

WebI - Advanced Users

Web Intelligence (WebI)

Enterprise Reporting (ER)

OFM

OFFICE OF FINANCIAL MANAGEMENT

Welcome!

Quick introductions & expectations for this session

- ✓ Your name?
- ✓ Your agency?
- ✓ What is your experience with using Enterprise Reporting Web Intelligence (WebI)?
- ✓ What are your expectations for this training session?



Topics

This training session will focus on advanced topics for WebI.

- ❖ [Quick Overview](#)
- ❖ [Log on / Password Rules](#)
- ❖ [Basic Navigation - WebI Launchpad](#)
- ❖ [Nested Query Filter](#)
- ❖ [Report Tables \(Break/Section\)](#)
- ❖ [Data Tracking](#)
- ❖ [On-Report Filtering](#)
- ❖ [Formulas/Variables](#)
- ❖ [Multiple Queries](#)
- ❖ [Merge Dimensions](#)
- ❖ [Print/Export](#)
- ❖ [Schedule Reports](#)
- ❖ [Help/Resources](#)
- ❖ [Q&A and Wrap Up](#)



Quick Overview

Web Intelligence (WebI) is a web-based reporting and analysis tool. It provides an interactive way to view and analyze data from various enterprise systems using standard options.

- ✓ Create new query/report or modify existing query/report using common toolbars, dropdown lists, various options for quickly adding/removing objects, etc.
- ✓ Save and retrieve query/report using common file structures.
- ✓ Preview results before running or saving a query.
- ✓ Manage page layouts and sort/filter data.
- ✓ Display data using web browser or export to other formats.



Quick Overview - WebI

WebI queries/reports are referred to as documents or web intelligence documents (WID files). A WebI document includes a query/report and related objects/formulas/variables.

- ✓ **WebI queries/reports** are created and managed by agency users. They are based on agency-specific scenarios to meet agency business data needs.
- ✓ **WebI standard reports** are created and managed by the OFM Enterprise Reporting team. They are based on common business scenarios to meet data needs across state agencies.
- ❖ If you need to run standard reports without using additional WebI tools, use the [Enterprise Reporting portal](#).



Quick Overview - Hours of Operation

Enterprise Reporting is available 24/7 so that you can use data and reports.


- ✓ **System maintenance** 7:00 pm Saturday to 7:30 am Sunday either the 1st or 2nd week of every month.
- ✓ **Daily AFRS data updates** 8:00 pm to midnight. New and existing AFRS reports/queries cannot be generated during this time.
- ✓ **Help Desk** staff available from 8:00 am to 5:00 pm weekdays (Monday to Friday - HereToHelp@ofm.wa.gov 360.407.9100)



Log On

Authorized users can log on with their enterprise reporting (ER) user ID/password from inside the state government network (SGN).

- ✓ <https://reporting.ofm.wa.gov>



Log in to BI Launch Pad

User Name

Password

Sign in

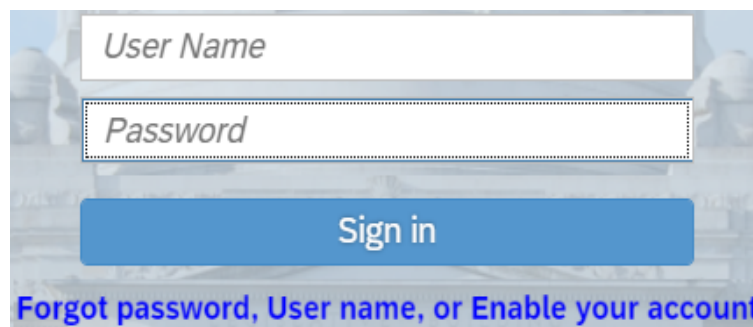
[Forgot password, User name, or Enable your account](#)

- ✓ Use [Secure Access Washington](#) (SAW) if you need to log on outside of the state government network. For information about using SAW to access WebI, reference the [Enterprise Reporting \(ER\) page](#) on the [OFM IT Systems website](#).

Password Rules

Your password ...

- ✓ Needs to include at least 8 characters with at least two of the following characters: upper case letter, lower case letter, number, special character (!@#\$%&*).
- ✓ Cannot include your user name.
- ✓ Needs to be changed every 120 days.



A screenshot of a login interface. It features two input fields: the top one is labeled 'User Name' and the bottom one is labeled 'Password'. Below the fields is a blue button with the text 'Sign in'. At the bottom of the form, there is a blue link that reads 'Forgot password, User name, or Enable your account'.

After 5 incorrect logon attempts, your user account will be locked.

- ✓ If your user account is locked, contact the OFM Help Desk.



HereToHelp@ofm.wa.gov 360.407.9100

Basic Navigation - WebI Launchpad

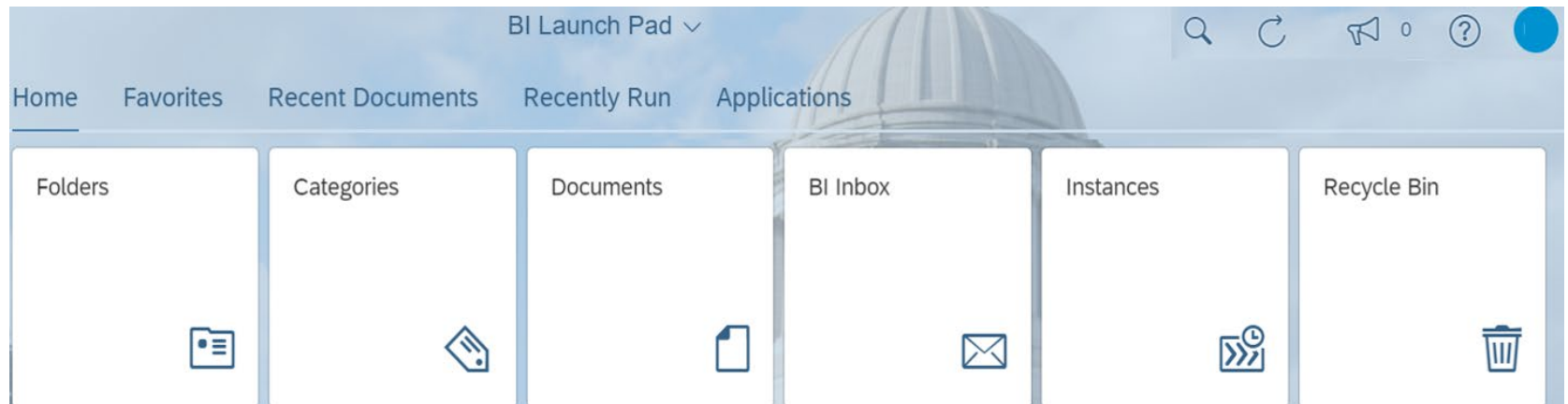
In this section, we will review basic navigation for the WebI launchpad.

- ✓ The WebI launchpad home page will be displayed after you log on.
- ❖ This training session will focus on advanced topics for WebI. If you need a 'refresher' for basic navigation, reference the materials for WebI – Introduction (available on the [Enterprise Reporting \(ER\) page](#) on the [OFM IT Systems website](#)).

Basic Navigation - Launchpad (Home)

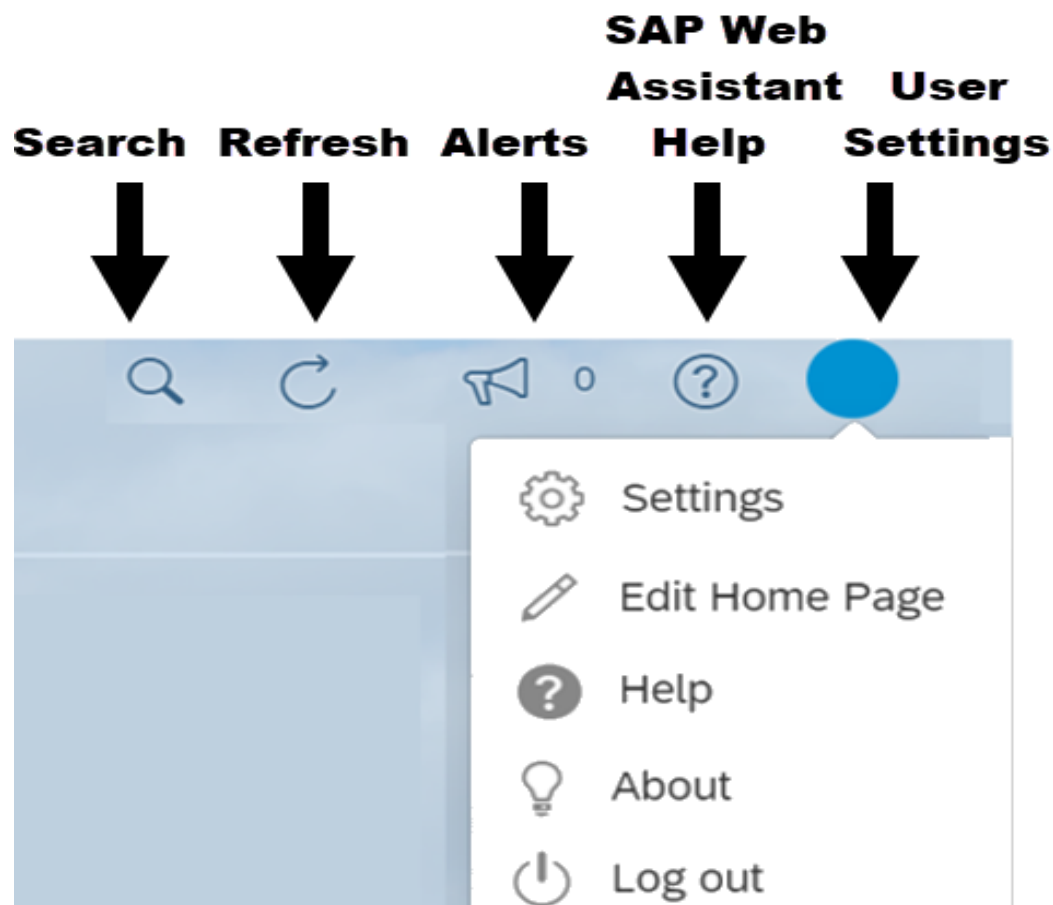
Home page includes quick links for navigation.

- ✓ **Top banner** includes standard navigation tools for search, refresh, alerts, web assistant (help), and user settings.
- ✓ **Menu bar** includes home, favorites, recent documents, recently run, and applications.
- ✓ **Tile section** includes folders, categories, documents, BI inbox, instances, and recycle bin.



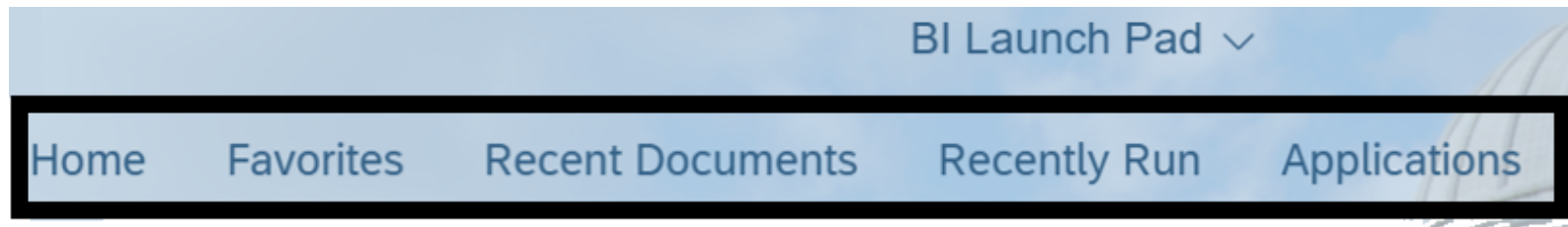
Basic Navigation - Top Banner

Top banner includes standard navigation tools for search, refresh, alerts, help (SAP web assistant), and user settings.



Basic Navigation - Menu Bar

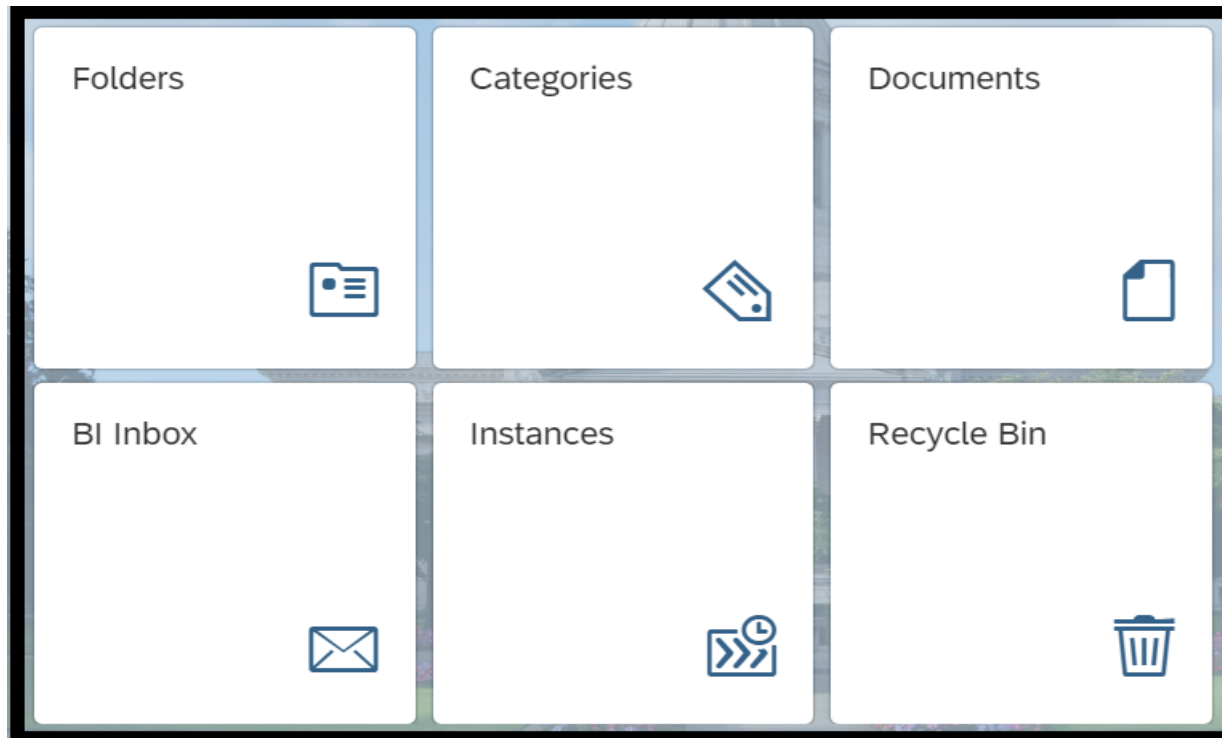
Menu bar includes quick links for navigating to home, favorites, recent documents, recently run, and applications.



**Web
Intelligence**

Basic Navigation - Tile Section

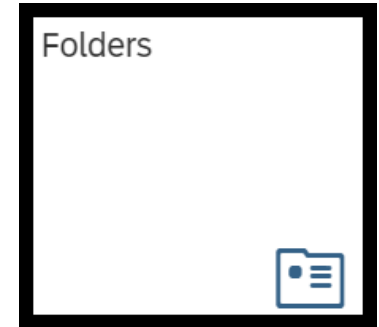
Tile section includes quick links for navigating to folders, categories, documents, documents, BI inbox, instances, and recycle bin.



Basic Navigation - Folders

Use the folders tile to access your personal folders and the public (agency) folders.

- Select folders.**
- Select personal folders to expand the folder structure.**



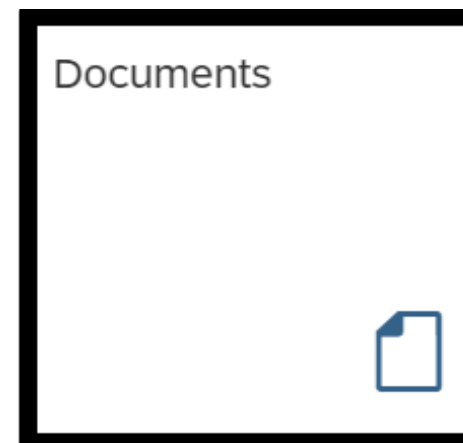
<input type="checkbox"/>	Title	Favori...	Type
<input type="checkbox"/>	Sample WebI Document		Web Intelligence
<input type="checkbox"/>	Sample WebI Docume...		Web Intelligence

Basic Navigation - Documents

Use the documents tile to access a list of all documents that are available within the BI launch pad.

