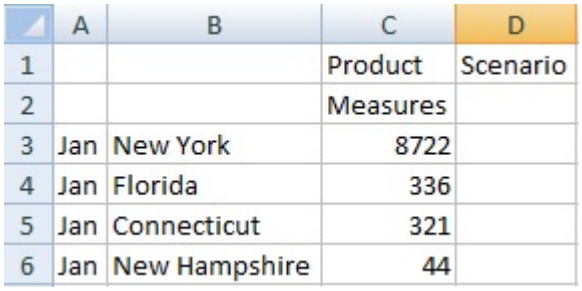
Figure 9-4 Members Selected for Keep Only



	A	B	C	D
1			Product	Scenario
2			Measures	
3	Jan	New York	8722	
4	Jan	Florida	336	
5	Jan	Connecticut	321	
6	Jan	New Hampshire	44	
7	Jan	West	2339	
8	Jan	South	997	
9	Jan	Central	2956	
10	Jan	Market	16234	

And then click **Keep Only**.

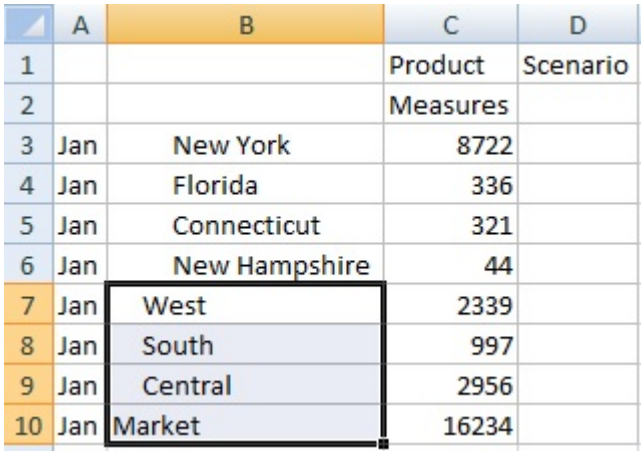
Figure 9-5 Grid with Only Jan Group Members New York, Florida, Connecticut, and New Hampshire



	A	B	C	D
1			Product	Scenario
2			Measures	
3	Jan	New York	8722	
4	Jan	Florida	336	
5	Jan	Connecticut	321	
6	Jan	New Hampshire	44	

You can achieve the result in another way. Select the West, South and Central members, and the Market dimension.

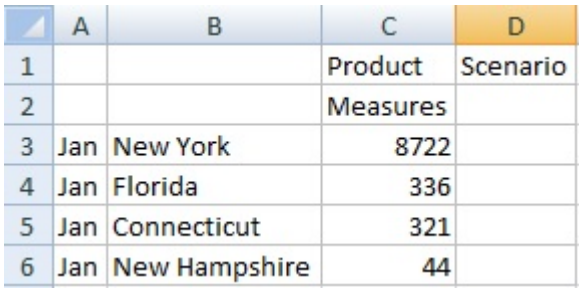
Figure 9-6 Members Selected for Remove Only



	A	B	C	D
1			Product	Scenario
2			Measures	
3	Jan	New York	8722	
4	Jan	Florida	336	
5	Jan	Connecticut	321	
6	Jan	New Hampshire	44	
7	Jan	West	2339	
8	Jan	South	997	
9	Jan	Central	2956	
10	Jan	Market	16234	

And then click **Remove Only**.

Figure 9-7 Grid with Only Jan Group Members New York, Florida, Connecticut, and New Hampshire



	A	B	C	D
1			Product	Scenario
2			Measures	
3	Jan	New York	8722	
4	Jan	Florida	336	
5	Jan	Connecticut	321	
6	Jan	New Hampshire	44	

Remember that the **Keep Only** and **Remove Only** commands are always performed on the selected groups, evaluated within the grid.

Cascading Reports

You can create separate reports for any or all of the members of one or more dimensions in a report based on an ad hoc grid.

You can then cascade these reports separately across individual sheets. Each sheet tab is named according to the dimensions and members of the report it contains.

> **Note**
>
> The names on the sheets created as a result of cascading have a 30 character limit. Any characters over 30 are truncated.

To cascade a report from an ad hoc grid:

1. Open an ad hoc grid.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
3. Select **Analysis** and then select **Cascade**.
4. Under **Cascade**, select the required option:
   - **Cascade - Same Spreadsheet** to cascade all reports in the current spreadsheet
   - **Cascade - New Spreadsheet** to cascade all reports in a new spreadsheet
   - **Cascade - Different Spreadsheets** to cascade all reports in different spreadsheets

   The **Cascade** panel opens.
5. In the **Cascade** panel, click

   next to each dimension to launch the **Member Selector** dialog.
6. Select the members for the dimension for which you want to create reports, and then click **Done**.

   One report will be generated for each member you select. Based on your selection, the number of cascaded sheets is displayed at the bottom of the **Cascade** panel.
7. Click **Done** to begin cascading.

   You will see temporary sheets getting created until all the reports are cascaded. The resulting reports are created on separate sheets in either the current spreadsheet, a new spreadsheet, or different spreadsheets based on your selection. Each sheet tab is named according to the dimensions and members of the report it contains. Click a sheet tab to view a report.

> **Note**
>
> After the temporary sheets are created, if you do not see the final cascaded reports, check the pop-up blocker settings on your browser and make sure you allow pop-up windows to be launched for cascading reports.

Saving Ad Hoc Grids

You can save ad hoc grids as forms.

To save an ad hoc grid as a form:

1. Open the ad hoc grid.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
3. Select **Analysis**, and then select **Save Ad Hoc Grid**
4. In **Save Grid As**, enter a name and description for the form, and then browse to the location where you want to save the grid.
5. Click **OK**.

   The saved grid is displayed in the Smart View Home panel tree list in the selected location.

Preserving Google Sheets Formulas in Ad Hoc Operations

You can associate Google Sheets formulas and comments with members and data cells in ad hoc grids and set cell styles to identify such cells. By default, formulas are preserved when you perform ad hoc operations with the exception of Pivot.

To specify whether to preserve formulas and comments in ad hoc operations:

1. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Options**.
2. Select the **Member** tab, then scroll down to **Comments and Formula**, and then do one of the following:
   - To preserve formulas and comments in ad hoc grids, select the **Preserve Formulas and Comments in Ad Hoc** check box.
   - To disable preservation of formulas and comments, clear the **Preserve Formulas and Comments in Ad Hoc** check box. Do this only if you do not need to preserve formulas and comments, and you want faster execution of queries.
   - To preserve comments and unknown members in ad hoc grids, select the **Preserve Formulas and Comments in Ad Hoc** and **Preserve Comments and Unknown Members** check boxes. The **Preserve Formulas and Comments in Ad Hoc** check box must be selected first to enable the **Preserve Comments and Unknown Members** check box
   - To disable preservation of comments and unknown members, clear **Preserve Comments and Unknown Members**. Do this only if you do not need to preserve comments and unknown members, and you want faster execution of queries.

   The selection you make applies to formulas in both member and data cells.

Running a Query Report

You can display all member combinations across dimensions by running a query sheet as a report.

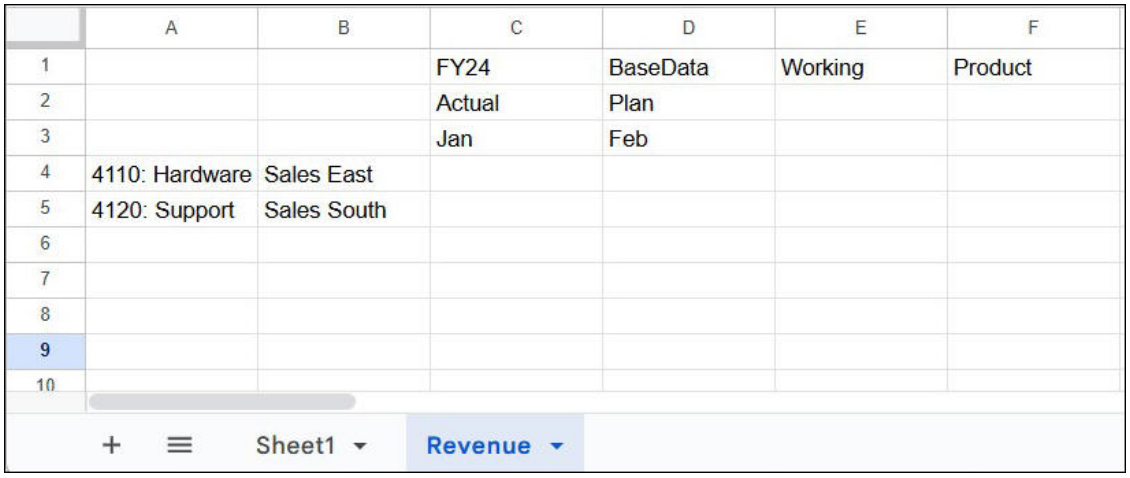
You can fetch these combinations for all the members on the sheet using the **Run as Report** or for specific row or column members using the **Cross Join on Rows** or **Cross Join on Columns** option.

Run As Report

You can run an ad hoc query sheet as a report to fetch the cross joins between all members in row and column dimensions and to display all member combinations across the dimensions in a separate sheet. The **Run as Report** option enables you to perform a *cross join* to display all member combinations across the dimensions.

Any regular ad hoc sheet can be treated as a query sheet. You can either type the dimensions and members directly in the sheet or select them using the Member Selector. For example, let's create the following freeform grid in which:

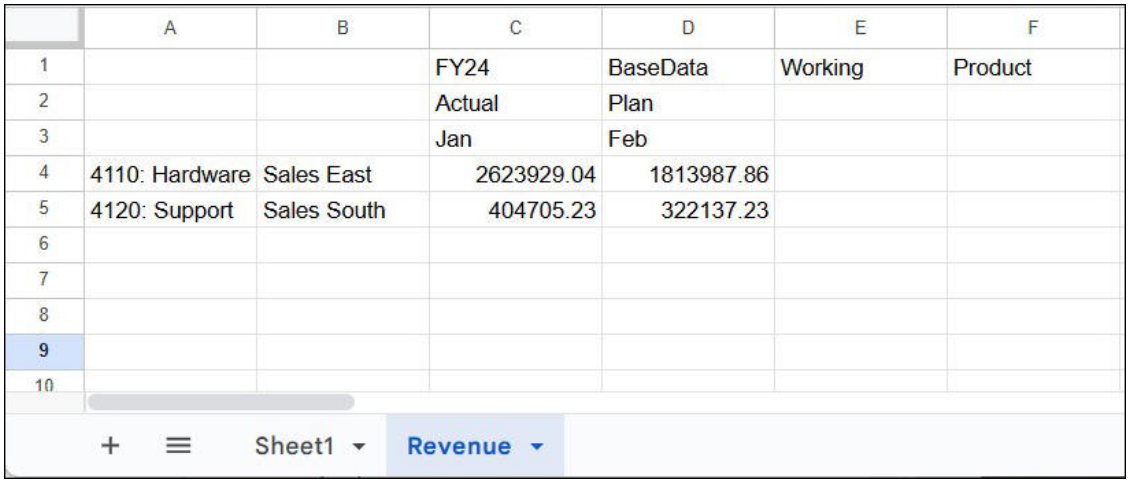
- Scenario and Time in the columns, where you want to see Actual data for the month of January and Plan data for the month of February.
- Account and Entity in the rows, where you want to see specific data for specific Account and specific Sales Entity.



	A	B	C	D	E	F
1			FY24	BaseData	Working	Product
2			Actual	Plan		
3			Jan	Feb		
4	4110: Hardware	Sales East				
5	4120: Support	Sales South				
6						
7						
8						
9						
10						

Sheet1 Revenue

You can optionally click **Refresh** to see the data values in the grid before running the report.



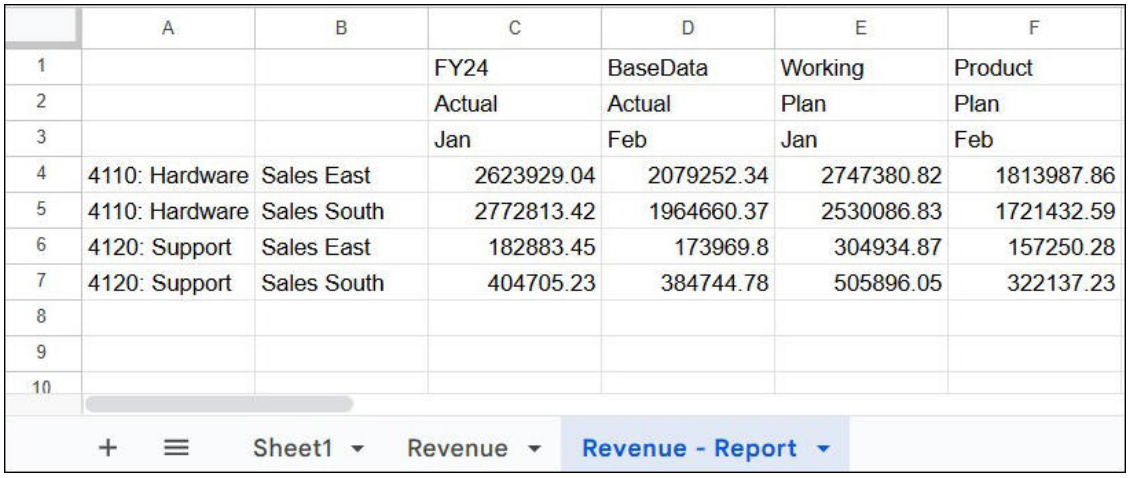
	A	B	C	D	E	F
1			FY24	BaseData	Working	Product
2			Actual	Plan		
3			Jan	Feb		
4	4110: Hardware	Sales East	2623929.04	1813987.86		
5	4120: Support	Sales South	404705.23	322137.23		
6						
7						
8						
9						
10						

Sheet1 Revenue

In the grid, every member combination for rows and columns is different. For example, cell C4 displays the value for Hardware revenue from Sales East for Jan for the Actual scenario, where as cell D5 displays the value for Support revenue from Sales South for Feb for the Plan scenario.

To run this ad hoc query sheet as a report, use the **Run as Report** option. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**. Click **Query** and then click **Run as Report**.

A combination of all row and column members available on the sheet is displayed in a separate report sheet. The report sheet is named as *<Sheet name> - Report*. In this example, the query sheet is named as *Revenue*, so the report sheet gets created with the name *Revenue - Report*.



