



Enterprise Reporting Advanced Web Intelligence Training

Enterprise Reporting Services

Table of Contents

Chapter	Page
<u>1 – Overview</u>	4
<u>2 – Web Intelligence Access</u>	8
<u>3 – BI Launch Pad Navigation</u>	12
<u>4 – Nested Query Filter</u>	17
<u>5 – Working with Report Tables</u>	27
<u>6 – Data Tracking</u>	32
<u>7 – On-Report Filtering</u>	37
<u>8 – Formulas and Variables</u>	51
<u>9 – Working with Multiple Queries</u>	60
<u>10 – Printing and Exporting Reports</u>	72
<u>11 – Scheduling Reports</u>	79
<u>12 – Log off</u>	85

- Your name?
- Your agency?
- How have you been using ER Web Intelligence?

Overview

At the conclusion of class participants should have an understanding of the these Web Intelligence features:

- Nested Queries
- Creating Sections
- On-Report Filtering
- Working with Multiple Queries
- Data Tracking
- Creating Variables
- Merge Dimensions

SAP Business Objects Web Intelligence Product Tutorials

- <http://scn.sap.com/docs/DOC-7819>

ER Hours of Operation

- 24/7 for viewing reports
- Daily AFRS Data updates are from 8 pm through Midnight – New and existing AFRS queries cannot be generated during this time

System Maintenance – Between 12:00 am and 7:30 am on the Last Monday of every month

Getting Support

- 8:00 a.m. to 5:00 p.m. Monday through Friday
- 360-407-9100
- solutionscenter@des.wa.gov

Web Intelligence Access

Web Intelligence access

Web Intelligence customers must have online access either through the State Governmental Network (SGN) or through Secure Access WA (SAW) for use from outside of the state firewall.

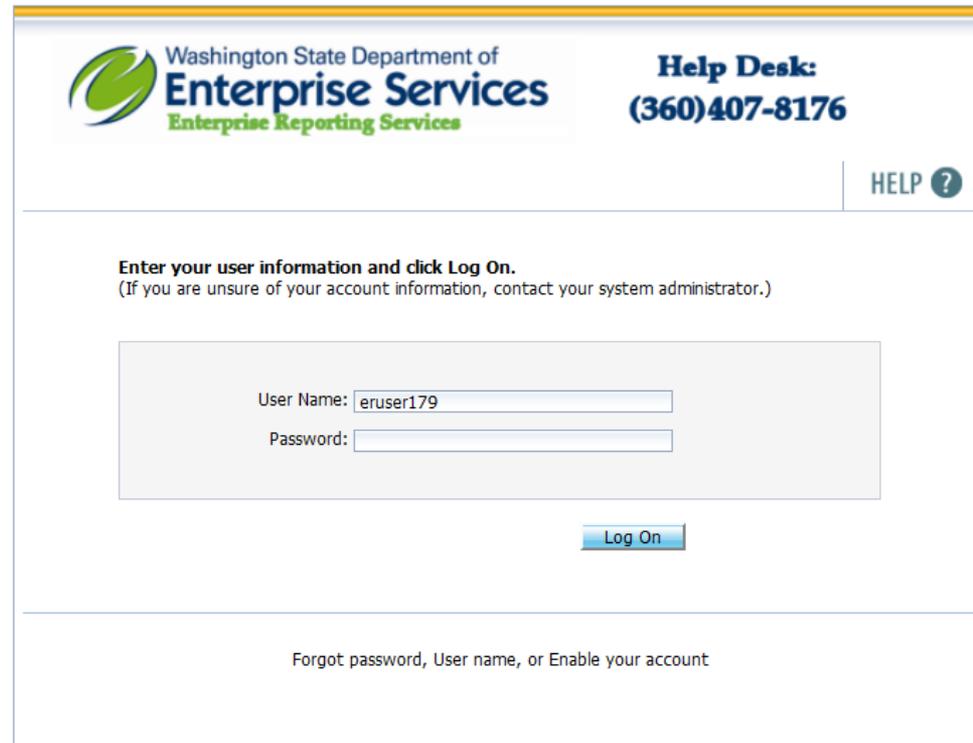
This guide only includes information for access within the SGN.

For access using SAW please consult the instructions at:

http://des.wa.gov/SiteCollectionDocuments/ITSolutions/Enterprise%20Reporting/SAW_Instructions/BO_4.0_SAW_Instructions.pdf

Type <https://reporting.des.wa.gov> into the address bar of your internet browser and click **Go**, or press [Enter].

1. Enter your assigned User Name in the **User Name** field
2. Enter your Password in the **Password** field.
 - This application requires a hardened password. Refer to the password guidelines on the next page.
3. Click the **Log On** button or press [Enter] to initiate a connection to the Web Intelligence.



The screenshot shows the login interface for the Washington State Department of Enterprise Services. At the top left is the logo for Enterprise Reporting Services. To the right is the Help Desk contact information: (360)407-8176. A HELP ? link is located in the top right corner. The main heading reads "Enter your user information and click Log On." with a sub-note: "(If you are unsure of your account information, contact your system administrator.)". Below this is a login form with two input fields: "User Name:" containing "eruser179" and "Password:". A "Log On" button is positioned below the password field. At the bottom of the page, there is a link for "Forgot password, User name, or Enable your account".

Password Requirements

The hardened password criteria is as follows:

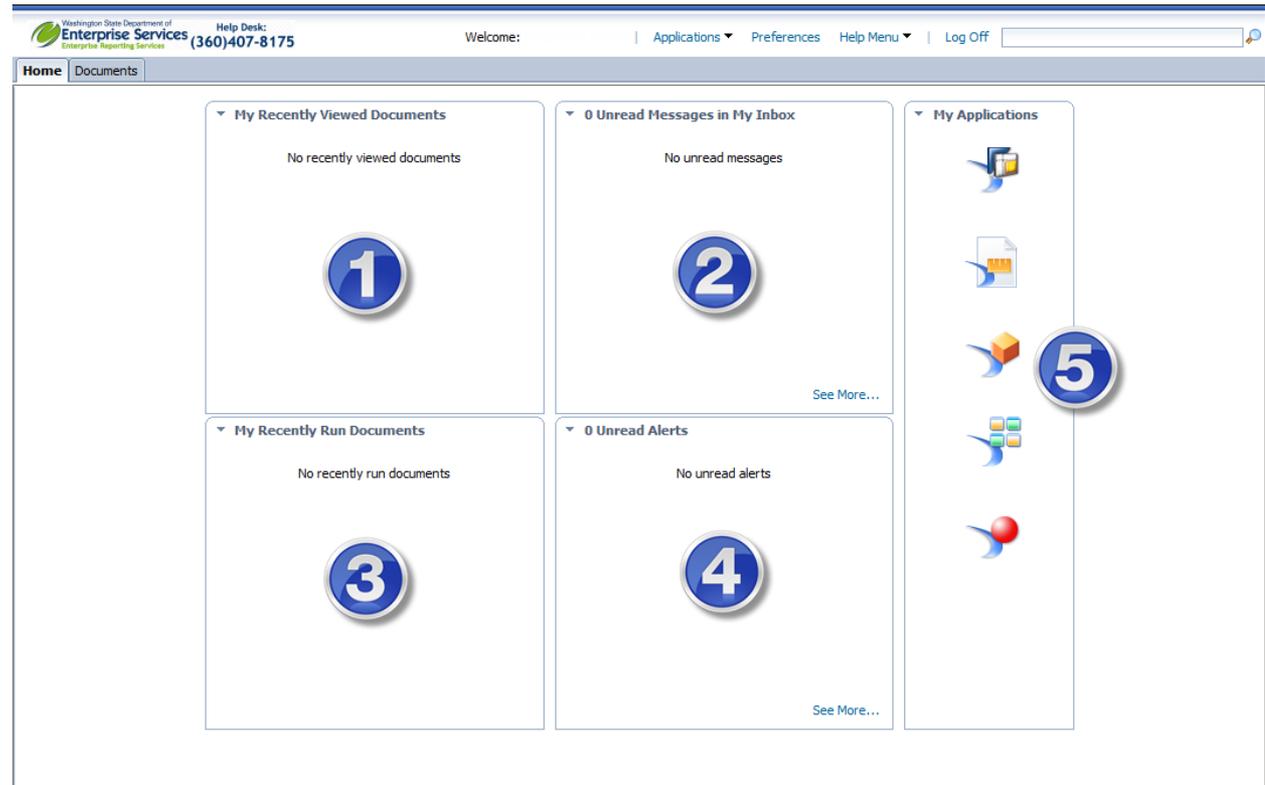
- Password must be at least eight characters long.
- Password must contain at least two of the following character classes: upper case letters, lower case letters, numerals, and special characters. It cannot contain your logon ID.
- Password must be changed every 120 days.
- After five incorrect logon attempts, your user account will be locked.

BI Launch Pad Navigation

BI Launch Pad Navigation

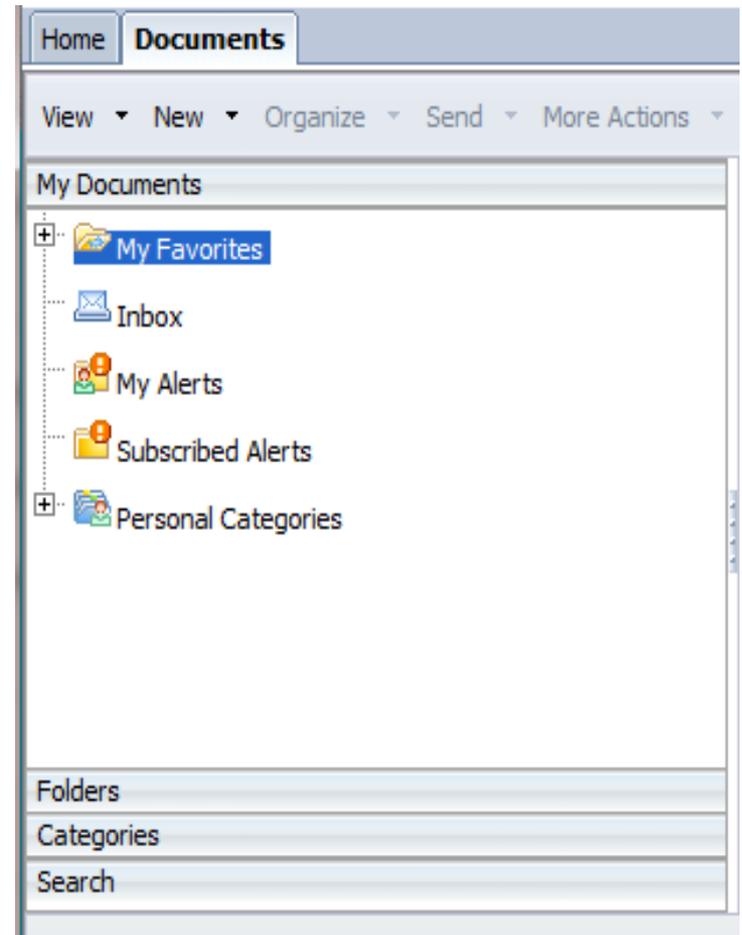
The “Home” tab allows for quick access to:

1. Recently Viewed Reports
2. Unread Business Objects Inbox Items
3. Recently Run Reports
4. Unread Alerts (Currently not in use)
5. Applications



The “Documents” tab allows access to

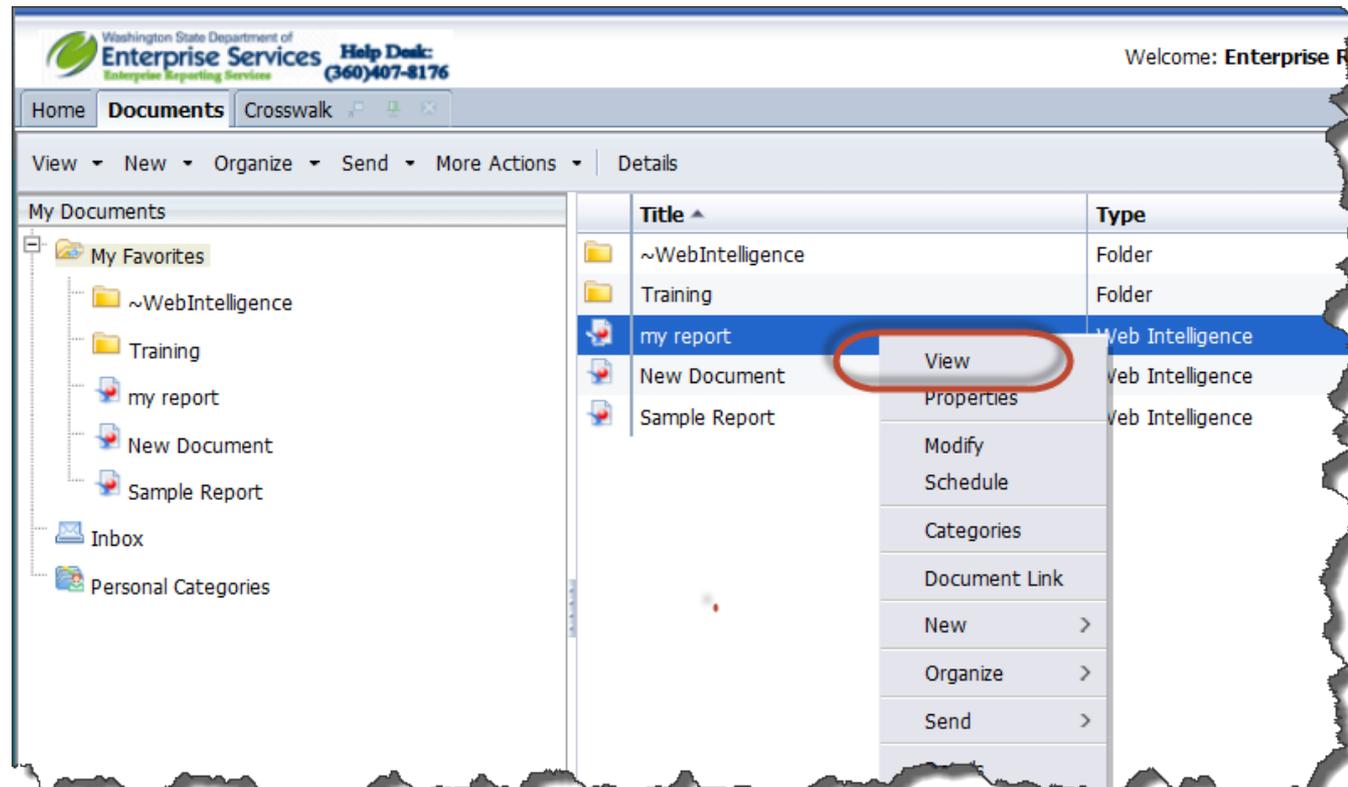
- My Documents – Access to personal documents. Other users will not have access to these documents.
- Folders – Access to Agency and other public folders.
- Personal Categories – Allows users to group reports that are used frequently together regardless of their folder.
- Search – Allow users to search for documents and objects stored in Web Intelligence.



Viewing Existing Documents

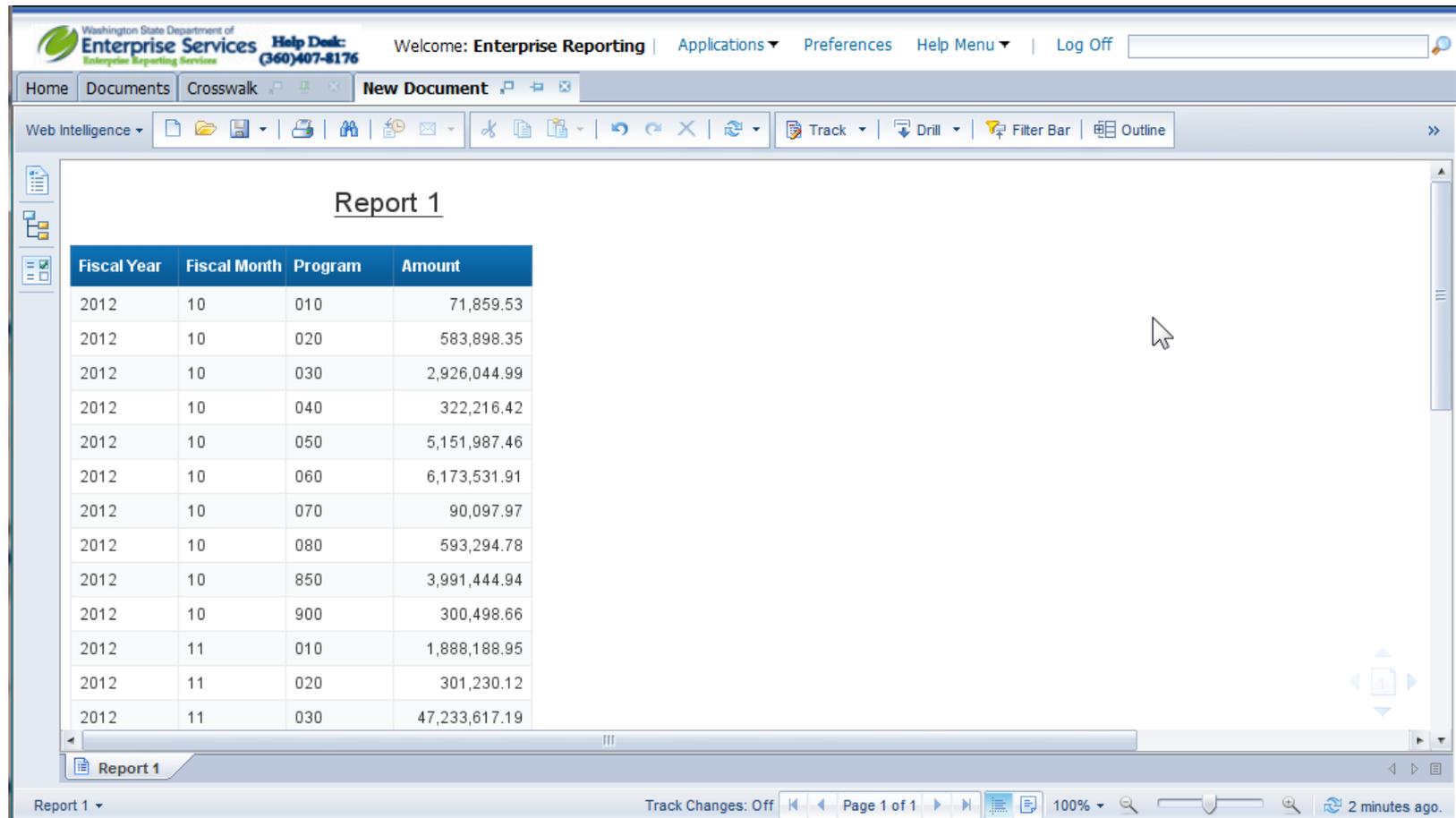
The BI Launch Pad allows for the viewing of existing Web Intelligence Reports. To view an existing Web Intelligence Report:

1. Click on the report in the Recently Viewed or Recently Run lists on the “Home” tab or select the “Documents” tab.
2. Select the correct folder where you need to view your report(s). In the example below we are looking in “My Documents” and “My Favorites”.
3. Right Click on the report you wish to view and from the menu select “View”.