Select documents.

Scroll through the list of documents
(number of documents on the counter will automatically update as you scroll down the page).



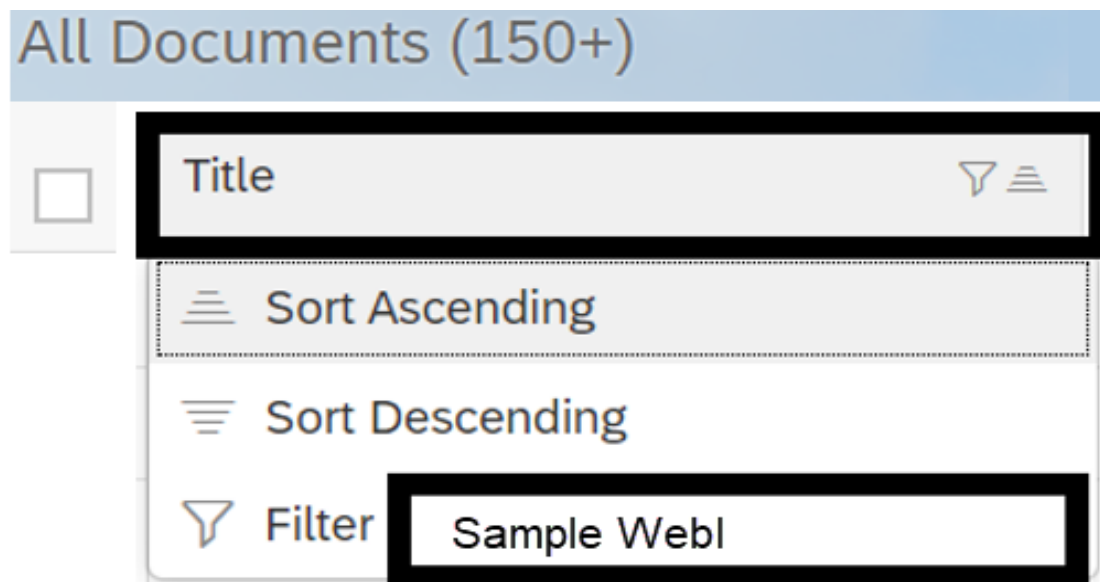
All Documents (50+)						
<input type="checkbox"/>	Title	Favorites	Type	Description	Last Updated	

❖ **Reminder:** if you need to run standard reports without using additional WebI tools, use the Enterprise Reporting portal.

Basic Navigation - Document Sort/Filter

Column headings in the document list include quick filters to sort the list (ascending / descending) or narrow the list of documents.

- ❑ **Select title heading to filter the list of documents.**
- ❑ **Input filter criteria (and press enter).**



Nested Query Filter

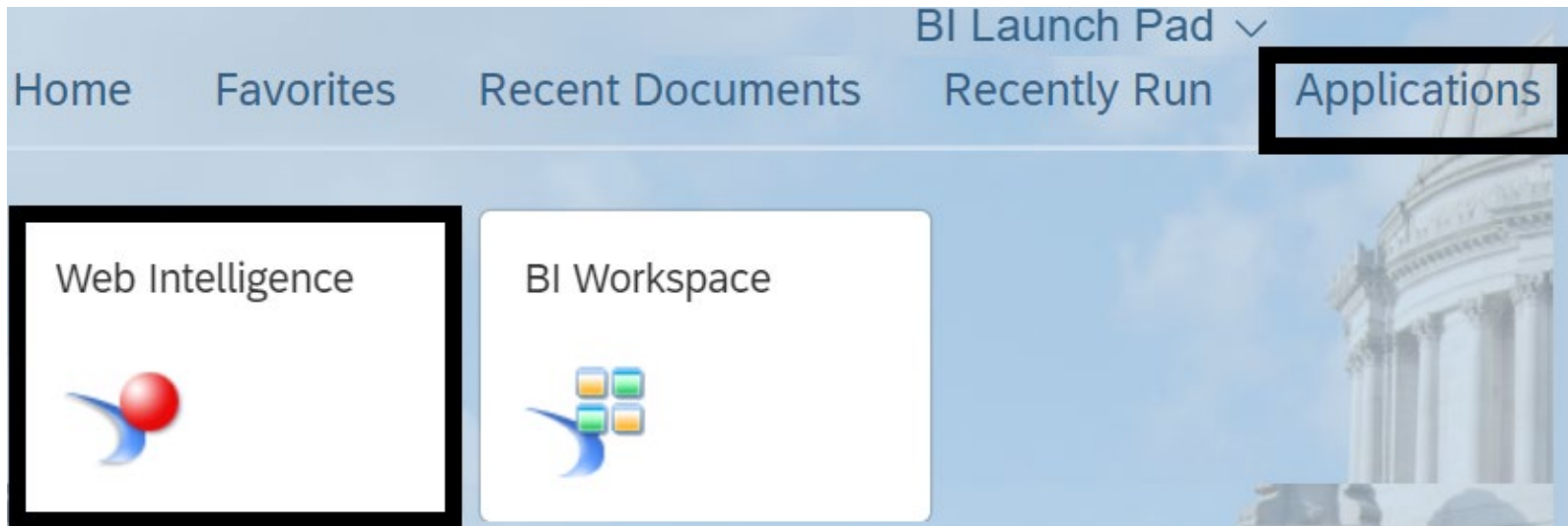
In this section, we will create a new document with a nested query filter.

- ✓ Nested query filters allow you to create more complex filter conditions than is possible when you combine filters at the same level.

Create New WebI Document

Use WebI to create a new document.

- ❑ **Select Web Intelligence** (located in applications).



Select Data Source

- ❑ **Select data source SAP BI platform repository and universe.**

Select a Data Source

SAP BI Platform Repository
Browse resources from your enterprise repository

Google Drive
Select a data source from Google Drive

Web Services
Select public or internal web services

Universe
Select a universe as a data source

Web Intelligence Document
Use a Web Intelligence document as a data source

Excel
Select an Excel spreadsheet as a data source

Text
Select a Text file as a data source

SAP BW (incl. BW/4HANA and S/4HANA)
Select a BEx query or BW Info provider as a data source

SAP HANA
Select an SAP HANA view as a data source

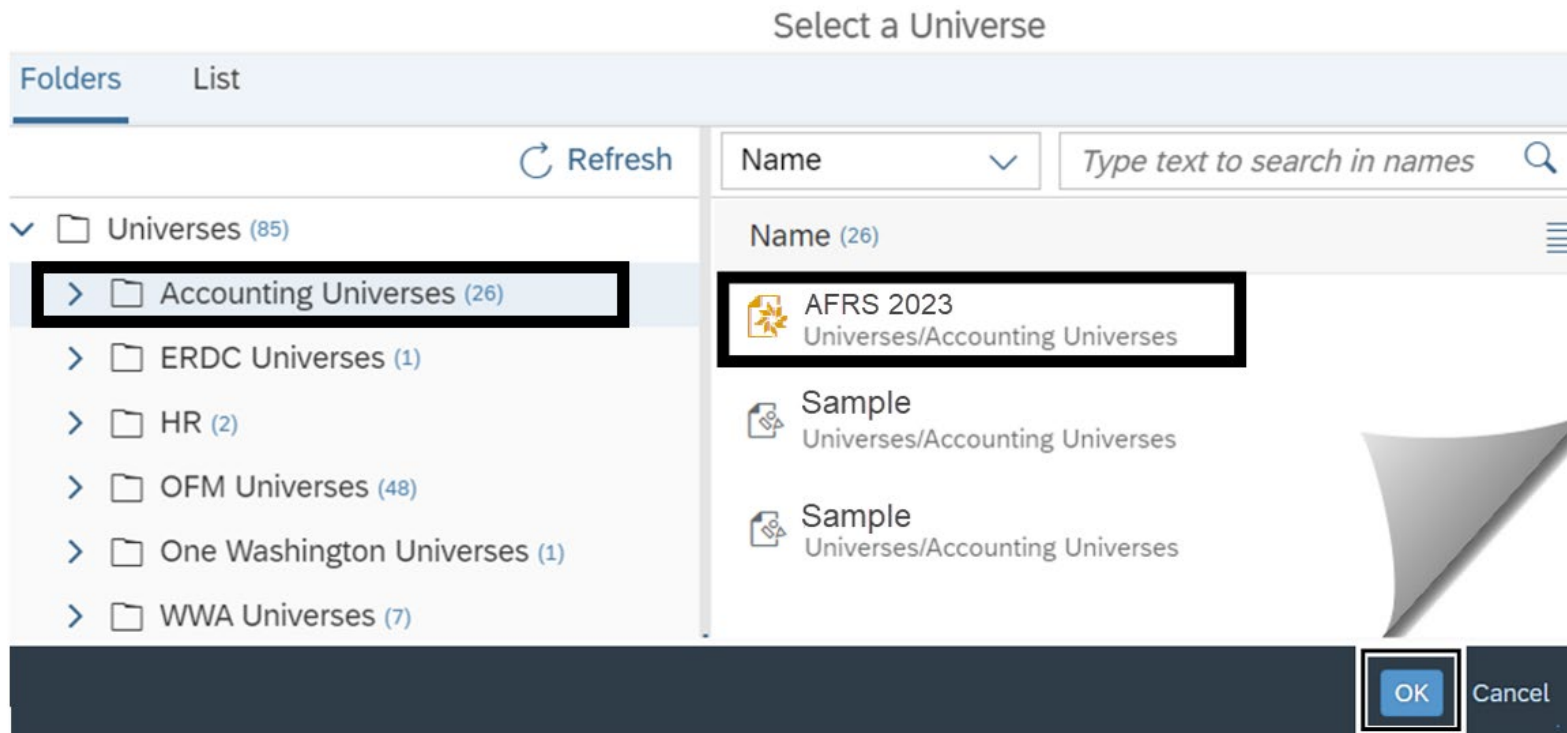
.....

No Data Source
Create an empty document

OK Cancel

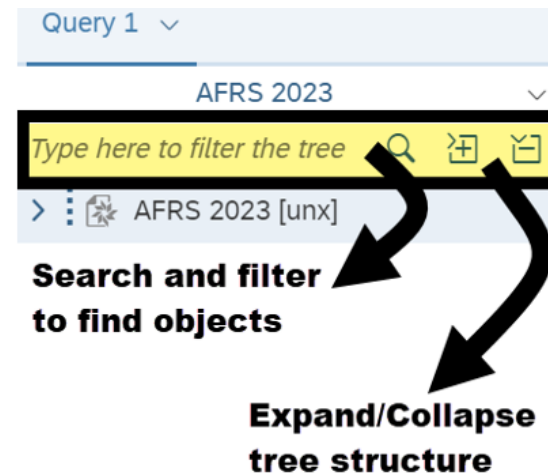
Select Universe

- ❑ **Select universe name.**
- ✓ WebI will display a list of available universes based on your security/permissions. In this example, we select accounting universes and a current AFRS universe.



Build Query (Add Result Objects/Query Filters)

- ❑ **Add result objects** biennium, agency, program, GL account, and amount.
- ❑ **Add query filters** agency, fiscal month, and cash, accr(all) expenditures (6505, 6510, 6560).
- ❑ **Apply query operators** agency equal to your 3-digit agency number (or use in list to select values) and fiscal month (between 01 and 12).
- ✓ Use the search and filter tools to find objects if needed. For example, use search to quickly find the object for cash, accr(all) expenditures (6505, 6510, 6560). You can input full or partial search term.



Sample Query - Before Nested Filter

In this example, the result objects section includes biennium, agency, program, GL account, amount (measure) and the query filters section includes agency (equal to 3-digit agency number), fiscal month (between 01 and 12), cash,accr(all) expenditures (6505, 6510, 6560).

Result Objects



Biennium	Agency	Program
GL Account	Amount	

Query Filters



Agency	Equal to	105	⋮	⊗		
Fiscal Month	Between	01	⋮	And	12	⋮
Cash, Accr(all) Expen...	Cash, Accr(all) Expenditures (6505,6510,6560)					

Create Nested Filter

- ❑ **Drag and drop query filter object to create nested filter.**
- ✓ In this example, we drag and drop fiscal month from the universe objects over the fiscal month in the query filters section. Ensure your cursor is directly over the original filter object when you drop it to create the nested filter.

The screenshot illustrates the process of creating a nested filter in a software interface. On the left, the 'AFRS 2023' universe is expanded to show 'Time Class' objects. 'Fiscal Month' is selected in the 'Time Class' list. A thick black arrow points from 'Fiscal Month' to the 'Query Filters' section. In the 'Query Filters' section, 'Fiscal Month' is already present as a filter. A second 'Fiscal Month' object is being dragged over the first one, creating a nested filter structure. The 'Query Filters' section also shows 'Agency' and 'Cash, Accr(all) Expen...' filters. The 'Result Objects' section shows 'Biennium', 'Program', 'Amount', 'Agency', and 'GL Account'.

Sample Nested Filter

In this example, we have a nested filter for the fiscal month. After we created the nested filter, we applied a filter operator (in list 99).

Query Filters



Query Filter Configuration:

- Agency: Equal to 105
- AND
- OR
 - Fiscal Month: Between 01 And 12
 - Fiscal Month: In List 99
- Cash, Accr(all) Expen...

Nested Filter AND/OR Statement

Notice the AND/OR statements in the query filters section.

- ✓ Agency **AND** fiscal month (between 01 and 12 **OR** in list 99) **AND** cash,accr(all) expenditures (6505, 6510, 6560).

The screenshot displays a query filter interface with the following components:

- A central vertical line with a box containing "AND" and "OR" options.
- Filter 1: Agency Equal to 105
- Filter 2: Fiscal Month Between 01 and 12 (with "And" and "12" to its right)
- Filter 3: Fiscal Month In List 99 (with a close button "X")
- Filter 4: Cash, Accr(all) Expen...

Add Another Nested Filter

In this example, we have added another set of objects to the query filters. We can use drag and drop to create another nested query filter for the second set of program/subprogram filters.

- ❑ **Use the > add arrow to add query filters.** Add program (in list 020) and subprogram (in list 01).
- ❑ **Create nested filter.** Drag and drop subprogram over program.

The screenshot displays a query builder interface with the following components:

- On the left, there are navigation arrows (> and <) and an "AND" button.
- The main filter area contains:
 - A filter for "Agency" with the operator "Equal to" and the value "105".
 - An "OR" group containing:
 - A filter for "Fiscal Month" with the operator "Between" and the value "01".
 - A filter for "Fiscal Month" with the operator "In List" and the value "99".
 - A filter for "Cash, Accr(all) Expen..." with a funnel icon.
 - A filter for "Program" with the operator "In List" and the value "020".
 - A filter for "Subprogram" with the operator "In List" and the value "01".
- A dashed box highlights the "Program" and "Subprogram" filters, with a curved arrow indicating the "Subprogram" filter being dragged over the "Program" filter to create a nested filter.

Sample Multiple Nested Filters

Nested query filters can be set on multiple objects and can be used to combine different data elements.

- ✓ In this example, we have multiple filters and nested filters: Agency (equal to 3-digit agency number) **AND** fiscal month (between 01 and 12 **OR** in list 99) **AND** cash,accr(all) expenditures (6505, 6510, 6560) **AND** program (in list 020 **OR** subprogram in list 01).

The screenshot displays a query builder interface with the following nested filters:

- Agency**: Equal to 105
- Fiscal Month**: Between 01 and 12
- Fiscal Month**: In List 99
- Cash, Accr(all) Expen...**
- Program**: In List 020
- Subprogram**: In List 01

The filters are connected by logical operators: **AND** (between Agency and the Fiscal Month filters), **OR** (between the two Fiscal Month filters), **AND** (between the Fiscal Month filters and Cash, Accr(all) Expenditures), **OR** (between Program and Subprogram), and **AND** (between Cash, Accr(all) Expenditures and the Program/Subprogram filters).