	A	B	C	D	E	F
1			FY24	BaseData	Working	Product
2			Actual	Actual	Plan	Plan
3			Jan	Feb	Jan	Feb
4	4110: Hardware	Sales East	2623929.04	2079252.34	2747380.82	1813987.86
5	4110: Hardware	Sales South	2772813.42	1964660.37	2530086.83	1721432.59
6	4120: Support	Sales East	182883.45	173969.8	304934.87	157250.28
7	4120: Support	Sales South	404705.23	384744.78	505896.05	322137.23
8						
9						
10						

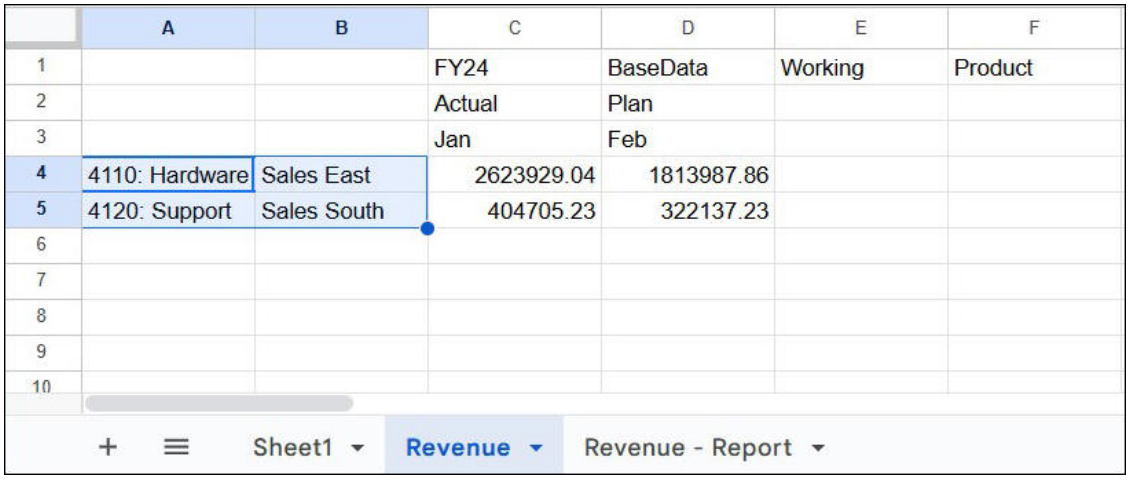
Sheet1 | Revenue | Revenue - Report

The report sheet displays a grid consisting of combinations of all existing row and column members on the sheet, along with their data values. In the above example, the report sheet displays Actual and Plan columns for both Jan and Feb months, and Hardware and Support values in rows for both Sales East and Sales South entities.

Cross Join on Rows

If you want to perform cross join for only specific members in rows, use the **Cross Join on Rows** option.

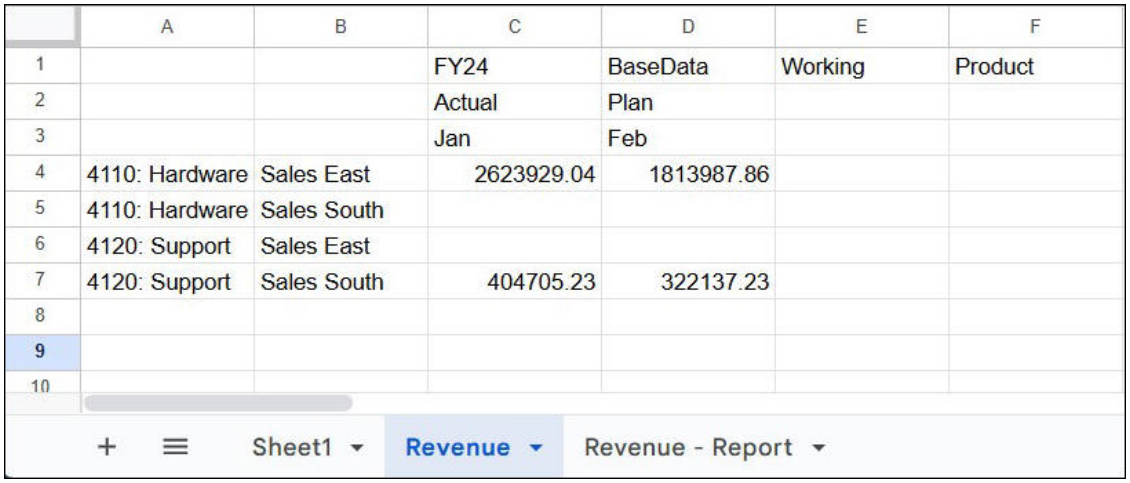
To display combinations for specific members, select the required row members.



	A	B	C	D	E	F
1			FY24	BaseData	Working	Product
2			Actual	Plan		
3			Jan	Feb		
4	4110: Hardware	Sales East	2623929.04	1813987.86		
5	4120: Support	Sales South	404705.23	322137.23		
6						
7						
8						
9						
10						

Sheet1 | Revenue | Revenue - Report

In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**. Click **Query** and then click **Cross Join on Rows**.

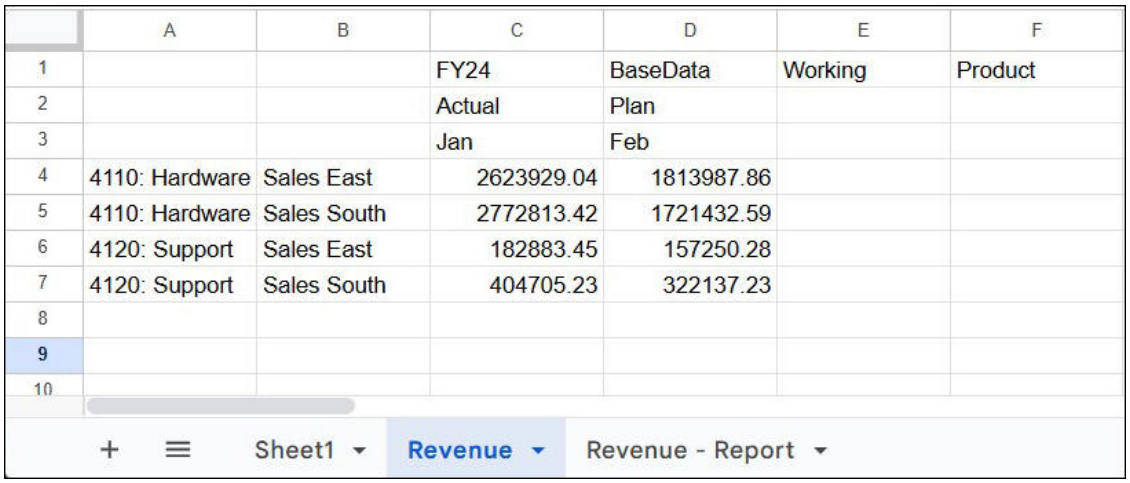


	A	B	C	D	E	F
1			FY24	BaseData	Working	Product
2			Actual	Plan		
3			Jan	Feb		
4	4110: Hardware	Sales East	2623929.04	1813987.86		
5	4110: Hardware	Sales South				
6	4120: Support	Sales East				
7	4120: Support	Sales South	404705.23	322137.23		
8						
9						
10						

Sheet1 | Revenue | Revenue - Report

Note that the cross joins or combinations for the selected members are displayed in the same ad hoc sheet in new rows at the end of the original grid. For example, new rows 5 and 6 appear in the Revenue sheet tab itself.

Click **Refresh** to display the data values for the different row combinations.



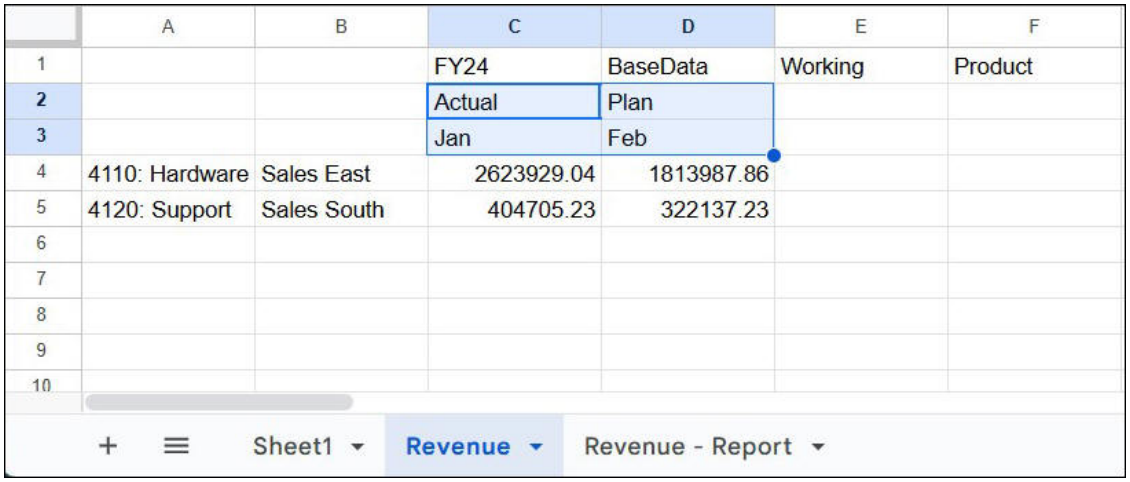
	A	B	C	D	E	F
1			FY24	BaseData	Working	Product
2			Actual	Plan		
3			Jan	Feb		
4	4110: Hardware	Sales East	2623929.04	1813987.86		
5	4110: Hardware	Sales South	2772813.42	1721432.59		
6	4120: Support	Sales East	182883.45	157250.28		
7	4120: Support	Sales South	404705.23	322137.23		
8						
9						
10						

Sheet1 | Revenue | Revenue - Report

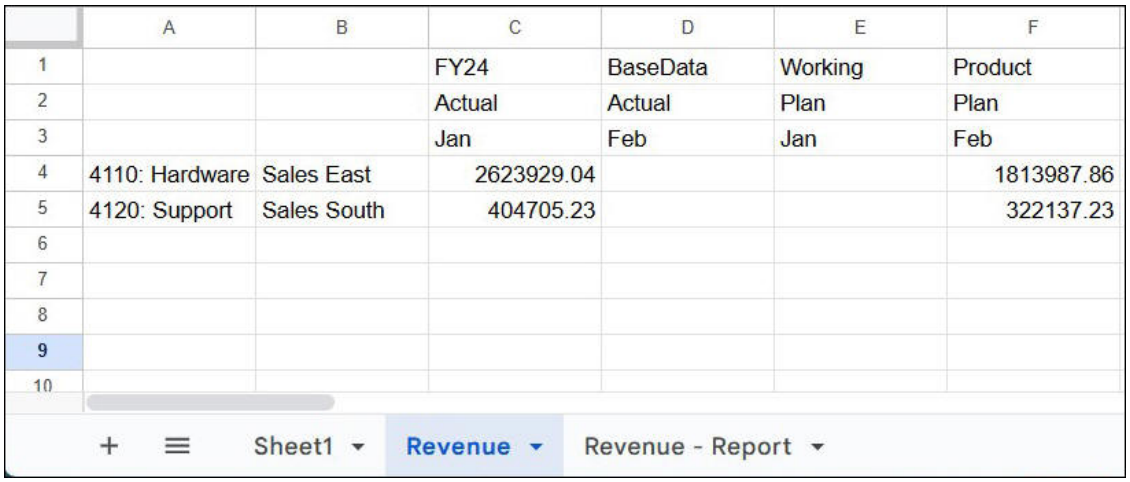
Cross Join on Columns

If you want to perform cross join for only specific members in columns to display their combinations, use the **Cross Join on Columns** option.

To display combinations for specific members, select the required column members.

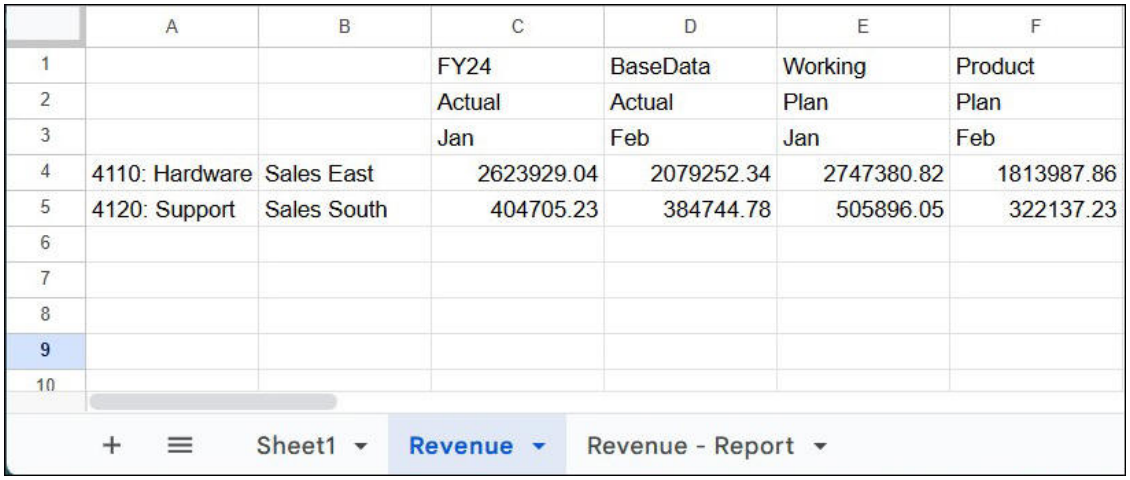


In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**. Click **Query** and then click **Cross Join on Columns**.



Note that the cross joins or combinations for the selected members are displayed in the same ad hoc sheet in new columns after the existing columns. For example, new columns D and E appear in the Revenue sheet tab itself.

Click **Refresh** to display the data values for the different column combinations.



	A	B	C	D	E	F
1			FY24	BaseData	Working	Product
2			Actual	Actual	Plan	Plan
3			Jan	Feb	Jan	Feb
4	4110: Hardware	Sales East	2623929.04	2079252.34	2747380.82	1813987.86
5	4120: Support	Sales South	404705.23	384744.78	505896.05	322137.23
6						
7						
8						
9						
10						

Sheet1 | Revenue | Revenue - Report

Working with Comments and Unknown Members

You can easily access and edit comments and unknown members in an ad hoc grid using the Comment Edit dialog that opens from the View Comments ribbon command.

Related Topics

- About Comments and Unknown Members
  Set options to highlight comments and unknown members on an ad hoc sheet, then use the Comment Edit dialog to modify or delete comments and unknown members as you require.
- Enabling Comment Display in the Sheet
  You can set options in Smart View to detect comments and unknown members on an ad hoc sheet.
- Displaying the Comment Edit Dialog on Refresh
  You can configure an option to display the Comment Edit dialog each time you refresh the sheet.
- Viewing Comments in the Sheet
  You can view comments in an ad hoc sheet.
- Editing and Deleting Comments and Unknown Members
  You can edit comments and unknown members using the Comment Edit dialog.

About Comments and Unknown Members

Set options to highlight comments and unknown members on an ad hoc sheet, then use the Comment Edit dialog to modify or delete comments and unknown members as you require.

When you are connected to a provider, you can enable options in Smart View that allow you to quickly detect:

- Unknown members on a grid
- Text typed outside the grid; for example, your own notes on a sheet

In Smart View, cells containing these types of text are referred to as *comments*.

You can set options in Smart View that allow you quickly and easily spot comment cells, including invalid, or unknown, members in the grid or pertinent notes you may have made on a sheet outside of the grid.

For example, in the Vision database, a member named "Total Entities" is renamed "Total Entity." Smart View tracks this change and shows it to you in the sheet if you define a cell style to call out comments. Then, you can quickly note the change and correct it either directly in the grid or by clicking **View Comments** in the Smart View ribbon and modifying the cell in the **Comment Edit** dialog.

To call out comments on an ad hoc sheet, open an ad hoc grid and in the **Options** dialog, **Formatting** tab:

- Select the **Use Cell Styles** check box
- Set a cell style for Comments

You can then easily identify comment cells on the ad hoc sheet, and further select and work with them in the **Comment Edit** dialog box.

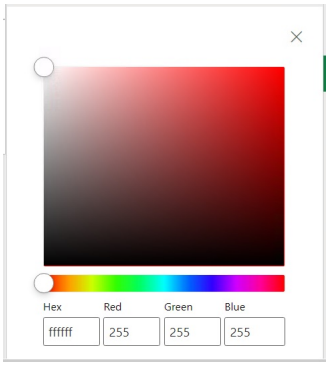
You can also select the **Always show on refresh** check box in the **Comment Edit** dialog box to launch it on each refresh.