Viewing Existing Documents

4. The report will open in view mode.
5. To navigate you can scroll up and down or left and right, and advance pages using the page navigation controls located on the bottom of the page.



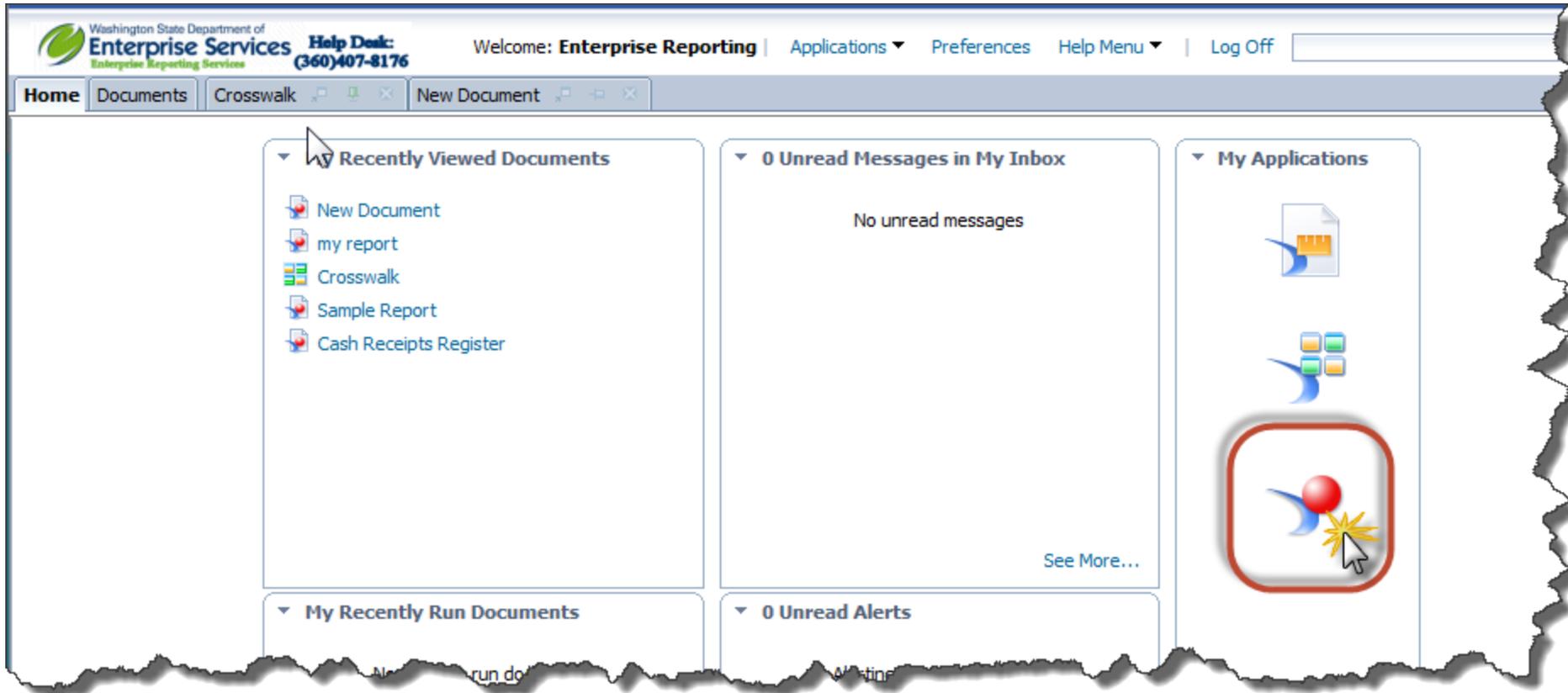
The screenshot displays the Enterprise Reporting interface. At the top, there is a header with the Washington State Department of Enterprise Services logo, a help desk number (360)407-8176, and a welcome message for Enterprise Reporting. Below the header is a navigation bar with tabs for Home, Documents, Crosswalk, and New Document. A toolbar contains various icons for file operations and navigation. The main content area shows a report titled "Report 1" with a table of data. The table has four columns: Fiscal Year, Fiscal Month, Program, and Amount. The data is organized by fiscal year (2012) and fiscal month (10, 11), with rows for different programs (010, 020, 030, 040, 050, 060, 070, 080, 850, 900). The bottom of the interface features a status bar with "Track Changes: Off", "Page 1 of 1", a zoom level of 100%, and a timestamp of "2 minutes ago".

Fiscal Year	Fiscal Month	Program	Amount
2012	10	010	71,859.53
2012	10	020	583,898.35
2012	10	030	2,926,044.99
2012	10	040	322,216.42
2012	10	050	5,151,987.46
2012	10	060	6,173,531.91
2012	10	070	90,097.97
2012	10	080	593,294.78
2012	10	850	3,991,444.94
2012	10	900	300,498.66
2012	11	010	1,888,188.95
2012	11	020	301,230.12
2012	11	030	47,233,617.19

Nested Query Filter

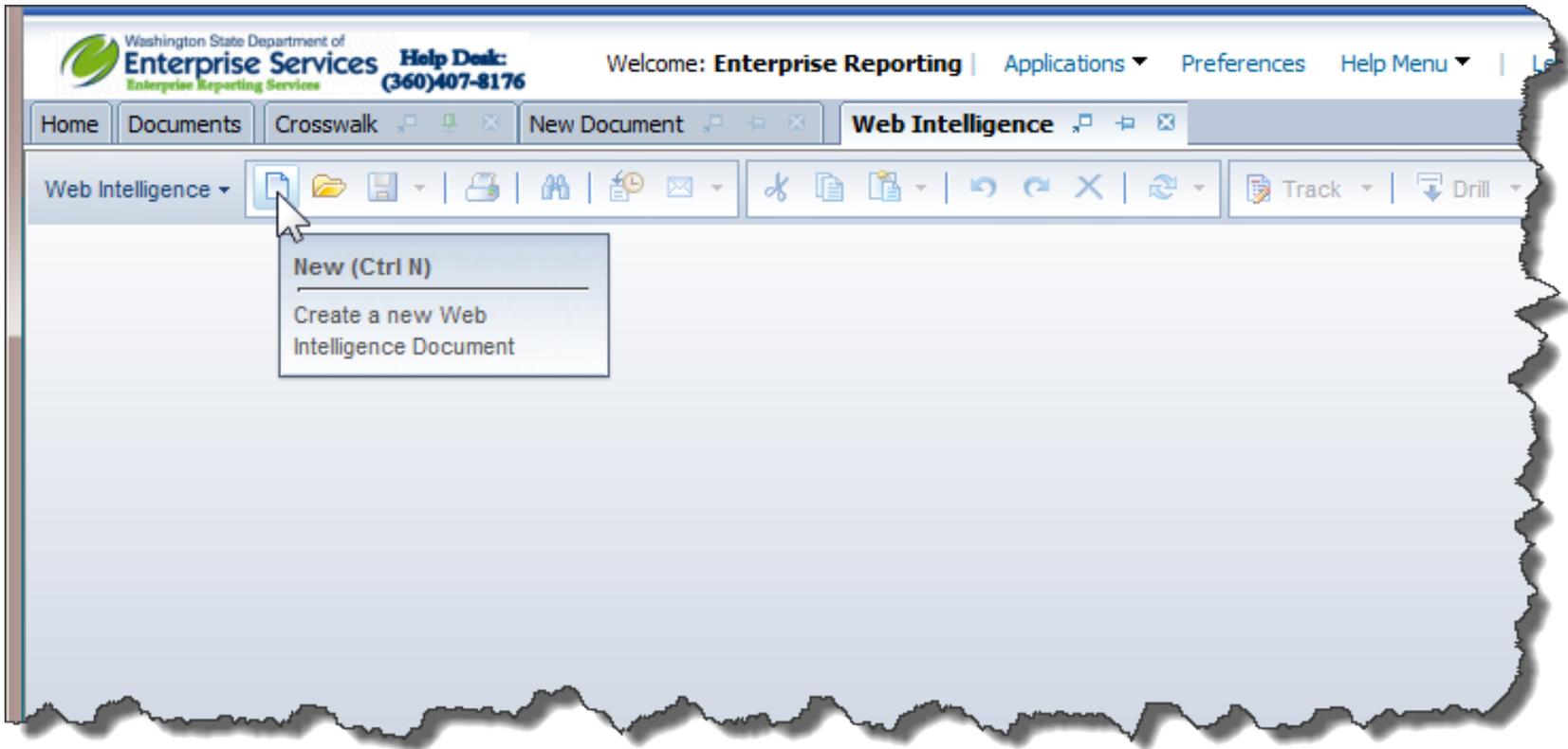
Creating New Web Intelligence Document

1. To create a new Web Intelligence document , click on the **Web Intelligence** icon in the **My Applications** panel.



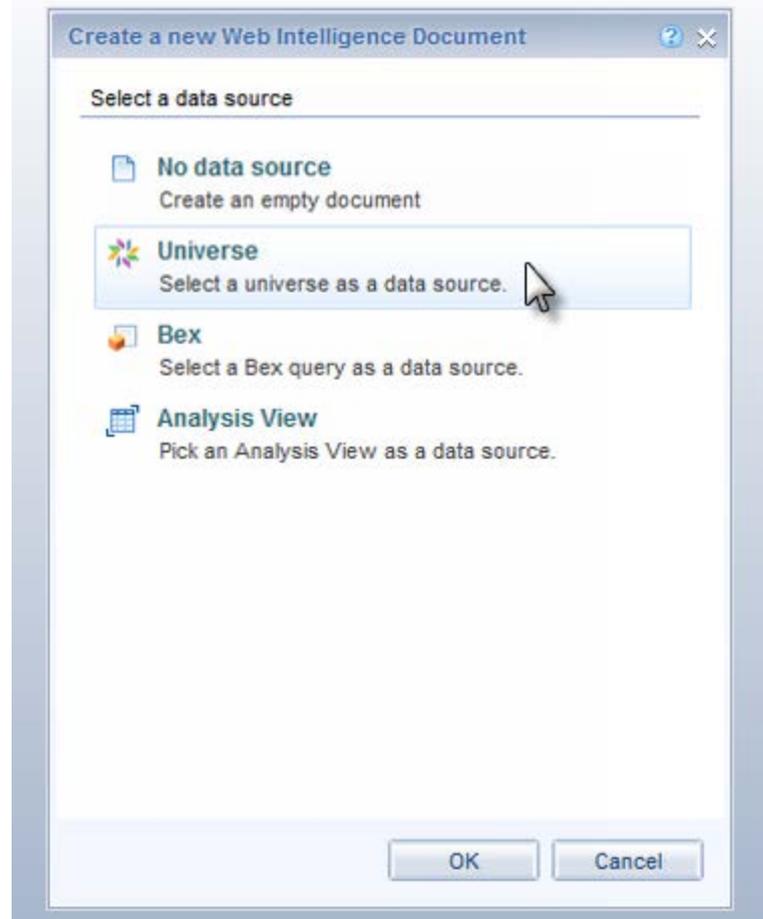
Creating New Web Intelligence Document

2. Click on **New** in the Web Intelligence Toolbar



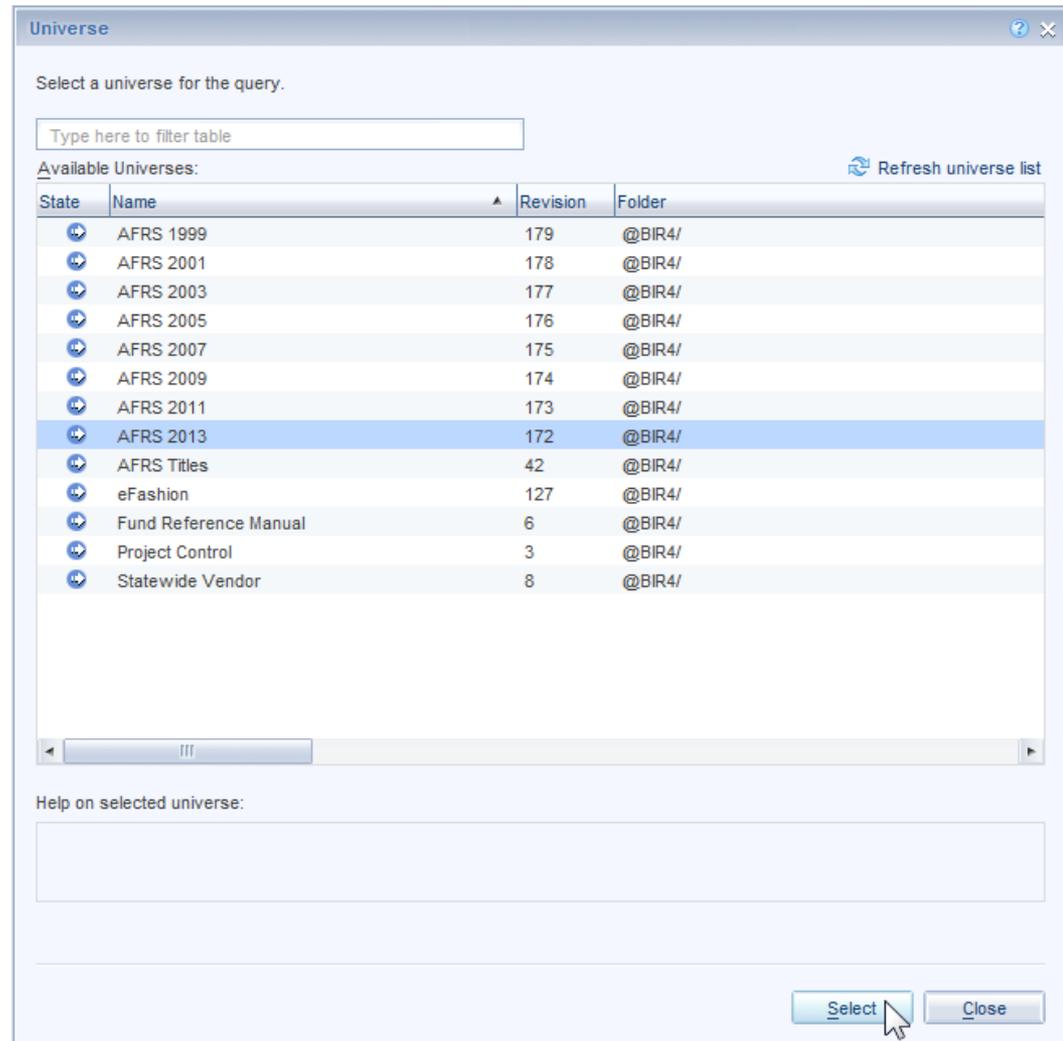
Creating New Web Intelligence Document

3. Select **Universe**, and click **OK**.



Creating New Web Intelligence Document

4. Select a universe. If a default universe is proposed, you can use this universe or select a different universe.
5. Click **Select**



Nested Query Filters

Nesting query filters allows you to create more complex filter conditions than is possible when you combine filters at the same level. To create a nested query filter follow the following steps.

1. Select the field you want to nest.

The screenshot displays the 'Query Panel' interface. On the left, the 'Universe outline' shows a tree structure for 'AFRS 2013' with 'Time Class' expanded. A black arrow points from 'Fiscal Month' in the outline to the 'Query Filters' section. The 'Query Filters' section contains four filter conditions: 'Agency Equal to 179', 'Fiscal Month Between 01 And 12', 'GL Account Matches pattern 65%', and 'Fiscal Month In list'. The 'Fiscal Month' field in the last filter is highlighted with a mouse cursor. The 'Result Objects' section shows 'Biennium', 'Agency', 'GL Account', 'Amount', and 'Program'. The 'Data Preview' section is at the bottom, showing a 'Refresh' button and the text 'Last refresh date: January 2, 2013 7:43:14 AM GMT-08:00'.

Nested Query Filters

2. Drag the filter over the filter you wish to nest with.

The screenshot displays the 'Query Panel' application window. On the left, the 'Universe outline' shows a tree structure under 'AFRS 2013' with 'Fiscal Month' selected. The 'Result Objects' pane at the top right contains buttons for 'Biennium', 'Agency', 'GL Account', 'Amount', and 'Program'. The 'Query Filters' pane in the center contains several filter rules: 'Agency Equal to 179', 'GL Account Matches pattern 65%', and 'Fiscal Month Between 01 And 12'. A blue box highlights the 'Fiscal Month Between 01 And 12' filter, and a mouse cursor is positioned over it, indicating it is being dragged. Below this, another 'Fiscal Month In list' filter is visible. The 'Data Preview' pane at the bottom is currently empty. The status bar at the bottom right shows the last refresh date as 'January 2, 2013 7:43:14 AM GMT-08:00'.

Nested Query Filters

3. The query should look similar to this.

The screenshot displays a software interface titled "Query Panel" with a toolbar at the top containing "Add Query", "Run query", and "Close" buttons. The interface is divided into several sections:

- Universe outline:** A tree view on the left showing a hierarchy under "Master Perspective" and "AFRS 2013". The "Time Class" folder is expanded, listing fields such as "Biennium", "Fiscal Year", "Fiscal Year Num", "Fiscal Month", "Posting Fiscal Month", "Posting Adjust Month", "Month Year", "Quarter", "Month Desc", "Calendar Month", "Calendar Year", and "Federal Fiscal Year".
- Result Objects:** A horizontal bar at the top right containing buttons for "Biennium", "Agency", "GL Account", "Amount", and "Program".
- Query Filters:** A central section containing a list of filters:
 - Agency: Equal to 179
 - GL Account: Matches pattern 65%
 - Fiscal Month: In list (highlighted with a blue rounded rectangle)
 - Fiscal Month: Between 01 and 12
- Data Preview:** A section at the bottom right with a "Refresh" button.

The status bar at the bottom indicates "Query 1" and "Last refresh date: January 2, 2013 7:43:14 AM GMT-08:00".

Nested Query Filters

4. Define the query value.

The screenshot displays the 'Query Panel' application window. On the left, the 'Universe outline' shows a tree structure under 'AFRS 2013' with 'Fiscal Month' selected. The 'Result Objects' pane at the top right lists 'Biennium', 'Agency', 'GL Account', 'Amount', and 'Program'. The 'Query Filters' pane in the center contains four filter rules:

- Agency Equal to 179
- GL Account Matches pattern 65%
- Fiscal Month In list 99 (highlighted with a blue box)
- Fiscal Month Between 01 and 12

The filter rules are connected by 'And' operators. The 'Data Preview' pane at the bottom is currently empty, and a 'Refresh' button is visible. The status bar at the bottom right shows the last refresh date as 'January 2, 2013 7:43:14 AM GMT-08:00'.