Additional Info - Nested Filter AND/OR Condition

Notice the AND/OR conditions in the sample query. The outer left side condition setting is **AND** with the nested queries set to **OR**.

- ✓ If you changed the left side AND condition in the sample query to OR, the query would return very different results: all data for agency (equal to 3-digit agency number) OR fiscal months (between 01 and 12 or in list 99) OR cash,accr(all) expenditures (6505, 6510, 6560) OR program (in list 020 or subprogram in list 01).

The screenshot displays a query builder interface with the following structure:

- AND** (outer condition, highlighted in a yellow box)
 - Agency Equal to 105
 - OR** (inner condition, highlighted in a yellow box)
 - Fiscal Month Between 01 And 12
 - Fiscal Month In List 99
 - Cash, Accr(all) Expen...
 - OR** (inner condition, highlighted in a yellow box)
 - Program In List 020
 - Subprogram In List 01

Additional Info - Change AND/OR Condition

In most cases, you want the outer left side condition set to AND.

- ✓ Double-click a condition to change it if needed. For example, you might need to change the condition to meet a reporting requirement or you might accidentally change the AND condition and need to change it back.

The screenshot displays a vertical list of search conditions in a reporting tool. The conditions are:

- Agency Equal to 105
- Fiscal Month Between 01
- Fiscal Month In List 99
- Cash, Accr(all) Expen...
- Program In List 020
- Subprogram In List 01

Operators are shown between conditions: 'AND' between Agency and Fiscal Month, 'And' between Fiscal Month and Fiscal Month, and 'OR' between Fiscal Month and Program. A yellow box highlights the 'AND' operator on the left side of the interface.

Report Tables (Break/Section)

In this section, we will create table breaks and sections.

- ✓ **Breaks** = separate data within one block. One column will contain values for a dimension, detail, or measure, which are repeated for each row of values in the block.
- ✓ **Sections** = distribute data into multiple free-standing cells called section headers. Each section cell contains one value for a dimension, with a block of data that corresponds to the dimension value.

Sample Report Table/Columns/Rows

After you run a query, the results will be displayed in columns/rows of data in the report table on the report page.

- ✓ The report page includes additional options and navigation tools in design mode. For example, you can quickly undo changes, edit the query, or refresh data.

The screenshot displays a software interface for report design. At the top, a menu bar includes 'File', 'Query', and 'Analyze'. The 'File' menu is open, showing an 'Undo' button. Below the menu, a toolbar contains icons for 'Edit' and 'Refresh', with arrows pointing to the 'Query' menu. The main area shows a report titled 'Report 1' with a table of data. To the right, a 'Query 1' panel lists fields: 'Fiscal Month', 'Fiscal Year', 'Program', and 'Amount'. A 'Design' dropdown menu is visible in the top right corner.

Report 1

Report table (columns/rows)

Fiscal Year	Fiscal Month	Program	Amount
2022	12	010	130,112.99

Query 1

- Fiscal Month
- Fiscal Year
- Program
- Amount

Add Table Break

A break divides a large table into smaller sub-tables based on your selected value. For example, you can display subtotals by a specified value.

- ❑ Right-click the table.
- ❑ Select data.
- ❑ Select add break.

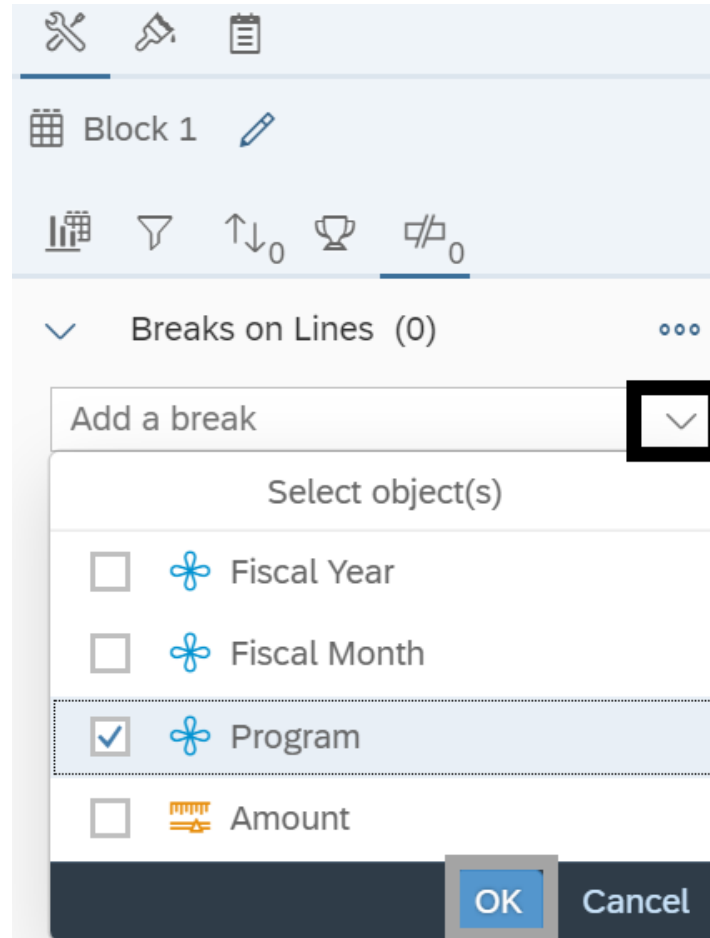
Report 1

Fiscal Year	Fiscal Month	Program	Amount
2022	01		1,56
2022	01	010	13
2022	01	020	1,74
2022	01	030	22
2022	01	040	6
2022	01	050	6,47
2022	01	060	4,86
2022	01	080	17,27
2022	01	850	29,2
2022	01	900	96
2022	02		1,56

The screenshot shows a right-click context menu for a table. The 'Data' option is selected, and the 'Add Break' sub-option is highlighted with a black box. The menu also includes options like Copy, Delete, Comments, Freeze Header..., Element Link, Copy Link For, Shared Element, and Format Table. The 'Add Break' option is located under the 'Data' menu item.

Select Break Object

- Select object.** This will add a break for the data in your report by the object you selected.
- Select ok.**



Edit/Remove Table Break

After you add a table break, the option will change from 'add break' to 'edit break'. You can also remove all breaks.

- ❑ **Right-click the table.**
- ❑ **Select data.**
- ❑ **Select remove all breaks.**

Report 1

Fiscal Year	Fiscal Month	Program	Amount
2022	01		1,000
2022	02		1,000
2022	03		1,000
2022	04		1,000
2022	05		1,000
2022	06		1,000
2022	07		1,000
2022	08		1,000

The screenshot shows a right-click context menu for a table. The menu items are: Comments, Freeze Header..., Element Link >, Copy Link For >, Shared Element >, Data >, and Format Table >. The 'Data' option is highlighted with a black box. The 'Edit Break' and 'Remove All Breaks' options are also highlighted with black boxes. Other options visible in the menu include Add Sort, Remove All Sorts, Add Rank, and Remove Rank.

Create Section

Sections allow you to split report information into smaller components.

- ✓ You cannot use a measure to create a section.
- ❑ **Select the data object you want to define as a section.** You can select the data cell or column heading.
- ❑ **Right-click and select set as section.**

Report 1

Year	Fiscal Month	Program	Amount
12		010	127,878.85
12		020	12,714,017.82
12		030	492,259.95
12		040	720,841.07
12		050	20,790,249.35

Set as Section

Insert >

Unmerge

Hyperlink >

Element Link >

Footer Calculation >

Insert Section Using Toolbar Option

You can use the insert option on the toolbar to create a section from a dimension in the document (even if the object is not currently displayed on the report table).

- ❑ **Select insert section.**
- ❑ **Select blank space above report table (or any location on report canvas).**
- ❑ **Select object from list and select ok.**

The screenshot illustrates the process of inserting a section into a report. At the top, the 'Insert' toolbar is shown with a menu icon highlighted. Below it, the report canvas is labeled 'Report 1'. A dashed arrow points from the 'Insert section' button in the toolbar to a blank space above a report table. The report table has the following data:

Fiscal Year	Fiscal Month	Amount
	12	121,824,595.02

To the right, the 'Define a New Section' dialog box is open, showing a search bar and a list of dimensions under 'Query 1':

- Fiscal Month
- Fiscal Year
- Program

The 'Program' dimension is selected in the dialog box. The 'OK' button is highlighted.

Data Tracking

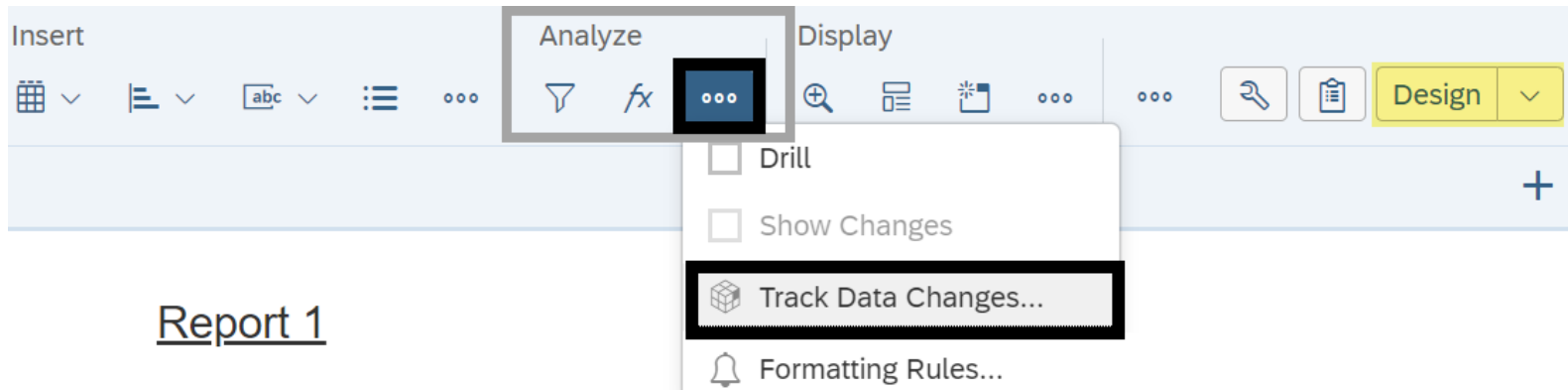
In this section, we will explore some options for tracking data.

- ✓ When you track data changes, you select a particular data refresh as a reference point. This data is known as the reference data. When you show the data changes, WebI places your current data in context by showing how it relates to the reference data.
- ✓ WebI provides options so that you can display changes for modified data, added/removed data, and increased/decreased data.

Select Track Data Changes

Use the analyze section on the report page to activate data tracking.

- Select ellipsis** (for more options).
- Select track data changes.**



Select Comparison

There are several options for tracking data changes.

❑ **Select options for comparison and select ok.**

- ✓ **Compare with last data refresh** - current data becomes reference data after each refresh. Report shows difference between most recent data and data before last refresh.
- ✓ **Compare with last data refresh** - select a particular data refresh as a reference point (this data is the reference data). WebI places your current data in context by showing how it relates to the reference data.

Tracking

Off

Compare with last refresh

Compare with refresh from

Sample Date/Time



Select Other General Options

The general tab provides additional options for tracking data changes. For example, you can select which reports will have data tracking.

The screenshot displays a software interface with a sidebar on the left and a main content area on the right. The sidebar has two tabs: 'General' (selected) and 'Tracking Options'. The main content area is titled 'Tracking' and contains three radio button options: 'Off', 'Compare with last refresh' (which is selected and highlighted with a dashed border), and 'Compare with refresh from'. Below these options is a dropdown menu currently showing 'Sample Date/Time'. At the bottom of the main content area, there is a section titled 'Reports' which contains a list of reports. The first report, 'Report 1', is checked with a blue checkmark. Below the list is a checkbox labeled 'Refresh data now' which is currently unchecked.

General

Tracking Options

Tracking

Off

Compare with last refresh

Compare with refresh from

Sample Date/Time






Reports

Report 1

Refresh data now

Select Tracking Options

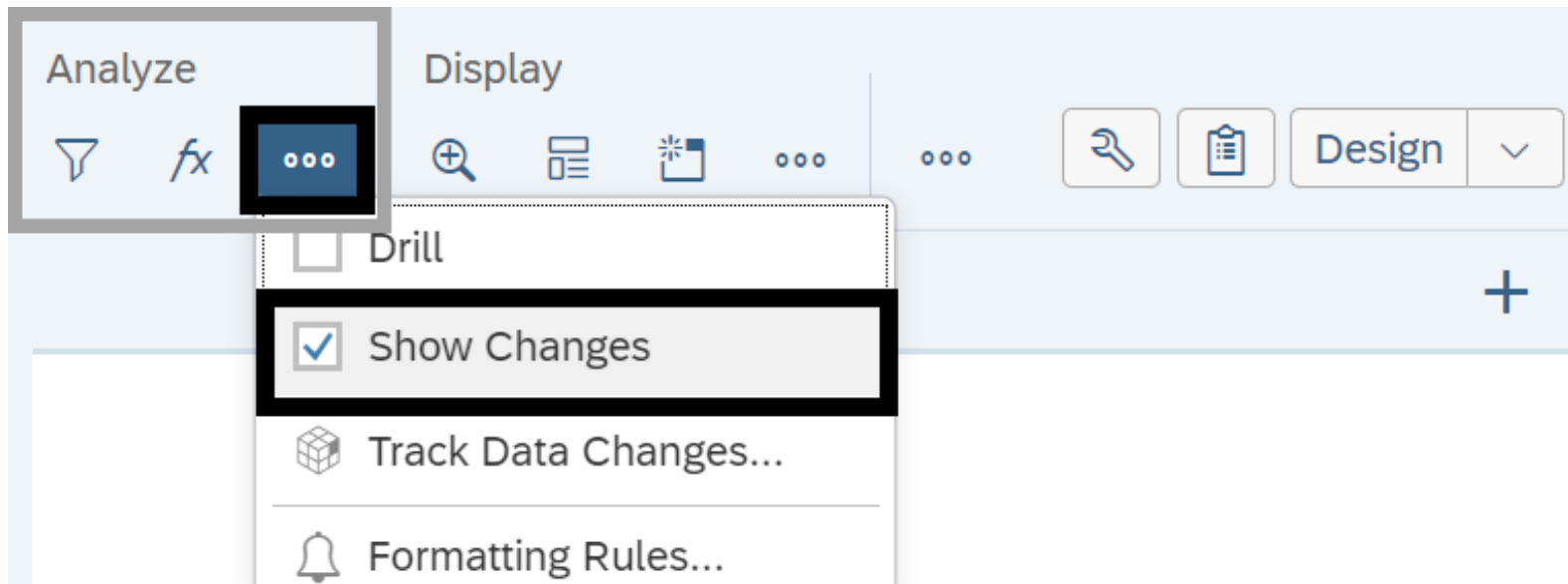
The tracking options tab includes additional options.

General			
Tracking Options			
Changes			
<input checked="" type="checkbox"/> Insertions	Format:	AbCd123	
<input checked="" type="checkbox"/> Deletions	Format:	AbCd123	
Details			
<input checked="" type="checkbox"/> Changes	Format:	AbCd123	
Measures and Details (Numerical Values Only)			
<input checked="" type="checkbox"/> Increased values	Format:	\$100.00	
<input type="checkbox"/> Greater or equal to	<input type="text" value="10"/>	%	
<input checked="" type="checkbox"/> Decreased values	Format:	\$100.00	
<input type="checkbox"/> Greater or equal to	<input type="text" value="10"/>	%	

Select Show Changes

Use the analyze section on the report page toolbar to show changes.

- Select ellipsis** (for more options).
- Select show changes.**



On-Report Filtering

In this section, we will explore some options for applying filters on the report page.

- ✓ Unlike query filters, a report filter doesn't modify the data that is retrieved from the data source (it simply hides values at the report level).
- ❖ **Query filters** are defined on query panel to limit the data retrieved from the data source.
- ❖ **Report filters** are defined on report page in design mode to limit the values displayed on the report.