Enabling Comment Display in the Sheet

You can set options in Smart View to detect comments and unknown members on an ad hoc sheet.

To enable comment display in an ad hoc sheet:

1. In the **Options** dialog, perform these tasks:
   a. In **Members** tab, select the **Preserve Formulas and Comments in Ad Hoc** and **Preserve Comments and Unknown Members** check boxes.
   b. In the **Formatting** tab, select the **Use Cell Styles** check box.
   c. Click the **Cell Styles** button, expand **Miscellaneous Styles**, and then click on **Comment**. Drag the color controls (the circles in the top left corner of each color block) till you arrive at the color you want.



2. Click **X** in the top right corner to close the **Options** panel.

   You are now ready for the steps in Viewing Comments in the Sheet.

   Optionally, to view the **Comment Edit** dialog with every refresh, complete the steps in Displaying the Comment Edit Dialog on Refresh.

Displaying the Comment Edit Dialog on Refresh

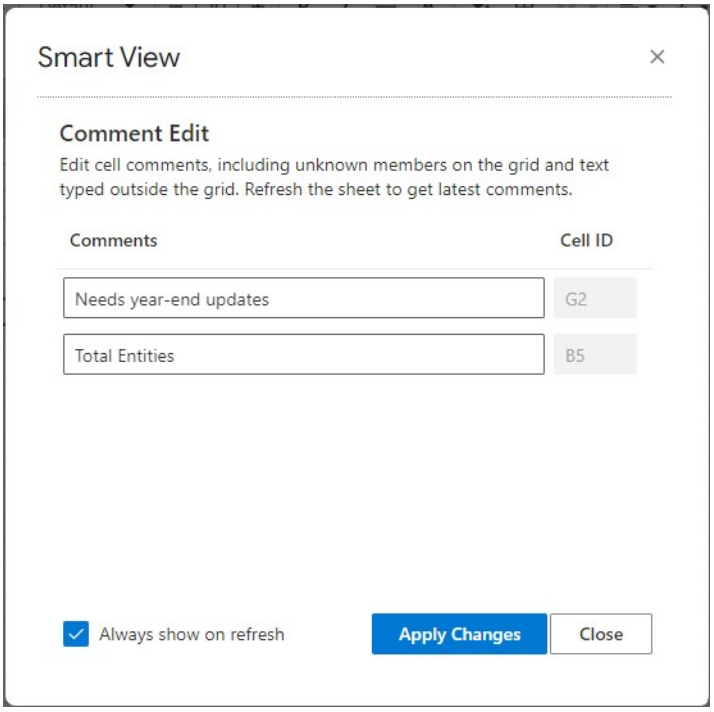
You can configure an option to display the Comment Edit dialog each time you refresh the sheet.

> **Note**
>
> This procedure is optional.

To enable comment display in the sheet upon refresh:

1. Place an ad hoc grid on the sheet.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
3. Select **Data**, **More**, and then select **View Comments**.
4. In the **Comment Edit** dialog, select the **Always show on refresh** check box.

Figure 9-8 Comment Edit Dialog



5. Click **Apply Changes**.

   The **Comment Edit** dialog will display each time you refresh the grid.

   The **Always show on refresh** check box applies not just for the current worksheet but for any new worksheets you open subsequently. You do not have to set it on a per-sheet basis.

6. **Optional:** To disable the **Comment Edit** dialog display on refresh, clear the **Always show on refresh** check box.

Viewing Comments in the Sheet

You can view comments in an ad hoc sheet.

To view comment cells in an ad hoc sheet:

1. Be sure to complete the steps in Enabling Comment Display in the Sheet
2. Start an ad hoc grid or open a spreadsheet containing a grid and click **Refresh**.
3. On the sheet, note the cells containing comments and unknown members.

   In the example shown below, cell B5 is an unknown member and Smart View marked the cell as a comment. The member name was probably changed in the underlying cube. The comment style indicates to us that this member needs attention.

Figure 9-9 Grid Showing Cells Marked with Comment Style

	A	B	C	D	E	F	G
1			HSP_View	Scenario	Version	Product	
2			Year				Needs year-end updates
3			Period				
4	Account	Entity	#Missing				
5		Total Entities					

   Additionally, a comment outside of the grid (G2), provides general instructions about the grid. Similarly, comments can be provided by users to highlight incorrect details, ask for additional information, or provide clarification.
4. Continue with Editing and Deleting Comments and Unknown Members.

Editing and Deleting Comments and Unknown Members

You can edit comments and unknown members using the Comment Edit dialog.

Before you begin, complete the steps in Enabling Comment Display in the Sheet.

> **Note**
>
> The procedure in this topic shows you how to edit comments on an ad hoc sheet using the **View Comments** command and the **Comment Edit** dialog box in Smart View. You can also edit comments directly in the grid, without using the Smart View interface elements in this topic.

To edit and delete comments on an ad hoc grid:

1. Open an ad hoc grid containing comments, and click **Refresh**.

   In the example shown below, the grid displays some comments in the sheet.

Figure 9-10 Grid Showing Cells Marked with Comment Style

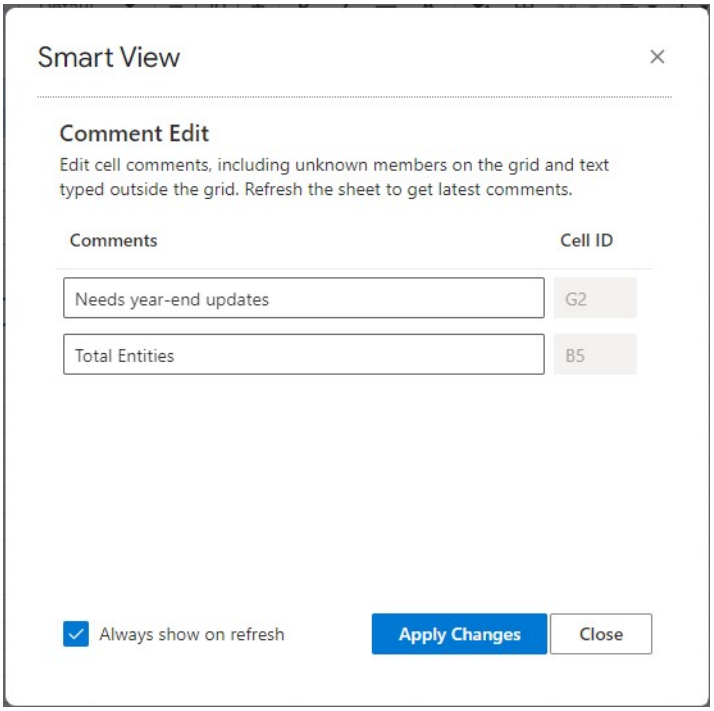
	A	B	C	D	E	F	G
1			HSP_View	Scenario	Version	Product	
2			Year				Needs year-end updates
3			Period				
4	Account	Entity	#Missing				
5		Total Entities					

2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
3. Select **Data**, **More**, and then select **View Comments**.

   The **Comment Edit** dialog box is launched.

   Based on the grid in the above example, the **Comment Edit** dialog shows the comments present in the sheet which can be edited.

Figure 9-11 Comment Edit Dialog



4. To edit the text in a comment cell, in the **Comment Edit** dialog, click in the comment cell text box to edit; and then modify the text as required.

   Using the example **Comment Edit** dialog, click in the "Total Entities" comment cell text box, and then change "Total Entities" to "Total Entity".
5. Click **Apply Changes** and note the change in the grid.

   Cells that were edited are now marked in the dirty cell style.
6. Click **Refresh**; the dirty cell style is cleared in the cells you edited and the appropriate cell style is applied.
7. To delete comments:
   a. Launch the **Comment Edit** dialog, click in the comment cell text box to highlight the editable text; and press the **Delete** key.

b. Click **Apply Changes** in the **Comment Edit** dialog to return to the ad hoc grid sheet.

c. Click **Refresh**.

Working with Multiple-Grid Sheets

In Smart View, you can retrieve multiple ad hoc grids on one sheet. The grids can all be connected either to the same data source or to different data sources.

Related Topics

- About Multiple Ad Hoc Grids on a Sheet
  When connected to supported Smart View data sources, you can create multiple grids on one sheet.
- Creating Multiple-Grid Sheets
  You can create a multiple-grid sheet by placing ad hoc grids from the same data source or different data sources.
- Renaming Grid Ranges
  You can rename grid ranges in multiple-grid sheets to identify them using a friendly and meaningful name.

About Multiple Ad Hoc Grids on a Sheet

When connected to supported Smart View data sources, you can create multiple grids on one sheet.

These grids can be connected to the same data source or to different data sources. For example, one grid can be connected to Planning and another can be connected to Tax Reporting. They can also be sourced from cubes. You can retrieve data in these grids and shift them on the sheet.

> **Note**
>
> **Administrators:** To enable multiple-grid ad hoc for Smart View users, set the **Smart View Ad Hoc Behavior** option to **Standard** in the service application settings. See the administration documentation for your service for more information.

Guidelines for Working with Multiple-Grid Sheets

Note the following guidelines while working with sheets that contain multiple ad hoc grids:

- While inserting multiple ad hoc grids, always insert them on a new sheet which does not have any previous grid in it. If you have already opened a form or an ad hoc grid on a sheet and then select a cell range for adding another grid on the same sheet, a message prompts you stating, *"Multiple grids cannot be added to a single-grid sheets. Add a new sheet to add multiple grids"*.
- When working with multiple ad hoc grids, select at least one cell within a grid before performing any grid-specific operation. This helps Smart View identify the grid on which you want to take the action. If your selection is on a cell outside the grid, a message prompts you stating, *"Select at least one cell in the grid on which you want to perform this operation"*.
- You can submit data for only one grid at a time in a multiple-grid sheet.

If you try to submit data for more than one grid at a time—that is, if you have selected cell ranges in more than one grid—the first range returned by Google Sheets is used to determine the selected grid and the data on only that grid is submitted.

- You can refresh grid data in a sheet for all connections at the same time.

  For example, you are working on a sheet with Grid 1 and Grid 2 connected to Planning and Grid 3 connected to Tax Reporting. When you click **Refresh** from the **Smart View for Google Workspace** menu, all grids—Grid 1, Grid 2, and Grid 3—are refreshed at the same time in a single operation.

  – To refresh all grids together, select any cell outside the ranges of the grids and click **Refresh**.

  – To refresh only a particular grid, select any cell within the range of the grid and click **Refresh**. This is saves the time taken to refresh data, especially when the sheet contains a lot of grids.

  For more information, see Refreshing Data.

- The settings in the **Options** dialog box apply only to the selected grid on the sheet. This means that you can set different Option settings for each grid in a multiple-grid sheet.

  For example, you want to apply Blue as the background color for Member cells for Grid 1 and Green for Grid 2. First, click anywhere in Grid 1, open the **Options** dialog box, and then set the Blue cell style under **Formatting**, **Cell Styles**. Click **Done** and then **OK** to apply the change and close the dialog box. Now, repeat the same for Grid 2, by clicking anywhere in Grid 2 and opening the dialog. After setting the styles, click **Refresh**. The Member cells appear in Blue and Green background colors respectively for Grid 1 and Grid 2.

- When you zoom in on a grid and it expands to display data on more rows and columns, the placement of the other grids is automatically adjusted such that the expanded grid does not overlap the contents of the other grids on the sheet.

  For example, if you have two grids one below the other separated by two blank rows of space and you zoom in on the top grid, the bottom grid is pushed down in the sheet, and you can scroll down till the top grid ends to view the other grid.

- While viewing sheet information for a multiple-grid sheet, the **Sheet Info** dialog box displays a separate **Connection** section for each grid. For example, Connection (Grid 1), Connection (Grid 2), and so on. Each section displays details such as Server, Application, URL, Provider, Alias Table, and Associated Ranges. For more information, see Sheet Information.

- Functions can be inserted in a multiple-grid sheet by typing them manually or using the Function Builder..

  However, in case the multiple-grid sheet contains grids from multiple connections, the HsGetSheetInfo function retrieves the sheet properties only for the first connection, irrespective of the connection that is currently active on the sheet. This is a limitation.

- Creating a connection for functions is not supported on a multiple-grid sheet.

- On a Functions-only sheet, multiple grids cannot be inserted.

- If a particular operation from the **Smart View for Google Workspace** menu is not supported in a multiple-grid sheet, a message appears to indicate that you cannot perform the operation on the current sheet.

- When a Smart Form is opened as an ad hoc grid in a multiple-grid sheet, the formula cells appear blank since the layout changes and formula references are not retained.

Creating Multiple-Grid Sheets

You can create a multiple-grid sheet by placing ad hoc grids from the same data source or different data sources.

For placing multiple grids from multiple data source connections, you can connect to the required data sources before you start creating multiple grid sheet or even during the process.

To create a multiple-grid sheet:

1. Open a new sheet.

   Ensure that the sheet is blank and does not contain any existing data.
2. Select a range of cells from any location in the sheet.

   You must select a range of cells, instead of only one cell.
3. From the Smart View Home panel, perform an action:
   - Select a cube.
   - Select a form, right-click on it, and then select **Ad Hoc Analysis**.
4. Select **Yes** in the prompt asking to change the sheet to support multiple grids.

   The ad hoc grid is added in the position of the selected range.
5. To add another grid from the same data source on the sheet:
   a. Select a different range of cells.
   b. From the Smart View Home panel, select a cube, or select a form, right-click on it, and then select **Ad Hoc Analysis**.

      The ad hoc grid is added in the position of the selected range.
6. To add a grid from another data source on the same sheet:
   a. Connect to the other data source, if not already connected. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Connect** under **Start**.

      For more information, see Connecting to Data Sources.
   b. Select a range of blank cells.
   c. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Active Connections** under **Start**.
   d. In the **Active Connections** dialog, click the **Server URL** list to view the list of active connections, select the required connection, and click **Launch Home**.

      The Smart View Home panel opens to display the library contents of the connected data source.
   e. From the Smart View Home panel, select a cube, or select a form, right-click on it, and then select **Ad Hoc Analysis**.

      The ad hoc grid is added in the position of the selected range.

Renaming Grid Ranges

You can rename grid ranges in multiple-grid sheets to identify them using a friendly and meaningful name.

When you place ranges on a multiple-grid sheet, Google Sheets assigns each range a name by default. The strings used in the name ranges may not be particularly user friendly. For

example, a range based on the Vision Plan1 cube might look like this: Vision_Plan1_88CA3264. A more user-friendly name, for example Business Drivers, helps users identify and understand the ad hoc grids in the multiple-grid sheet.

Using Smart View's **Rename Grid Range** option, you can rename the grid ranges while retaining their metadata and connection.

Related Topics:

- Renaming Grids on a Multiple-Grid Sheet
- Guidelines for Renaming Grids on a Multiple-Grid Sheet

Renaming Grids on a Multiple-Grid Sheet

To rename grids in a multiple-grid sheet:

1. In the multiple-grid sheet, select any cell in the grid that you want to rename.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Ad Hoc**.
3. Select **Analysis** and then select **Rename Grid Range**.
4. Review the grid's current name and enter a new name.
5. Click **OK**.
6. To view the new name, you can check the following:
    - **Sheet Information:** In the **Sheet Information** dialog, the new name appears in the **Associated Range** field.
    - **Name Box** At the top of the sheet, click the down arrow in the Name Box next to the Formula Bar. The new grid name appears in the list along with the cell ranges of the grid.