Nested Query Filters

5. Click the indented **And** to make it an **Or**. Then run your query.

The screenshot displays the 'Query Panel' interface. On the left, the 'Universe outline' shows a tree structure under 'AFRS 2013' with 'Time Class' expanded to 'Fiscal Month'. The 'Result Objects' pane shows 'Biennium', 'Agency', 'GL Account', 'Amount', and 'Program'. The 'Query Filters' pane contains the following filters:

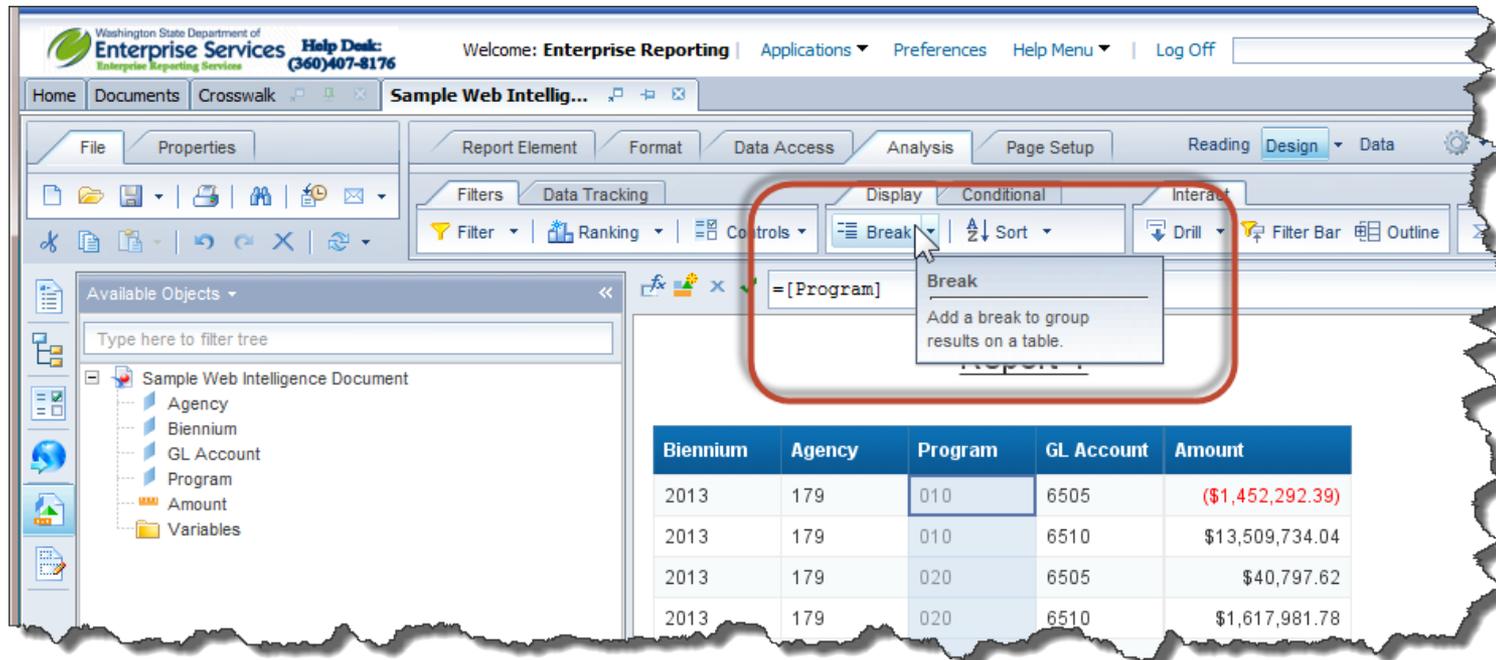
- Agency: Equal to 179
- GL Account: Matches pattern 65%
- Fiscal Month: In list 99
- Fiscal Month: Between 01 and 12

The 'And' connector between the second and third filters is highlighted with a blue box, and a mouse cursor is clicking on it to change it to 'Or'. The 'Data Preview' pane at the bottom is empty, and the status bar shows 'Last refresh date: January 2, 2013 7:43:14 AM GMT-08:00'.

Working with Report Tables

A break divides a large table into smaller sub-tables based on a selected dimension value. Using a break, you can display subtotals by the specified value, as well as a grand total for all values. The data is automatically sorted in ascending order by the dimension values when a break is inserted.

To add a break, click in the data to highlight the column. Click on the **Insert/Remove Break** button on the Reporting toolbar.



The screenshot displays the Enterprise Reporting software interface. The top navigation bar includes the Washington State Department of Enterprise Services logo, a help desk number (360)407-8176, and a welcome message for 'Enterprise Reporting'. The main toolbar contains various options like 'File', 'Properties', 'Report Element', 'Format', 'Data Access', 'Analysis', 'Page Setup', 'Reading', and 'Design'. The 'Analysis' tab is active, showing a 'Break' button highlighted with a red box. A tooltip for the 'Break' button is visible, stating 'Add a break to group results on a table.' The interface also shows an 'Available Objects' pane on the left and a data table at the bottom right.

Biennium	Agency	Program	GL Account	Amount
2013	179	010	6505	(\$1,452,292.39)
2013	179	010	6510	\$13,509,734.04
2013	179	020	6505	\$40,797.62
2013	179	020	6510	\$1,617,981.78

Sections allow you to split report information into smaller, more comprehensible parts.

You can create a single section or include multiple sections with subsections in a report. You can also remove and reposition sections within a report.

You cannot use a measure to create a section.

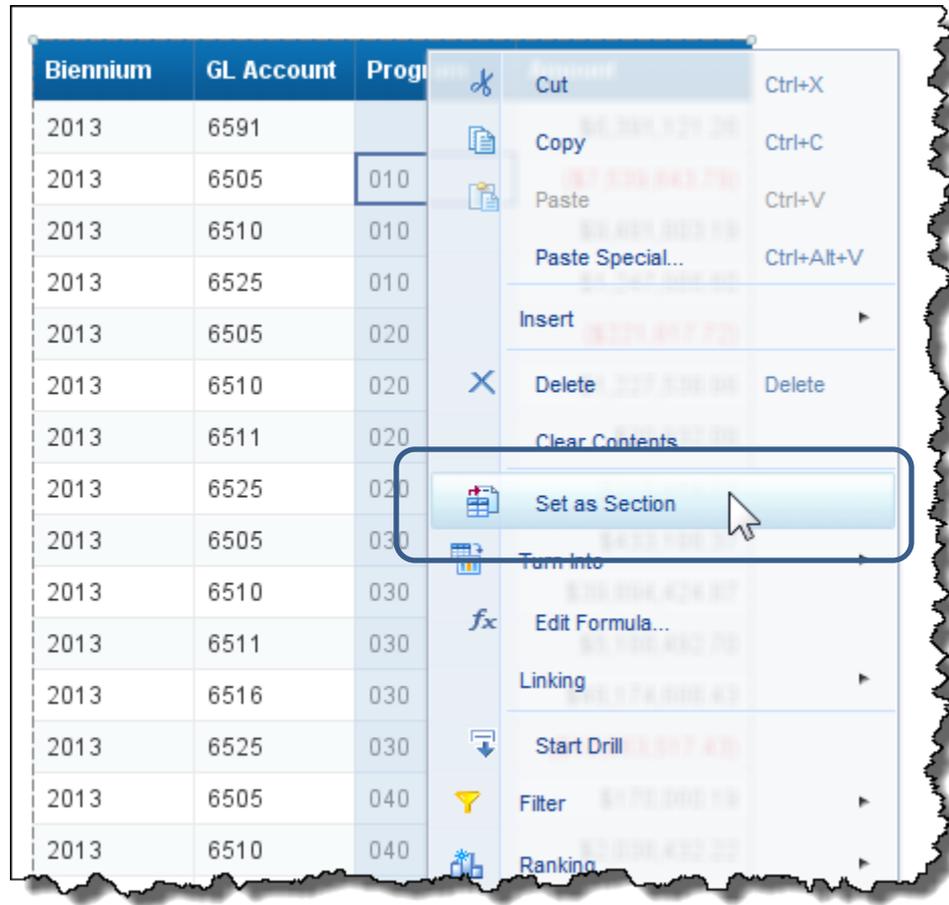
Use the following steps to create sections in a report.

1. Select the data you wish to use as your section.

Biennium	GL Account	Program	Amount
2013	6591		\$6,391,121.26
2013	6505	010	(\$7,539,843.79)
2013	6510	010	\$9,481,803.19
2013	6525	010	\$1,247,986.60
2013	6505	020	(\$221,817.72)
2013	6510	020	\$1,227,538.86
2013	6511	020	\$20,932.08
2013	6525	020	\$215,454.76

Creating Sections

2. Right click on the data element and select **Set as Section** from the context menu.



- The report will now be displayed in sections based on the data element selected.

Biennium	GL Account	Amount
2013	6591	\$6,391,121.26
	Sum:	6,391,121.26

010

Biennium	GL Account	Amount
2013	6505	(\$7,539,843.79)
2013	6510	\$9,481,803.19
2013	6525	\$1,247,986.60
	Sum:	3,189,946

020

Biennium	GL Account	Amount
2013	6505	(\$221,817.72)
2013	6510	\$1,227,538.86
2013	6511	\$20,932.08
2013	6525	\$215,454.76
	Sum:	1,242,107.98

030

Data Tracking

Web Intelligence allows you to track and display data changes to help you focus your analysis on key areas.

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 display the data changes, Web Intelligence places your current data in context by showing how it relates to the reference data.

Web Intelligence allows you to track the following types of data change:

- Added data
- Modified data
- Decreased data
- Removed data
- Increased data

1. To activate data tracking click on Track Changes on the bottom of the screen.

The screenshot shows a software interface with a top menu bar containing 'File', 'Properties', 'Report Element', 'Format', 'Data Access', 'Analysis', and 'Page Setup'. Below the menu bar are toolbars for 'Data Providers' (New data provider, Edit, Purge) and 'Data Objects' (New Variable, Merge). The main workspace displays two tables. The first table has columns 'Biennium', 'GL Account', and 'Amount', with rows for 2013 and a 'Sum' row. The second table is titled '010' and has the same columns, with rows for 2013 and a 'Sum' row. At the bottom of the interface, a status bar shows 'Track Changes: Off' circled in blue, along with navigation icons, 'Page 1 of 1', '100%', and a refresh icon with '1 minute ago'.

Biennium	GL Account	Amount
2013	6591	\$6,391,121.26
	Sum:	6,391,121.26

Biennium	GL Account	Amount
2013	6505	(\$7,479,347.72)
2013	6510	\$7,302,690.32
2013	6525	\$1,247,986.60
	Sum:	1,071,329.2

2. When the Data Tracking window opens select whether to compare with last data refresh or with a certain date in time.

Compare with last data refresh

The current data becomes the reference data after each data refresh. The report always shows the difference between the most recent data and the data before the last refresh.

Compare with data refresh from:

The current data becomes the fixed reference data and remains the reference data after further data refreshes. The report always shows the difference between the most recent data and this fixed reference data.

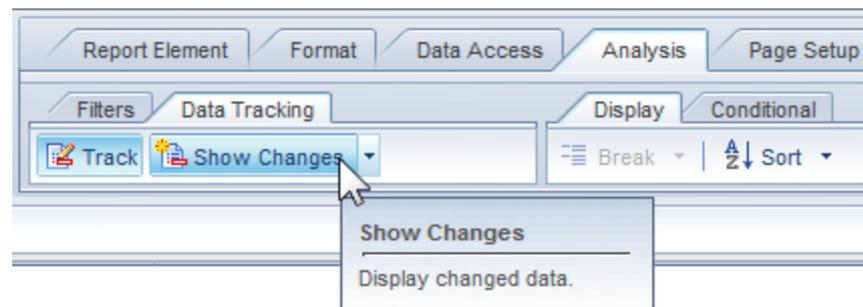
3. Select which reports to have data tracking.
4. Select whether to refresh now.

- When the data is refreshed it will automatically show the where the changes in the data are.

030

Biennium	GL Account	Amount
2013	6505	\$433,186.37
2013	6510	\$39,894,424.87
2013	6511	\$5,188,492.70
2013	6516	\$48,174,688.43
2013	6525	(\$10,063,517.43)
	Sum:	83,627,274.94

- Track changes can be toggled to display or not by clicking on the **Show Changes** button located under the **Analysis** tab and **Data Tracking** sub-tab.



On-Report Filtering

You can filter reports to limit the results that are displayed to specific information that interests you. The data you filter out remains within the Web Intelligence document; it is simply not displayed in the report tables or charts. This means you can change or remove report filters in order to view the hidden values, without modifying the query definition behind the document.

You can 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 further to focus on results for a different dimension.

You can include multiple filters in a report.

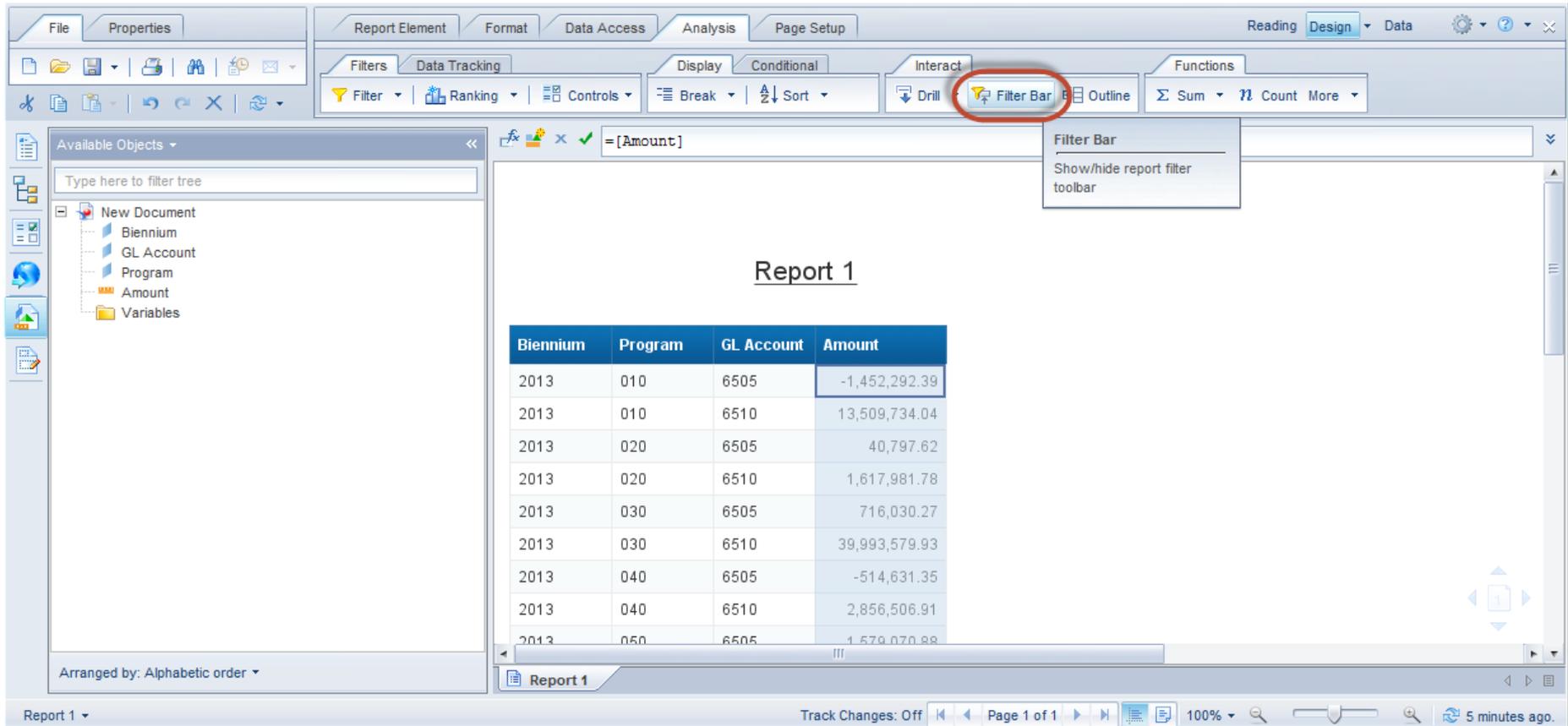
You can apply filters at two levels within a document:

- Query filters – these filters are defined on the query; they limit the data retrieved from the data source and returned to the Web Intelligence document.
- Report filters – these filters limit the values displayed on reports, tables, charts, sections within the document, but they don't modify the data that is retrieved from the data source; they simply hide values at the report level.

Report Filter Bar

The report filter bar allows for the addition of multiple single value report filters to a report.

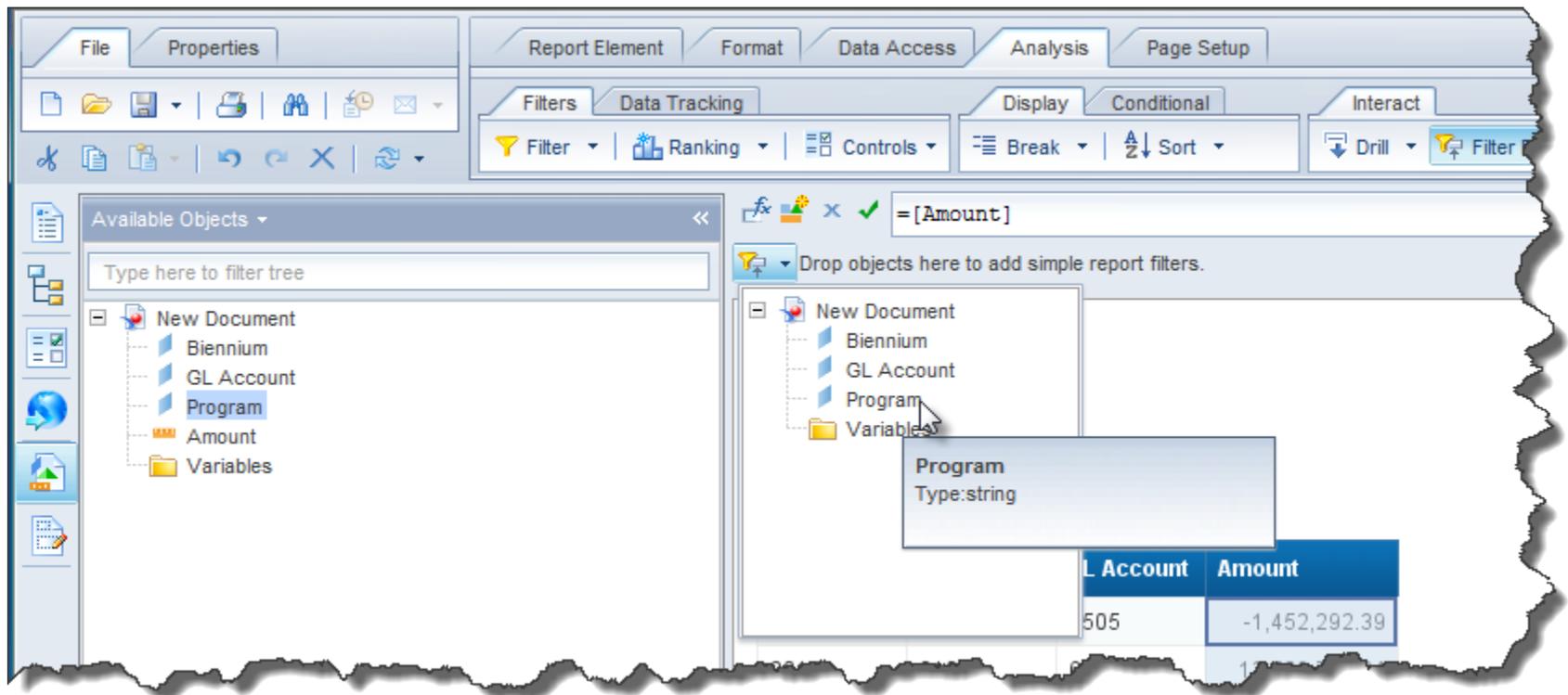
1. Click on the **Analysis** tab and on the Interact tab select **Filter Bar**



The screenshot shows the software interface with the 'Analysis' tab selected in the ribbon. Within the 'Interact' group, the 'Filter Bar' option is highlighted with a red circle. A tooltip for 'Filter Bar' is visible, showing the text 'Filter Bar' and 'Show/hide report filter toolbar'. The main window displays a report titled 'Report 1' with a table of financial data. The table has columns for Biennium, Program, GL Account, and Amount. The data is as follows:

Biennium	Program	GL Account	Amount
2013	010	6505	-1,452,292.39
2013	010	6510	13,509,734.04
2013	020	6505	40,797.62
2013	020	6510	1,617,981.78
2013	030	6505	716,030.27
2013	030	6510	39,993,579.93
2013	040	6505	-514,631.35
2013	040	6510	2,856,506.91
2013	050	6505	1,579,070.88

2. The **Report Filter Bar** will open under the **Formula Tool Bar**.
3. Click on the filter icon at the front of the **Report Filter Bar** and select the dimension to filter on.