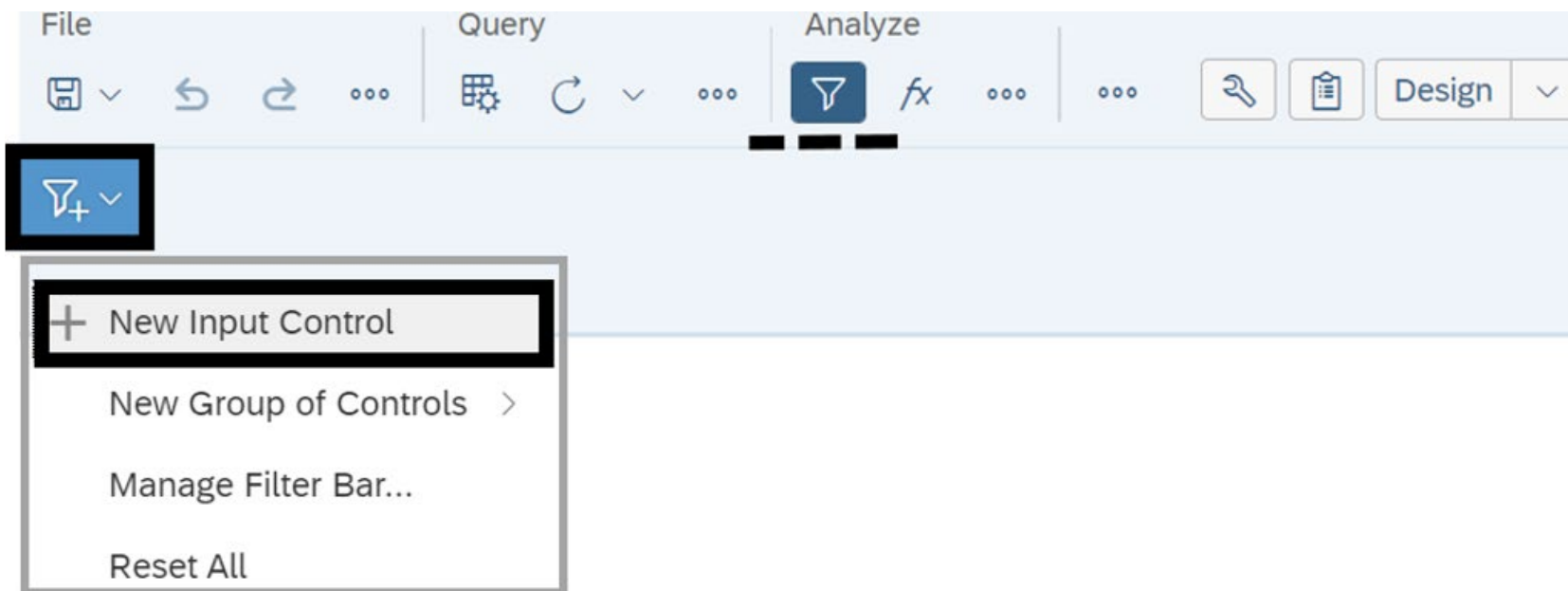
Report Filters

- ✓ You can define a filter to limit values displayed in tables, charts, and sections within the document.
- ✓ The data you filter out remains within the WebI document. This means you can change or remove report filters without modifying the query behind the report.
- ✓ You can include multiple filters in a report. You can also apply different filters to different parts of a report. For example, you can limit the results in the entire report to a specific dimension value and then limit results in a table or chart to focus on results for a different dimension.

Manage Filters

Use the manage filters option to define a filter from the objects in the document.

- ❑ **Select manage filters.** If the manage filters icon is not displayed, use the analyze section on report page toolbar to display the icon.
- ❑ **Select new input control.**



Select Object

- ❑ **Select object** for the filter. In this example, we select program.

New Control

* Object	Select an object
* Name	Query 1
Description	Fiscal Month
	Fiscal Year
	Program
	Amount

Select Filter Options

- ❑ Select other filter options if applicable and select ok.

Object ▼

Name

Description

Current target

- Document
- Current report

▼ Report 1

- Header
- ▼ Body
 - Block 1
 - Footer

Type ▼

Operator ▼

User restricted list of values OFF

Sort list of values ▼

Allow selection of all values ON

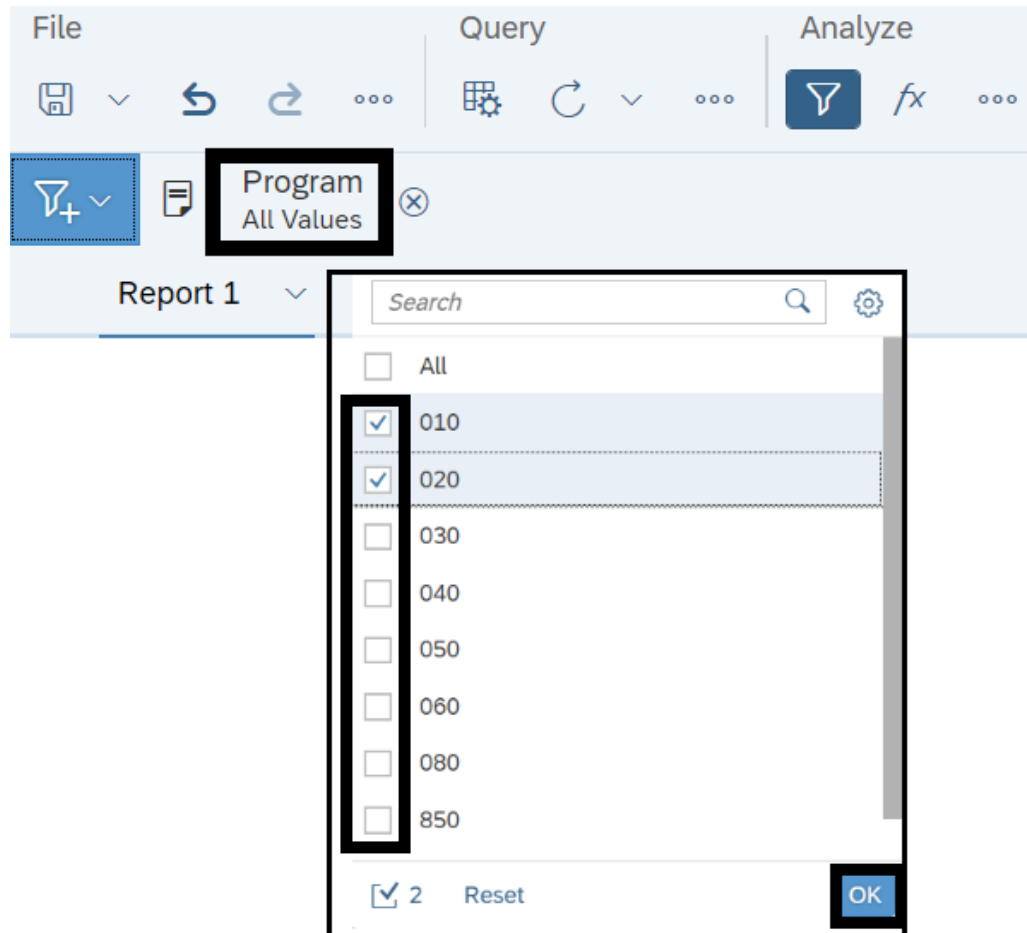
Allow selection of null values OFF

Reset on refresh OFF

Default value(s) ▼

Edit Filter Value

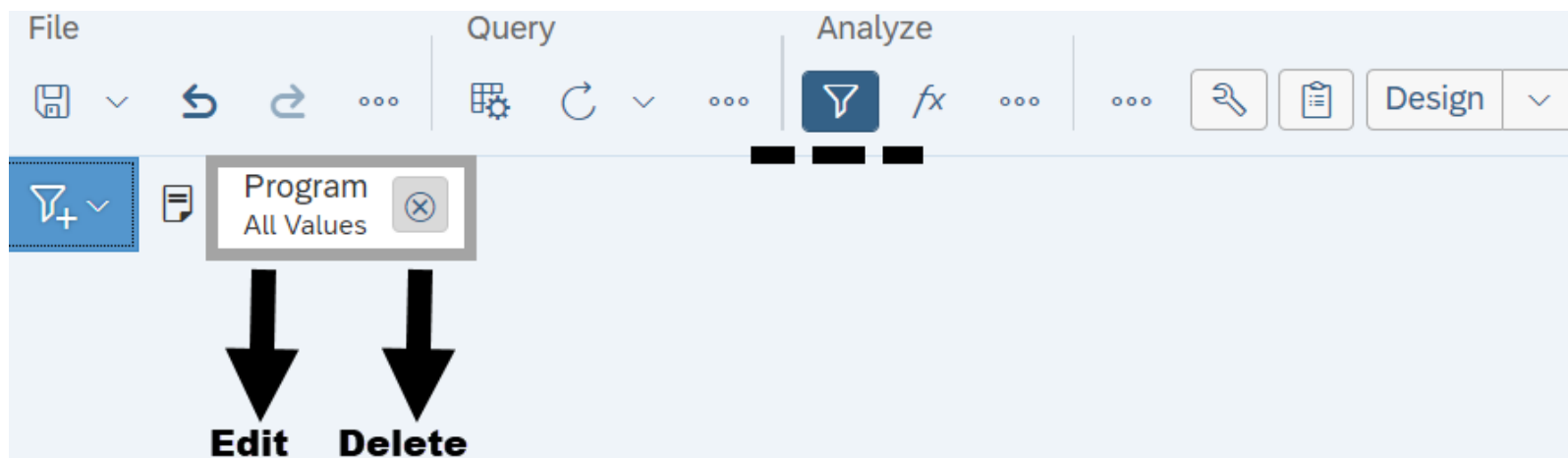
- ❑ Select filter values and select ok.
- ✓ Remember to save your document if needed.



Edit or Remove Filter

After you add a filter, the options to edit or delete the filter will be displayed on the toolbar.

- ✓ If the manage filters icon is not displayed, use the analyze section on report page toolbar to display the icon.



Formulas/Variables

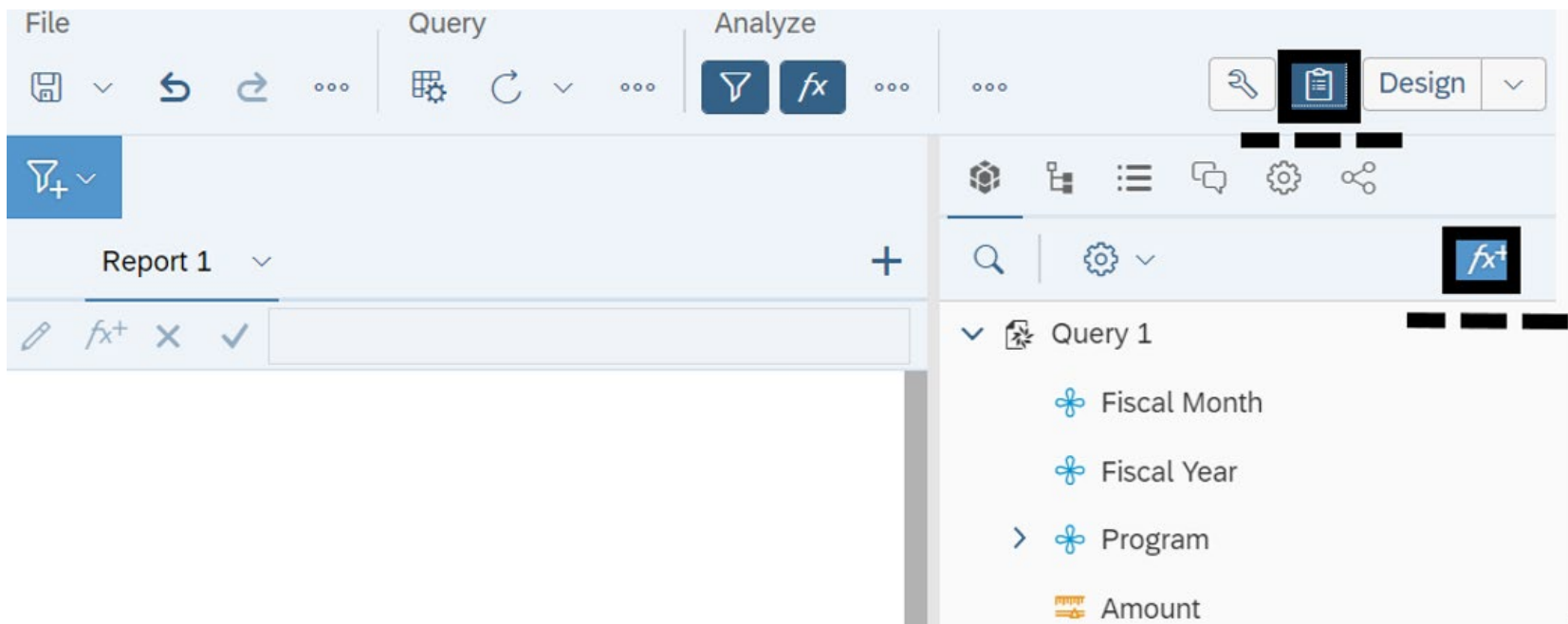
In this section, we will explore some options for applying formulas and variables.

- ❖ **Formulas** are custom calculations that allow additional calculations beyond the base objects and standard calculations.
- ❖ **Variables** are formulas or statements that have been assigned a name. You can use variables to simplify complex formulas by breaking down formulas into manageable parts (making it much easier to read and make building formulas less error-prone).

Create Formula/Variable

Use the report page to create a variable with concatenation formula to join two character strings.

- Select show main panel.** The toggle to show/hide main panel is next to the design mode option on the report page.
- Select add new variable.**



Input Variable Name

The create variable screen includes several options for you to build a variable. Use the toggles on the right side to display/hide objects, functions, operators.

❑ Input name for new variable.

Create Variable

Name: **Program/Title** Qualification: Dimension Type: Undefined

Objects	Functions	Operators
Type here to filter objects tree <input type="text"/>	Type here to filter i <input type="text"/>	Type here to filter tree <input type="text"/>
<input checked="" type="checkbox"/> Query 1	<input checked="" type="checkbox"/> All	Values...
<input type="checkbox"/> Fiscal Month	Abs	Prompts...
<input type="checkbox"/> Fiscal Year	Aggregate	:
<input checked="" type="checkbox"/> Program	Ancestor	;
<input type="checkbox"/> Amount	Asc	After

Add Concatenation Formula/Objects

- ❑ Double-click first object to be concatenated.
- ❑ Input formula +"/"+ after first object.
- ❑ Double-click second object to be concatenated.
- ✓ In this example, we selected program (first object) then input +"/"+ (formula) then selected program title (second object).

The screenshot displays a software interface for creating a formula. On the left, a formula editor shows the formula `= [Program] + "/" + [Program Title]` in a yellow highlighted box. Above the editor are navigation icons: a blue arrow pointing left, a blue arrow pointing right, a checkmark, an 'X', a blue arrow pointing right, and a blue button with a left-pointing arrow and a list icon. Below the formula editor is a dashed line. On the right, an 'Objects' panel is visible. It has a search bar with the text 'Type here to filter objects tree' and a magnifying glass icon. Below the search bar is a list of objects: 'Query 1' (with a dropdown arrow and a star icon), 'Fiscal Month' (with a blue star icon), 'Fiscal Year' (with a blue star icon), 'Program' (with a blue star icon and a dropdown arrow), and 'Program Title' (with a green star icon). The 'Program' and 'Program Title' items are enclosed in a black rectangular box.

Validate Formula

- ❑ Select checkmark to validate formula and select ok.

Name:

Qualification:

1

The formula is correct.

Objects

Type here to filter objects tree

- ▼ Query 1
- Fiscal Month
- Fiscal Year
- ▼ Program
 - Program Title

Update Report Table

❑ Add variable to report table.

- ✓ In this example, we drag and drop the variable to the program column so that the concatenated values will be displayed on the report.

The screenshot displays the Microsoft Dynamics 365 Enterprise Reporting WebI interface. At the top, there are tabs for File, Query, Insert, and Analyze. The Analyze tab is active, showing a filter icon and a formula icon (fx). Below the tabs, there is a search bar and a 'Design' dropdown menu. The main area shows a report titled 'Report 1' with a table of data. A large black arrow points from the 'Program/Title' variable in the 'Variables' pane on the right to the 'Program' column header in the table.

