



Web Intelligence User Guide

Table of Contents

Chapter 1 - Overview.....	1
<i>Purpose</i>	1
Chapter 2 – Logon Procedure.....	3
<i>Web Intelligence Logon Screen</i>	3
<i>How to Log On to Web Intelligence</i>	3
<i>Changing Your Password</i>	4
Chapter 3 – Creating Queries.....	7
<i>Folder Structure</i>	7
<i>Creating a New Document/Query</i>	8
<i>Java Report Panel Overview</i>	12
<i>Universe Overview</i>	14
Select Fields to Display on Query/Report	15
Add Objects	15
Delete Objects.....	17
<i>Select Query Filters</i>	18
Overview.....	18
Filter Components.....	18
Query Filter Operators	19
Descriptions of Query Filter Operators.....	19
<i>Building Query Filters</i>	21
Filter Using Equal To.....	21
Filter Using a List	22
Filter Using a Range	27
<i>Filters Using Wildcards with Strings</i>	28
<i>Run Query</i>	31
<i>Cancelling a Query</i>	32
Chapter 4 - Save and Edit Queries.....	34
<i>Save a New Query</i>	34
<i>Save Query before Running</i>	36
<i>Save an Existing Query</i>	37
<i>Close Document without Saving</i>	38

<i>Modify a Query</i>	39
<i>Editing a Document from View Mode</i>	40
<i>Send a Document to Business Objects Inbox</i>	44
Chapter 5– Advanced Query Techniques	47
<i>Combining Filters</i>	47
<i>Combining Filters Using Wildcards with Strings</i>	50
<i>Adding Prompts to Filters</i>	51
Chapter 6 – Working with Report Tables	57
<i>Add and Remove Columns/Rows</i>	57
<i>Move or Swap Columns/Rows</i>	60
<i>Replace Columns or Rows</i>	62
<i>Format Numbers</i>	64
<i>Using Report Filters</i>	66
<i>Insert a calculation</i>	68
<i>Remove a Calculation</i>	69
<i>Create a Crosstab</i>	70
<i>Export Report Data</i>	71
<i>Copying Data to Other Applications as an Image</i>	72
Chapter 7–Using Sections, Breaks and Sorts	74
<i>Create a Section</i>	74
<i>Navigating From Section to Section</i>	75
<i>Create a Break</i>	78
<i>Using Sort Feature</i>	80
Chapter 8 – Working with Multiple Queries	81
<i>Add a Query</i>	81
<i>Rename a Query</i>	85
<i>Duplicate a Query</i>	88
<i>Move a Query</i>	89
<i>Delete a Query</i>	90
Chapter 9- Merge Dimensions	91
<i>Merge Dimensions Described</i>	91

<i>How to Merge Dimensions</i>	92
<i>Edit Merged Dimension</i>	97
<i>Delete Merged Dimension</i>	98
<i>Using Merged Dimensions in Reports</i>	99
<i>Purge Data from a Query</i>	102
Chapter 10 Formulas and Variables	104
<i>Create Variables</i>	104
Create a Variable from the Formula Toolbar.....	104
Create a Simple Variable	107
Creating Variables for Allotment, Expenditure and Variance.....	112
Chapter 11 – Print Reports	118
<i>Print a Report</i>	118
<i>View Page Layout</i>	119
Chapter 12 – Logoff	119
<i>Logoff Procedure</i>	119