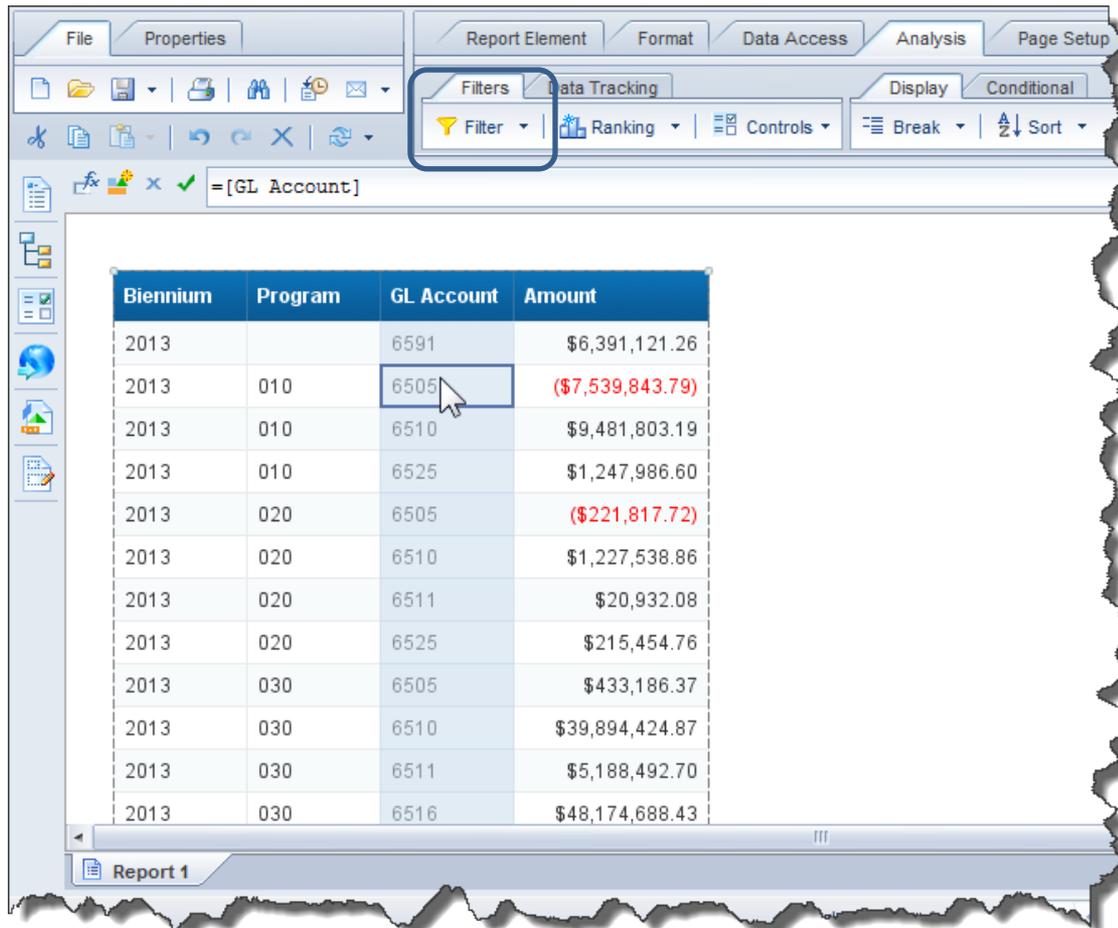


4. Select a value to filter the report.

The screenshot shows the Enterprise Reporting Services interface. The top navigation bar includes 'Home', 'Documents', and 'New Document'. The main toolbar contains tabs for 'Report Element', 'Format', 'Data Access', 'Analysis', and 'Page Setup'. Below these are sub-tabs for 'Filters', 'Data Tracking', 'Display', 'Conditional', and 'Interact'. The 'Filters' sub-tab is active, showing a 'Filter' dropdown menu. The 'Available Objects' pane on the left shows a tree structure with 'New Document' expanded to show 'Biennium', 'GL Account', 'Program', 'Amount', and 'Variables'. The 'Program' object is selected. The 'Filter Bar' is visible, showing a dropdown menu with 'All Program' selected. The report area displays a table titled 'Report 1' with the following data:

Biennium	Program	GL Account	Amount
2013	010	6505	-1,452,292.39
2013	010	6510	13,509,734.04

1. To set a filter on a table, select the column with the data to be filtered by clicking in the data.
2. Under the **Analysis** tab on the **Filters** sub-tab click **Filter**.



The screenshot shows a software interface with a table of financial data. The table has four columns: Biennium, Program, GL Account, and Amount. The 'GL Account' column is selected, and the 'Filter' button in the 'Analysis' tab is highlighted. The table data is as follows:

Biennium	Program	GL Account	Amount
2013		6591	\$6,391,121.26
2013	010	6505	(\$7,539,843.79)
2013	010	6510	\$9,481,803.19
2013	010	6525	\$1,247,986.60
2013	020	6505	(\$221,817.72)
2013	020	6510	\$1,227,538.86
2013	020	6511	\$20,932.08
2013	020	6525	\$215,454.76
2013	030	6505	\$433,186.37
2013	030	6510	\$39,894,424.87
2013	030	6511	\$5,188,492.70
2013	030	6516	\$48,174,688.43

- When the Report Filter box opens type the value(s) you want to retrieve in the box, or select the value(s) you want to retrieve from the displayed List of Values and add them to the Selected Values box by clicking the > button. Then click **OK**.

Report Filter

» Block 1 Add filter

GL Account In list

Type a value:

Selected Value(s)

GL Account

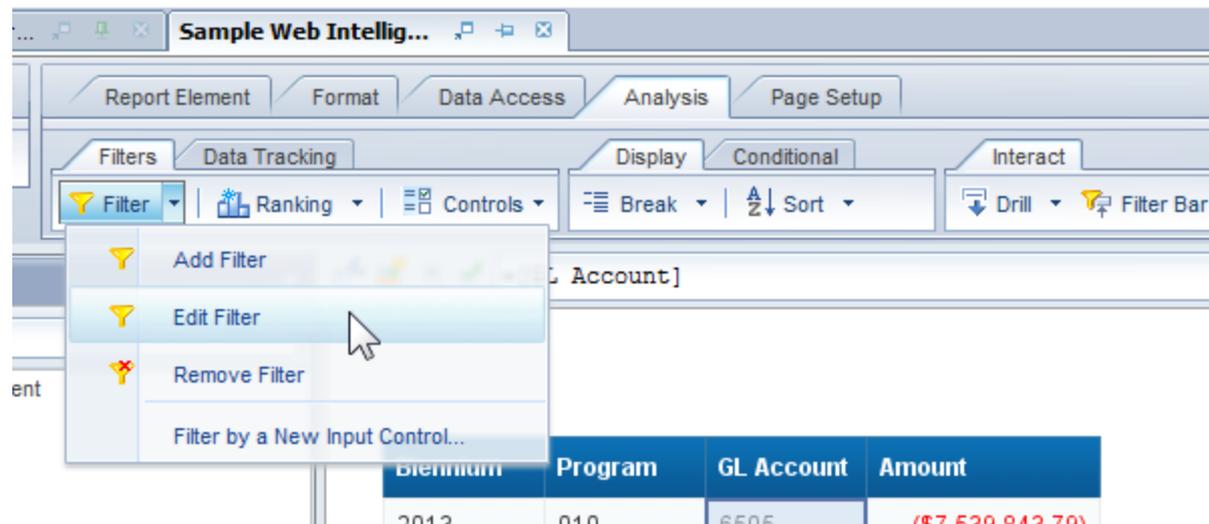
- 6505
- 6510
- 6511
- 6514
- 6515
- 6516
- 6525
- 6591

Enter search pattern

OK Cancel Apply

4. The report will now be filtered by the values selected.

Filters can be edited by clicking on the column that contains the filter and selecting edit filter from the Filter drop down list.



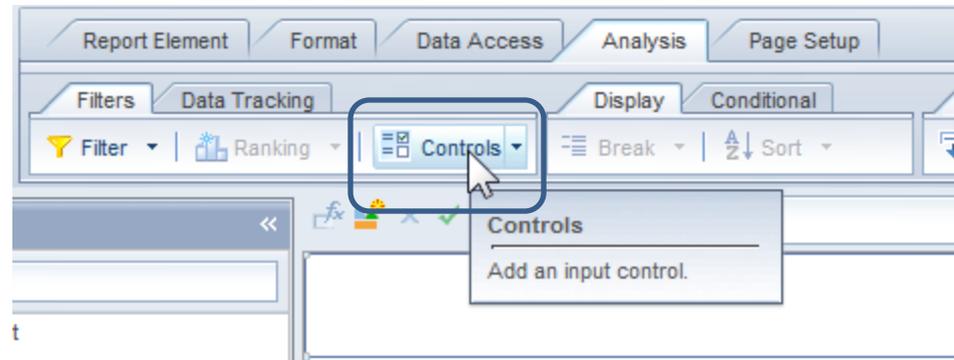
Report filters can be viewed by clicking on the **Document Structure and Filters** button in the list of icons along the left side of the screen. Filters will be displayed with a gold funnel icon.

The screenshot shows a software interface with a menu bar (File, Properties, Report Element, Format, Data Access, Analysis, Page Setup) and a toolbar. The 'Document Structure and Filters' pane is open on the left, displaying a tree view of the report structure. A tooltip points to the 'Document Structure and Filters' icon, stating: 'Document Structure and Filters. Display the document structure and filters.' The main report area shows a table titled 'Report 1' with the following data:

Biennium	Program	Program Title
2013	010	Executive Management

Input controls provide a convenient, easily-accessible method for filtering and analyzing report data. You define input controls using standard windows controls such as text boxes and radio buttons. You associate these controls with report elements such as tables or section headers, and use the controls to filter the data in the report elements. When you select values in the input control, Web Intelligence filters the values in the associated report elements. To add an input control follow these steps.

1. Select the column with the data to be filtered by clicking in the data.
2. Under the **Analysis** tab and **Filters** sub-tab click the **Controls** button.



3. In the **Define Input Control** box check to make sure the right dimension is selected and click **Next**.
4. Select the type of input control to add and set the options. Then click **Next**.
 - There is a description of the combo box type in the top right corner of the Define Input Control box.

Define Input Control

Choose Control Type
Select and define the control

Single value

- Entry field
- Combo box**
- Radio buttons
- List box

Multiple values

- Check boxes
- List box

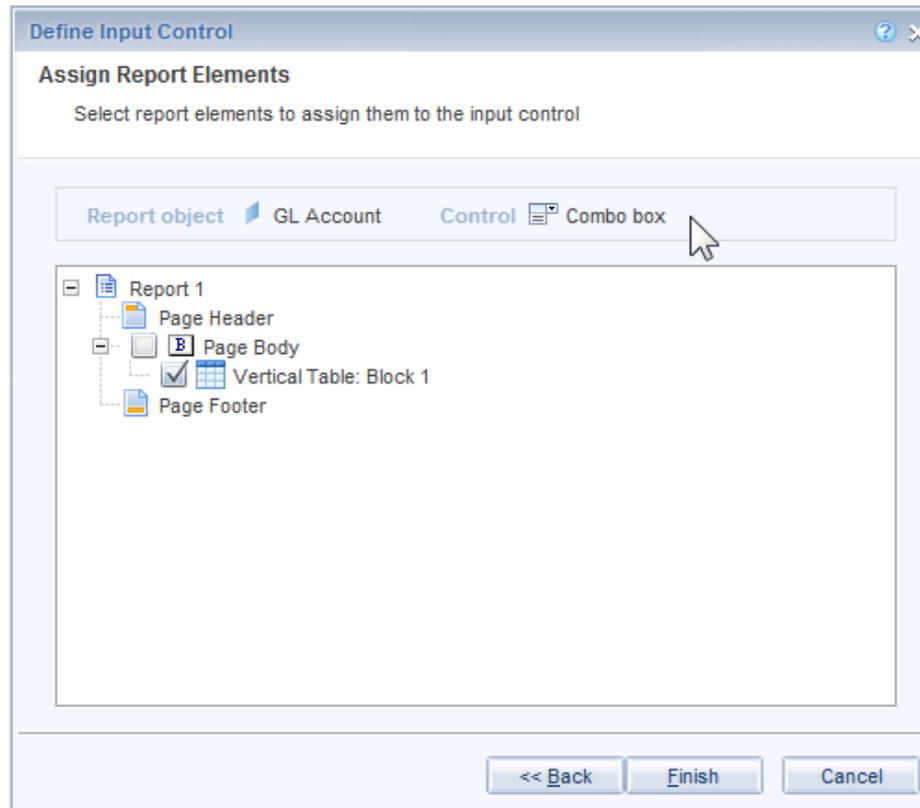
Use the combo box to allow a user to select one value from a list of possible values. Control has the same behavior as list box while being more compact, list is expanded only when the user selects combo box, otherwise only the current selection is displayed.

Input control properties

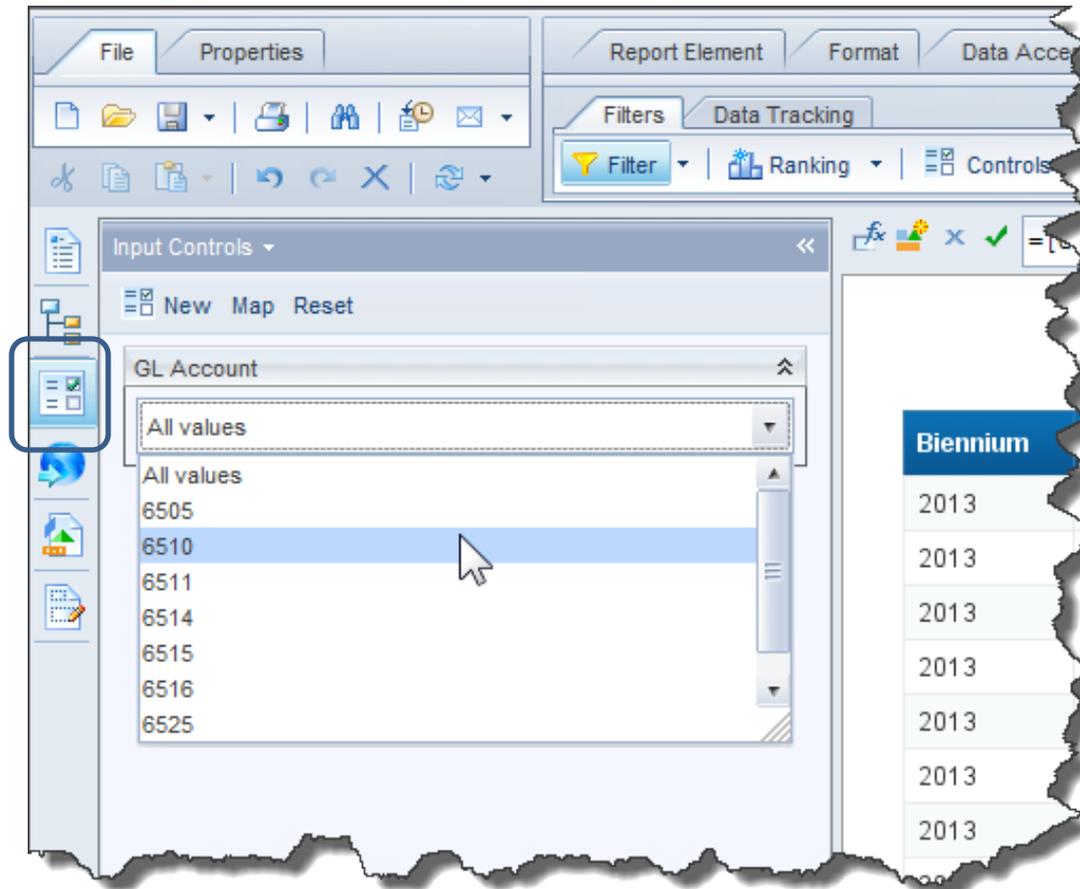
Label	GL Account
Description	
List of Values	All values from report ...
Use restricted list of values	<input type="checkbox"/> Yes
Default value(s)	...
Operator	Equal to

<< Back Next >> Cancel

5. Select the report elements to assign the input control to. Input Controls can be assigned to the entire report(s) or certain elements.
6. Click **Finish**.



7. You can now use the Input Control to filter your report. Input Controls can be accessed by clicking on the **Input Controls** icon along the left side of the screen.