Fiscal Year	Fiscal Month	Program	Amount
2020	12	010	1,078.85
2020	12	020	12,714,017.82
2020	12	030	492,259.95
2020	12	040	720,841.07
2020	12	050	20,700,240.25

The 'Variables' pane on the right lists the following variables:

- Fiscal Month
- Fiscal Year
- Program
- Amount
- Program/Title

Sample Report Table With New Variable

In this example, the report table includes the new variable and the concatenated values are displayed in the column.

The screenshot displays a software interface with a report table and a variable list. The report table, titled "Report 1", has four columns: "Fiscal Year", "Fiscal Month", "Program/Title", and "Amount". The data rows are:

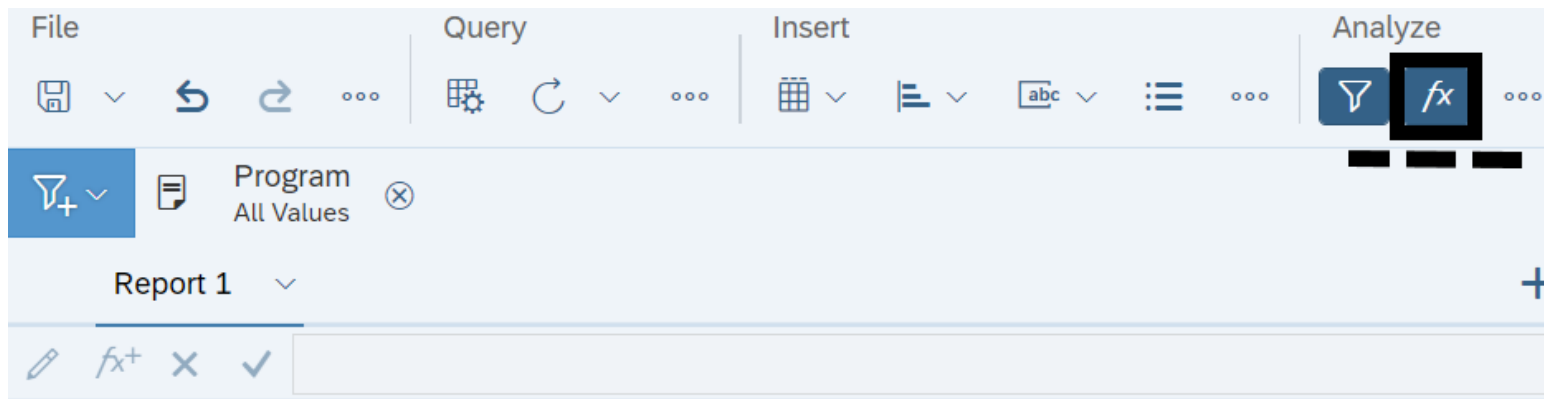
Fiscal Year	Fiscal Month	Program/Title	Amount
2020	12	010/Support Services	127,878.85
2020	12	020/Finance	12,714,017.82
2020	12	030/Enterprise Technology Solutions	492,259.95
2020	12	040/Information Systems	700,011.07

The variable list on the right shows "Query 1" with variables: "Fiscal Month", "Fiscal Year", "Program", "Amount", and "Variables". The "Variables" section includes "Program/Title".

Create Formula Using Formula Bar

You can also create a formula using the formula bar.

- ❑ **Select toggle in the analyze section to show formula bar.**

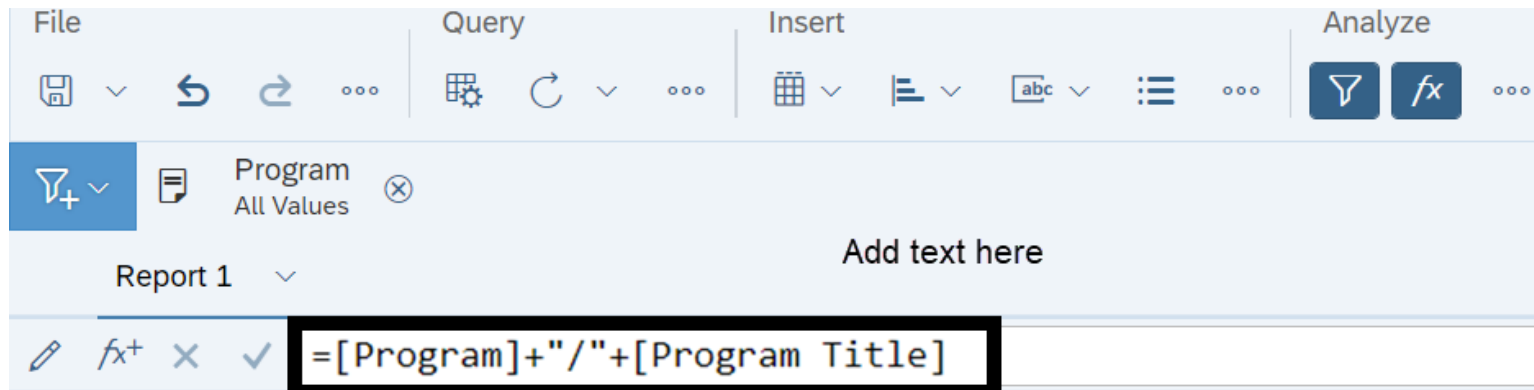


Report 1

Fiscal Year	Fiscal Month	Program	Amount
2020	12	010	127,878.85
2020	12	020	12,714,017.82

Input Formula

- ❑ Double-click cell in report table.
- ❑ Input formula in formula bar.
- ✓ In this example, we select the cell in the program column (so that the column is highlighted) and input concatenation formula `= [Program] + "/" + [Program Title]`.

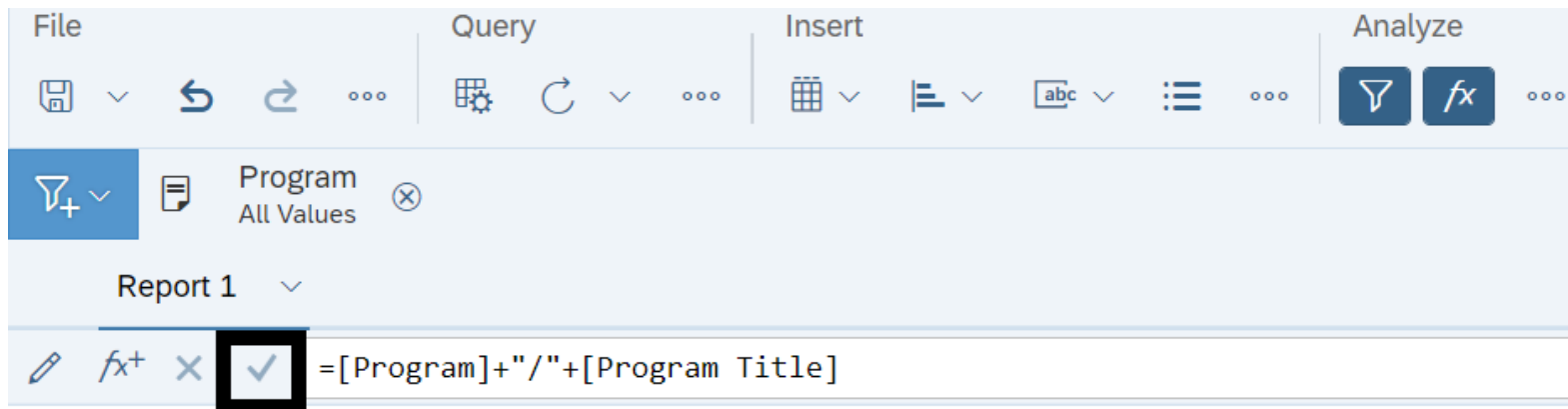


Report 1

Fiscal Year	Fiscal Month	Program	Amount
2020	12	010	127,878.85
2020	12	020	12 714 017.82

Validate Concatenation Formula

- ❑ Select checkmark to validate formula.
- ✓ In this example, the formula was valid and the report table is updated to include program with title.



The screenshot shows a software interface with a menu bar (File, Query, Insert, Analyze) and a toolbar. Below the toolbar, there is a section for 'Program All Values' and a dropdown menu for 'Report 1'. At the bottom, a formula bar displays the formula `= [Program] + "/" + [Program Title]`. A checkmark icon in the formula bar is highlighted with a black box, indicating the formula is valid.

Report 1

Fiscal Year	Fiscal Month	Program	Amount
2020	12	010/Support Services	127,878.85
2020	12	020/Finance	12,714,017.82
2020	12	030/Enterprise Technology Solutions	102,250.05

Sample AFRS Variables (Examples)

Examples of AFRS variables.

Approved and Adjusted Allotment Variables

Budget Option 1

=Sum(If([GL Account] InList ("0621";"0623";"0622";"6210"); [Amount];0))

Budget Option 2 w/ FTE's

=Sum(If([GL Account]InList("0622";"6210");[Amount];0))

Cash, Accrual Encumbrance Variable

Cash, Accr(all), Encum

=Sum(If([GL Account] InList ("6505";"6510";"6560";"6410");[Amount];0))

Revenue Variable

Cash Accr(all)

=Sum(If([GL Account]InList("3205";"3210";"3260");[GL Amount];0))

Multiple Queries

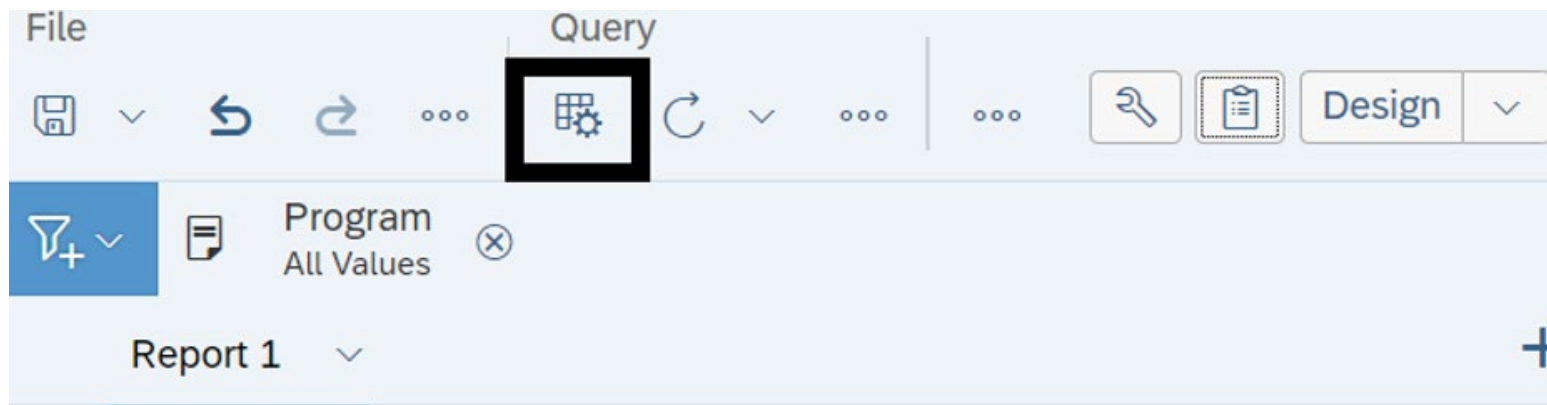
In this section, we will explore some options for using multiple queries in a document.

- ✓ Defining multiple queries in a single document is needed when the data you want to include in a document is available in multiple sources or when you want to create several differently-focused queries on the same data source.
- ✓ You can define multiple queries when you create a new document or add more queries to an existing document.
- ✓ You can display the information from all the queries on a single report or on multiple reports in the same document.

Edit Query

Use the query panel to duplicate the query in your document. For example, you can duplicate the existing query in your report and then modify it if you want to build a different query on a universe already included in the document.

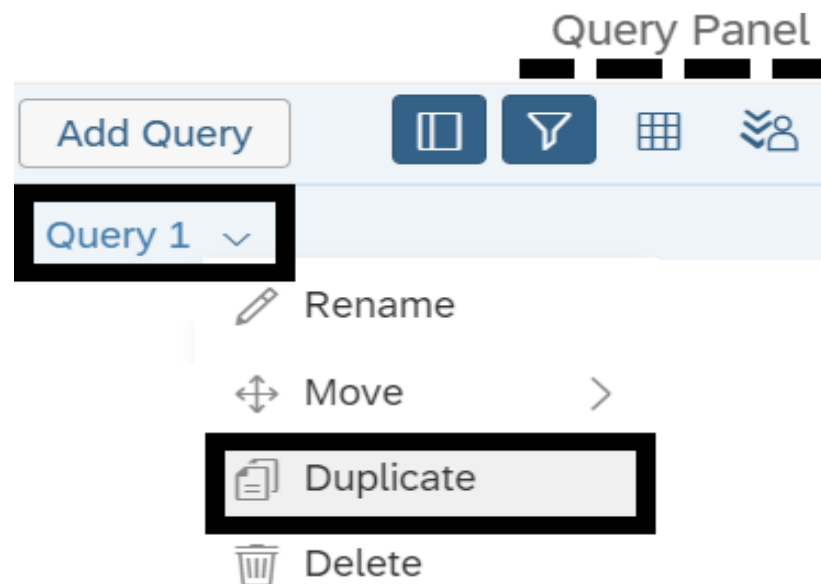
❑ Select Edit.



Duplicate Query

The duplicate query will use the same data source as the query it is duplicated from (you can update it later to use a difference source).

- Select Query.**
- Select Duplicate.**
- Select Run.**



Select Add Query Option

- ❑ **Select add query option.** In this example, we select the option to insert a table in a new report.

Add Query

Choose how you want to include the data from the new query.

Insert a table in a new report

Insert a table in the current report

Include the result objects in the document without generating a table

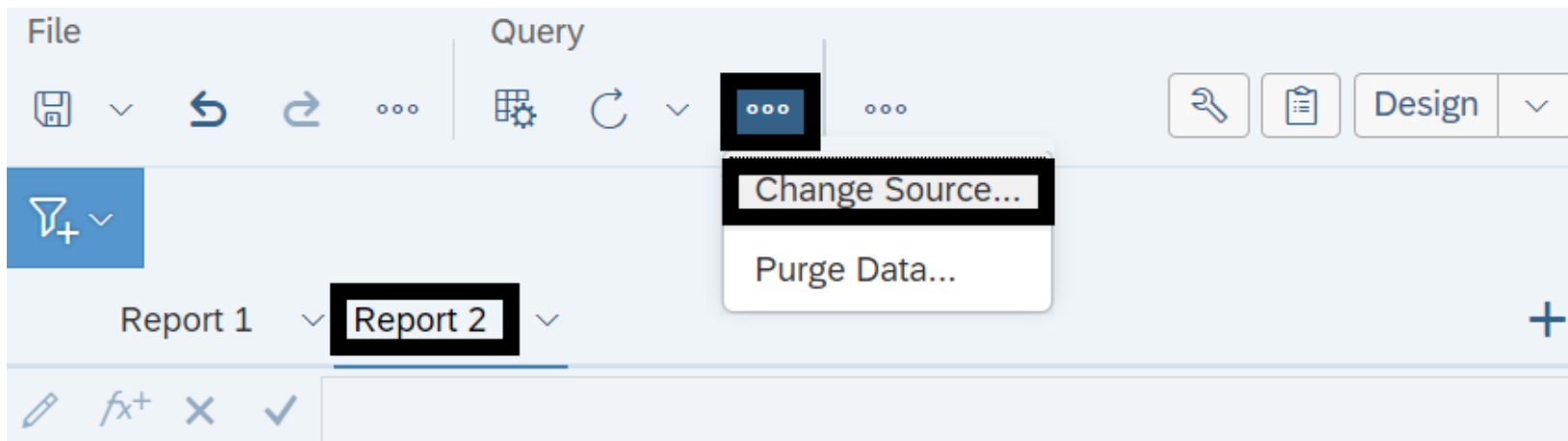
OK

Display Option	Additional Information
Insert table in new report	Display on new report in document.
Insert table in current report	Display in new table on current report in document.
Include result objects in document without generating table	Include data in document without displaying data on report (you can add the objects to the report later if needed).

Change Data Source

Use the report page to change the source.

- ❑ **Select report.**
- ❑ **Select change source.**



Select Query

- ❑ **Select query and select ok.**
- ✓ In this example, we select the duplicate query that we created for the report.