Guidelines for Renaming Grids on a Multiple-Grid Sheet

While renaming the grids, consider the following guidelines:

- Only alphanumeric characters are allowed in grid names. Special characters are not allowed.
- The name cannot start with a number.
- The name must be limited to 255 characters.
- The name must be unique for each grid. Multiple grids cannot have the same name. For example, grids having names as *Sales* and *SALES* are not considered unique, and so not allowed.
- Only one grid can be renamed at a time. Select at least on cell in the specific grid to rename it.

Note

It is not recommended to use Google's Named Ranges to rename a grid range. It could cause a loss of metadata. When you rename a grid range outside Smart View:

- The grid's connection is broken, preventing Smart View from identifying it.
- You cannot perform any grid operations on such a grid.
- You cannot view the grid's details in the Sheet Information dialog as it is considered invalid.

10

General Operations

Related Topics

- Sheet Information
  You can view connection and other details for the current worksheet.
- Monitoring Job Status
  Use the Job Console to view the execution status of ongoing and completed Oracle Fusion Cloud Enterprise Performance Management jobs and delete them if needed.
- Sharing Spreadsheets
  You can share spreadsheets using the Share feature available in Google Sheets.
- Setting User Preferences
  Set preferences for application settings, display settings, and user variables.
- Adding Favorites
  An easy way to access Oracle Smart View for Google Workspace operations is by marking them as favorite.

Sheet Information

You can view connection and other details for the current worksheet.

Related Topics

- Guidelines on Sheet Information
  Consider the guidelines in this topic when using sheet information.
- Viewing Sheet Information
  You can view useful information about the sheet such as connection details, connection status, sheet type, and last connected date and time. You can also save this information to an html file or delete the sheet's metadata, if not required.
- Support for Sheet Information in Cloud EPM

Guidelines on Sheet Information

Consider the guidelines in this topic when using sheet information.

- You can see separate **Connection** sections in the **Sheet Info** dialog box for each valid grid present on the sheet. For example, Connection (Grid 1), Connection (Grid 2), and so on.
- In a multiple-grid sheet, if you rename a grid range or delete its original name using Google's Named Ranges, instead of Smart View's **Rename Grid Range** option, then Smart View considers such a grid as invalid. This is because the grid's connection is broken, thus preventing Smart View from identifying it. You cannot view details of such a grid in the **Sheet Info** dialog box and cannot perform any grid operations on such a grid. It is recommended to always use Smart View's **Rename Grid Range** option for giving friendly or understandable names to your grids. For more information, see Renaming Grid Ranges.
- For a Function sheet, the **Sheet Info** dialog box only displays the **Sheet Type** as *Function*. No other description is available for display for a Function sheet.

Viewing Sheet Information

You can view useful information about the sheet such as connection details, connection status, sheet type, and last connected date and time. You can also save this information to an html file or delete the sheet's metadata, if not required.

To view sheet information:

1. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Sheet Info**.
2. Depending on the data on the sheet, view the following information displayed in the **Sheet Info** dialog box:
   - **Connection**
     - **Server:** Name of the server to which the sheet is connected
     - **Application:** Application to which the sheet is connected
     - **Cube:** Cube, model, or database to which the sheet is connected
     - **URL:** URL string of the data source provider to which the sheet is connected
     - **Provider:** Data source type to which the sheet is connected.
     - **Alias Table:** Current alias table
     - **Form Name:** Name of the form to which the sheet is connected. This property applies when connected to forms in Oracle Fusion Cloud Enterprise Performance Management applications.
     - **Associated Range:** Name of the cell range associated with the grid. If you have renamed the grid range using Smart View's **Rename Grid Range** option, then you can view the new name here.

     > **Note**
     >
     > For multiple-grid sheets, you can see separate **Connection** sections for each valid grid present on the sheet. For example, Connection (Grid 1), Connection (Grid 2), and so on.

   - **General**
     - **Sheet Type:** Form, Ad hoc, Multiple grid ad hoc, or Function

       > **Note**
       >
       > For a Function sheet, the **Sheet Info** dialog box only displays the **Sheet Type** as *Function*. No other details are available for display for a Function sheet.

     - **Last Retrieved:** Date and time when the sheet was last refreshed
3. Select the following options as needed:
   - **Delete:** Provides these options for deleting Smart View metadata:
     - **Delete worksheet metadata** deletes all Smart View metadata in the active sheet.

  - **Delete spreadsheet metadata** deletes all Smart View metadata in the active spreadsheet.

> **Note**
>
> The Delete operation cannot be undone.

- **Save:** Saves the sheet information content to an HTML file.

4. Click **Close** to close the **Sheet Info** dialog box.

Support for Sheet Information in Cloud EPM

Without connecting to a data source, if you open a new blank sheet or a saved sheet and launch the **Sheet Info** dialog, it displays the **Sheet Type** information as *Empty*. No other details are available for display without establishing a connection for the sheet.

Once connected to a data source, the Sheet Information is supported as follows for various artifacts as per different connection scenarios.

> **Note**
>
> For a Function sheet, the **Sheet Info** dialog only displays the **Sheet Type** as *Function*. No other details are available for display for a Function sheet.

Table 10-1 Sheet Information Supported by in Cloud EPM

Connection Status	Form	Ad Hoc	Functions
Set Active Connection for this Worksheet	Yes	Yes	No
Set as Default Connection, before associating with active connection	N/A	N/A	N/A
Set as Default Connection, after associating with active connection	Yes	Yes	No
Last Retrieved	Yes	Yes	No

Monitoring Job Status

Use the Job Console to view the execution status of ongoing and completed Oracle Fusion Cloud Enterprise Performance Management jobs and delete them if needed.

To check the execution status of jobs:

1. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form**.
2. Select **Data**, **More**, and then select **Job Console**.
   Alternatively, you can click the **Actions** menu in the Smart View Home panel and select **Job Console**.
3. View the list of jobs.

By default, all jobs are displayed. You can filter the list of jobs using any of the following job criteria:

- **Job Type**
- **Status**
- **Job Name**
- **User Name**
- **Start Date**
- **End Date**

If you enter criteria to filter the jobs, click **Go** to display the jobs matching your selections.

4. **Optional:** To view the application name and the plan type of a job, select the job and click **Show Details**.
   To see details for all jobs in the list, click **Select All**, and then click **Show Details.**.
5. **Optional:** To delete a job, select the job and click **Delete**.
   To delete all jobs in the list, click **Select All**, and then click **Delete**.

> **Note**
>
> Deleting a job only deletes it from the list in the **Job Console**. It does not cancel a job.

6. When you are finished viewing jobs, click **OK** to close the Job Console.

Sharing Spreadsheets

You can share spreadsheets using the Share feature available in Google Sheets.

Google Sheets provides a Share feature using which you can share your spreadsheets with your team. The **Share** button is located at the top right corner, next to your user profile icon. When you share a spreadsheet, all its contents and sheets are shared. You can set editing access and share the spreadsheet either through email or by copying and sending its link to the recipients. For more information on how to share a spreadsheet, see Google's documentation on Share files from Google Drive.

When recipients access the shared spreadsheet, they can view the sheet contents but need the Smart View add-on extension installed to work on it. If the recipients do not have the Smart View add-on extension installed in their Google Sheets, they can install it from Google Workspace Marketplace. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Install**. For more information on installing the Smart View add-on extension, see *Getting Started with Oracle Smart View for Google Workspace*.

In the shared spreadsheet, the recipients can initially view the full contents, irrespective of their access to dimensions and members. However, when they try to perform an operation such as refresh or submit, they are prompted to log in and start a new session. After logging in, the recipients can refresh the spreadsheet to view data as per their access privileges and preform further operations. Multiple users can continue working on the same spreadsheet simultaneously.

Setting User Preferences

Set preferences for application settings, display settings, and user variables.

To set user preferences for an Oracle Fusion Cloud Enterprise Performance Management application:

1. From the tree list in the Smart View Home panel, select a cube or open a form or ad hoc grid.
2. From the Smart View Home panel, click the **Actions** menu and then click **User Preferences**.

   User Preferences appears as a panel with three tabs: **Settings**, **Display**, and **Variables**.
3. From the **User Preferences** panel, click a tab and perform an action:
   - **Settings** tab—Manage email options, specify alias settings, set workflow options for approvals, and specify out of office settings for planning units.
     - Select a check box on the right to use the default application setting for an option.
     - Select a check box on the left to override the default application settings.
     - For **Alias Table**, select an alias table from the drop-down list on the left to override the default application settings, and then select the check box on the left.

     > **Note**
     >
     > Changes to the alias table require you to restart Smart View and reconnect to take effect.

   - **Display**—Set number formatting for thousand separator, decimal separator, negative sign, and negative color; Set page options to remember selected page members, allow a search if the number of pages exceeds a number you specify, and set member indentation; Set other options to display consolidation operators, specify number of members on each page and record, and set date format.
     - Select a check box on the right to use the default application settings.
     - For each available property on the left, select an option from the drop-down list or type directly into the text box to override the default application settings.
   - **Variables**—Variables set up by the administrator to help you navigate large forms and grids.

     The left column displays the user variable name. The associated dimension is displayed below user variable name. Click the ellipses icon to launch the **Member Selection** dialog. Then select a member to use as the default for the user variable.

   > **Note**
   >
   > User preferences for locale, date format, and decimal/numeric format set on forms from within the web application are not honored on forms in Smart View.

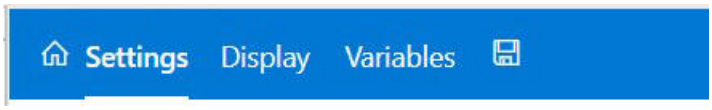
4. After making changes in a tab, click **Save**,

   at the top of the **User Preferences** panel before selecting another tab.

5. When you're finished setting user preferences, click

in the panel to close.



Adding Favorites

An easy way to access Oracle Smart View for Google Workspace operations is by marking them as favorite.

You can select the operations that you use frequently and they appears pinned at the top of the **Favorites** panel. When you want to use an operation, simply open the **Favorites** panel and click the operation link, instead of navigating the **Extensions**, **Smart View for Google Workspace** menu to reach the operation.

To launch the **Favorites** panel and add your favorite operations:

1. In the Smart View Home panel, click the **Actions** menu, and then click **Favorites**.
You can also click

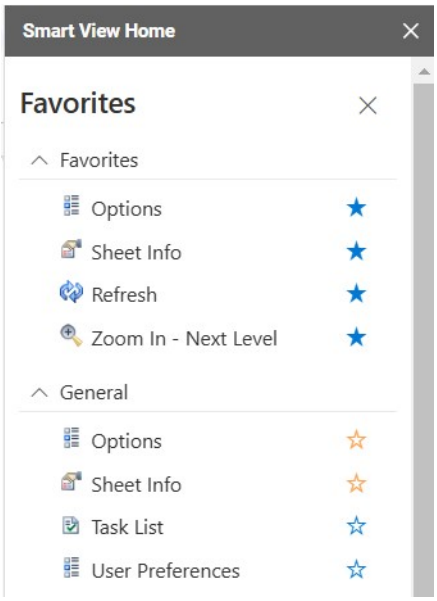
in the Smart View Home panel to open the **Favorites** panel.

   A list of operations appear categorized under different groups, similar to the grouping seen in the main menu, in the **Favorites** panel.

2. Expand a group and click

for the required operation.
The Favorites icon appears highlighted

and the selected operation gets added in the **Favorites** group on top of the list.



3. The next time you want to use the operation, simply launch the **Favorites** panel and click the operation from the favorites list.
4. To remove an operation from the **Favorites** list, click the Favorites icon
   ★
   to clear the selection.

11

Task Lists

Related Topics

- About Task Lists
  Open and manage tasks from the Smart View panel in Google Sheets.
- Opening a Task List
  Open a task list to view its details and take actions.
- Viewing the Task List
  View the details of individual tasks in the task list, take action on them, and track the overall completion status of the task list.
- Executing a Task
  Execute incomplete tasks as per their requirements.
- Completing a Task
  Mark a task complete after completing its requirements.
- Creating Task List Reports
  Create and download a task list report on the task-wise and overall completion status of the task list.

About Task Lists

Open and manage tasks from the Smart View panel in Google Sheets.

Applies to: Planning

You can open and manage tasks from the Smart View panel in Google Sheets.

Task lists help you organize, track, and prioritize your workload. For example, a task might help you complete forms, launch business rules, or promote approval units. Through tasks, you can also launch a website or internal company page.

You can open and view task lists, execute and complete tasks, and create task list reports from the Task List panel. Service Administrators manage and assign access permissions for task lists. For more information, see the administration documentation for your data source.

Opening a Task List

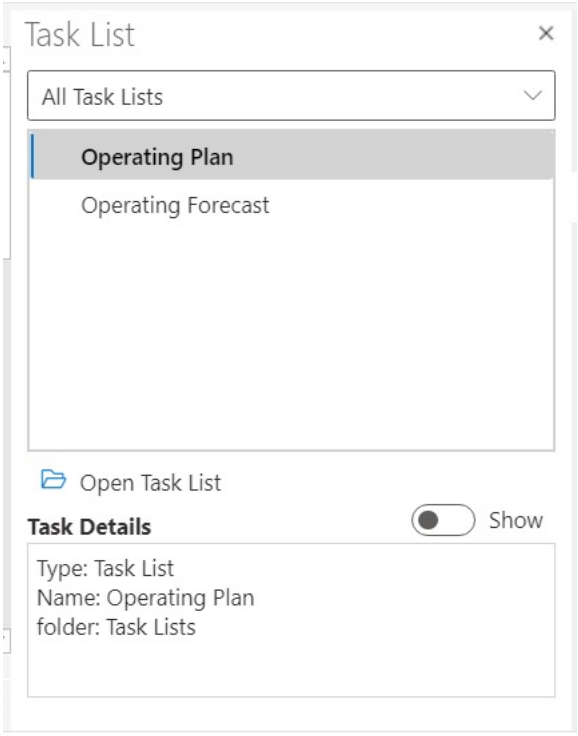
Open a task list to view its details and take actions.

To open a task list from Smart View:

1. Connect to your data provider.
2. Open a form or ad hoc grid.

   You must have a form or ad hoc grid open on the sheet before you begin working with task lists.
3. From the Actions Menu in the Smart View Home panel, click **Task List**.

   This opens the Task List panel:



In the Task List panel, use the **Show/Hide** toggle button to display or hide the **Task Details** pane.

Available commands for tasks appear in the Action Panel, just below the task list tree view pane and above the **Task Details** pane.

4. From the Task List panel, select a task list, and then click **Open Task List** on the Action Panel.
5. Continue with Viewing the Task List.

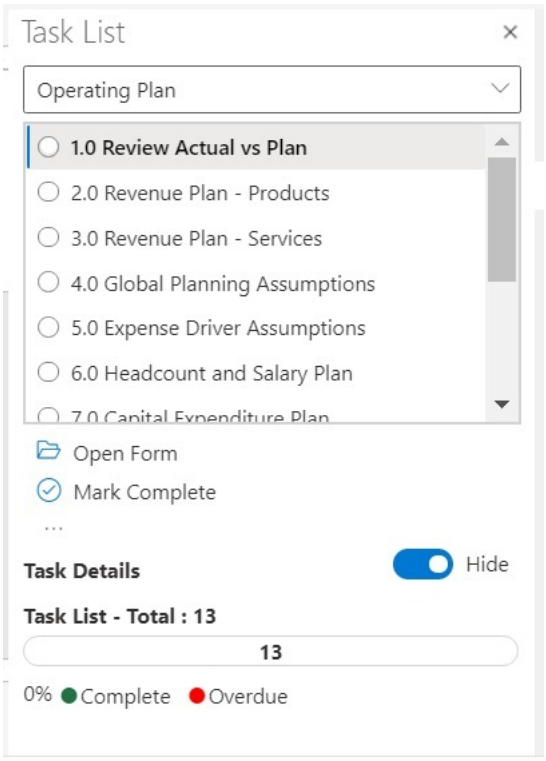
Viewing the Task List

View the details of individual tasks in the task list, take action on them, and track the overall completion status of the task list.