Formulas and Variables

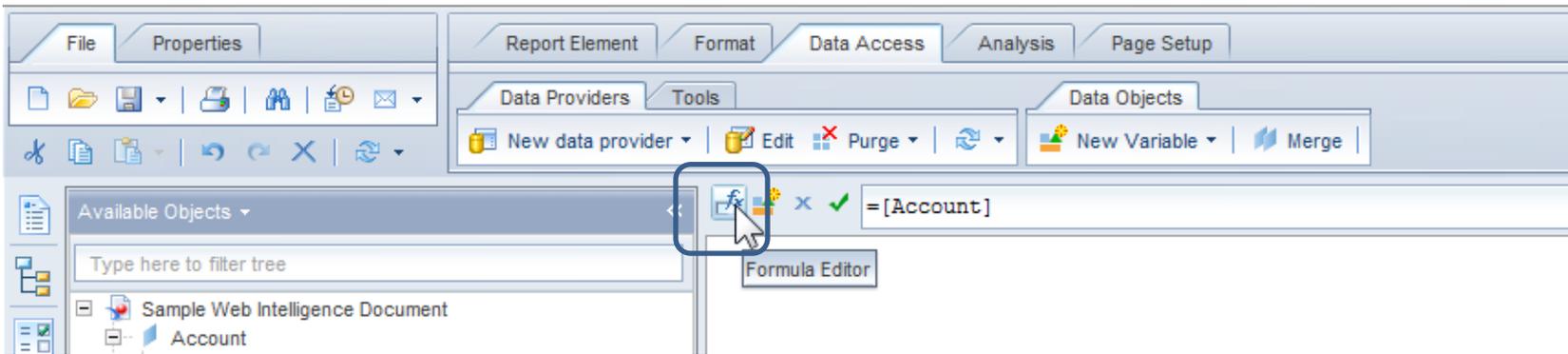
Formulas are custom calculations allowing additional calculations beyond the base objects and standard calculations.

Variables are formulas or syntax statements that have been assigned a name. Variables can be used in tables and formulas in exactly the same way as other report objects. Variables appear in the formula editor under the Variables folder.

Variables can be used to simplify complex formulas by breaking a complex formula down into manageable parts and making it much easier to read, as well as making building formulas much less error-prone.

How to create a Concatenation Formula.

1. Click on the first object to be concatenated.
2. Click the **Formula Editor** button in the **Formula Bar**.



3. Click in the **Formula** box after the first object.
4. Then add this value after the first object:
+ " / " +
5. Then double click the next object to be added in the **Available Objects** list.

(See Next Page)

Create a Formula

The screenshot shows the 'Formula Editor' window with the following components:

- Formula:** A text box containing the formula: `= [Account] + " / " + [Account Title]`
- Validation:** A green checkmark icon with a tooltip that says 'Validate' is positioned over the formula text box.
- Status:** A message below the formula text box reads: 'Formula has not been validated.'
- Available objects:** A tree view on the left showing a hierarchy of objects. 'Account Title' is selected and highlighted in blue.
- Functions:** A list of function categories including Aggregate, All, Character, Data Provider, Date & Time, Document, Logical, Misc., Numeric, and Set.
- Operators:** A list of operators including =, <, <=, <>, >=, >, ., +, -, /, *, ;, (,), :, After, All, And, Before, Before_After, Between, Block, Body, Bottom, Break, Col, DayPeriod, and Distinct.
- Description:** A text box at the bottom containing the text 'Account Title'.
- Buttons:** 'OK' and 'Cancel' buttons are located at the bottom right of the window.

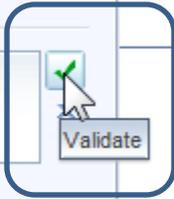
Create a Formula

- Click the green check mark to validate the formula.

Formula: _____

`=[Account]+" / "+[Account Title]`

Formula has not been validated.

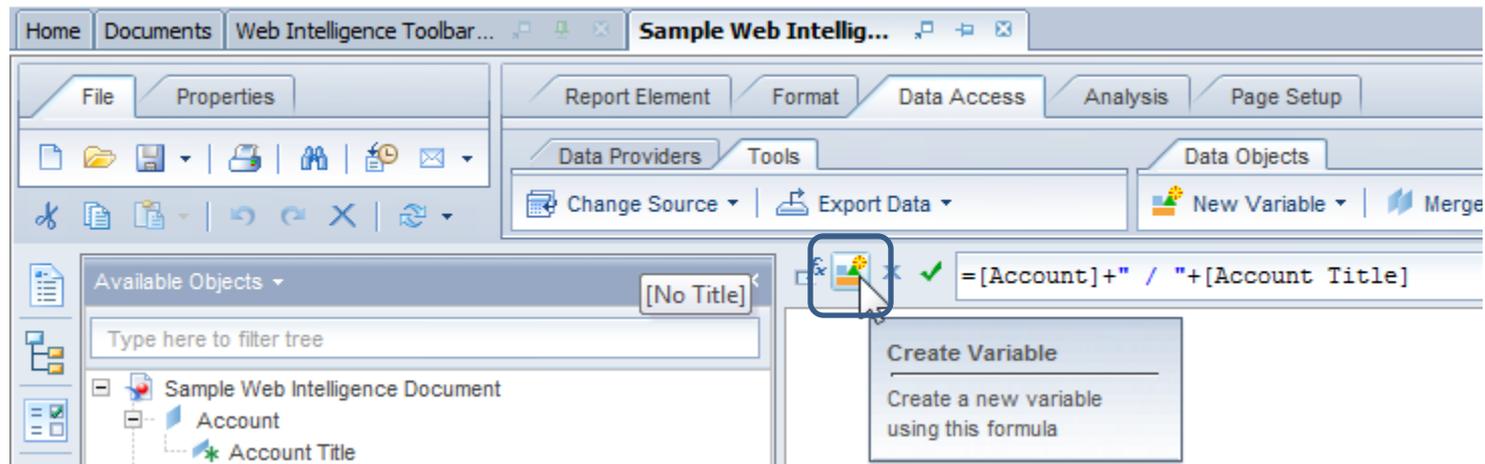


- If the formula is correct **The formula is correct** will be displayed under the **Formula** box.
- Once the formula is correct click **OK**. The new value will now be displayed in the column.

Biennium	Program	Program Title	Account	GL Account	Amount
2013	010	Executive Management	001 / General Fund	6505	(\$1,946,017.64)
2013	010	Executive Management	001 / General Fund	6510	\$1,176,392.76
2013	010	Executive Management	03K / Industrial Insurance Premium Refund	6505	\$551.53
2013	010	Executive Management	03K / Industrial Insurance Premium Refund	6510	\$37,674.82
2013	010	Executive Management	084 / Building Code Council Account	6505	\$0.00
2013	010	Executive Management	084 / Building Code Council Account	6510	\$0.00

Turn a Formula into a Variable

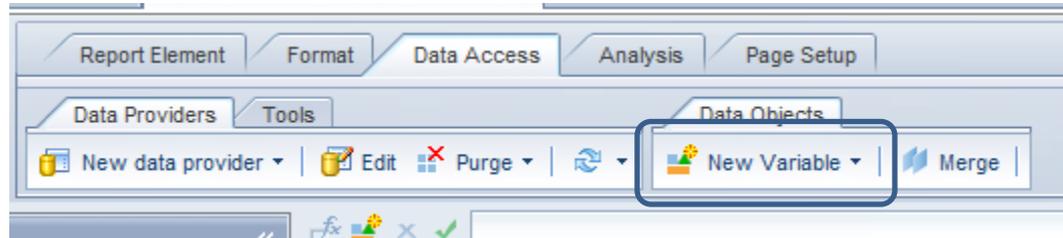
1. Click on the data in the column that contains the formula to be turned into a variable.
2. In the **Formula Tool Bar** click the **Create Variable** button.



3. In the **Create Variable** window assign the Variable a name.
4. Click OK.
5. The variable is now ready for use in another report or variable.

Create Variable from Scratch

1. Click on the **Data Access** tab. Under the **Data Objects** click on **New Variable**.



2. Assign the new variable a title in the **Name** box.
3. Click in the **Formula** box.
4. In the **Available Objects** double click the first object to be added.
5. Then add this value after the first object:
+ " / " +
6. Then double click the next object to be added from the **Available Objects** list.

Create Variable from Scratch

7. Click the green check mark to validate the formula.



8. If the formula is correct **The formula is correct** will be displayed under the **Formula** box.
9. Once the formula is correct click **OK**. The new variable will now be displayed under Available Objects .

AFRS Variables – Examples

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))

Working with Multiple Queries

Working with Multiple Queries

You can include one or multiple queries in a document. These queries can be based on any supported data source.

Defining multiple queries in a single document is necessary when the data you want to include in a document is available in multiple data sources, or when you want to create several differently-focused queries on the same data source.

You can define multiple queries when you build a new document or add more queries to an existing document. You can present the information from all of the queries on a single report or on multiple reports in the same document.

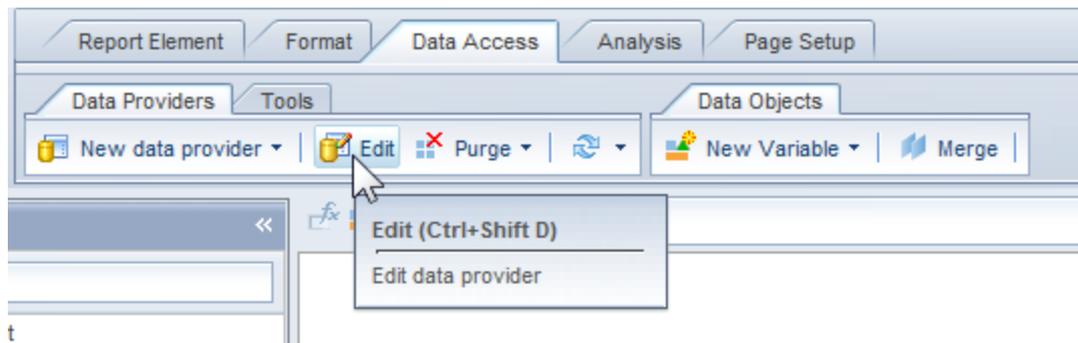
You must run the query first before you are allowed to duplicate the query.

If you want to build a different query on a universe already included in the document, you can duplicate the existing query on that universe and then modify it, instead of starting from scratch.

Duplicated Queries always use the same data source as the query they were duplicated from, but can be updated to use a different source.

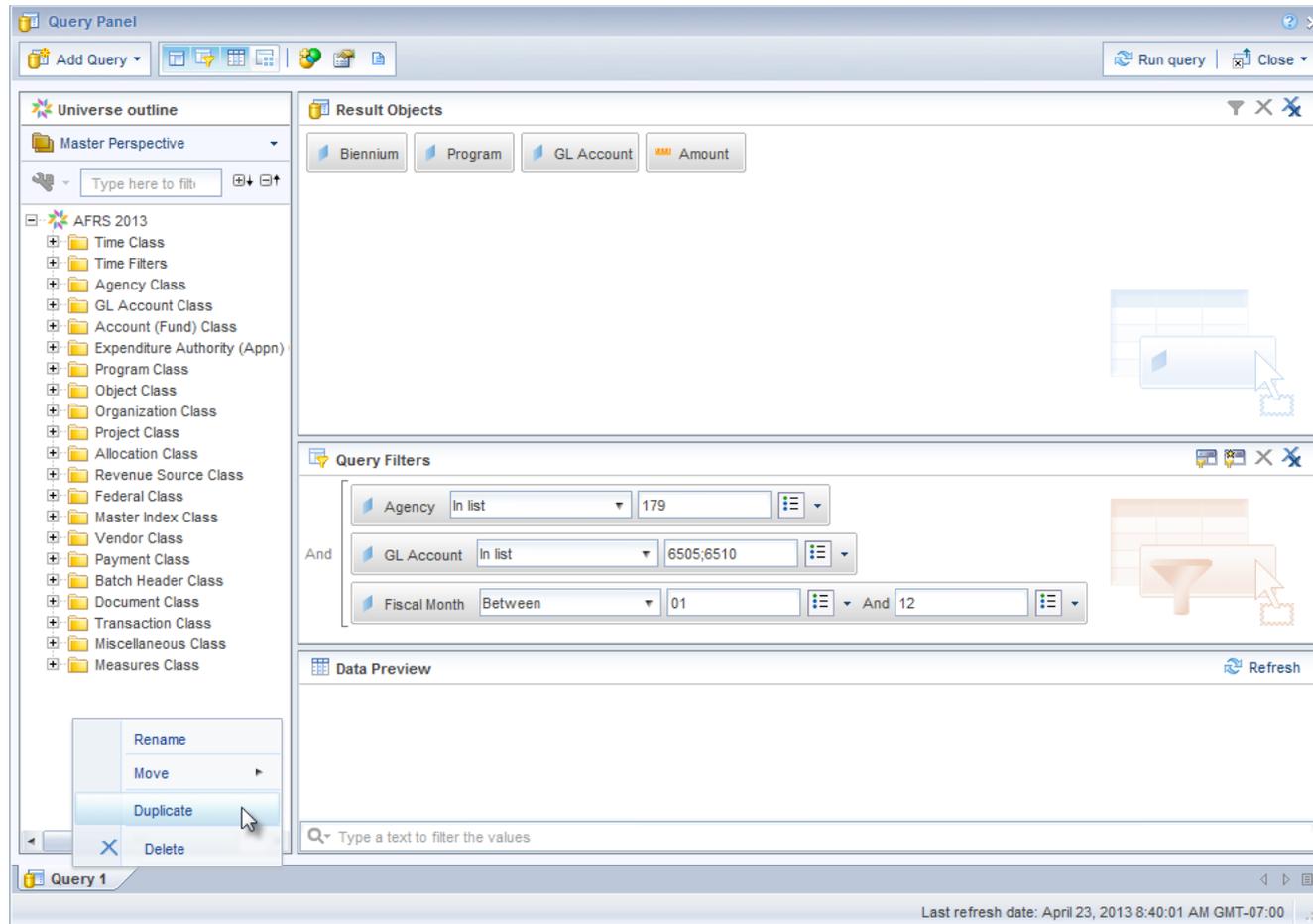
Duplicate a Query

1. After opening the Web Intelligence document click on the **Data Access Tab**.
2. On the Data Providers sub-tab click **Edit**.