Select a Query

Name	Type	Data Source
 Query 1	Universe	AFRS 2021 [unx]
 Query 1 (1)	Universe	AFRS 2021 [unx]

Specify New Data Source


- Select option to specify new data source.
- Select universe and select next.

Change Source Wizard

Change Data Source
Select another data source - an existing data source in the document or a new data source




Select an option

Choose an existing data source from the document

Name	Type
 AFRS 2021 [unx]	Universe

Specify a new data source

Select a data source

-  Universe...
-  SAP BW...
-  SAP HANA...

Apply changes in all queries sharing the same data source.

[Next](#) [Cancel](#)

Select Universe To Change Data Source

❑ Select universe and select ok.

Select a universe for the query.

Type here to filter table

Name	☰	Revision	Folder
AFRS 2021 with TIN.unx		7	@BIR4_QA\Accounting Universes
AFRS 2021.unx		7	@BIR4_QA\Accounting Universes
AFRS 2023 Test.unx		1	@BIR4_QA\Accounting Universes
AFRS 2023 with TIN.unx		2	@BIR4_QA\Accounting Universes
AFRS 2023.unx		2	@BIR4_QA\Accounting Universes

OK

Cancel

Select Next

Review your changes and select next.


Change Source Wizard

Change Data Source

Select another data source - an existing data source in the document or a new data source

Select an option

Choose an existing data source from the document

Name	Type
 AFRS 2021 [unx]	Universe

Specify a new data source

Select a data source ▾

AFRS 2023.unx

Type: Universe

[Change](#)

Apply changes in all queries sharing the same data source.

Next

Cancel

Select Mapping

- ❑ **Select options for mapping objects and select next.** In this example, we use the default strategy.

Strategy Selection
Select the strategies to use for mapping objects between the source and target data sources

Available strategies		Selected strategy order
Same name Removal	> <	Same ID Same technical name Same path Closest name

Settings... ↑ ↓ Default

Previous **Next** Cancel

Select Finish

- ❑ **Review object mapping and select finish.**
 - ✓ The data source wizard will return you to the query panel so that you can run the query.

Object Mapping
Show how each object in the original data source is replaced by an object in the destination data source or removed

Map source and target objects:

<input type="checkbox"/> Current	New	
<input type="checkbox"/> Fiscal Year	✓ Fiscal Year	...
<input type="checkbox"/> Fiscal Month	✓ Fiscal Month	...
<input type="checkbox"/> Agency	✓ Agency	...
<input type="checkbox"/> GL Account	✓ GL Account	...
<input type="checkbox"/> Program	✓ Program	...
<input type="checkbox"/> Amount	✓ Amount	...

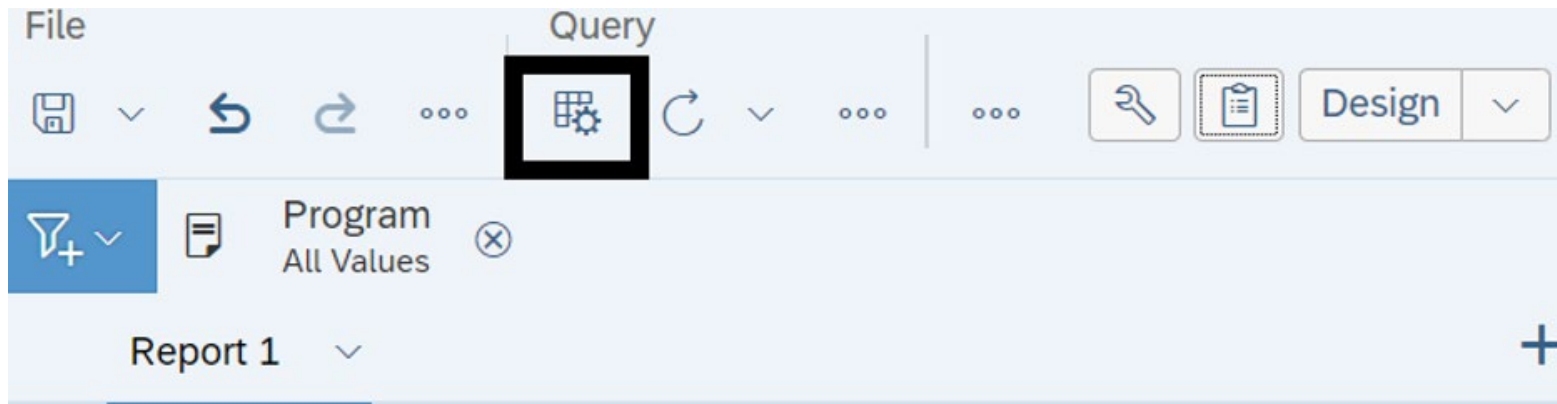
Strategies...

Finish **Cancel**

Add Another Query

You can also use the query panel to add another query in your document (instead of duplicating an existing query in the document).

❑ **Select Edit.**



Add Query Then Build/Run Query

- ❑ Select add query.
- ❑ Build and run the query. When you run the query, the system will prompt you to select an add query option in the next step.

Query Panel

The screenshot shows the 'Query Panel' interface. At the top, there is a toolbar with several icons, and the 'Add Query' button is highlighted with a black box. Below the toolbar, there are dropdown menus for 'Query 1', 'Query 1 (1)', and 'Query 2'. The main area is divided into two panes. The left pane shows a tree view for 'AFRS 2023' with a search bar and a list of objects: 'AFRS 2023 [unx]', 'Time Class', 'Time Filters', 'Agency Class', 'GL Account Class', 'GL Account Filters', and 'Account (Fund) Class'. The right pane has two sections: 'Result Objects' and 'Query Filters'. The 'Result Objects' section has a search bar, a list of objects, and a description: 'To include data in reports, select objects on the Universe pane and add them here by clicking the arrow or using drag-and-drop. Click Run Query to return the results.' The 'Query Filters' section has a search bar, a list of filters, and a description: 'To filter the query, select predefined filters or objects in the Universe pane and add them here by clicking the arrow or using drag-and-drop. Select Filter to specify the values you want returned to reports or select Prompt to define a message so users can select values of their choice.'

Select Add Query Option

- ❑ **Select add query option.** In this example, we select the option to insert a table in a new report.

Add Query

Choose how you want to include the data from the new query.

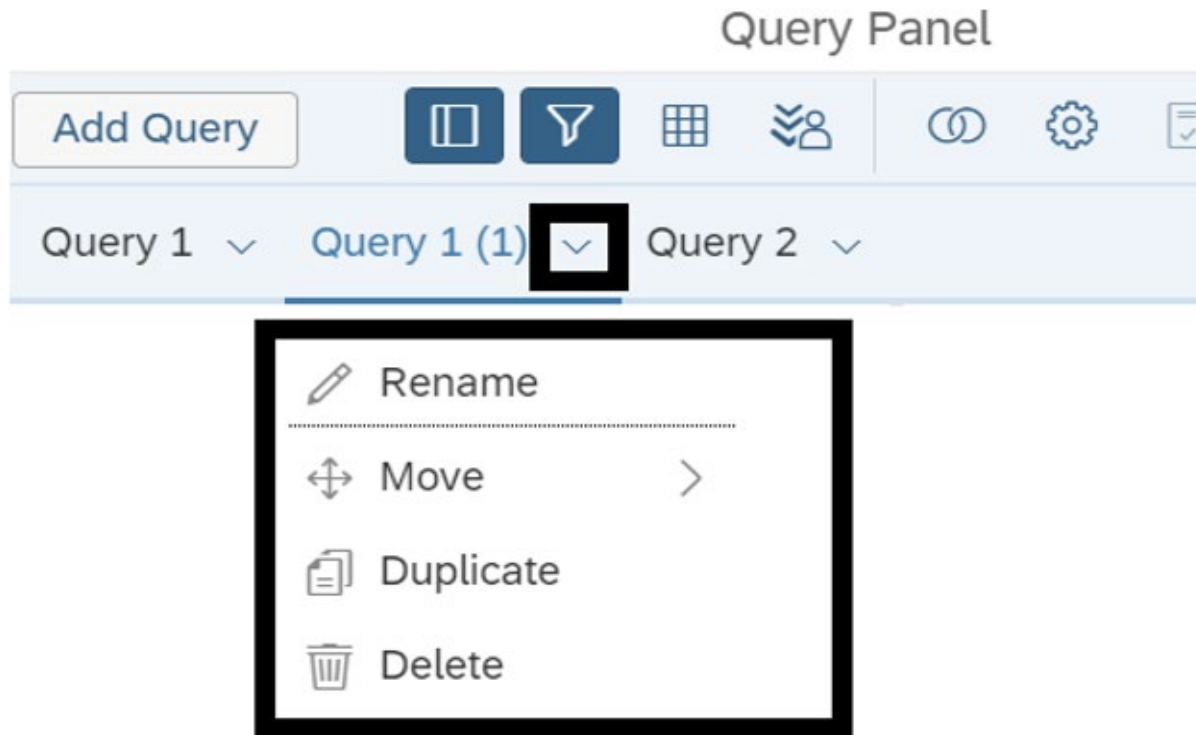
- Insert a table in a new report
- Insert a table in the current report
- Include the result objects in the document without generating a table

OK

Display Option	Additional Information
Insert table in new report	Display on new report in document.
Insert table in current report	Display in new table on current report in document.
Include result objects in document without generating table	Include data in document without displaying data on report (you can add the objects to the report later if needed).

Additional Query Options

Use the query panel to rename a query, move a query, or delete a query.



Merge Dimensions

In this section, we will explore some options for manually merging dimensions.

- ✓ You can synchronize data from multiple queries or data providers by merging dimension objects.

Rules For Merging Dimensions

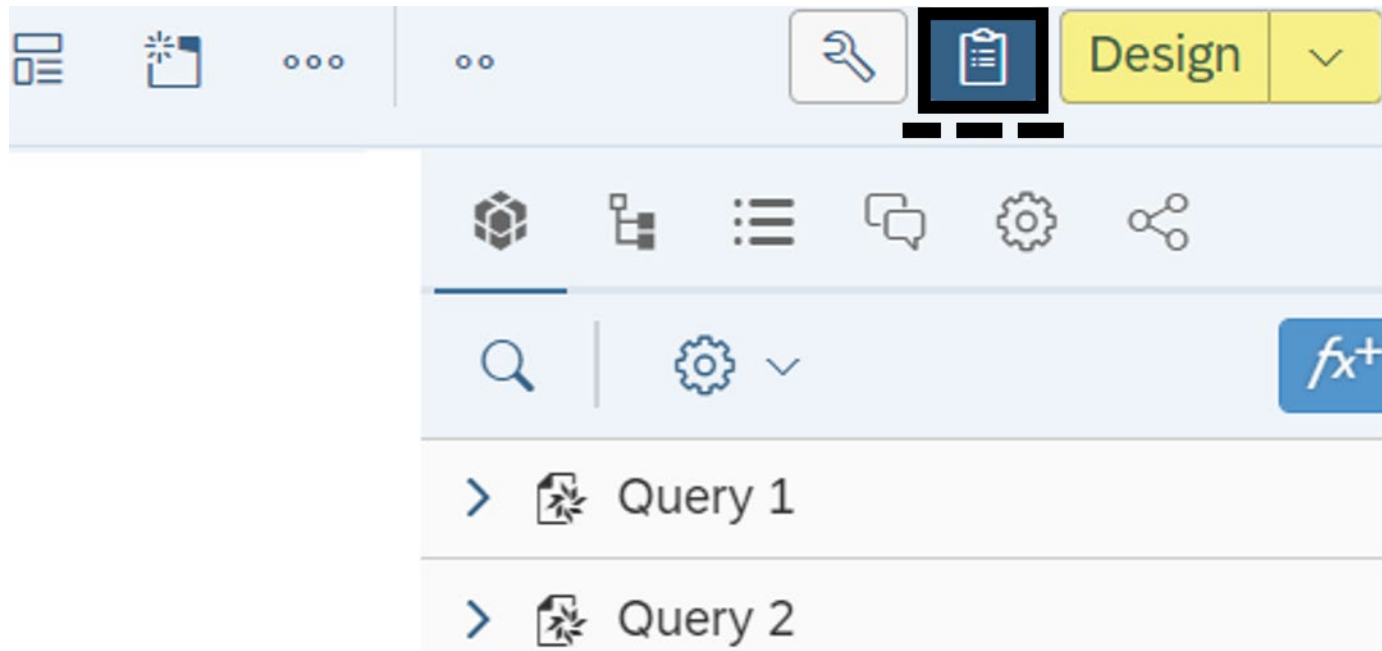
You can merge dimensions to combine data from different data sources in a report.

- ✓ Only dimensions defined in the universe can be merged. You cannot merge variables.
- ✓ Measures cannot be merged. Measures need to be calculated with a formula or variable.
- ✓ Objects need to have the same data type. For example, you cannot merge a number with a string (even if the values match).
- ✓ Any number of queries can be merged.
- ✓ Any number of dimension objects can be merged between two queries.
- ✓ Values are case-sensitive. For example, if values are the same but have different capitalization they will be displayed as different values (because the uppercase/lowercase values do not match).

Display Report Page Main Panel

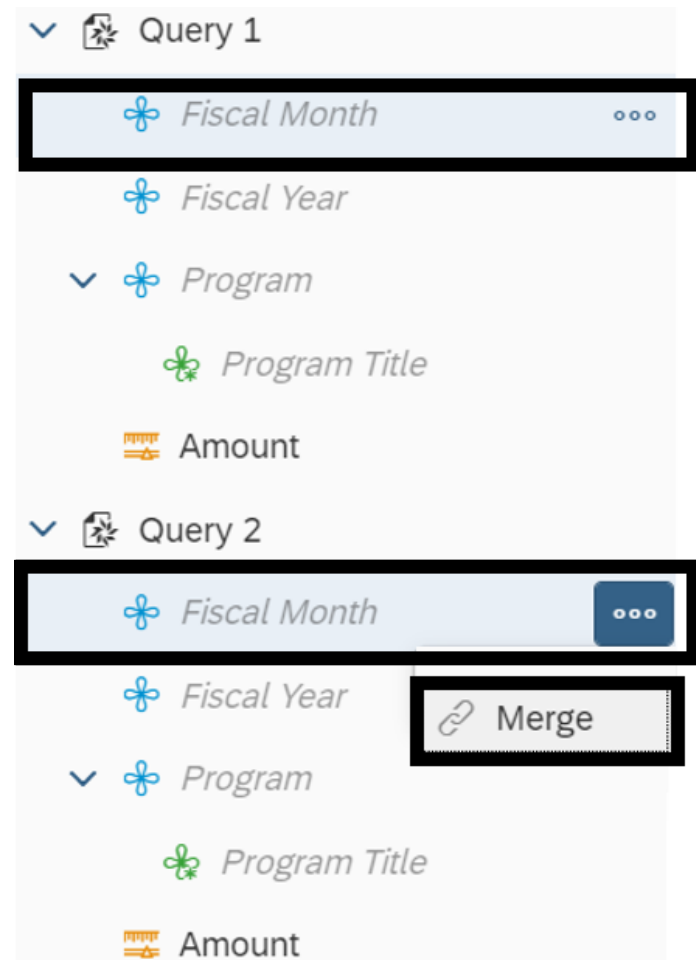
Use the report page to manually merge dimensions.

Select toggle to display main panel.



Select Dimensions/Select Merge

- ❑ **Select first set of dimensions to be merged.**
 - ✓ Use control key to select dimensions.
- ❑ **Select merge.**
 - ✓ Use ellipsis to select merge option.
- ❑ **Repeat the steps to merge additional dimensions.**



Sample Merged Dimensions

Merged dimensions will be displayed with the query information in the main panel on the report page.