A task list in the Task List panel displays the following:

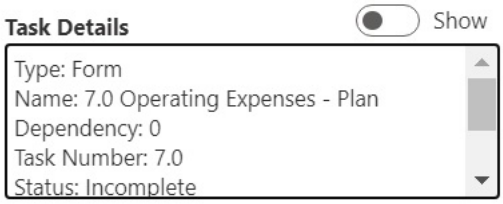
- The individual tasks in the task list. These may contain subordinate tasks. The status of the task – complete, incomplete, or overdue – is indicated by color-coding.

  For example:



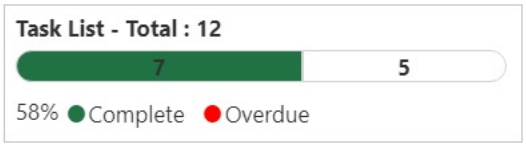
- **Task Details** gives you details for the selected task in the task list, including the task status.

  For example:



  Use the **Show/Hide** toggle button to display or hide the **Task Details** pane.

- A status bar gives you a high-level view of the status of your task list. The status bar, located at the bottom of the Task List panel, shows you the number of tasks in the task list, the number of completed tasks along with a percentage of completed tasks for the task list, and the number of tasks to complete; for example:

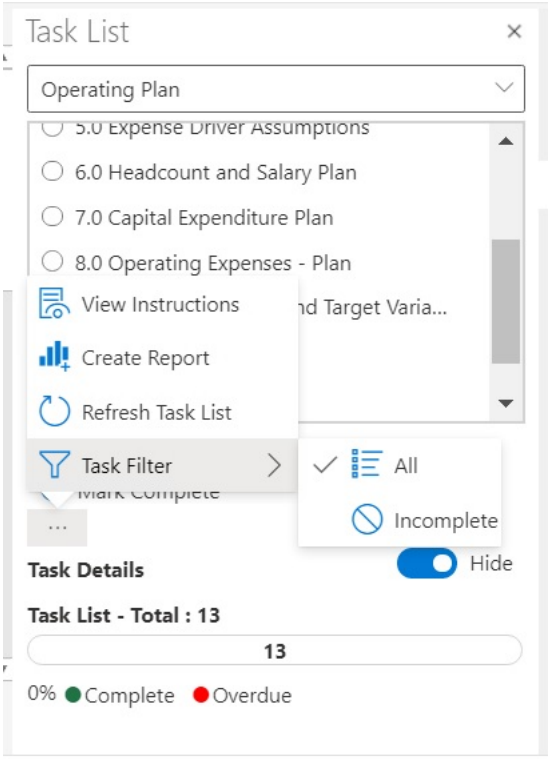


- The Action Panel displays the actions that are available for the selected task

  In the example above, the **Open Form** and **Mark Complete** commands are available, along with the ... .

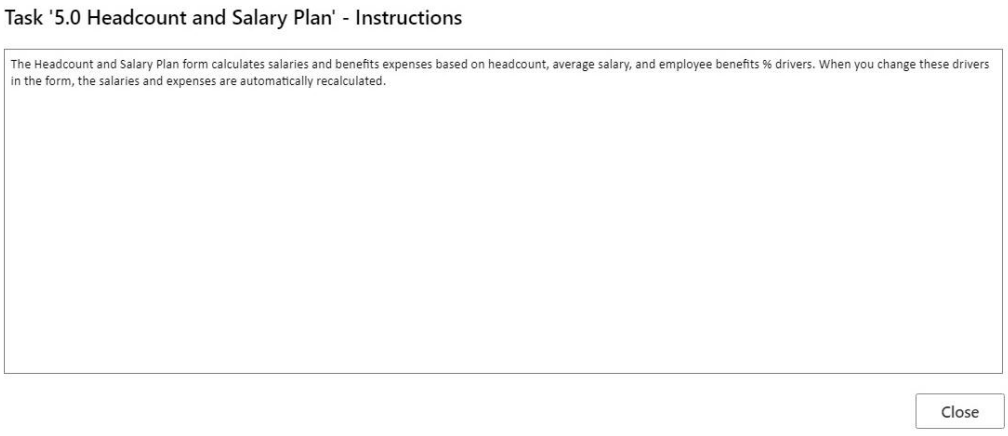
Similarly, for tasks with business rules, the **Launch Rule** command appears for selecting and running business rules from the task list itself, while the **Open URL or File** command appears for tasks that launch links or open files.

- The **More items** button, ... lets you access a drop-down menu with more commands for the selected task:



These actions are available:

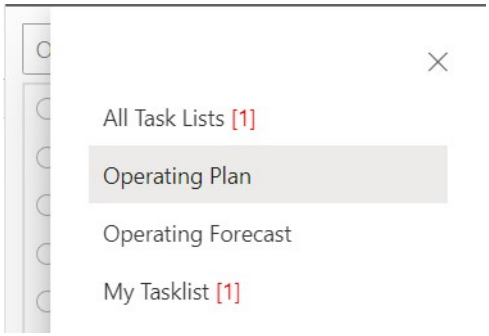
– **View Instructions**: To view instructions for a task, click the **More items** button, ..., and then select **View Instructions**. A dialog with information specific to the task is displayed; for example:



– **Create Report**: See Creating Task List Reports.

  - **Refresh Task List**: Click to refresh the task list, incorporating any new tasks added to the list, and updating the status bar.
  - **Task Filter**: Click to view the submenu. Select **Incomplete** to view only incomplete tasks in the task list. Select **All** to view the entire task list.
- A drop-down menu at the top in the Task List panel lets you select other task lists associated with the current application; for example, click the arrow:

View the other task lists available for application. Task lists with overdue tasks display the number of overdue tasks in red color next to their name.



Executing a Task

Execute incomplete tasks as per their requirements.

To execute a task:

1. Open the task list that contains the task to execute.
2. From the Action Panel, click **Execute Task**.

   Task execution varies with the task and data source.

Completing a Task

Mark a task complete after completing its requirements.

To complete a task:

1. Complete the requirements of the task.
2. Open the task list that contains the task to complete.
3. Ensure that any dependent tasks are completed.
4. Select the task to mark complete.
5. From the Action Panel, click **Mark Complete**.

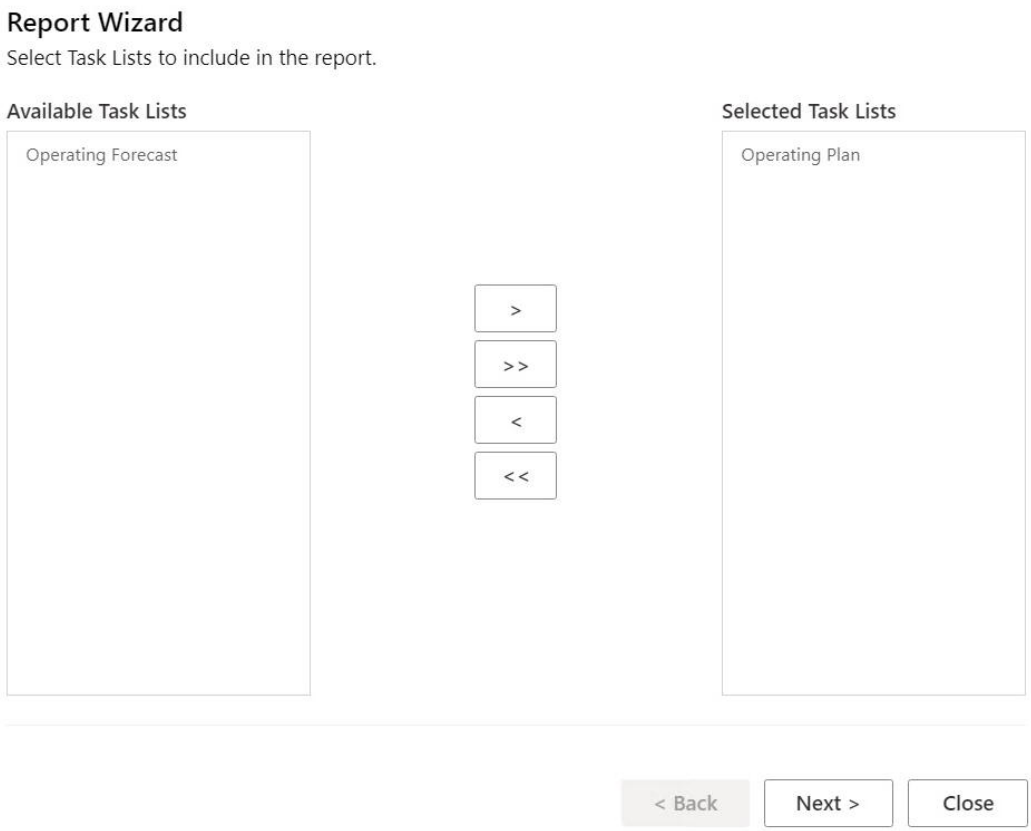
Creating Task List Reports

Create and download a task list report on the task-wise and overall completion status of the task list.

To create a task list report:

1. Open a task list.
2. Select a task, then click ..., and then select **Create Report**.
3. In the **Report Wizard**, use the right and left arrow keys to move all task lists to be included in the report from **Available Task Lists** to **Selected Task Lists**.

   In the following example, the Operating Plan task list is selected for a report.



4. Click **Next**.
5. Use the right and left arrow keys to move the users whose status you want to include in the report from **Available Users** to **Selected Users**.
6. Click **Next**.
7. Select options to create your report.

   Available options are:

   - **Group Results By**—Group the report output by Task List or by Users.
   - **Display Columns**—Use the check boxes to select the columns to display in the report.

- **Report Details**—Use the check boxes to select the details to include in the report. All report details are selected by default.

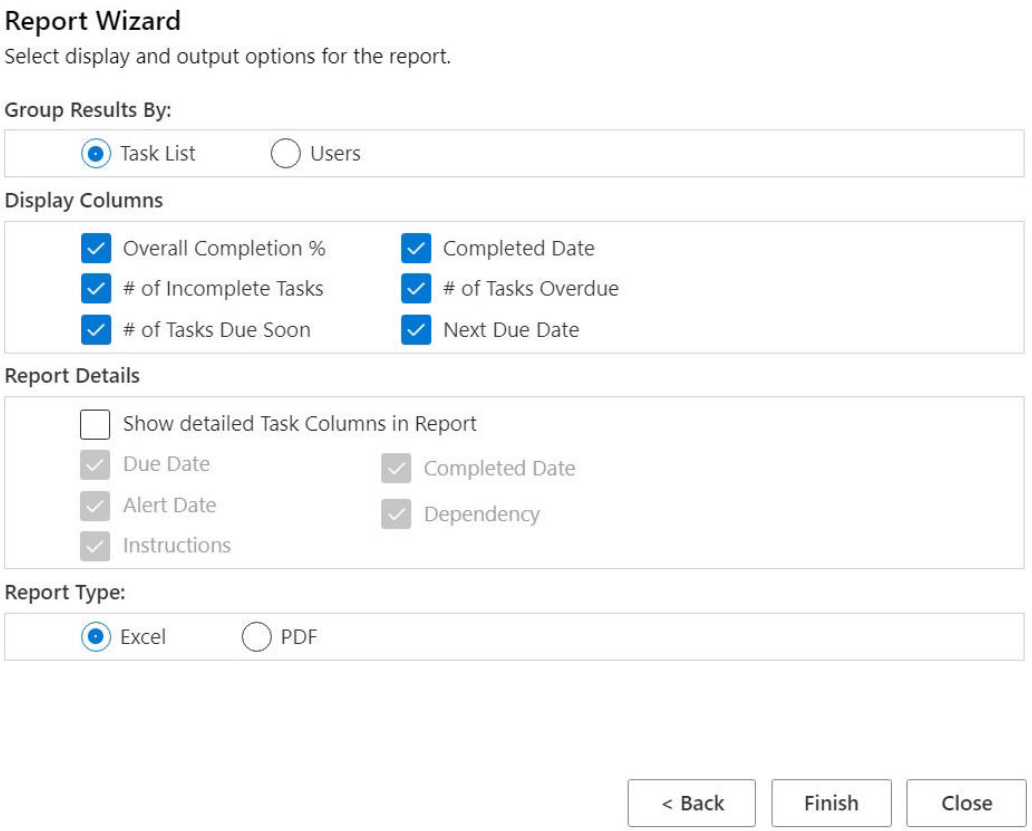
  Select specific columns by first clearing the **Show Details Task Columns in Report** option and then clearing the individual report options that you do not require.

- **Report Type**—Output type for the report: Excel or PDF.

  Selecting the report type as Excel downloads the report in an HTML file.

> **Note**
>
> The support for creating PDF task list reports will be made available in a future release.

In the following default example, results are groups by Task List, all display columns are selected, all report details are selected, and the report output type is Excel.



8. Click **Finish**, and then click **Close**.

   The report is created in the selected report type.

12

Planning Approvals

Related Topics

- About Planning Approvals
  Planning approvals is the submission, review, and approval process of a planning unit.
- Viewing Planning Units
  You can view the list of planning units in the Manage Approvals panel.
- Finding Planning Units
  In the Manage Approval panel, you can locate planning units easily by searching or by applying a filter to the list of planning units. You can use an auto filter or select members as filter criteria.
- Changing Status of Planning Units
  You can change the status of one or more planning units at a time.
- Viewing Promotional Path for Planning Units
  You can view the promotional path of a planning unit in graphical form.
- Adding Annotations for Planning Units
  You can add or view comments about data in a planning unit that is started. Annotations can vary by combinations of scenario, version, and entity members
- Setting up an Out of Office Assistant
  You can set up the Out of Office Assistant to reassign planning units that arrive while you are out of the office.

About Planning Approvals

Planning approvals is the submission, review, and approval process of a planning unit.

Applies to: Planning

The approvals process structures the workflow and formalize authority levels as you prepare budget data.

Approvals enable you to:

- Review and approve planning data
- Track the progress of the budget
- Identify issues in the review process
- View reviewers' remarks through annotations
- View the promotional path of planning data
- Ensure that the plan data meets data validation rules

Viewing Planning Units

You can view the list of planning units in the Manage Approvals panel.

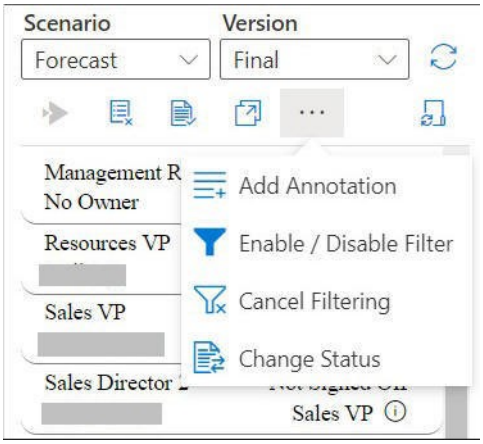
To open the Manage Approvals panel and view the planning units:

1. Open the appropriate form.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form**.
3. Select **Workflow**, and then select **Approvals** to open the **Manage Approvals** panel. Alternatively, you can also click the **Actions** menu in the Smart View Home panel and select **Approvals**.