Chapter 1 - Overview

Purpose

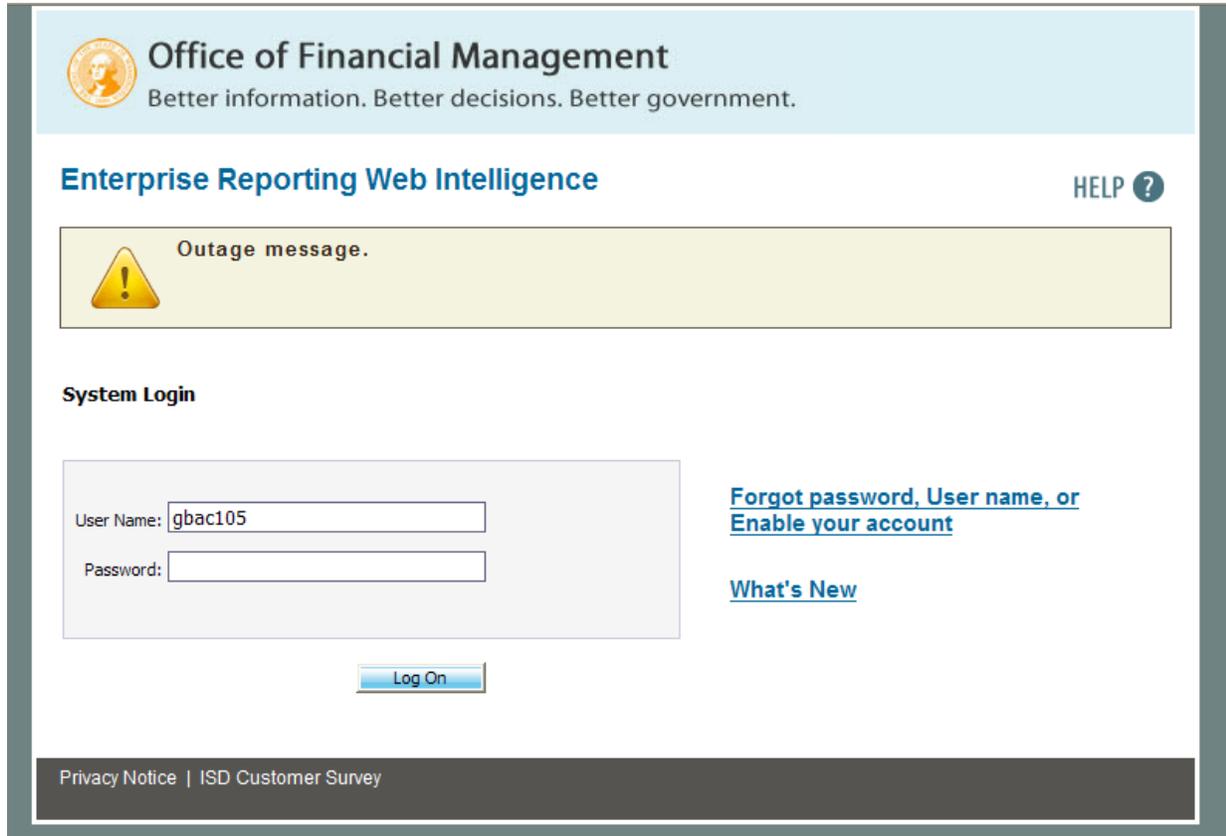
This reference guide provides instructions on using the Enterprise Reporting Web Intelligence Analysis tool by Business Objects. This document focuses on basic features for working with queries and reports using the Java Report Panel and is not intended to cover all the features available in the Web Intelligence Tool. For further information on using other, more advanced features, please refer to the Business Objects user guide, "Building Reports Using the Web Intelligence Java Report Panel", available as a link on the logon page or in the "Documentation" folder under Public Folders in the home page. The examples used in this guide focus on data sources for AFRS History data, although the functionality can be applied to any data sources available in the tool based on a user's security profile.

Note: All references in this manual to the Business Objects user guide refer to "Building Reports Using the Web Intelligence Java Report Panel" referred to above.

The Web Intelligence Analysis tool provides business users an easy-to-use interactive and flexible user interface for building and analyzing reports or organizational data over the web, through the Washington State Intranet or through the Internet. It provides querying, reporting, and analysis capabilities all in a single tool, improving the ability to interpret and act on information quickly. The tool also has graphical and drill down features, enabling users to conduct more detailed analyses.

Chapter 2 – Logon Procedure

Web Intelligence Logon Screen



The screenshot shows the logon interface for the Office of Financial Management's Enterprise Reporting Web Intelligence. At the top, the OFM logo and tagline "Better information. Better decisions. Better government." are displayed. Below this, the page title "Enterprise Reporting Web Intelligence" is shown alongside a "HELP ?" link. A yellow warning box with a triangle icon contains the text "Outage message." The main section is titled "System Login" and features a form with two input fields: "User Name:" containing the text "gbac105" and "Password:". To the right of the form are two links: "Forgot password, User name, or Enable your account" and "What's New". A "Log On" button is positioned below the form. At the bottom of the page, a dark grey footer contains the text "Privacy Notice | ISD Customer Survey".