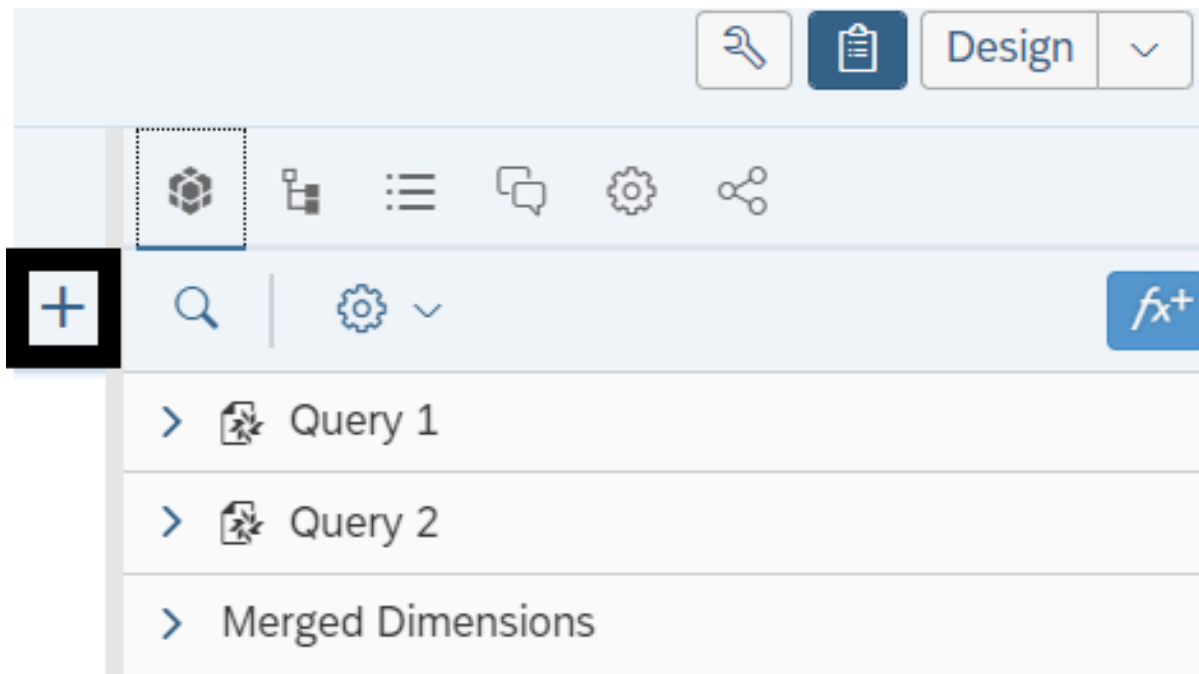
The screenshot displays a hierarchical list of dimensions in a report interface. At the top, there are two expandable sections: 'Query 1' and 'Query 2', each with a right-pointing chevron and a small icon. Below these is a collapsed section 'Merged Dimensions' with a downward-pointing chevron. Under 'Merged Dimensions', there are three main categories, each with a downward chevron and a blue icon: 'Fiscal Month', 'Fiscal Year', and 'Program'. Each of these categories contains two sub-items, 'Fiscal Month (Query 1)', 'Fiscal Month (Query 2)', 'Fiscal Year (Query 1)', 'Fiscal Year (Query 2)', 'Program (Query 1)', and 'Program (Query 2)', each with a blue icon.

- > Query 1
- > Query 2
- ▼ Merged Dimensions
 - ▼ Fiscal Month
 - Fiscal Month (Query 1)
 - Fiscal Month (Query 2)
 - ▼ Fiscal Year
 - Fiscal Year (Query 1)
 - Fiscal Year (Query 2)
 - ▼ Program
 - Program (Query 1)
 - Program (Query 2)

Add New Report

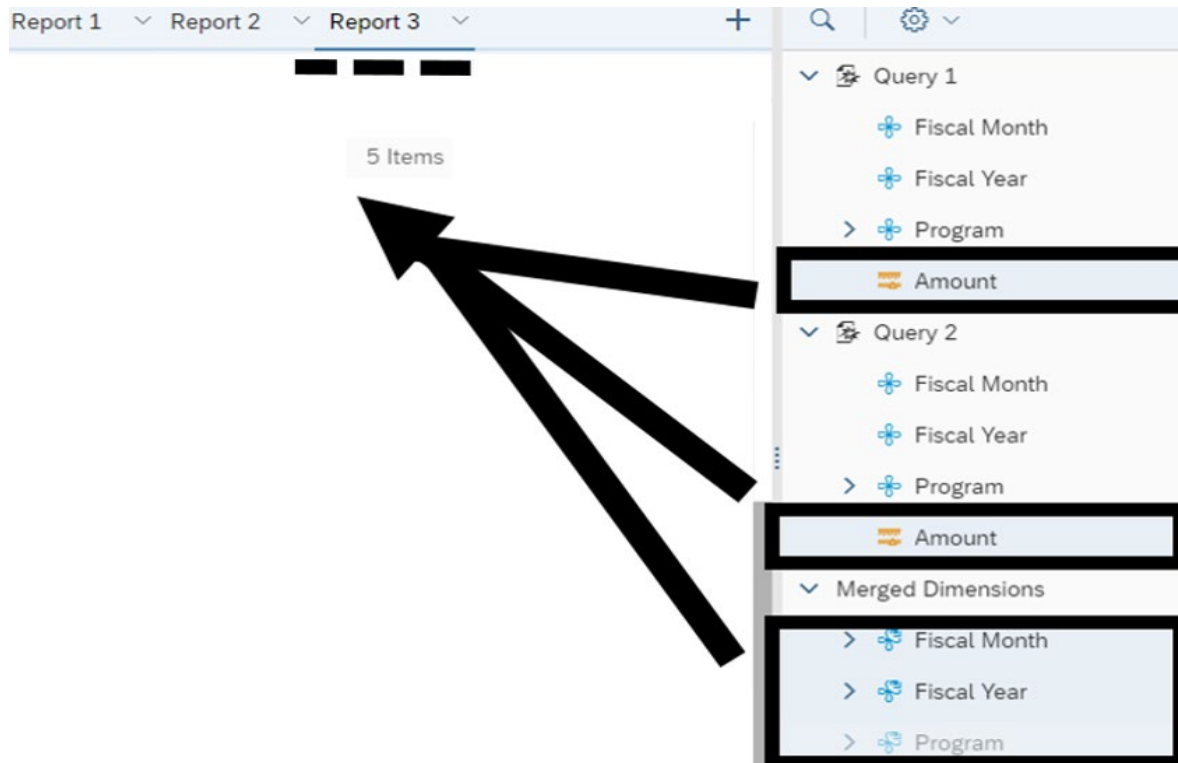
Add a new report to display the merged dimensions.

❑ **Select add new report.**



Add Objects To New Report

- ❑ Drag and drop objects to new report.
- ✓ Use the control key to select multiple objects. In this example, we add the merged dimensions and the amount measure from the two queries to the blank space on the new report.



Sample Report With Merged Dimensions

In this example, we added the merged dimensions and the amount measure from the two queries to the new report. If you want to display a single amount column, you could [create a formula](#) to sum the two amounts.

The screenshot displays a reporting tool interface with three tabs: 'Insert', 'Analyze', and 'Display'. The 'Analyze' tab is active, showing a filter icon and a formula icon (fx). Below the tabs, there are three report thumbnails labeled 'Report 1', 'Report 2', and 'Report 3', with 'Report 3' selected. To the right, a sidebar contains a search icon, a settings gear, and a list of data sources: 'Query 1', 'Query 2', and 'Merged Dimensions'. The 'Merged Dimensions' section is expanded, showing 'Fiscal Month', 'Fiscal Year', and 'Program'. A blue 'fx+' button is visible in the sidebar. Below the interface, a data table is shown with the following content:

Program	Fiscal Year	Fiscal Month	Amount	Amount
010	2020	12	127,878.85	
010	2022	12		130,112.99
020	2020	12	12,714,017.82	
020	2022	12		10,429,328.09
030	2020	12	492,259.95	

Print/Export

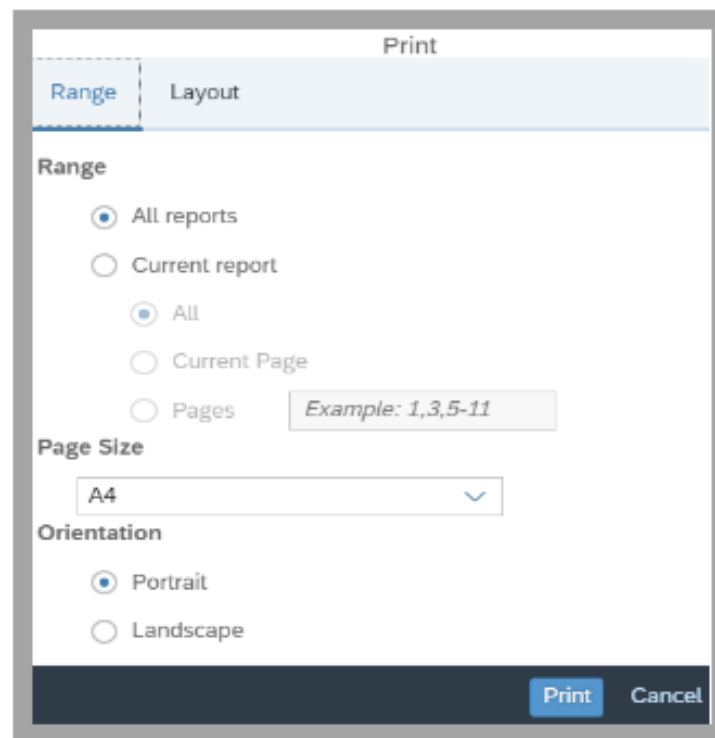
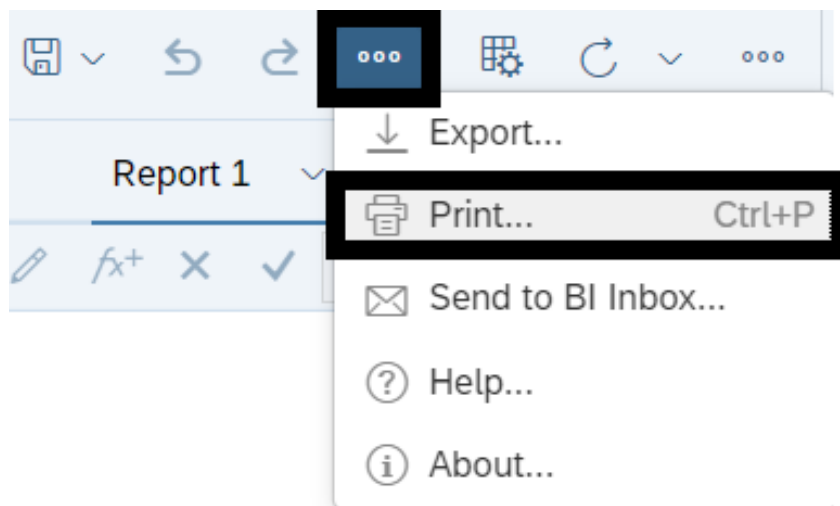
In this section, we will review basic print and export options.

- ✓ WebI uses standard options to print and export reports. This will be very similar to how you print and export files in other modern business systems.
- ✓ Always consider data contents before you print or export a file. If your report includes confidential or personal information, you may need to remove/purge or anonymize data before sending it to a non-secure location.

Print

Print option is available on the report toolbar.

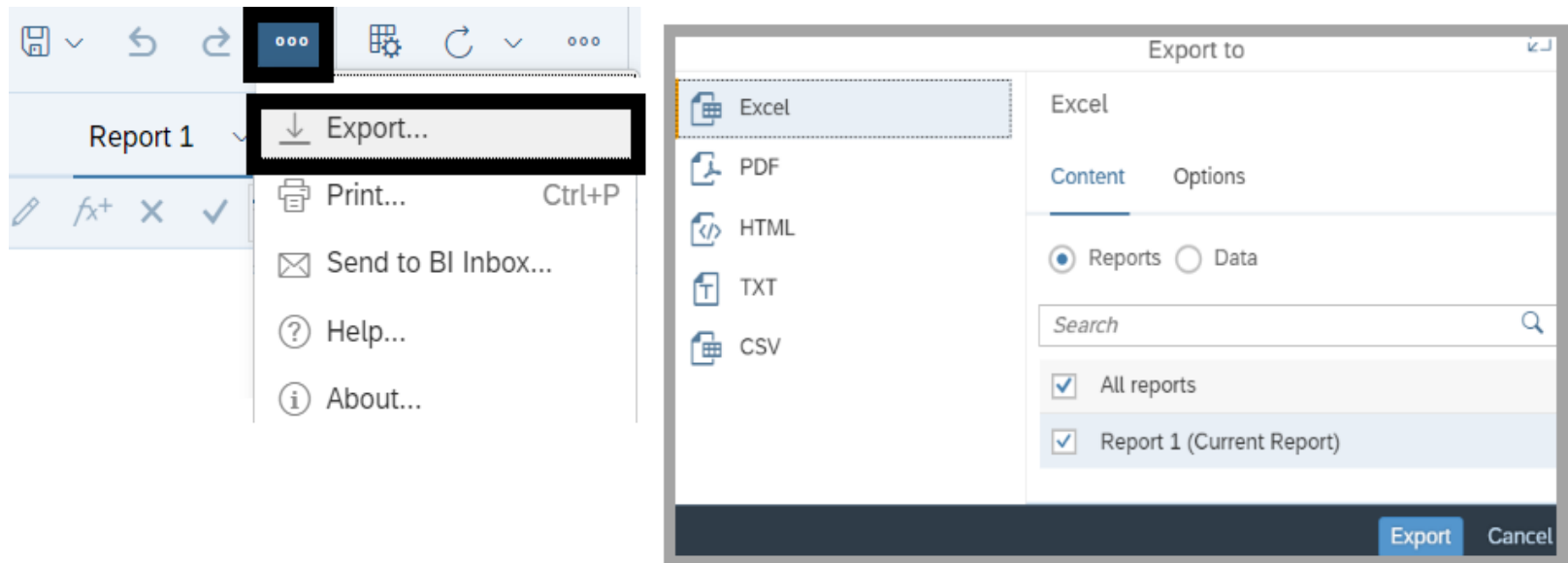
- ✓ You can print all reports in the document or specific pages in a report.



Export

Export option is available on the report toolbar.

- ✓ You can export all reports in the document, a specific report, or raw data. WebI will use your desktop downloads folder as a default location for the exported file.



Schedule Reports

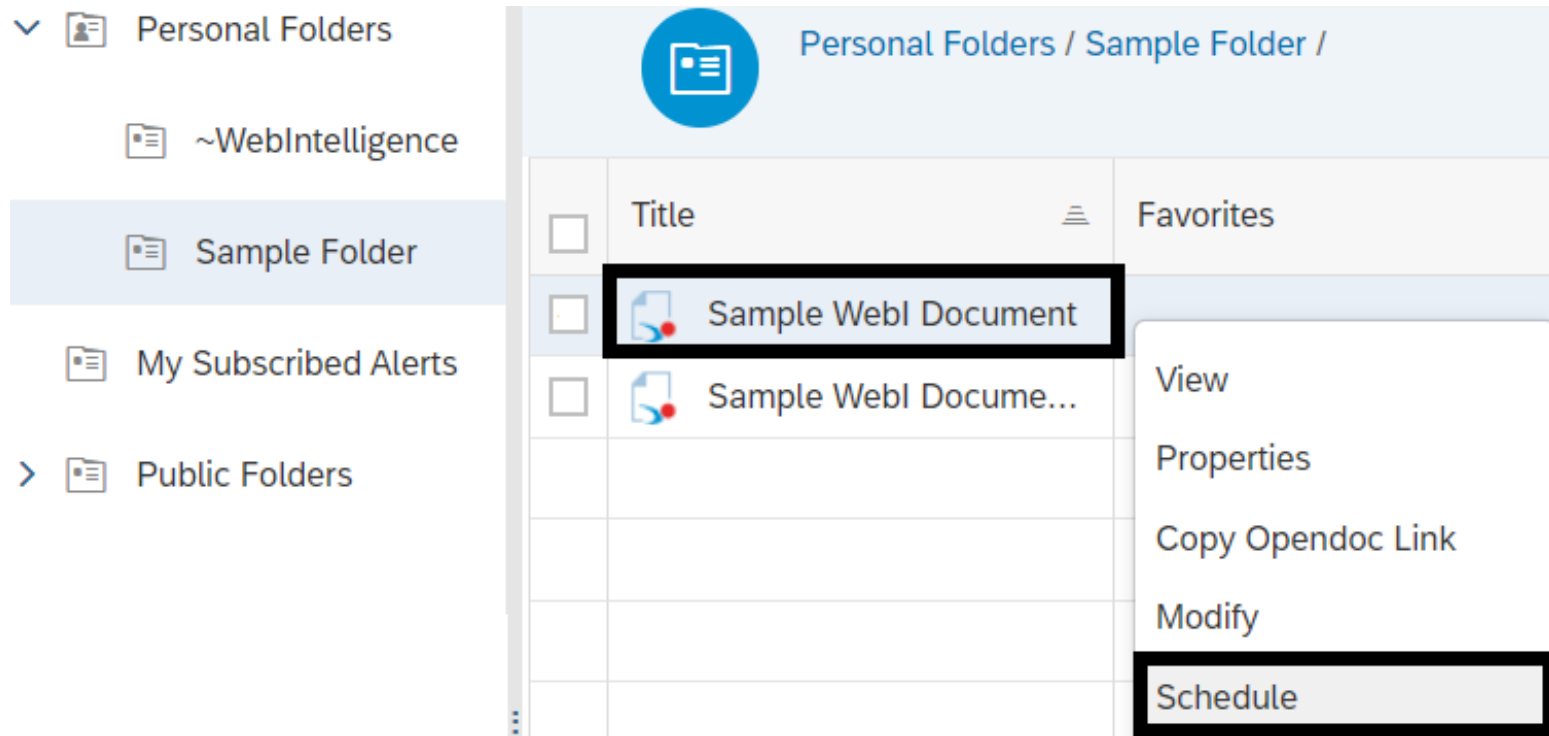
In this section, we will review basic options for scheduling reports.