Figure 12-1 Approvals panel

4. In the **Manage Approvals** panel, select a **Scenario** and **Version**.
5. Click to display the list of planning units to which you have access.
6. Select the planning unit that you want to view or work on.
   If the list is too long to locate the planning unit easily, you can search or apply filters to the list as described in Finding Planning Units.
7. To view details for the selected planning unit, click **Planning Unit Details**.
   - In the **Approval Status** tab, you can view a history of the process status, owner, actions taken, and the dates and times the status changed.
   - In the **Annotations** tab, you can view any comments that were entered for the planning unit. See Adding Annotations for Planning Units.
8. Click **Close** to return to the Manage Approvals panel.
9. Perform actions on the planning units using the toolbar on top of the list. Click the ellipsis button to see more actions.

Figure 12-2 Toolbar to perform various actions on planning units



- — Exclude planning units from the approval process and remove them from the list.
- — Validate planning units to run any data validation rules set by administrators.
- — View promotional path for planning units.
- — Add annotations or comments for planning units.
- — Filter the list of planning units using different criteria.
- — Cancel any filters applied on the planning units list.
- — Change the status of planning units.
- — Set actions to manage planning units when you are out of office.

10. Click to close the Manage Approvals panel and return to the Smart View Home panel. If you opened the Manage Approvals panel from the **Actions** menu, then use the **Close** button, which appears next to the **Planning Unit Details** button, to close the Manage Approvals panel and return to the Smart View Home panel.

Finding Planning Units

In the Manage Approval panel, you can locate planning units easily by searching or by applying a filter to the list of planning units. You can use an auto filter or select members as filter criteria.

To filter the list of planning units:

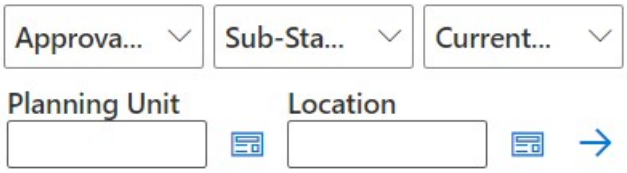
1. Open the appropriate form.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form**.
3. Select **Workflow**, and then select **Approvals** to open the **Manage Approvals** panel.

Alternatively, you can also click the **Actions** menu in the Smart View Home panel and select **Approvals**.

4. In the **Manage Approvals** panel, select a **Scenario** and **Version**.
5. Click to display the list of planning units to which you have access.
6. Click to enable filtering.

   If this option is not seen in the toolbar, click the ellipses menu to locate the option.

   The filter options, which contains filtering tools, are displayed just above the planning unit list; for example:



7. Perform one of the following procedures:
   - **Search**

     To search for a specific planning unit, enter its name in the **Planning Unit** field.
   - **Use the Auto filters**

     From the **Approvals Status**, **Sub-Status**, and **Current Owner** lists, select the required filter values.
   - **Filter by member selection**

     a. Click , next to the **Planning Units** field or the **Location** field, and then select members for the planning unit list or location list.

     b. In the **Member Selector** dialog, select the required members and click **Done**. You can further filter on planning units or location by making selections in **Approvals Status**, **Sub-Status**, and **Current Owner** lists.
8. Click to apply the filters.

   The list of planning units is reloaded with the filtered units.

> **Note**
>
> To cancel the applied filters, click .

Changing Status of Planning Units

You can change the status of one or more planning units at a time.

To view or change the status of a planning unit:

1. Open the appropriate form.

2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form**.
3. Select **Workflow**, and then select **Approvals** to open the **Manage Approvals** panel.

   Alternatively, you can also click the **Actions** menu in the Smart View Home panel and select **Approvals**.
4. In the **Manage Approvals** panel, select a **Scenario** and **Version**.
5. Click  to display the list of planning units to which you have access.
6. Select a planning unit for which you want to change the status.
7. Click the ellipsis button, and then select **Change Status**,  .

   > **Note**
   >
   > If you change the status of a parent entity, all of its children change, too, unless they were excluded during the First Pass state or were approved.

8. In the **Change Status** dialog, select an action and the next owner for the planning unit.
9. **Optional:** In the **Enter Annotation** field, enter an annotation for the planning unit.

   This annotation is seen in the **Planning Unit Details** section under the **Annotations** tab.
10. Click **Submit**.

    The status is updated and you can see it in the **Planning Unit Details** section under the **Approvals Status** tab.
11. **Optional:** To validate the changed planning unit, click  . You can validate only one planning unit at a time.

Viewing Promotional Path for Planning Units

You can view the promotional path of a planning unit in graphical form.

Planning units move from person to person and department to department based on the following:

- The owners and reviewers assigned to the planning unit
- The planning unit place in the hierarchy

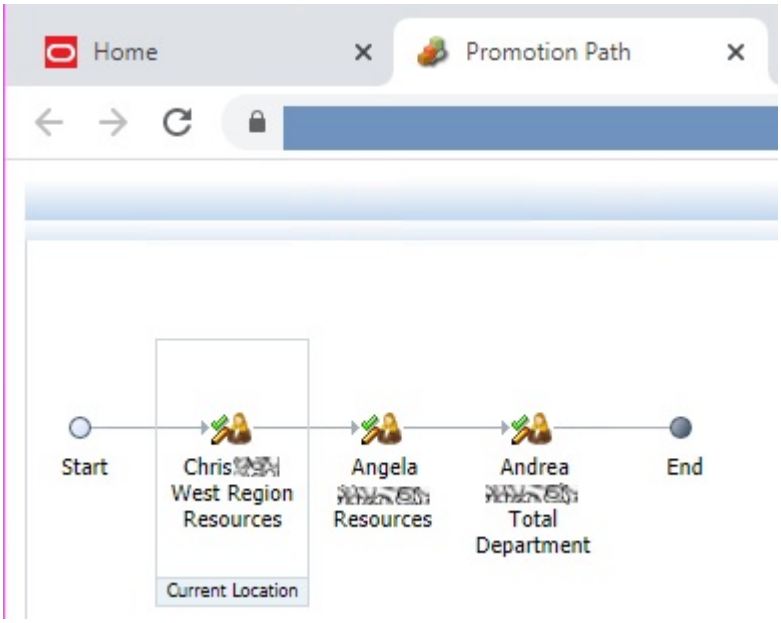
To view the promotional path of a planning unit in graphical form:

1. Open the appropriate form.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form**.
3. Select **Workflow**, and then select **Approvals** to open the **Manage Approvals** panel.

   Alternatively, you can also click the **Actions** menu in the Smart View Home panel and select **Approvals**.
4. In the **Manage Approvals** panel, select a **Scenario** and **Version**.
5. Click  to display the list of planning units to which you have access.

6. Select a planning unit for which you want to view the promotional path.
7. Click .

   The promotional path is displayed in graphical format. In Chrome, the promotional path is displayed in a separate tab; for example:



Adding Annotations for Planning Units

You can add or view comments about data in a planning unit that is started. Annotations can vary by combinations of scenario, version, and entity members

To add a planning unit annotation:

1. Open the appropriate form.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form**.
3. Select **Workflow**, and then select **Approvals** to open the **Manage Approvals** panel.

   Alternatively, you can also click the **Actions** menu in the Smart View Home panel and select **Approvals**.
4. In the **Manage Approvals** panel, select a **Scenario** and **Version**.
5. Click to display the list of planning units to which you have access.
6. Select the planning unit for which you want to add an annotation.
7. **Optional:** To view existing annotations for the selected planning unit, click **Planning Unit Details** and then click the **Annotations** tab.
8. Click .

   If this option is not seen in the toolbar, click the ellipses menu to locate the option.
9. In **Approvals - Add Annotation**, enter a title and annotations.

In the **Enter Annotation** text box, you can enter up to 1500 characters. On multibyte systems, Oracle recommends limiting annotations to 750 characters. You can enter URLs and links along with text.

10. Click **Submit**.

Setting up an Out of Office Assistant

You can set up the Out of Office Assistant to reassign planning units that arrive while you are out of the office.

With the Out of Office Assistant, you can set the following actions that can be automatically taken on planning units assigned to you while you are away.

- Promote: The planning units are promoted to the next owner or level in the promotional path.
- Reject: The planning units are rejected and returned to the previous owner.
- Delegate: The planning units are delegated to a user of your choice.
- Submit: The planning units are submitted.

To set up the Out of Office Assistant:

1. Open the appropriate form.
2. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Form**.
3. Select **Workflow**, and then select **Approvals** to open the **Manage Approvals** panel.

   Alternatively, you can also click the **Actions** menu in the Smart View Home panel and select **Approvals**.

4. In the **Manage Approvals** panel, click **Out of Office Assistant**,  .
5. In the **Out of Office Assistant** dialog, select the **I am currently out of office** check box.
6. Select an action and the next owner to manage the planning units that arrive while you are out of the office.

   For example, if you select the **Delegate** option, select the owner to whom the planning units must be delegated from the **Select Next Owner** list.

7. **Optional:** In the **Enter Annotation** field, enter an annotation for the planning units.

   This annotation is seen in the **Planning Unit Details** section under the **Annotations** tab.

8. Click **Submit**.

13

Functions

Related Topics

- About Functions
  You can use supported functions in Smart View to retrieve and send data in specific cells in Google Sheets sheet.
- Creating Functions
  You can create functions manually or by using the Function Builder.
- Function Descriptions
  Smart View supports the functions listed here. Click a function name to access description, syntax, and examples.
- Running Functions
  You can run most Smart View functions automatically using **Refresh** commands.
- Specifying a Label for Missing Data in Functions
  Set a value for missing data in user-defined functions, such as HsGetValue or HsSetValue, using the **Missing Label** option in the **Options** dialog.
- Updating Unresolved Functions
  You can update the functions that remain unresolved after a sheet refresh.
- Common Function Error Codes
  These are some common error codes displayed in functions.

About Functions

You can use supported functions in Smart View to retrieve and send data in specific cells in Google Sheets sheet.

If you are familiar with the contents of your database, you can use Smart View functions to perform operations on specific data in Google Sheets cells.

In Smart View, you can use the Function Builder panel to add functions to cells on a sheet, or enter functions manually into cells on the sheet, providing a connection name and the POV, and then retrieve data upon refresh.

The following functions are supported in Smart View.

Table 13-1 Smart View Functions and Supported Providers

Function	Description	Supported Providers
HsGetValue	Used to create static reports which can then be formatted as required by retrieving application data into specific cells.	• Planning • Planning Modules • Financial Consolidation and Close • Tax Reporting

Table 13-1 (Cont.) Smart View Functions and Supported Providers

Function	Description	Supported Providers
HsSetValue	Used to send a data value from a worksheet to a data source based on selected members of dimensions.	• Planning • Planning Modules • Financial Consolidation and Close • Tax Reporting
HsAlias	Used to display the alias of the specified dimension member.	• Planning • Planning Modules • Financial Consolidation and Close • Tax Reporting
HsGetSheetInfo	Used to retrieves detailed information about the current sheet, one sheet property at a time.	• Planning • Planning Modules • Financial Consolidation and Close • Tax Reporting

Guidelines for Using Functions

Consider the following guidelines while using functions in Smart View:

- Functions are validated only upon refresh.
- If any function is invalid, then all functions on the sheet, including valid functions, will display #Error. For example, an invalid dimension or member name will result in an invalid function. Review functions for errors and correct them, and then refresh the sheet again.
- If a function sheet contains functions from different data source connections, then refreshing the sheet refreshes all the functions from all the connected data sources.
- On a Functions-only sheet, ad hoc analysis cannot be performed and multiple grids cannot be inserted.

Creating Functions

You can create functions manually or by using the Function Builder.

Related Topics:

- Creating Functions in the Function Builder
- Creating Functions Manually

Creating Functions in the Function Builder

In the Function Builder, you select a function and specify the connection and members that you want the function to use.

The Function Builder then creates the function using the proper syntax and enters it into the selected cell. You can edit these functions.

The selections available to you in a given Function Builder field are limited by your selections in other fields of the Function Builder. For example, only the connections supported by the

selected function are displayed, and only the dimensions supported by the function you select are displayed.

A cell reference can be selected for each function argument. Type-in functionality is available for each argument.

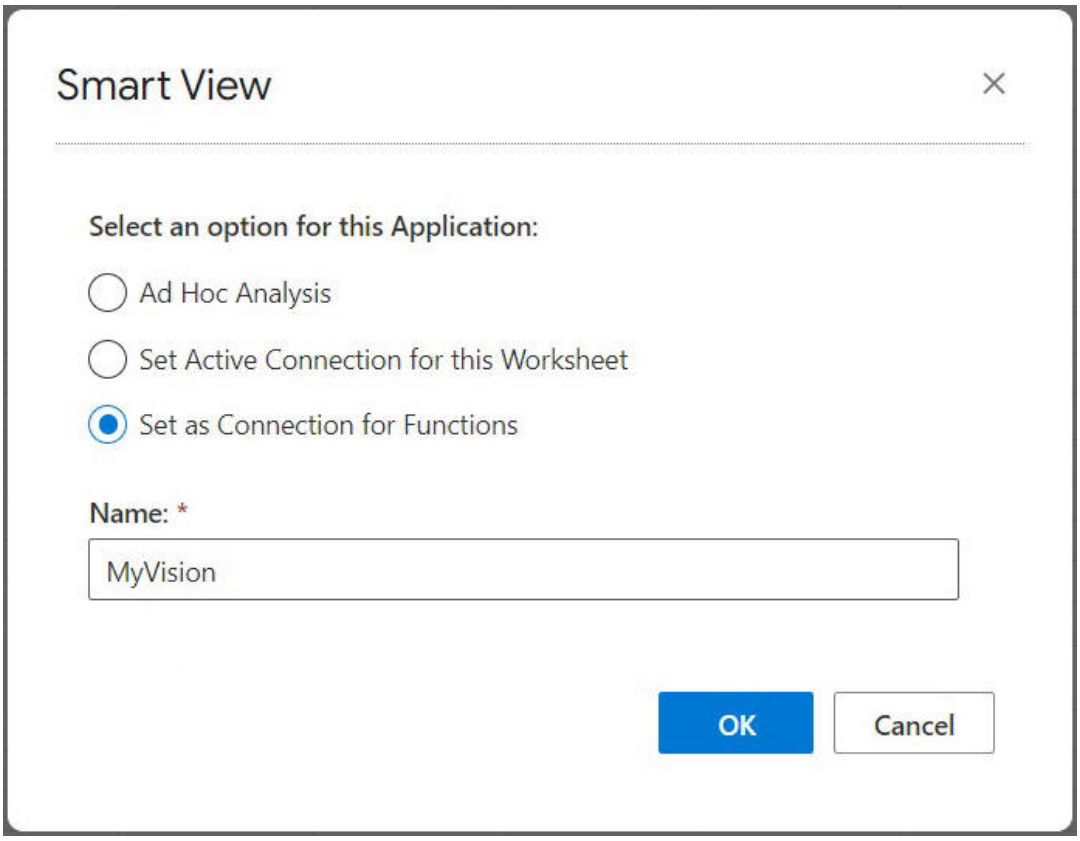
To create functions using the Function Builder:

1. Connect to a data source.
2. Select a cube and, in the connection dialog that displays, select **Set as Connection for Functions**, then type a name for the connection, and then click **OK**.

   In the below example, the connection name is **MyVision**.