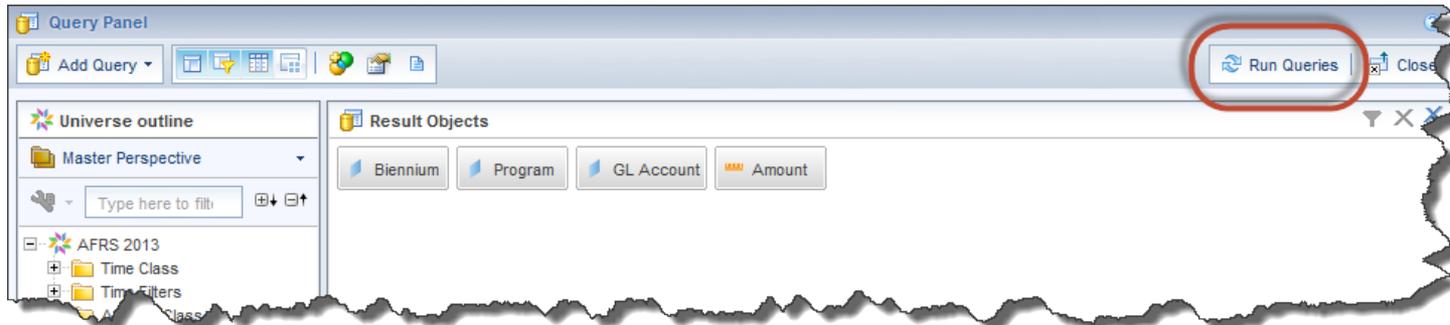


Duplicate a Query

3. Select the query to duplicate by right-clicking on the Query tab at the bottom of the report panel.

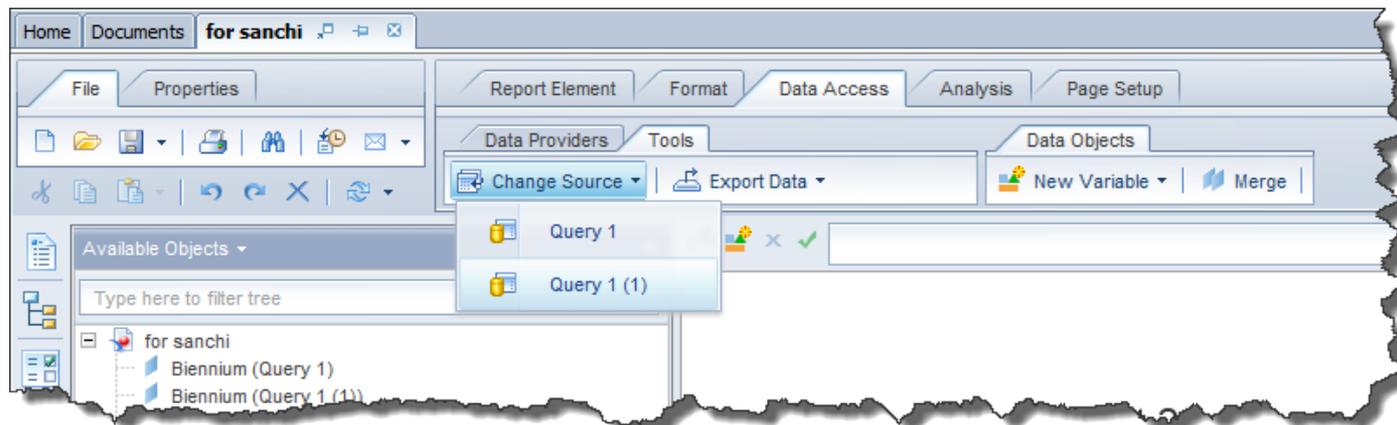


4. Select Run Queries

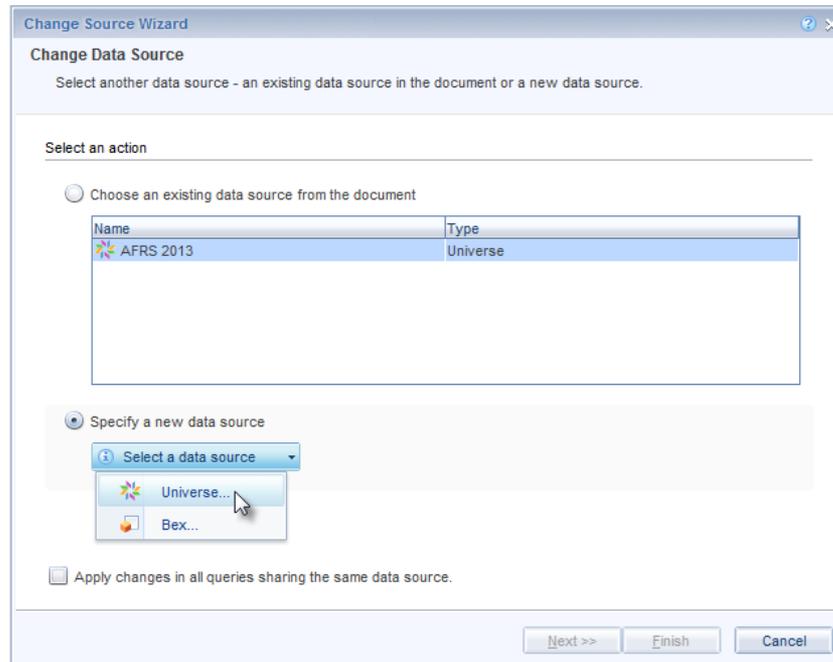


5. Once the report opens click on the **Data Access** tab, then click on the **Tools** sub-tab.

6. Click on **Change Source** and select the query to change.

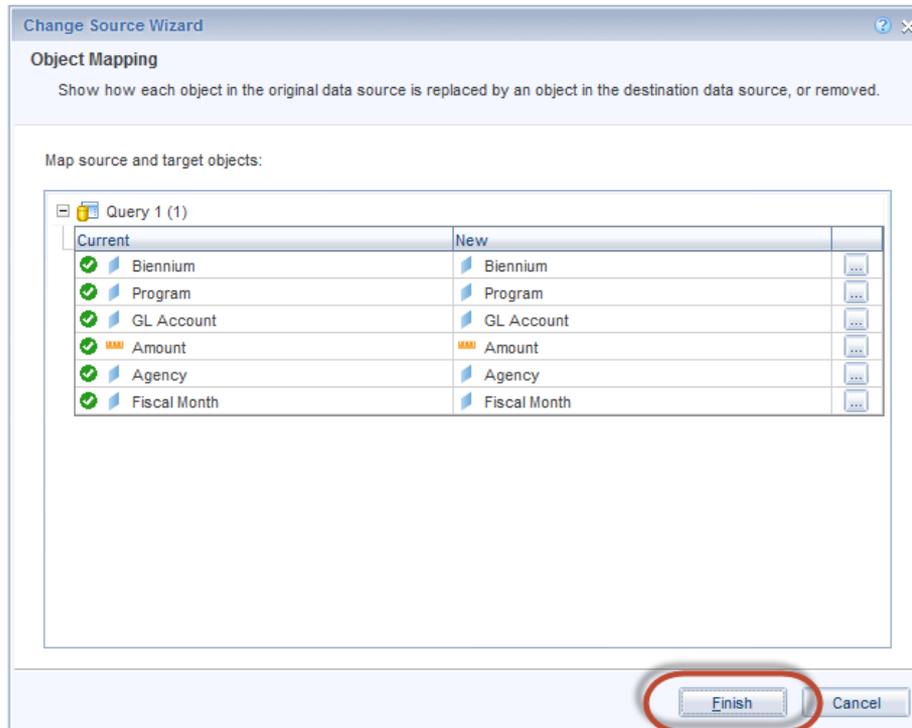


7. In the **Change Source Wizard** window select Specify a new data source and select Universe from the drop down list.



8. When the list of universes opens double click the new universe.
9. Then Click Next.

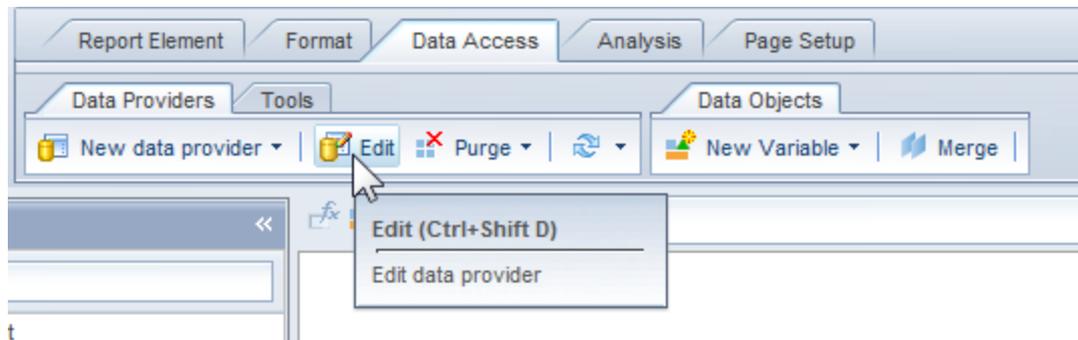
10. When the Object Mapping screen opens click Finish.



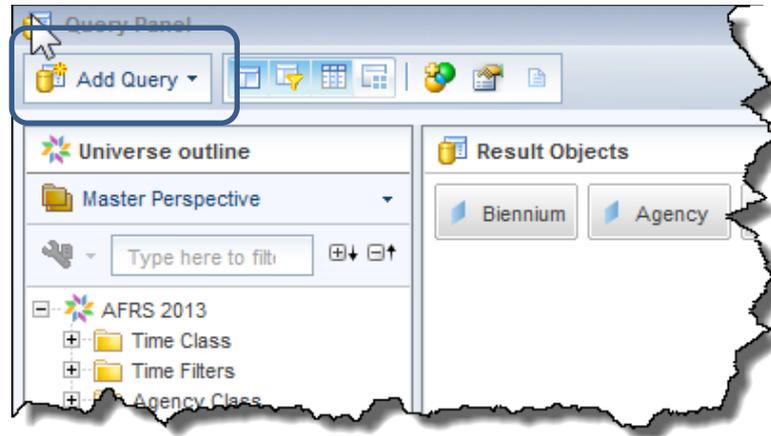
11. When the query pane opens rerun your queries.

Follow these steps to add an additional query to a document:

1. After opening the Web Intelligence document click on the **Data Access Tab**.
2. On the Data Providers sub-tab click **Edit**.

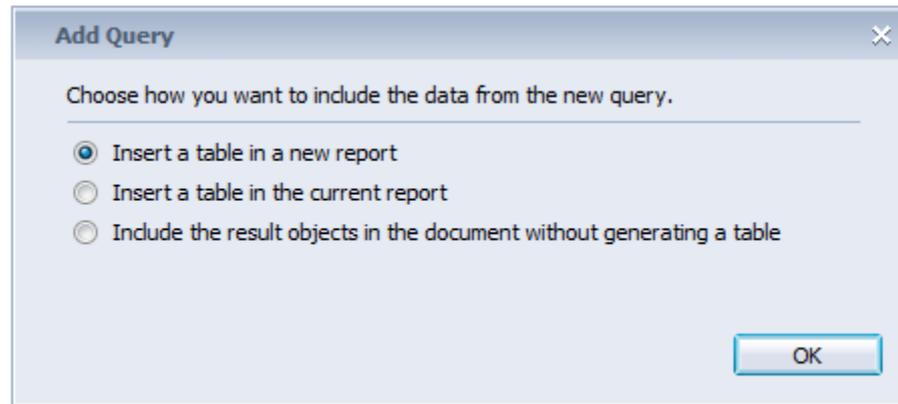


3. Click on **Add Query** in the top left.



4. Select **From Universe**.
5. Select the **Universe** for the new query.
6. Add **Result Objects** and **Query Filters** to the new query and click **Run Queries**.

- When the Add Query box appears select one of the three choices



Display Option	Description
Insert a table in a new report	Display the data on a new report in the document
Insert a table in the current report	Display the data on the currently selected report in a new table
Include the result objects in the document without generating a table	Include the data in the document without displaying the data on a report. (You can add the objects returned by the query to the report later.)

- The data will be displayed based the selection.

Rename Queries

The query name can be changed by right clicking the query on the query tab and selecting **Edit Name** from the menu, then typing a new name in the **New Value** box in the dialog box that appears.

Move Queries

The order of queries can be changed by right clicking on the query tab and selecting **Move** from the menu, then selecting **Right** or **Left** to move it in that direction.

Delete Queries

Queries can be deleted by right clicking on the query tab and selecting **Delete** from the menu. Click **Yes** on the warning to continue with the deletion or **No** to cancel.

Web Intelligence allows you to synchronize data from multiple queries or data providers by merging dimension objects.

Merging dimensions is the only way to combine data from different data sources in a report.

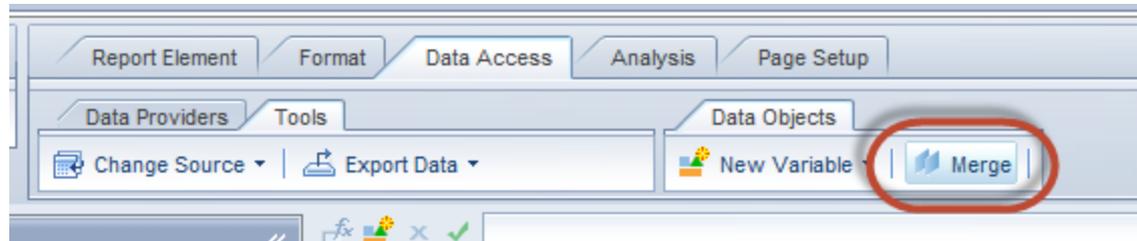
Rules when merging dimensions

- Only dimensions defined in the universe can be merged. You cannot merge variables.
- Objects must have the same data type. You cannot merge a number with a string, even if the values match.
- Any number of queries can be merged. There is no limit.
- Any number of dimension objects can be merged between two queries. Again, no limit.
- Values are case-sensitive. So, if the values are the same, but of different case, they will not match. They will be shown as different values.
- Measures can not be merged. Measures must be calculated with a formula or variable.

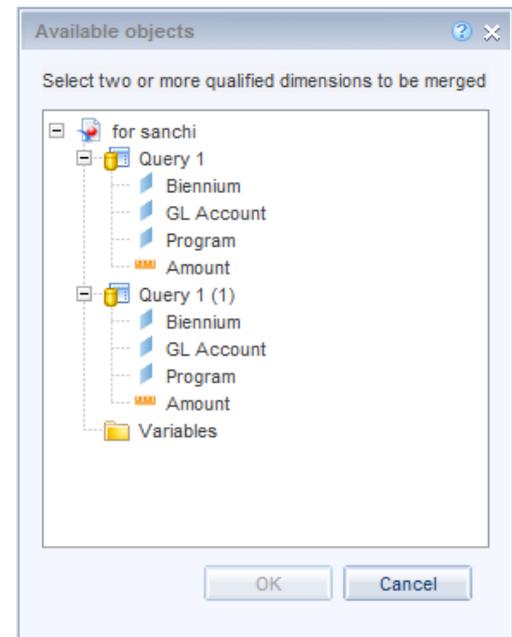
Merge Dimensions

When two queries have been successfully ran to merge dimension together follow these steps:

1. On the **Data Access** tab and **Data Objects** sub-tab click **Merge**.

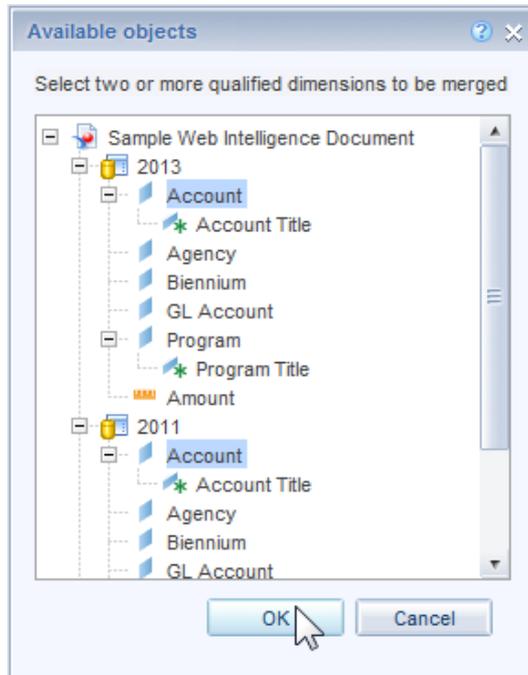


2. The Available Objects dialogue box will open.



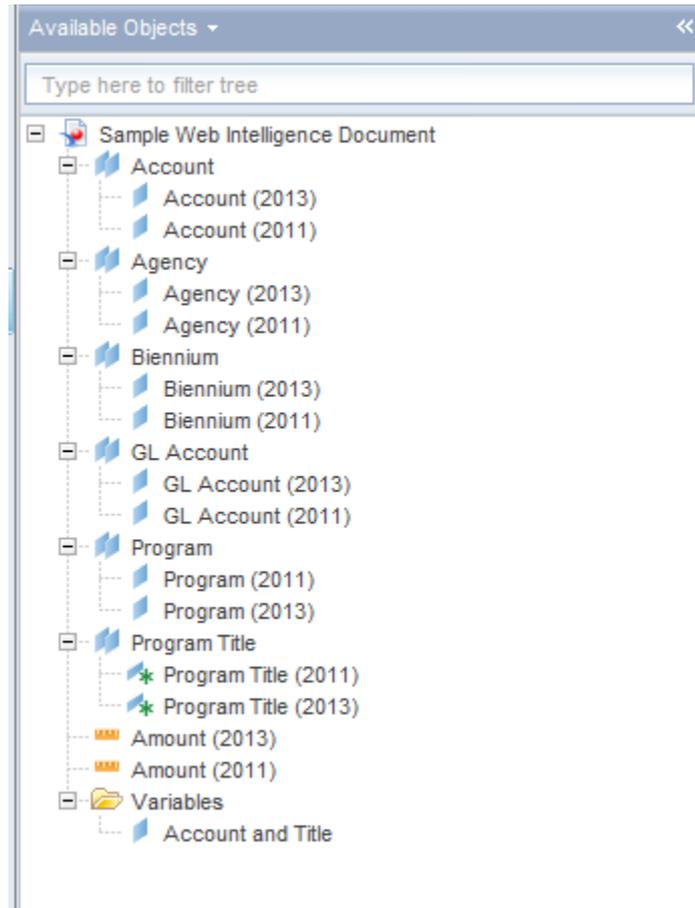
Merge Dimensions

3. Holding down the control key on the keyboard, click on the first objects to be merged.



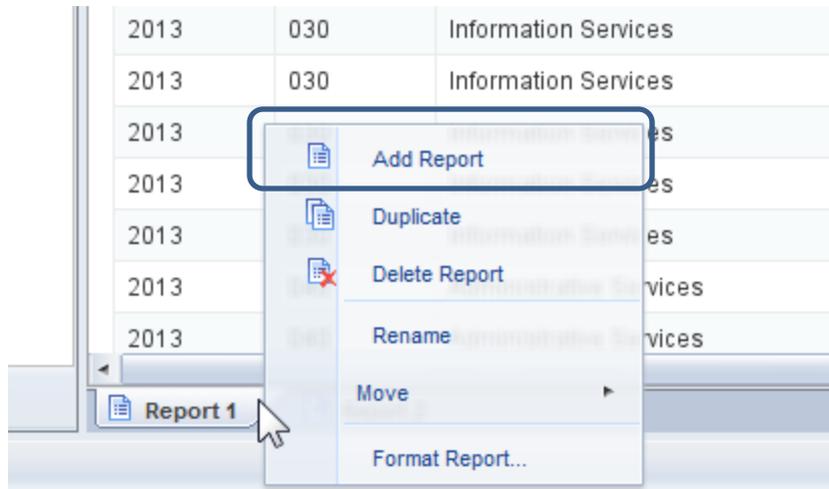
4. Click **OK**.
5. Repeat until all fields are merged.

6. Merged dimensions will display as a dimension under **Available Objects**.



Using Merged Dimensions in a Report

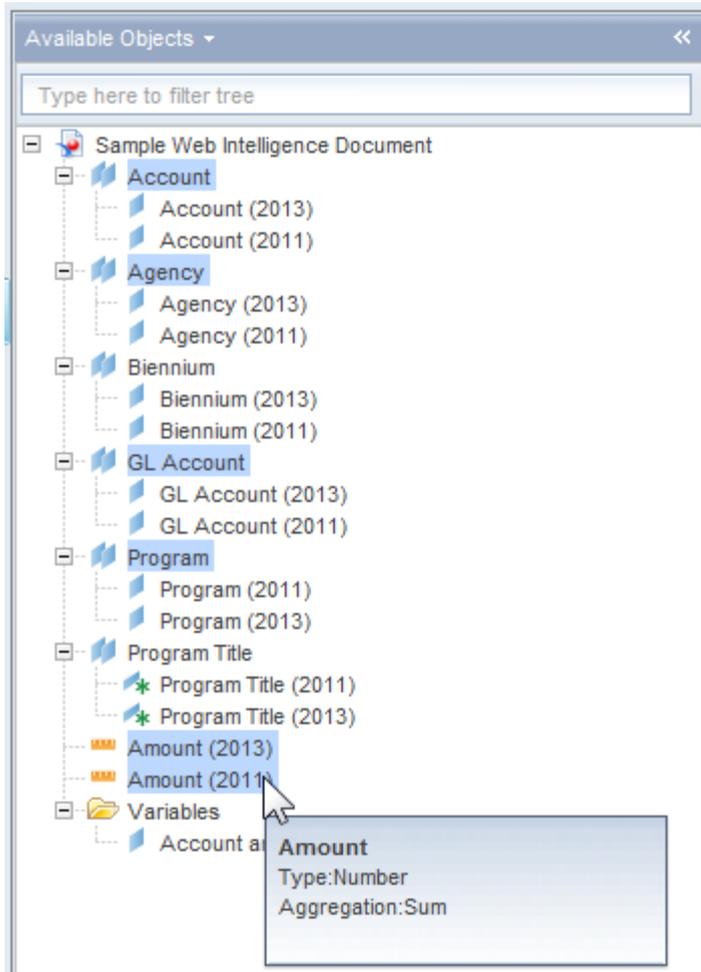
To display the merged dimension in a report first add report to the document. Add a report by right clicking on the **Report 1** tab, at the bottom of the report, and selecting **Add Report**.



An empty report will open and an additional report tab will be added.

Using Merged Dimensions in a Report

Select the merged dimensions to be displayed by holding the control key and selecting them in the order to be displayed.



Using Merged Dimensions in a Report

Drag the selected items into the empty report to display the results.