- ✓ This section also includes a quick reference table for common schedule occurrence options.
- ✓ Always consider data contents before sending a report to other people. If your report includes confidential or personal information, you may need to remove/purge or anonymize data before sending it to a non-secure location.
- ❖ Reminder: if you need to run standard reports without using additional WebI tools, use the Enterprise Reporting portal.

Schedule Report Occurrence

WebI provides several options for scheduling reports.

- ❑ **Right-click the document and select schedule.**



Schedule Report - Instance Title

Input instance title.

- ✓ You can change the instance title for the scheduled document for reference. It will not change the original name of the document.

Schedule

General ▾ Report Features ▾

Instance Title

Title *

Sample Web1 Document

Schedule Report - Recurrence

- ❑ **Select run report option.** You will be prompted for additional information based on the recurrence option you selected.

Recurrence

Run Report:

Now

Now

Once

Recurring

Calendar

Allow Retries

OFF

Schedule Report - Recurrence Options

- ✓ You will be prompted for additional information based on the recurrence option you selected.

Option	Additional Information
Now	Immediately.
Once	One time during specific timeframe. If you schedule report with events, it will run once if event is triggered between start/end times.
Hourly	Hourly based on date/time criteria.
Daily	Once every day based on date/time criteria.
Weekly	Weekly based on day(s) of the week and date/time criteria.
Monthly	Monthly based on month interval and date/time criteria.
Nth Day of Month	Specific day of each month based on date/time criteria.
1 st Monday of Month	First Monday of each month based on date/time criteria.
Last Day of Month	Last day of each month based on date/time criteria.
X Day of Nth Week of Month	Specific week and day of the month based on date/time criteria.
Calendar	Specific calendar activity (available in dropdown).

Schedule Report - Calendar

Recurrence option for calendar includes a list of activities. For example, AFRS fiscal month closing.

Run Report:

Calendar



Calendar Name:

AFRS Fiscal Month Closing



Start Date:

Sample Date/Time

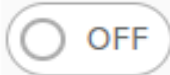


End Date:

Sample Date/Time



Allow Retries



- AFRS Fiscal Month Closing
- AFRS Fiscal Month Closing-Day Of (closing occurs after 6pm)
- AFRS Fiscal Month Closing-One Day Before
- AFRS Fiscal Month Closing-Two Days After
- AFRS Fiscal Month Closing-Two Days Before
- CAFR Closing
- Fifth Business Day of the Month
- First Paydate minus two days
- Third Business Day of the Month
- WWA Payroll Day 3
- WWA Payroll Day 4
- WWA Payroll Day 5

Schedule Report - Format

- Select report features.**
- Select output format.**
- Select schedule** (located in lower right corner).

Schedule

General Report Features

Formats

Web Intelligence

- Web Intelligence
- Microsoft Excel - Data
- Microsoft Excel - Reports
- Adobe Acrobat
- Comma Separated Values (CSV) - Data
- Comma Separated Values (CSV) Archive - Reports
- Plain Text
- HTML Archive

Help/Resources

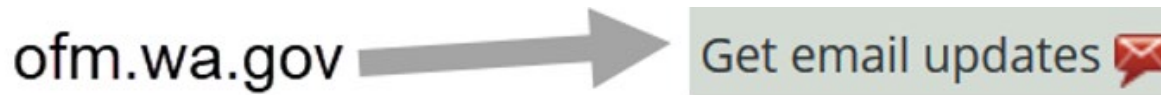
In this section, we will review some of the resources available to provide help and guidance for WebI tools.

- ✓ **OFM resources** will be specific for State of Washington reporting needs.
- ✓ **SAP resources** will not be specific for State of Washington (these resources are provided by the software vendor).

Help/Resources - OFM

If you need help using Webl, there are lots of resources available!

- ✓ Information page with links to reference materials and eLearning available on [Enterprise Reporting \(ER\) page](#) on the [OFM IT Systems website](#).
- ✓ For additional information, contact the OFM Help Desk HereToHelp@ofm.wa.gov 360.407.9100.
- ✓ Sign-up for news and updates via [GovDelivery subscriptions](#).



Subscription Topics

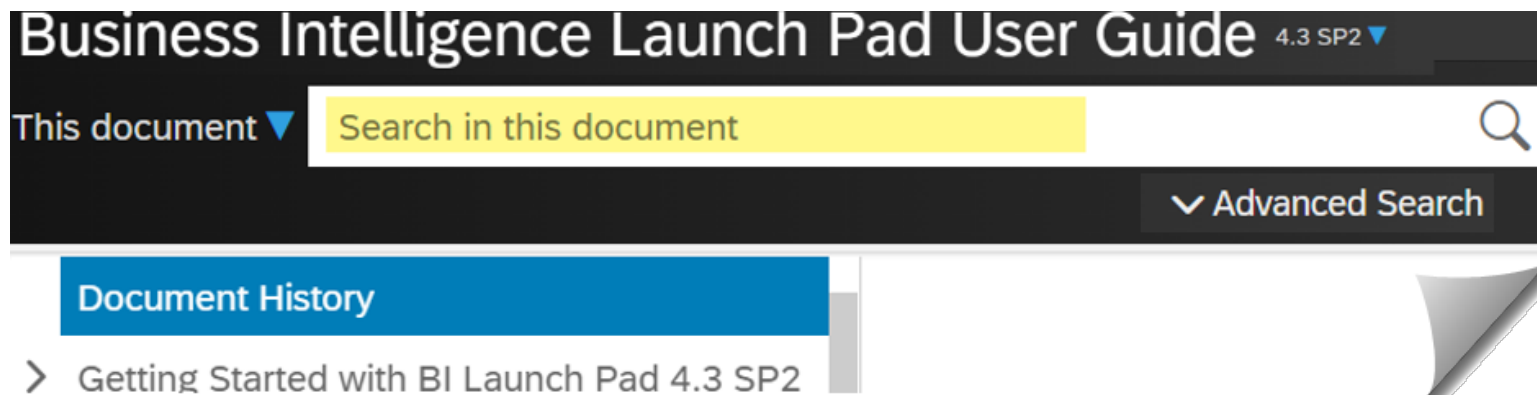
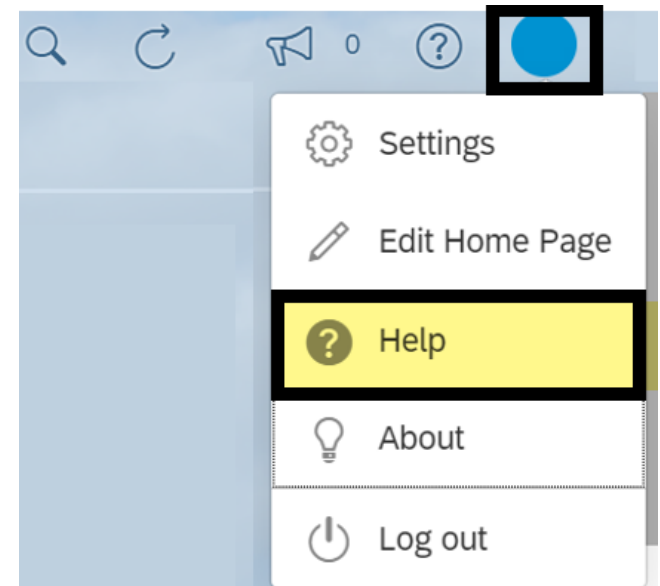
- Enterprise Reporting (ER) 



Help/Resources - SAP Online User Guide

Use the quick link for help in the user settings section of the launchpad to access the SAP online user guide.

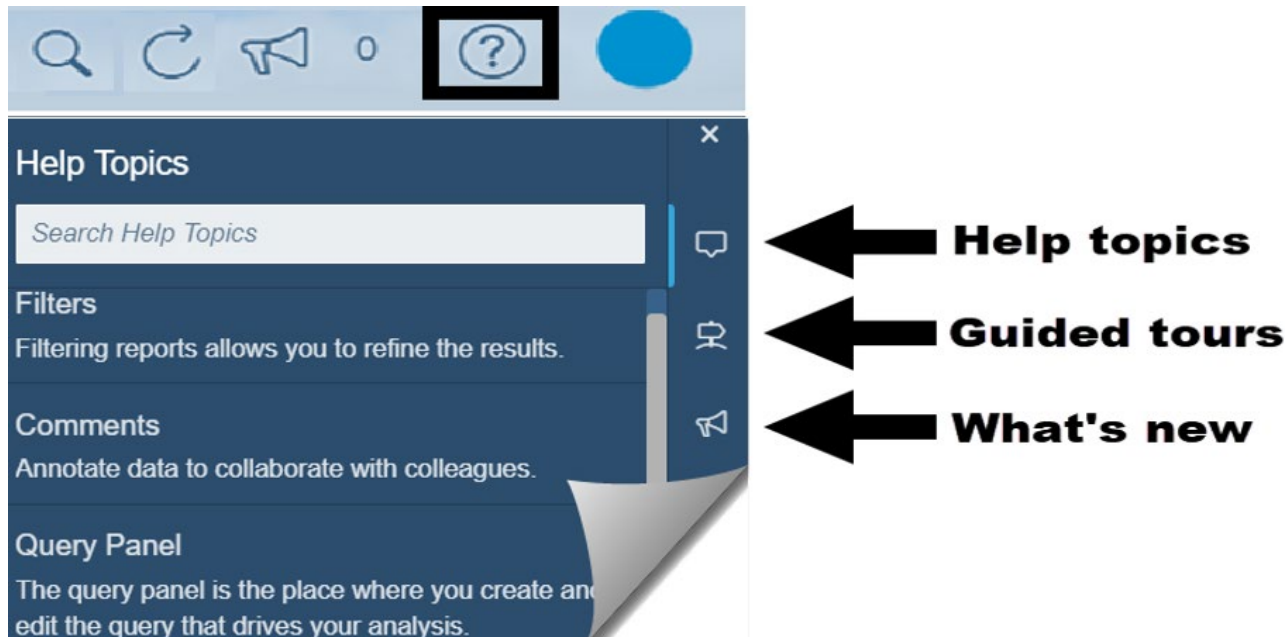
- ✓ Use the search tool within the SAP user guide to find specific topics or additional information.



Help/Resources - SAP Web Assistant

Use the quick link (question mark icon) in the top banner of the launchpad to access the SAP assistant.

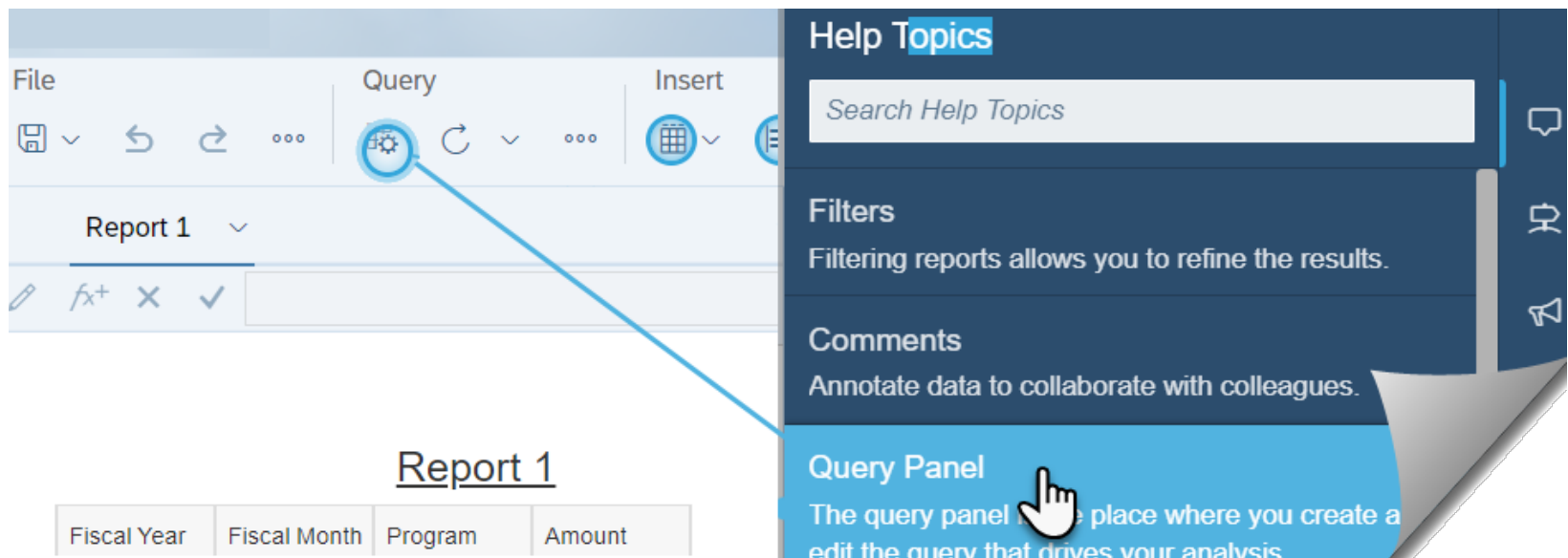
- ✓ **Help topics** content based on the page you are currently on.
- ✓ **Guided tours** limited content at this time (use the help topics for information and quick online demonstrations in the meantime).
- ✓ **What's new** quick recap of recent upgrade features.



Help/Resources - SAP Web Assistant Help Topics

Help topics in the SAP web assistant are based on the page you are currently on. For example, the content will be relevant for the report toolbar/options if you are on the report page.

- ✓ You can hover your cursor on a help topic to display a description with a line/pointer to direct you to the toolbar/option.



Help/Resources - SAP Web Assistant Online Demo

Help topics in the SAP web assistant are based on the page you are currently on. For example, the content will be relevant for the report toolbar/options if you are on the report page.

- ✓ You can select a help topic to display additional information and/or quick demonstration for that topic.

The image shows a screenshot of the SAP Web Assistant interface. On the left, the 'Query Panel' is visible, containing sections for 'Filters', 'Result Objects', and 'Query Filters'. On the right, a 'Help Topics' sidebar is open, listing 'Help Topics', 'Filters', 'Comments', and 'Query Panel'. A callout box points to the 'Query Panel' topic in the sidebar with the text: 'Select a help topic to display additional information and/or quick demonstration.'

Q&A and Wrap Up

Thank you for attending today's session!

- ✓ Q&A - any additional questions?
- ✓ If you need help, please contact the OFM Help Desk (HereToHelp@ofm.wa.gov 360.407.9100).

Don't forget to log off and close your browser!

Welcome: Sample Name

| Applications ▼

Preferences

Help menu ▼

Log off