> **Note**
>
> You must create a connection name for each *new* spreadsheet.
>
> The connection name is saved with the spreadsheet. When you reopen the saved spreadsheet, you will not be prompted to enter a connection name.

Figure 13-1 Connection Option and Name

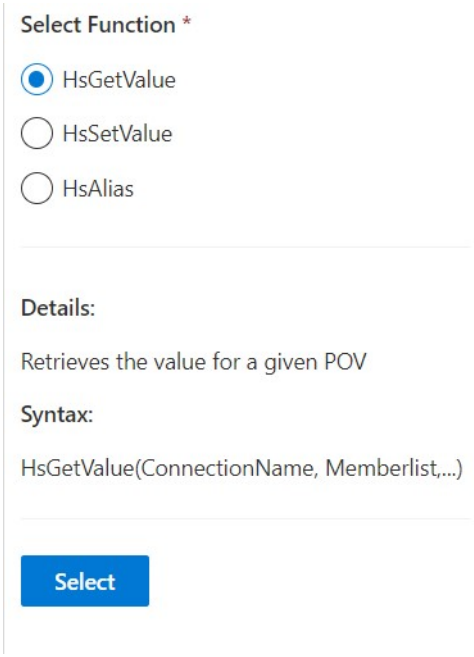


3. In the sheet, select the cell in to which you want to enter the function.
4. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Build Function** under **Functions**.
5. In the **Function Builder** panel, choose a function from the list and then click **Select**.

> **Note**
>
> Currently, Smart View supports these functions:
>
> - HsGetValue
> - HsSetValue
> - HsAlias
> - HsGetSheetInfo
>
> For detailed explanation of these functions, see Function Descriptions.

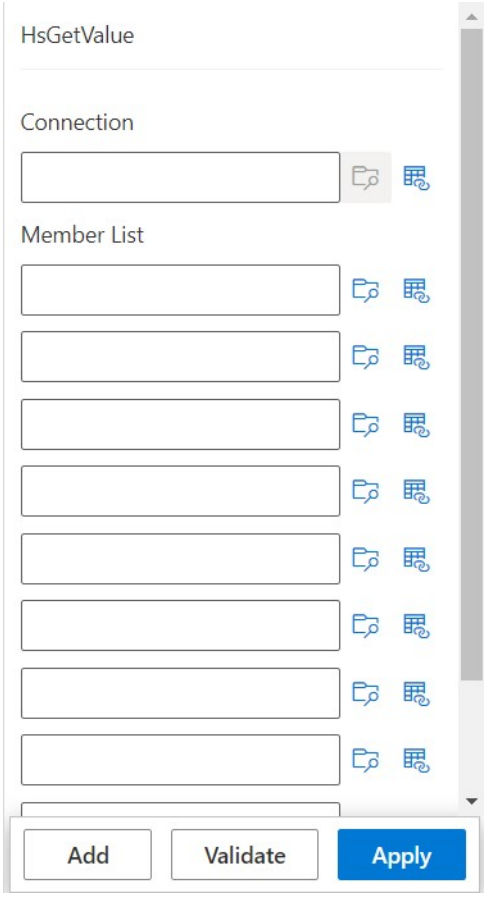
In the below example, the HsGetValue function is selected.

Figure 13-2 Function Builder Panel, Supported Functions List



After clicking **Select**, the selected function's panel is displayed in the **Function Builder**. The following example displays the fields for HsGetValue in the Function Builder. These fields vary based on the selected function.

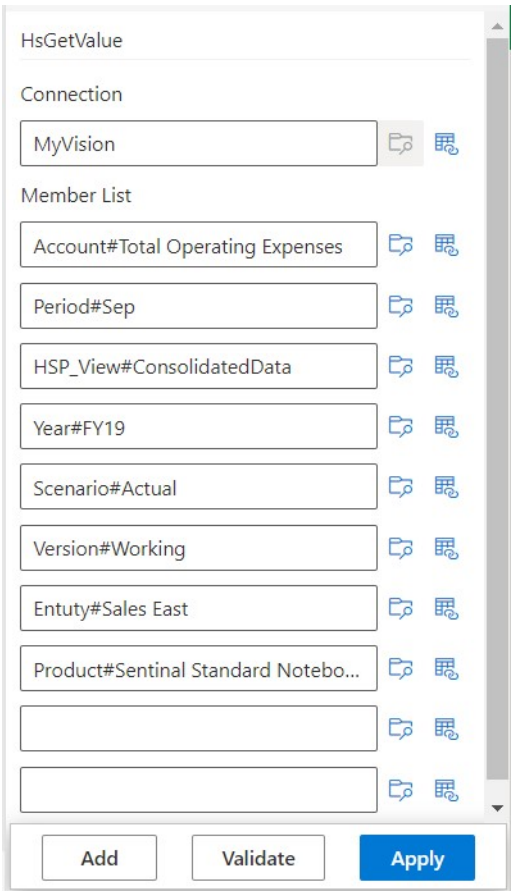
Figure 13-3 Function Builder Panel, Member List



6. **For HsGetValue:**
   a. In **Connection**, enter the connection name you specified in step 2.
   b. In **Member List**, add an argument for each dimension in the cube using any of the following methods:
      - Click the **Select Member** button, , next to the argument text box, and in the **Member Selector**, select a dimension and member. Repeat for each dimension in the cube.
      - Enter the argument manually by typing the dimension and member pair in the text boxes using the format: dimension#member. For example, Year#Qtr1 or Year#Jan. Repeat for each dimension in the cube.
      - To use cell references, follow the procedure in Using Cell References.

      The following example displays a completed Member List for the HsGetValue function.

Figure 13-4 Function Builder panel for HsGetValue based on the Planning Vision Sample Database



c. **Optional:** To add more rows in the **Member List**, click **Add**.

7. **For HsSetValue:**
   a. In **Value**, enter the value that you want to set.
   b. In **Connection**, enter the connection name you specified in step 2.
   c. In **Member List**, add an argument for each dimension in the cube.
   d. **Optional:** To add more rows in the **Member List**, click **Add**.
8. **For HsAlias:**
   a. In **Connection**, enter the connection name you specified in step 2.
   b. Enter the values in the **Member Name**, **Destination Alias**, **Source Alias**, and **Distinct Name** fields.
9. **For HsGetSheetInfo:** Select a property from the **Sheet Property** list.
10. Click **Validate** and correct any errors.

    Errors are noted in the **Function Builder** panel, next to the problem areas.

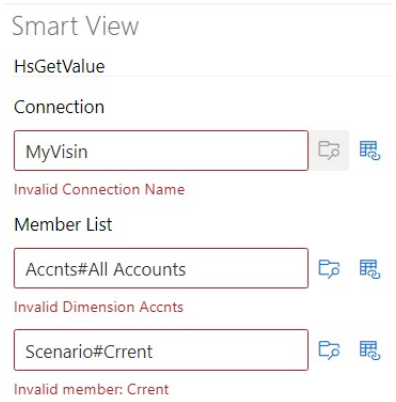
    Some of the errors that you may see are:

    - Connection offline or invalid
    - Invalid selection
    - Member name is invalid or not matching selected alias

- Dimension name is invalid or not matching selected alias
- Incomplete Dimension#Member combination
- Generic "Error" in cases of missing quotation marks or other minor syntax errors

For example, Function Builder Validation Errors shows simple spelling errors that resulted in an invalid Connection name, an invalid dimension name in one argument, and an invalid member name in another argument.

Figure 13-5 Function Builder Validation Errors



> **Note**
>
> Validate only works with dimension#member combinations that are hand-typed into the text boxes and does not apply to those dimension#members that are added using the **Member Selector** dialog. If all dimension#member combinations are entered using the **Member Selector**, then no validation messages regarding those combinations are displayed. You may still see an error regarding the connection name if it is misspelled.
>
> - If the connection name is correct and all the other dimension#member combinations were added using the **Member Selector** dialog, then a *"Validation successful"* message will not display.
> - If the connection name is correct and one or more dimension#member combinations were hand-typed correctly, then a *"Validation successful"* message will display.

11. Resolve the errors and click **Validate** again.

    When the function validates correctly, a message appears stating that validation is successful.

12. Click **Apply**.
13. To execute the function, follow the procedure in Running Functions.

Using Cell References

You can enter references to single cells for connection, label, data/text, or variable arguments.

To use cell references:

1. Follow the steps in Creating Functions in the Function Builder to open the **Function Builder** panel.
2. In the **Function Builder** panel, for each argument in the selected function, select the cell in the sheet to reference, and then click the **Cell Reference** button, .

   You can also hand type the cell reference using the following syntax:

   ""&<column letter><row number>&""

   For example:

   ""&A3&""

   Notes:

   - If the member name that you selected in this step is displayed as dimension#member in the grid, then the argument selection is complete. For example, if the member is displayed in the grid as Year#Qtr 2 in cell A3, then ""&A3&"" is complete.

     If only the member name is displayed in the grid, then you must manually enter the dimension name followed by # between the first two sets of double quotation marks. For example, if the member is displayed as Qtr2 in cell A3, then you must enter Year# between the quotation marks: "Year#"&A3&""
   - If an argument text field contains text before you select a reference cell, the cell reference text is appended to this text. Therefore, delete any unwanted text in the field before selecting a cell for reference.
   - If a date cell is directly referred as input, then convert the input to the proper text format using a Text function as follows; in this example, cell B3 contains a proper date:

     =HsSetValue(TEXT(B3,"dd/mm/yyyy"),"ConnectionName", "dim#member"…)
3. When you have finished entering cell references, click **Apply**.
4. Refresh the sheet.

Creating Functions Manually

You can create functions manually in Smart View.

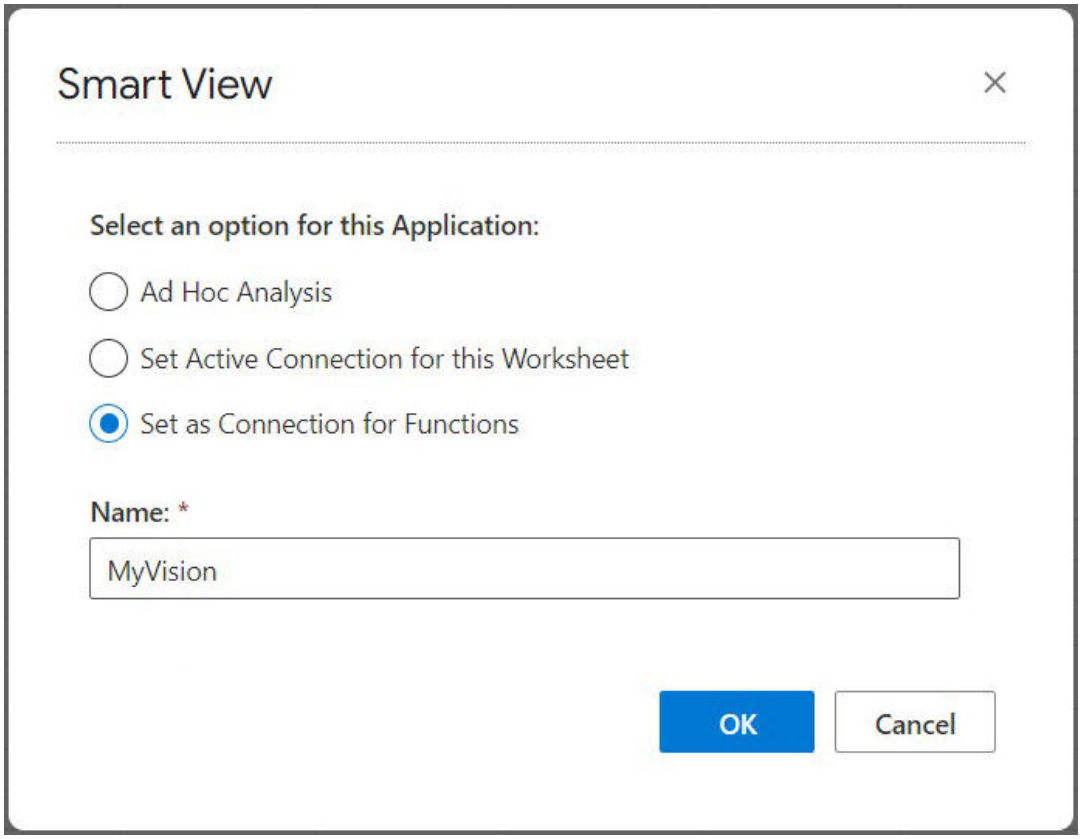
To create a function manually in Smart View:

1. Connect to a data source.
2. Select a cube and, in the connection dialog that displays, select **Set as Connection for Functions**, and then type a name for the connection, and then click **OK**.

   In the below example, the connection name is **MyVision**.

> **Note**
>
> You must create a connection name for each *new* spreadsheet.
>
> The connection name is saved with the spreadsheet. When you reopen the saved spreadsheet, you will not be prompted to enter a connection name.

Figure 13-6 Connection Option and Name



3. In the sheet, click the cell in which you want to enter the function.
4. Enter an equals sign and then type the function name; for example:

   =HsSetValue

5. Enter parameters for the function according to rules described in Syntax Guidelines, using the information specific to each function in Function Descriptions.
6. To add functions to other cells in the sheet, repeat steps 4 through 6
7. To run the functions, refresh the sheet.

   Functions are validated only upon refresh.

   If any function is invalid, then all functions on the sheet, including valid functions, will display #Error. For example, an invalid dimension or member name will result in an invalid function.

   Review the functions for errors and refresh the sheet again.

Syntax Guidelines

Use the following guidelines to enter parameters for functions.

See Function Descriptions for the syntax of individual functions.

- The connection parameter is the user-defined name for a connection.

  The connection parameter must precede the POV.

- The POV is composed of *dimension#member* pairs, for example:

  Entity#Connecticut

- Parent-child relationships are designated by a period, (.); for example:

  Entity#UnitedStates.Maine

- The connection and each POV *dimension#member* pair can be split into separate function parameters, each parameter enclosed in quotation marks, ("), and separated by a comma, (,); for example:

  "MyVision","Entity#UnitedStates","Account#Sales"

  The use of semicolons (;) as the dimension#member parameter separator is not supported.

- If a POV dimension#member is not specified, then Smart View adds the top level member of that dimension to the function. For example, in the following HsGetValue function, there is no Period dimension and member specified:

  =HsGetValue("MyVision","Account#Amount","Years#2017","Scenario#Annual,
  Contract","Version#Final","Entity#AR02-
  Argentina-,IS_Adjustments","Package#Depreciation","Currency#Local Currency")

  In this case, Smart View will add the top-level Period member, which is Period, to the function, Period#Period. For example:

  =HsGetValue("MyVision","Account#Amount","Period#Period","Years#2017","Scenario#Annual
  Contract","Version#Final","Entity#AR02-Argentina-
  IS_Adjustments","Package#Depreciation","Currency#Local Currency")

- Do not mix a dimension name and its aliases in functions. However, for members, you can either use the member name or its alias from the selected alias table.
- Enclose text values in quotation marks, (") when using them in HsSetValue function. For example:

  HsSetValue("Enter Some Text", "MyVision","Account#7110:
  Advertising","Period#Jun","HSP_View#BaseData","Year#FY16","Scenario#Plan","Version#Commentary","Enti
  ty#International Sales","Product#No Product")

Creating Functions from Multiple Connections

You can create a function sheet by adding functions from different cubes and data sources.

For adding functions from multiple data source connections, you can connect to the required data sources before you start creating the function sheet or even during the process.