Agency	Account	Program	GL Account	Amount	Amount
105	001	010	6505	1,279.12	20,791.08
105	001	010	6510	1,294,619.12	1,343,246.69
105	001	020	6505	133,873.15	127,907.42
105	001	020	6510	3,427,323.38	3,200,390.34
105	001	030	6505	138,342.13	0
105	001	030	6510	1,379,253.43	-44,199.98
105	001	040	6505	56,472.23	0
105	001	040	6510	477,291.41	146,885.77
105	001	050	6505	63,463.68	42,890.98
105	001	050	6510	1,488,937.45	1,150,073.85
105	001	060	6505	109,812.92	237,208.48
105	001	060	6510	4,045,479.46	3,831,254.32

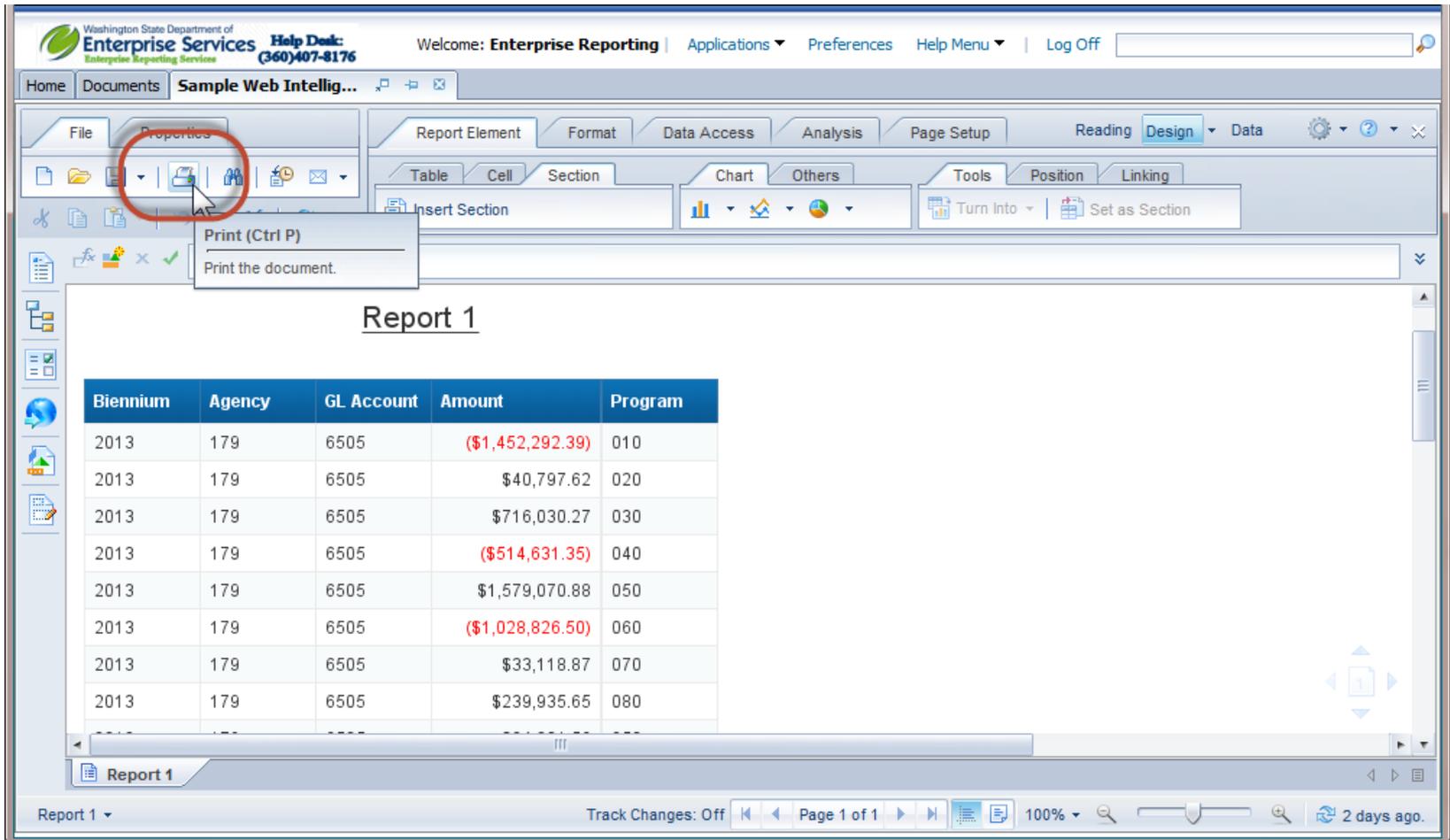
To see a single amount column a formula would need to be written summing the two amounts.

- An example would be `= [2013].[Amount] + [2011].[Amount]`

Printing and Exporting Reports

Printing Reports

Reports can be printed by clicking on the **Print** icon located on the **File** tab.



The screenshot shows the Enterprise Reporting software interface. The 'File' tab is active, and the 'Print' icon is highlighted with a red circle. A tooltip for the 'Print' icon is visible, displaying the text 'Print (Ctrl P)' and 'Print the document.' Below the toolbar, a table titled 'Report 1' is displayed. The table has five columns: Biennium, Agency, GL Account, Amount, and Program. The data rows are as follows:

Biennium	Agency	GL Account	Amount	Program
2013	179	6505	(\$1,452,292.39)	010
2013	179	6505	\$40,797.62	020
2013	179	6505	\$716,030.27	030
2013	179	6505	(\$514,631.35)	040
2013	179	6505	\$1,579,070.88	050
2013	179	6505	(\$1,028,826.50)	060
2013	179	6505	\$33,118.87	070
2013	179	6505	\$239,935.65	080

When the **Print** icon clicked the **Print** dialogue box displays. Set the print options and click **OK**.

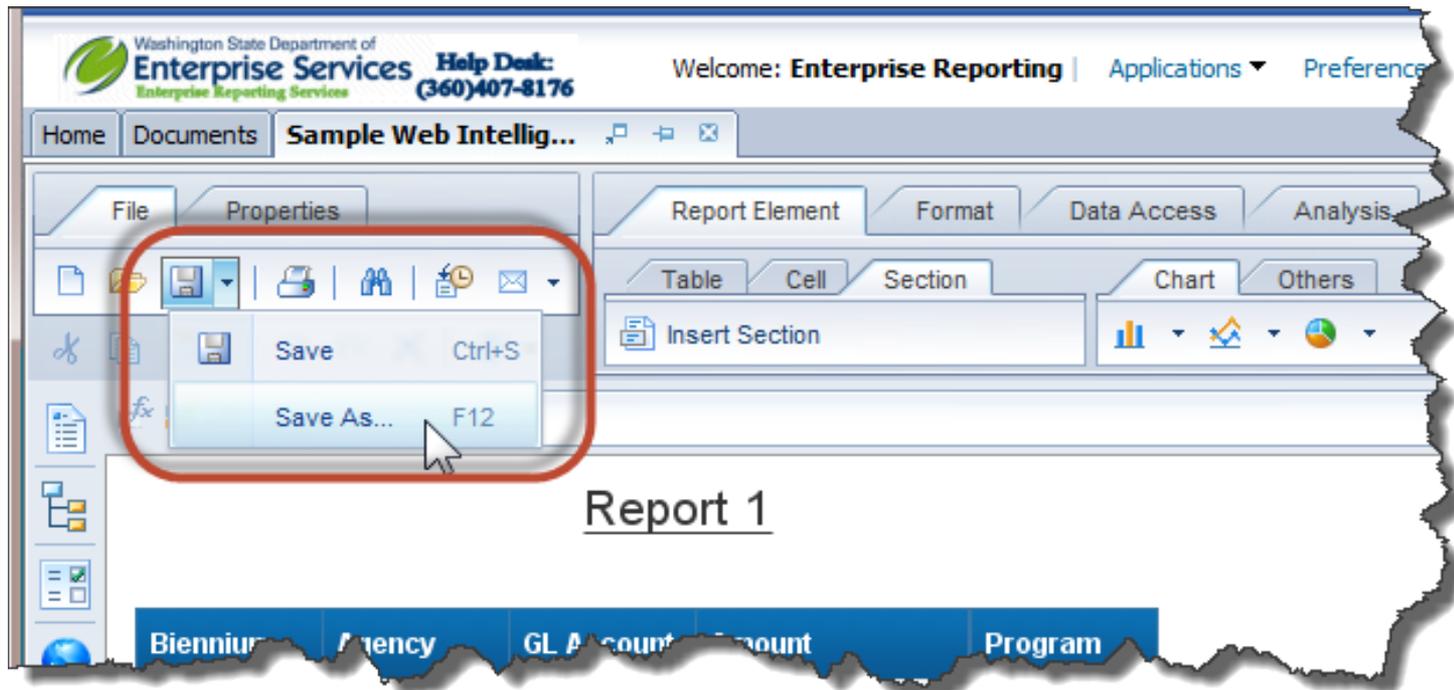
The screenshot shows a standard Windows-style dialog box titled "Print". It contains several sections for configuring the print job:

- Printer selection:** A dropdown menu showing the selected printer as "\\encmsoly1005\4074_01_C".
- Print Range:** Radio buttons for "All Reports", "Current Report" (selected), "All", "Current Page", and "Pages:" (with an empty input field). Below it, text reads "Enter page range (example: 1,3,5-11)."
- Page Size:** A dropdown menu set to "A4 (ISO/DIN & JIS)".
- Margins:** Four spinners for "Top", "Left", "Right", and "Bottom", all set to "0.79\"".
- Scaling:** Radio buttons for "Adjust To" (selected, set to "100%") and "Fit to" (with "auto" in the input field). The "Fit to" section has "page(s) wide" and "page(s) tall" options.
- Orientation:** Radio buttons for "Portrait" (selected) and "Landscape", each with a small document icon.
- Copies:** A label "Number of copies:" followed by a spinner set to "1".

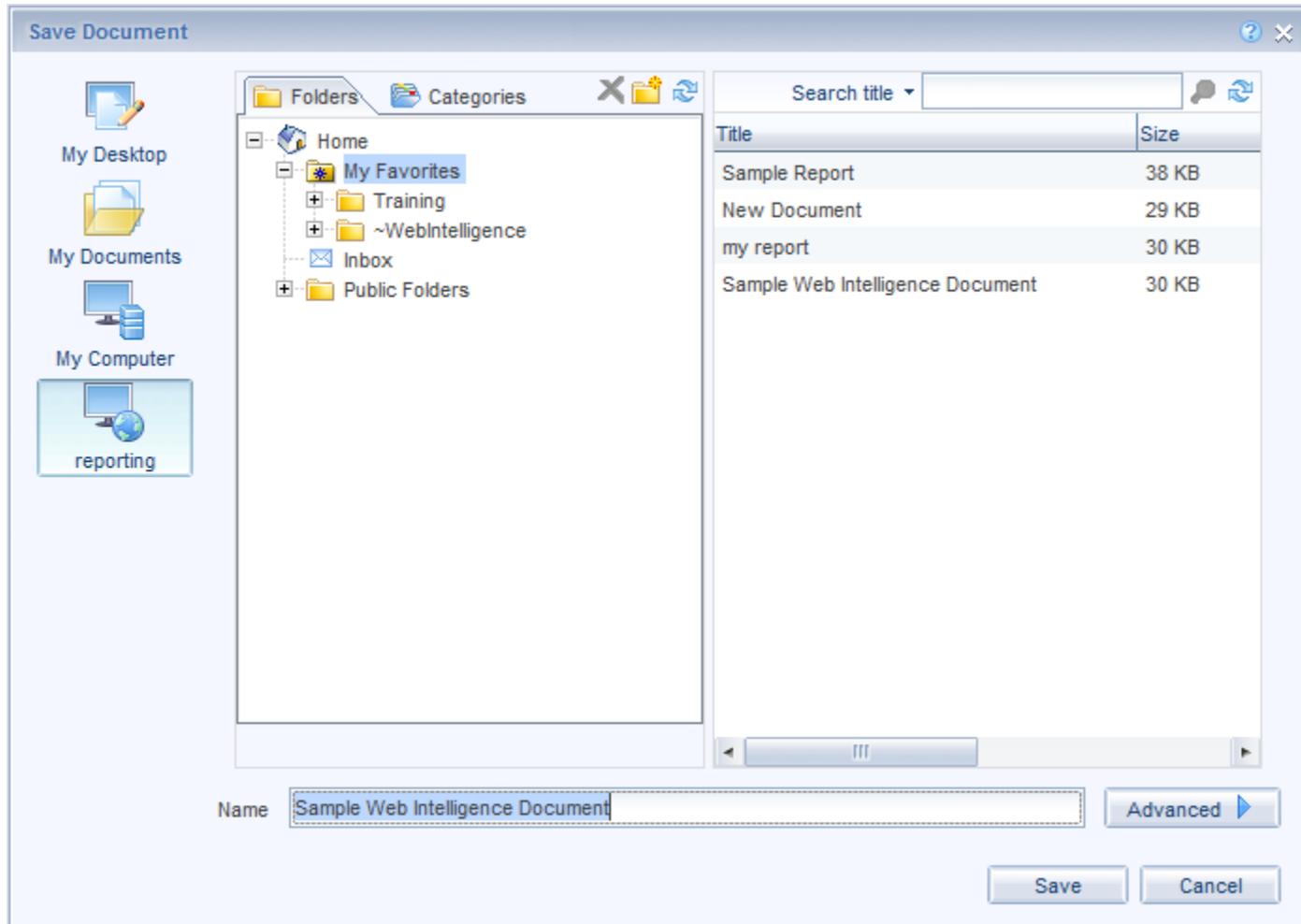
At the bottom right, there are "OK" and "Cancel" buttons.

Exporting Reports

1. To export a report click on the dropdown arrow next to the **Save** icon and select **Save as**.

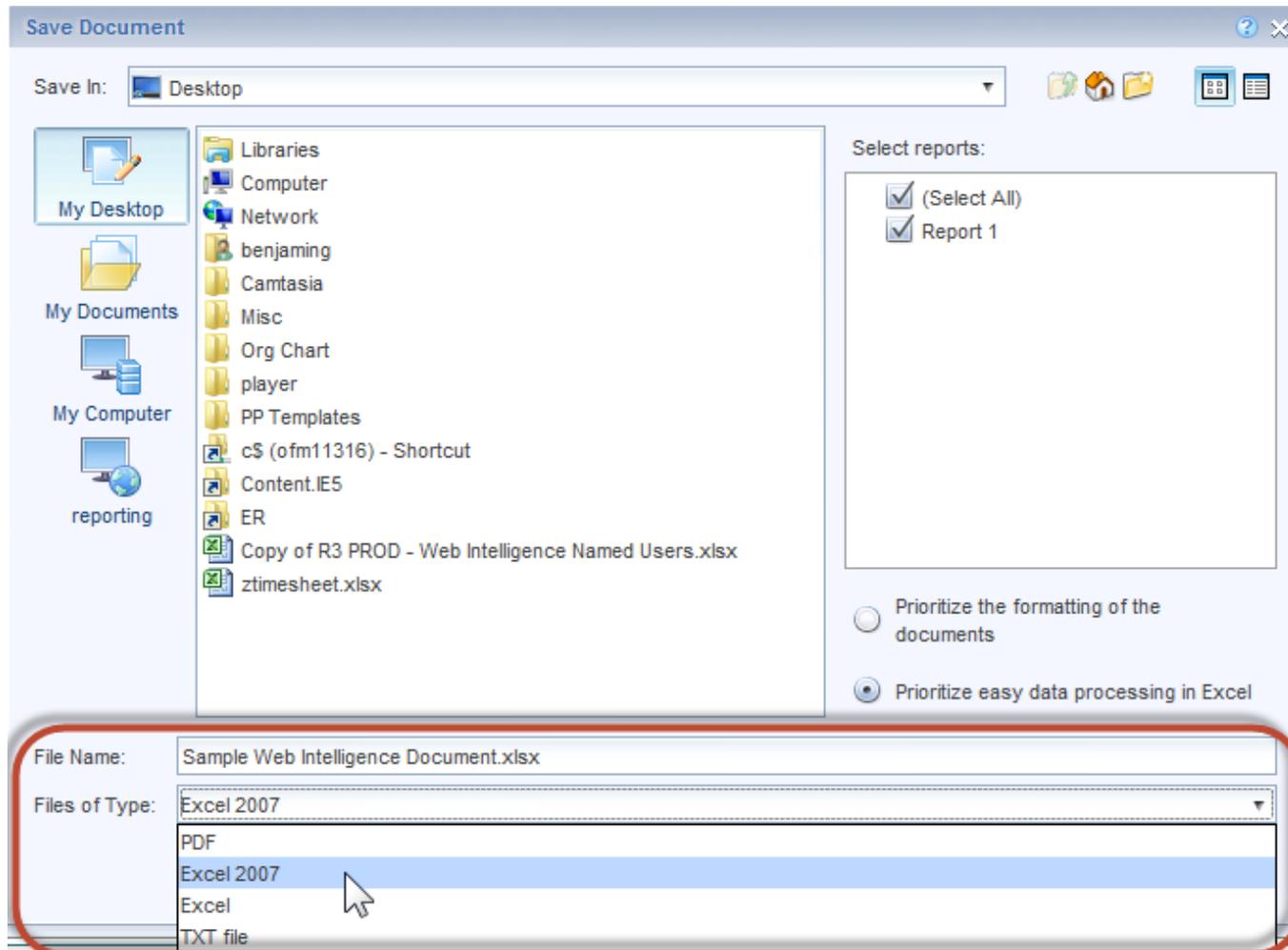


2. When **Save as** is clicked the **Save** dialogue box displays. Select **My Desktop**, **My Documents**, or **My Computer** as the location.