To add functions from multiple data source connection on the same sheet:

1. Open a new sheet and connect to a data source.
2. Select a cube and, in the connection dialog that displays, select **Set as Connection for Functions**, then type a name for the connection, and then click **OK**.
3. In the sheet, select the cell in to which you want to enter the function.

4. Add a function either by creating it manually or by using the Function Builder.
   See Creating Functions Manually and Creating Functions in the Function Builder.
5. To add a function from another cube on the same sheet, repeat the above steps from step 2 to step 5.
6. To add a function from another data source on the same sheet:
   a. Connect to the other data source, if not already connected. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Connect** under **Start**.
      For more information, see Connecting to Data Sources.
   b. Once connected, set it as an active connection in the sheet. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Active Connections** under **Start**.
      For more information, see Setting Active Connection for a Sheet.
   c. In the sheet, select the cell in to which you want to enter the function.
   d. Add a function either by creating it manually or by using the Function Builder.

   > **Note**
   >
   > In case of multiple-grid ad hoc sheets having grids from multiple connections, the HsGetSheetInfo function retrieves the sheet properties only for the first connection, irrespective of the connection that is currently active on the sheet. This is a limitation.

7. To run the functions and view the values, refresh the sheet.
   All functions from all the connected data sources are refreshed at once.

   Review the functions for errors and refresh the sheet again.

Function Descriptions

Smart View supports the functions listed here. Click a function name to access description, syntax, and examples.

- HsGetValue: Retrieves data from the data source for selected dimension members of a Point of View.
- HsSetValue: Sends a value to the data source for selected dimension members of a Point of View.
- HsAlias: Displays the alias of the specified dimension member.
- HsGetSheetInfo: Retrieves detailed information about the current sheet, one property at a time.

HsGetValue

Applies to: Planning, Planning Modules, Financial Consolidation and Close, Tax Reporting

Description

HsGetValue retrieves data from the data source for selected dimension members of a Point of View (POV).

When HsGetValue retrieves no data, the value specified for the **Missing/No Data Label** replacement option is used (see Data Options).

When HsGetValue and HsSetValue are on the same sheet, and you select **Refresh**, only HsGetValue is called. If you select **Submit**, HsSetValue is called. If HsSetValue returns successfully, then you must then select **Refresh** to call HsGetValue.

HsGetValue supports the use of one attribute dimension and member with Planning, Planning Modules, Financial Consolidation and Close, Tax Reporting data sources (see Example with Attribute).

Syntax

HsGetValue("*ConnectionName*","*POV*")

For detailed syntax information, see Syntax Guidelines.

Example 13-1 Example without Attribute

In this example, HsGetValue returns the value from the Vision application, Plan1 cube (represented by the MyVision connection name), for the specified POV.

```
=HsGetValue("MyVision","Account#Amount","Period#Jan","Years#2017","Scenario#Annual
Contract","Version#Final","Entity#AR02-Argentina-IS_Adjustments","Package#Depreciation","Currency#Local
Currency")
```

Example 13-2 Example with Attribute

In this example, HsGetValue returns the value from the Vision application, Plan1 cube (represented by the MyVision connection name), and the POV includes an attribute dimension and member, Entity_Regions#NA_Reg.

> **Note**
>
> HsGetValue supports only one attribute dimension and member per function.

```
=HsGetValue("MyVision","Account#Amount","Period#Jan","Years#2017","Scenario#Annual
Contract","Version#Final","Entity#AR02-Argentina-IS_Adjustments","Package#Depreciation","Currency#Local
Currency","Entity_Regions#NA_Reg")
```

HsSetValue

Applies to: Planning, Planning Modules, Financial Consolidation and Close, Tax Reporting

Description

HsSetValue sends a data value from a worksheet to the data source for selected dimension members of a Point of View (POV). Attribute dimensions and members are not supported in HsSetValue.

To send data to a data source, you must have the appropriate load rule and have write access for the data source.

HsSetValue can also be used to send enumerated data types, such as Smart List, text, and dates.

> **Note**
>
> HsSetValue function should not be used to set value for a data cell containing supporting details. If used, the HsSetValue function cannot identify if a cell contains supporting details or not, and proceeds to update and submit the cell value with the new function-fetched value. This leads to an incorrect behavior. The original value continues to appear in the Supporting Details dialog box for the cell. So it is recommended not to use HsSetValue function to set value in cells with supporting details.

Syntax

HsSetValue (value,"*ConnectionName*","*POV*")

For detailed syntax information, see Syntax Guidelines.

Example 13-3 Basic Example

In this example, HsSetValue sends the value 123 to the Vision application (represented by the MyVision connection name).

```
=HSSETVALUE(123, "MyVision","Account#7110: Advertising","Period#x---------
x","HSP_View#BaseData","Year#FY19","Scenario#Forecast","Version#Driver","Entity#International
Sales","Product#No Product")
```

Example 13-4 Example with Text

Quotation marks are required when text is used for the value parameter in HsSetValue.

```
HsSetValue("Enter Some Text", "MyVision","Account#7110:
Advertising","Period#Jun","HSP_View#BaseData","Year#FY16","Scenario#Plan","Version#Commentary","Entity#In
ternational Sales","Product#No Product")
```

HsAlias

Applies to: Planning, Planning Modules, Financial Consolidation and Close, Tax Reporting

Description

HsAlias displays the alias of the specified dimension member.

> **Note**
>
> Function nesting is not supported for HsAlias. That is, HsAlias output cannot be referenced in another HsAlias function.

Syntax

HsAlias("PrivateConnectionName","Dimension#Member", "OutputAliasTable", "MemberNameFromAliasTable", "FlagToReturnDistinctName")

> **Note**
>
> For detailed syntax information, see Syntax Guidelines.

Example 13-5 Basic Example

HsAlias("MyVision","Scenario#Actual", "German", "Default", "True")

Notes

- The connection and Dimension#Member parameters are required.
- The OutputAliasTable parameter is optional. If OutputAliasTable is empty, then the connection level alias will be used for OutputAliasTable.
- It is optional to specify which alias table the member is from. If MemberNameFromAliasTable is empty, then the original member name from the outline will be used.
- If the member name is not found in the alias table specified in MemberNameFromAliasTable, then the original member name from the outline will be used.
- The HsActive keyword within the HsAlias function can only be used on a sheet with an ad hoc grid.
- Copy and Paste either from Smart View or Google Sheets is not supported. Only static text will be pasted.
- The Boolean argument, FlagToReturnDistinctName, determines if the alias output is a short name or fully qualified name. The default is False.

HsGetSheetInfo

Applies to: Planning, Planning Modules, Financial Consolidation and Close, Tax Reporting

Description

HsGetSheetInfo retrieves information about the current sheet, one property at a time. The following sheet properties can be retrieved and displayed in the sheet.

Table 13-2 HsGetSheetInfo Details

String Equivalent	Sheet Information
Last Retrieved	The date and time that the last refresh was performed on the sheet
Sheet Type	Form, Ad hoc, Multiple grid ad hoc, Function, or Smart Form
Server	The server to which the sheet is connected

Table 13-2 (Cont.) HsGetSheetInfo Details

String Equivalent	Sheet Information
Application	The application to which the sheet is connected
Cube	The cube to which the sheet is connected
URL	The URL to which the sheet is connected
Alias Table	The current alias table
Provider	The data source type to which the sheet is connected

Display of the following sheet properties is not supported:

- User
- Friendly Name
- Description
- Provider URL

Syntax

```
HsGetSheetInfo("<string equivalent>")
```

For detailed syntax information, see Syntax Guidelines.

Example 13-6 Basic Example

In this example, HsGetSheetInfo tells you whether the sheet contains a Form, Ad hoc, Multiple grid ad hoc, Function, or Smart Form.

```
HsGetSheetInfo("Sheet Type")
```

Notes

- If you enter an invalid sheet property, the function returns a "Not Applicable" value.
- In a multiple-grid ad hoc sheet, HsGetSheetInfo always displays information related to the first inserted grid. If you use the Last Retrieved property to find the date and time when the last refresh was performed on the sheet, the HsGetSheetInfo function displays the time when the first grid was retrieved, even though the second grid was the one that was last retrieved on the sheet. However, you can launch the Sheet Information dialog to see the correct last retrieved time or refresh the sheet one more time to get the consistent time.
- In case of multiple-grid ad hoc sheets having grids from multiple connections, the HsGetSheetInfo function retrieves sheet property only for the first connection, irrespective of the connection that is currently active on the sheet.
  For example, if you have two ad hoc grids from two different connections on a multiple-grid ad hoc sheet and you use the URL property, the HsGetSheetInfo function displays the connection URL only for the grid that was first connected on the sheet.
- With cell styles enabled for an ad hoc grid, if you change a sheet property that you have added using the HsGetSheetInfo function, the function cell appears dirty. For example, if you change the URL sheet property added on the sheet to Cube, the function cell refreshes to display the cube name, but it appears dirty. In such case, click Refresh to remove the dirty background color.

Running Functions

You can run most Smart View functions automatically using **Refresh** commands.

For HsGetValue, use the **Submit** command.

To run functions and retrieve values:

1. Connect to a data source.
2. Open the sheet that contains the functions you want to run.
3. Do one of the following:
   - For HsSetValue, click **Submit**.
   - To run functions and update all the sheets in the spreadsheet, click **Refresh**.

Specifying a Label for Missing Data in Functions

Set a value for missing data in user-defined functions, such as HsGetValue or HsSetValue, using the **Missing Label** option in the **Options** dialog.

You can enter a value in the **Missing Label** field before performing any operations on the sheet, such as specifying a blank sheet for ad hoc analysis or for functions. This option is available immediately after connection when you open **Options**. You can also specify a value for the **Missing Label** option at any time.

To set the a value for the **Missing Label** option:

1. Connect to a data source.
2. **Optional:** Open a sheet that already contains functions.
3. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Options**.
4. In the **Advanced** tab of the **Options** dialog, under **User-Defined Functions**, enter a value in the **Missing Label** text box.

   The default value is #Missing; however, you may specify a custom value and include special characters or capitalization, as you require.
5. Close the panel or, optionally, save this value for future use by clicking the **Save Current Options as Default** link, and then close the panel.
6. Proceed by adding functions to the sheet manually or using the Function Builder; or, proceed with operations in the sheet containing functions that you opened earlier.

Updating Unresolved Functions

You can update the functions that remain unresolved after a sheet refresh.

Google Sheets typically supports refreshing of up to 1500 functions in a spreadsheet. While refreshing functions in a Smart View sheet, some functions may remain unresolved. This may happen if the sheet contains a large number of functions or if the refresh operation crosses Google Sheets' timeout threshold of 30 seconds. Cells with unresolved functions display the #Error code.

Instead of refreshing the whole sheet again, you can use the **Update Unresolved Functions** option to refresh only the cells with #Error and resolve the functions correctly.

To update unresolved functions:

1. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Functions**.
2. Select **Update Unresolved Functions**.
   The cells with #Error are refreshed to resolve the function and display the values.

Common Function Error Codes

These are some common error codes displayed in functions.

#NO CONNECTION - You are not connected or logged on to a data source.

#INVALID - Invalid metadata. Invalid cells that contain a value display the value as zero.

#LOCKED - The cell is locked.

#NO ACCESS - You do not have access to this cell.

#NO DATA - The cell contains NoData. You can select to display zeros instead of NoData. Cells use the Replacement text that you specify in the Options dialog.

#INVALID INPUT - The HsSetValue data value is not valid, for example, a text string.

#READ ONLY - This is for the HsSetValue function only when the cell is read-only.

#NEEDS REFRESH - Data needs to be refreshed.

#INVALID DIMENSION - An invalid dimension is specified in the function.

#INVALID MEMBER - An invalid dimension member name is specified in the function.

#NAME - Google Sheets does not recognize text in a formula. When you forward a sheet that contains functions to a user who does not have Smart View, they can view the same data as the functions on the sheet. When the user edits or refreshes the function, it changes to #Name.

14

Free-Form Mode

Related Topics

- About Free-Form Mode
  In ad hoc analysis, if you are familiar with the dimensions and members of your database, you can use *free-form mode* by typing dimension and member names directly into cells.
- Guidelines for Working in Free-Form Mode
  Consider these guidelines when working in free-form mode.
- Creating Free-Form Grids
  You can create a free-form grid by typing dimension and member names directly into cells in a sheet.
- Actions that may cause Unexpected Behavior
  Smart View tries to preserve all comments, formulas, and customized report layouts.

About Free-Form Mode

In ad hoc analysis, if you are familiar with the dimensions and members of your database, you can use *free-form mode* by typing dimension and member names directly into cells.

You can still use the POV, member selection, and other ad hoc operations in free-form grids.

Table 14-1 Smart View Grid Components

Grid Component	Description
Row Dimension	A dimension or member placed down one column across one or more rows in a worksheet
Column Dimension	A dimension or member placed on a row across one or more columns in a worksheet
Comments	Text added by the user
Data Region	Areas of the grid that contain data for dimensions or members
Blank Region	Areas of the worksheet that contain no entries

Guidelines for Working in Free-Form Mode

Consider these guidelines when working in free-form mode.

- Grids do not need to start in cell A1.
- A grid must have at least one row dimension and one column dimension.
- Each row dimension can contain members of only one dimension. Each column dimension can contain members of only one dimension.
- Members of one dimension can be entered only in *one* of the following regions:
  - In the same row
  - In the same column

- The replacement labels specified in the **Data** tab in the **Smart View** panel when you click **Options** apply in free-form mode.
- Numerical entries are identified as data in the data region, and as comments outside the data region. If you want to use a number as a member name, precede it with a single quotation mark; for example, '100.
- Precede member names that contain spaces between words with a single quotation mark.
- When connected to a database that supports duplicate member names, select **Distinct Member Name Only** in the **Member Name Display** field in the **Members** tab in Smart View **Options** to display fully qualified member names in the worksheet. To enter duplicate members, use this syntax for qualified member names:

  [Income].[Other]
  [Expenses].[Other]

- Aliases from the current alias table are permitted in free-form grids, but aliases from other alias tables are treated as comments.
- In an ad hoc grid, if you insert a column and type a member name in the new column, and want to change the alias table for the sheet, you must first refresh the sheet before changing the alias table.
- Consider the exceptions listed in Actions that may cause Unexpected Behavior while working in free-form mode.

Creating Free-Form Grids

You can create a free-form grid by typing dimension and member names directly into cells in a sheet.

To create a free-form grid:

1. Open a new sheet and connect to a data source.
   If you already connected to any data sources on other sheets and want to apply the same connection, open the **Active Connections** dialog box, select the server URL, and click **Set Connection for Sheet**. For more information, see the Setting Active Connection for an Existing Sheet section in Setting Active Connection for a Sheet.
2. In the sheet, create a grid by typing the member names in rows and columns in free-form mode.
   Follow the guidelines specified in Guidelines for Working in Free-Form Mode.
3. In the **Extensions** menu, select **Smart View for Google Workspace**, and then select **Refresh**.
4. Select the plan type to which you want to connect and retrieve data for the grid.
   The sheet refreshes and displays the values in the grid.

Actions that may cause Unexpected Behavior

Smart View tries to preserve all comments, formulas, and customized report layouts.

Some exceptions that may result in unexpected behavior when the following actions are performed:

- Zoom in on a page dimension
- Pivot a dimension from the POV to a row or column

- Drag and drop a dimension from the POV to the worksheet
- Pivot a row dimension to a column dimension
- Switch the location of a row dimension to another row
- Switch the location of a column dimension to another column
- Change member aliases using the Change Alias Table command