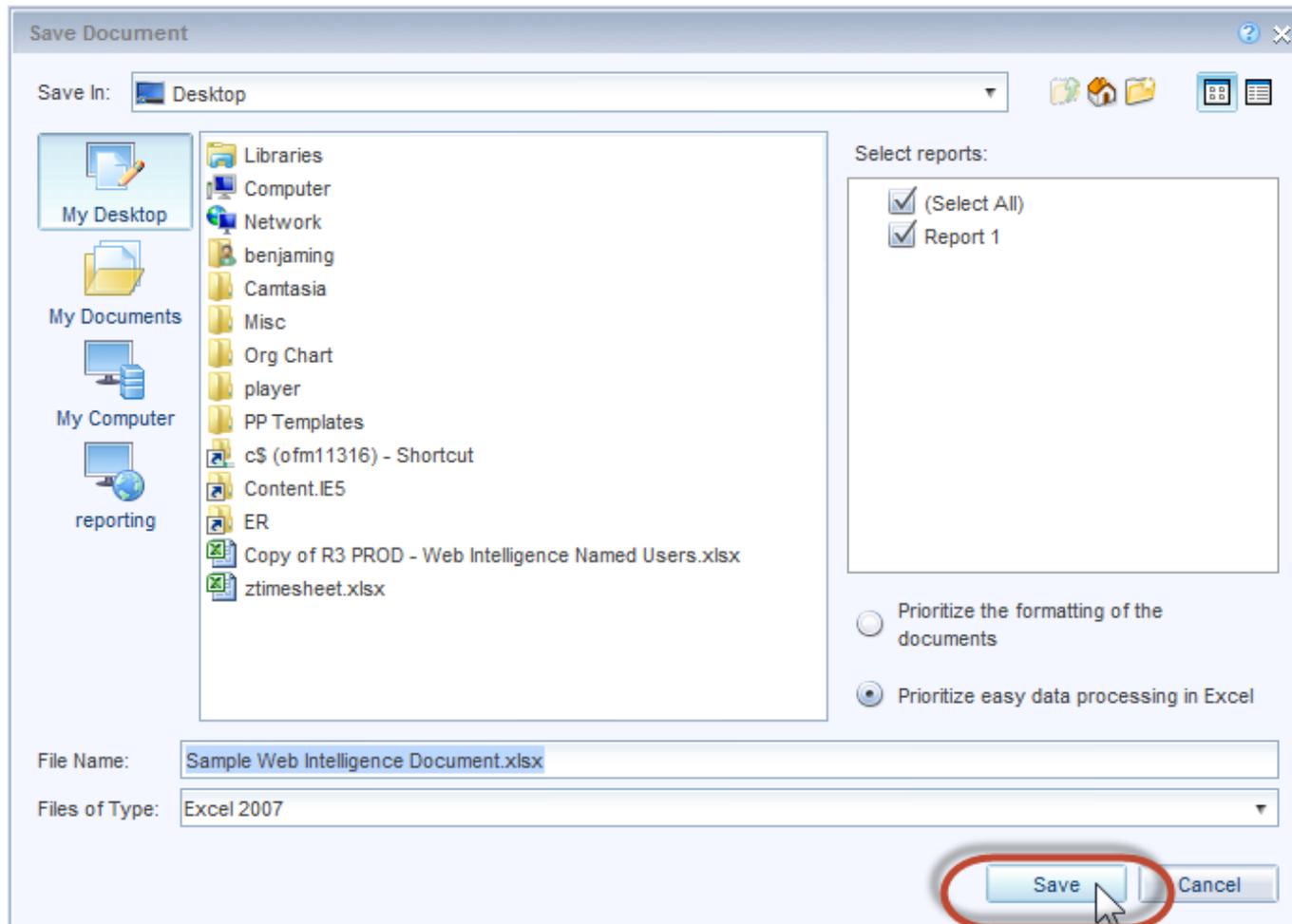


Exporting Reports

3. Verify the file name and update if needed.
4. Select the file type.



5. Click **Save**.

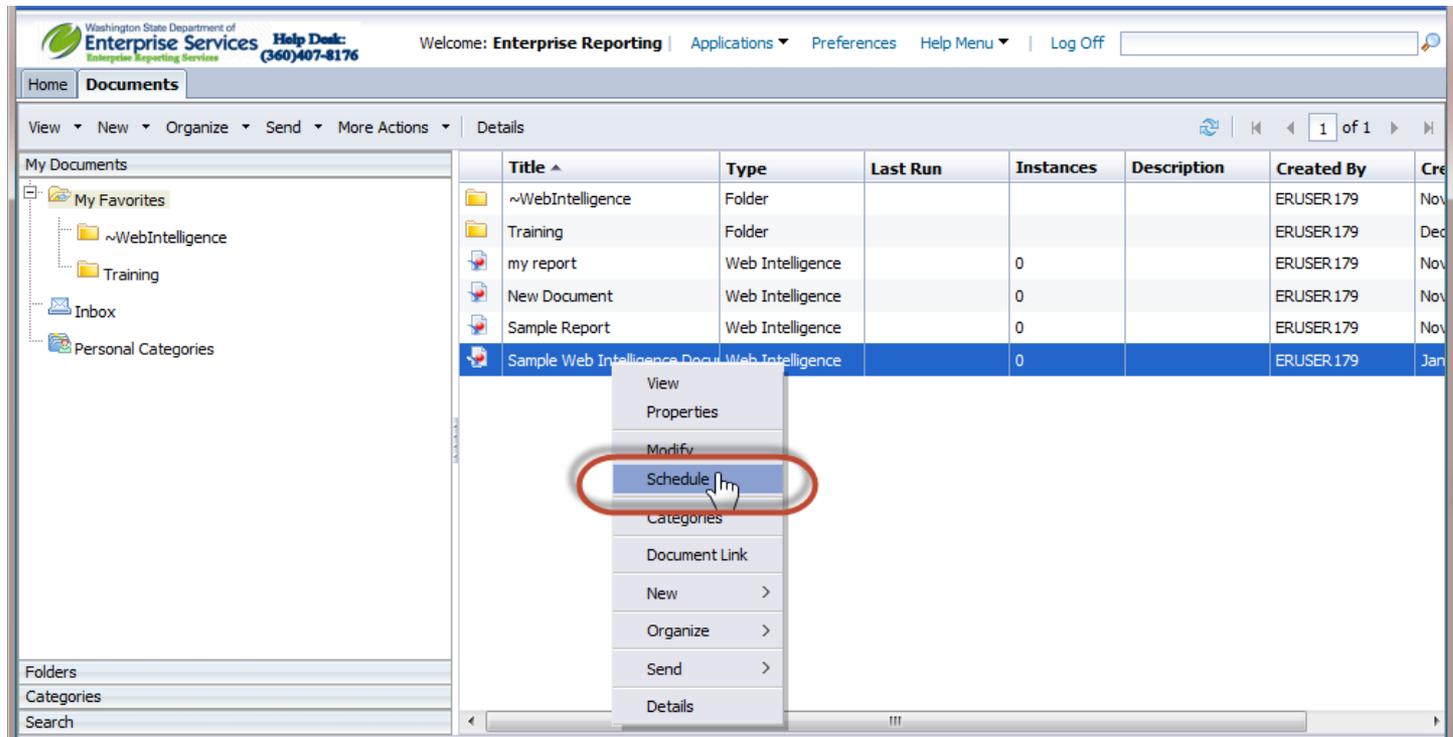


Scheduling Reports

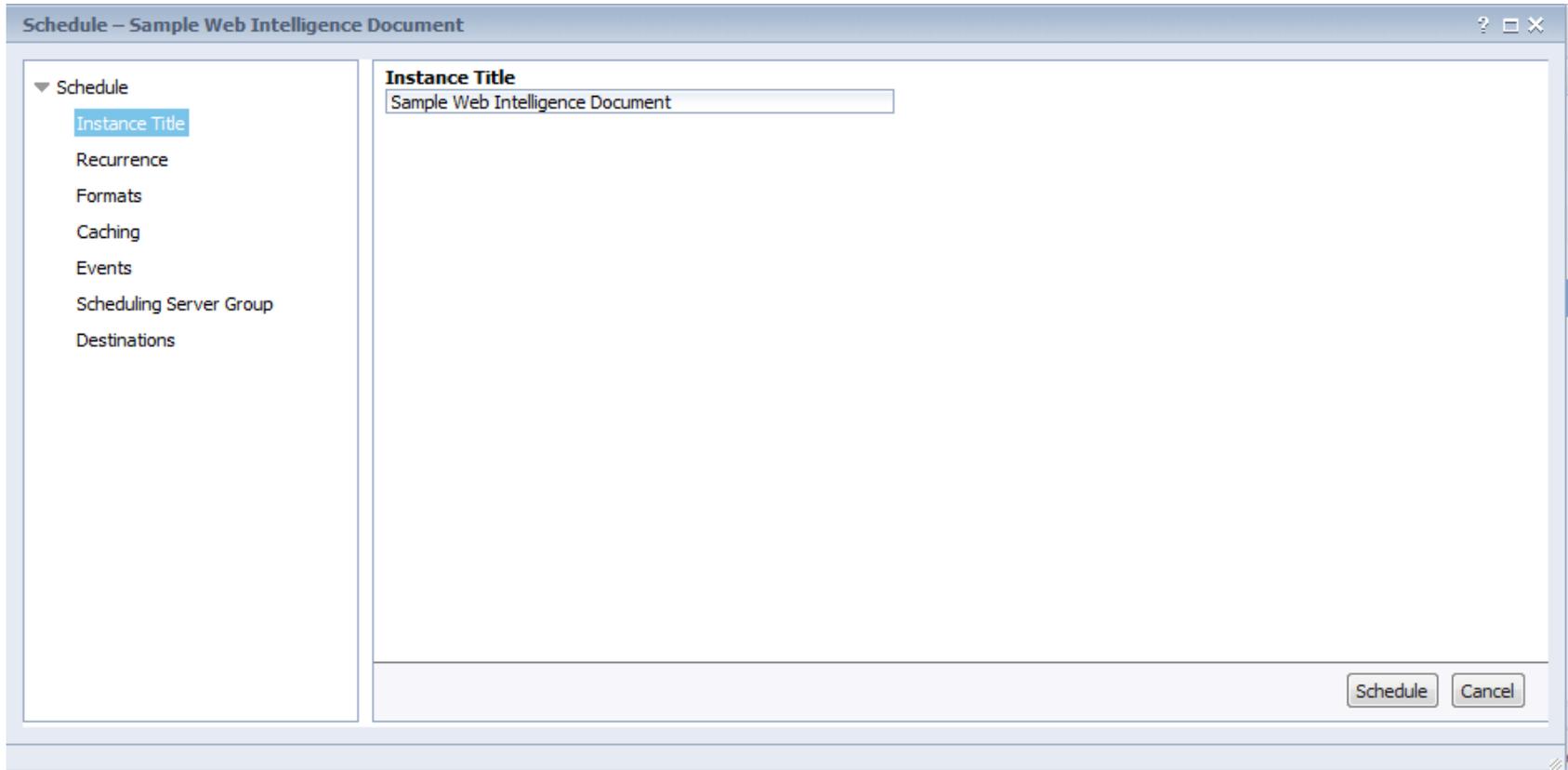
Scheduling Reports

Web Intelligence reports can be scheduled to run on a recurring schedule.

1. On the **Documents** tab, locate and select the object that to be scheduled.
2. Right click
3. Select “Schedule”



4. The schedule Dialogue will open.



5. In the **Instance Title** box, type a name for the instance.
6. In the "Schedule" dialog box, click Recurrence
7. Choose one of the recurrence options from the **Run object** list and set the required options. The default is "Now".

The following additional options are available:

- **Once**

This option requires a start and end time parameter. The object runs once at the time that you specify. If you schedule the object with events, the object will run once if the event is triggered between the start and end times.

- **Hourly**

This option requires information in hours and/or minutes for how frequently the object is run. Instances are created regularly to match the parameters that you enter. The first instance is created at the start time that you specify, and the object will cease to run on its hourly schedule at the end time that you specify.

- **Daily**

This option requires a start and end time parameter. The object runs once every N days at the time that you specify. It will not be run after the end time that you specify.

- **Weekly**

This option requires a start and end time parameter. Each week, the object runs on the selected days at the time that you specify. It will not be run after the end time that you specify.

- **Monthly**

This option requires a start date and time, along with a recurrence interval in months. The object runs on the specified date and time every N months. It will not be run after the end time that you specify.

- **Nth Day of Month**

This option requires a day of the month on which the object is run. Instances are created regularly each month on the day that you enter at the start time that you specify. The object will not be run after the end time that you specify.

- **1st Monday of Month**

This option requires a start and end time parameter. An instance is created on the first Monday of each month at the time that you specify. The object will not be run after the end time that you specify.

- **Last Day of Month**

This option requires a start and end time parameter. An instance is created on the last day of each month at the time that you specify. The object will not be run after the end time that you specify.

- **X Day of Nth Week of the Month**

This option requires a start and end time parameter. An instance is created monthly on a day of a week that you specify. The object will not be run after the end time that you specify.

- **Calendar**

This option allows you to select a calendar of dates. (Calendars are customized lists of schedule dates that are created by the Bi platform administrator.) An instance is created on each day that is indicated in the calendar, beginning at the start time that you specify and continuing until the end time that you specify.

8. Click **Formats**
9. Select the format you want to schedule to from the Output Format list.
10. Click **Destinations**
 - a) Select a destination option
 - b) Select the **Keep an instance in the history** check box if you want to save a copy of the instance.
 - c) Select the **Use default settings** check box if you want to the report to be sent to the logged in user.

You can schedule to the following destination locations:

- **Default Enterprise Location**

If you select this option, the instance is saved within Business Objects.

- **BI Inbox**

This option saves the instance to BI Inboxes specified.

- **Email**

This option sends the instance to the specified email recipients.

- **FTP Server**

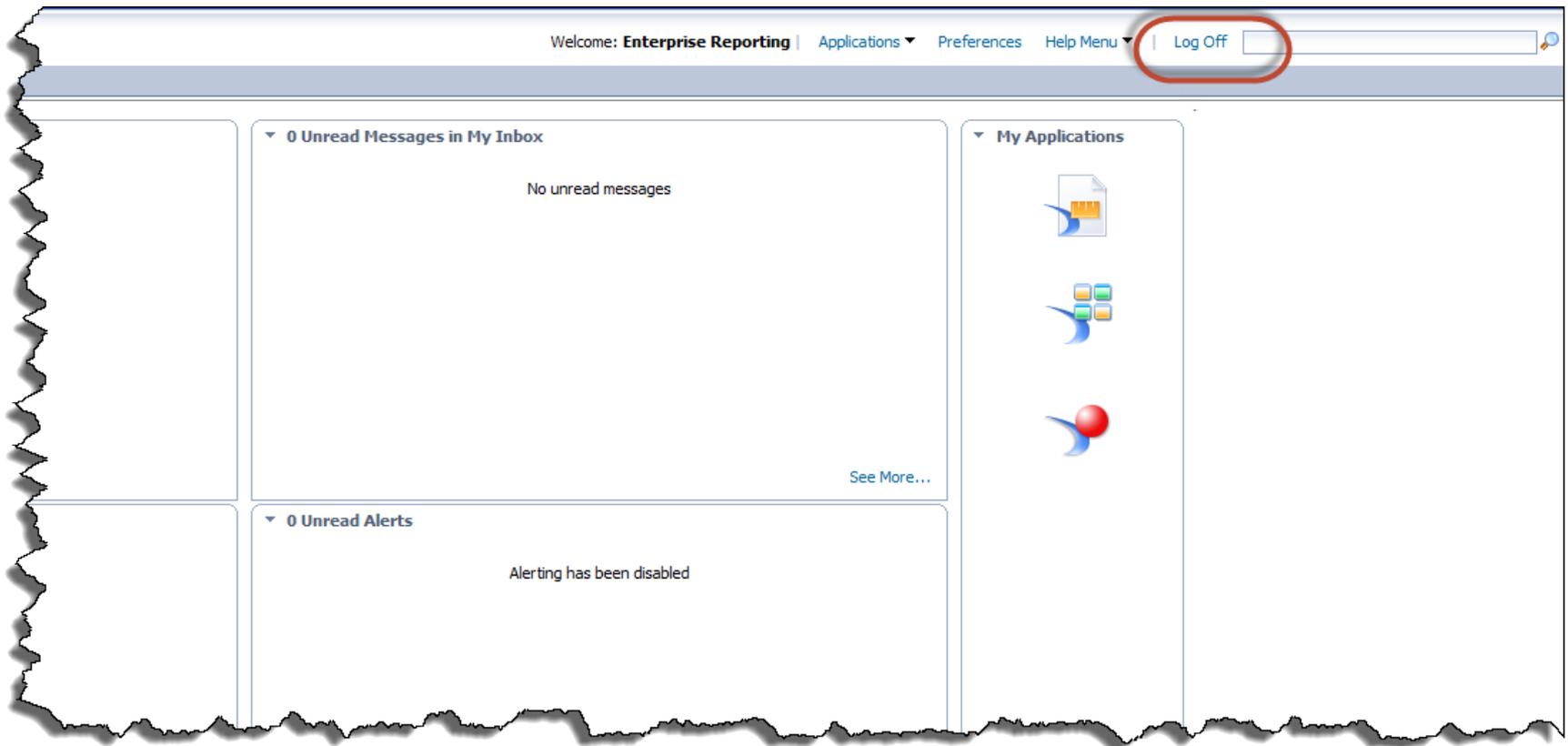
This option saves the instance to the specified FTP server.

- **File System**

This option saves the instance to the specified file location.

11. Click Schedule

To log off click the **Log Off** button.



Questions

Create a report to show the Allotments, Expenditures, and Variances for your agency by object.

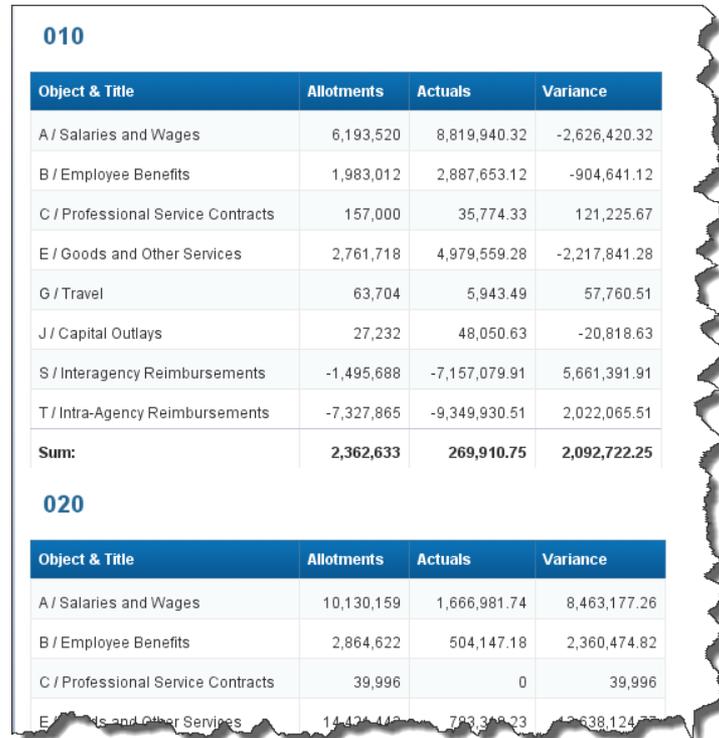
1. Open a new Web Intelligence Document
2. Select the universe for the current biennium
3. Select the following Result Objects
 - Program
 - Object
 - GL Account
 - Amount
 - Fiscal Month
4. Select the following Report Filters.
 - Agency
 - Set Agency filter to your agency.
 - GL Account
 - Set GL Account filter to 0622;6210;6410;6505;6510;6560
 - Select the predefined time filter for Biennium to Date thru Prior Month.

Practice Exercise 1 cont.

5. Create a variable to concatenate Object and Object Title
 - `= [Object] + " / " + [Object Title]`
6. Create a variable for the Allotments.
 - `= Sum(If([GL Account] InList("6210"; "0622"); [Amount]; 0))`
7. Create a variable for Actuals
 - `= Sum(If([GL Account] InList("6505"; "6510"; "6560"; "6410"); [Amount]; 0))`
8. Create a variable for the Variance
 - `= [Allotments] - [Actuals]`
9. Replace Object with the new Object and Title variable.
10. Remove GL Account and Amount from the Report
11. Add the new Variables (Allotments, Actuals, and Variance) to the report.
12. Create a section on Program
13. Add subtotal to each measure

Practice Exercise 1 cont.

14. Your report should look similar to this:



010

Object & Title	Allotments	Actuals	Variance
A / Salaries and Wages	6,193,520	8,819,940.32	-2,626,420.32
B / Employee Benefits	1,983,012	2,887,653.12	-904,641.12
C / Professional Service Contracts	157,000	35,774.33	121,225.67
E / Goods and Other Services	2,761,718	4,979,559.28	-2,217,841.28
G / Travel	63,704	5,943.49	57,760.51
J / Capital Outlays	27,232	48,050.63	-20,818.63
S / Interagency Reimbursements	-1,495,688	-7,157,079.91	5,661,391.91
T / Intra-Agency Reimbursements	-7,327,865	-9,349,930.51	2,022,065.51
Sum:	2,362,633	269,910.75	2,092,722.25

020

Object & Title	Allotments	Actuals	Variance
A / Salaries and Wages	10,130,159	1,666,981.74	8,463,177.26
B / Employee Benefits	2,864,622	504,147.18	2,360,474.82
C / Professional Service Contracts	39,996	0	39,996
E / Goods and Other Services	14,425,443	793,348.23	13,638,124.77

15. Add an Input Controls to filter the report by Program and Fiscal Month.