How to Log On to Web Intelligence

Web Intelligence customers must have online access either through the Washington State Intranet or through a secure Fortress server to use the tool from outside of the state firewall.

Complete the following steps to log on to Web Intelligence:

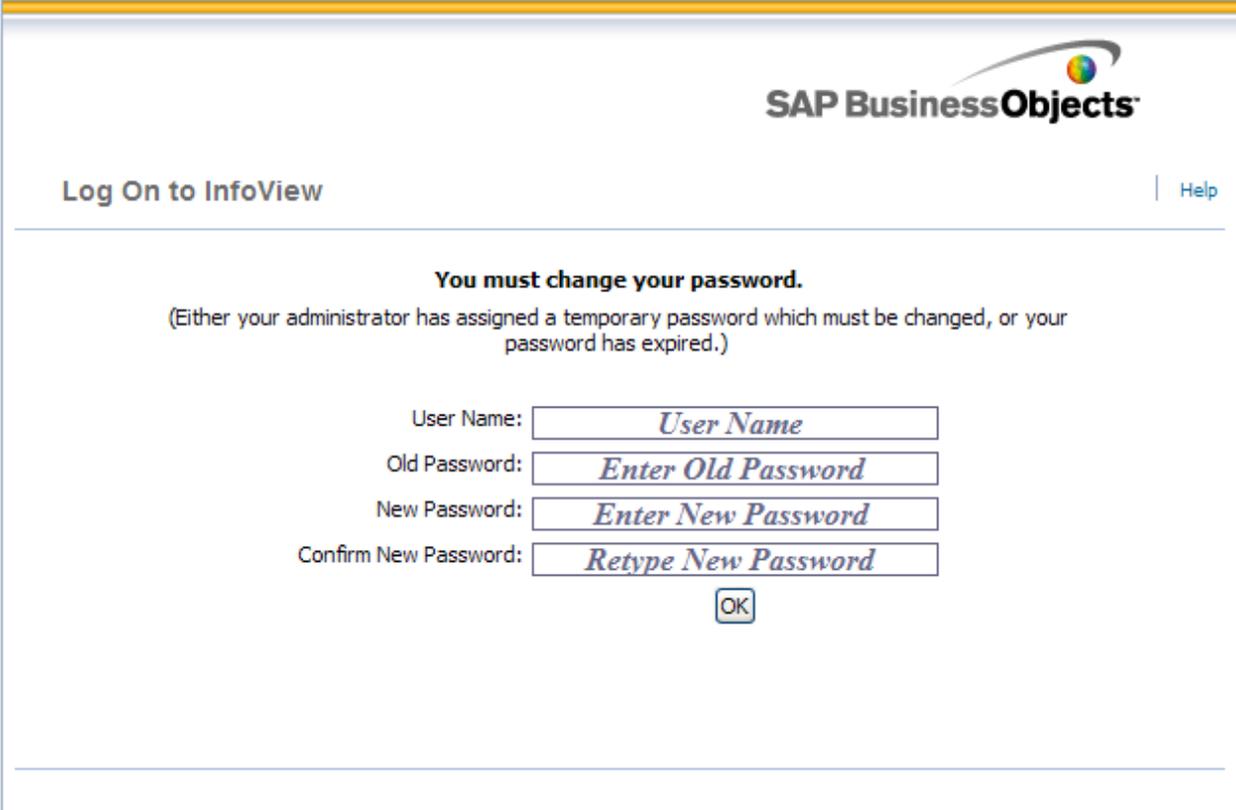
1. Start Internet Explorer.
2. Type <https://adhocreporing.ofm.wa.gov> for the Intranet web site or <https://fortress.wa.gov/ofm/adhocreporting> for the Internet web site in the **Address** field and click **Go**, or press [Enter].

The Web Intelligence logon screen will display as illustrated above.

3. Enter your User Name assigned by the Office of Financial Management (OFM) in the **User Name** field, and then press [Tab] to move your cursor to the next field.
4. Enter your Password in the **Password** field. This application is using hardened password. Refer to the password guidelines on the next page.
5. Click the **Log On** button or press [Enter] to initiate a connection to the Web Intelligence.

Changing Your Password

The application is following the OFM hardened password standards, so the first time you log on you see a message requiring you to change your password, as illustrated below.



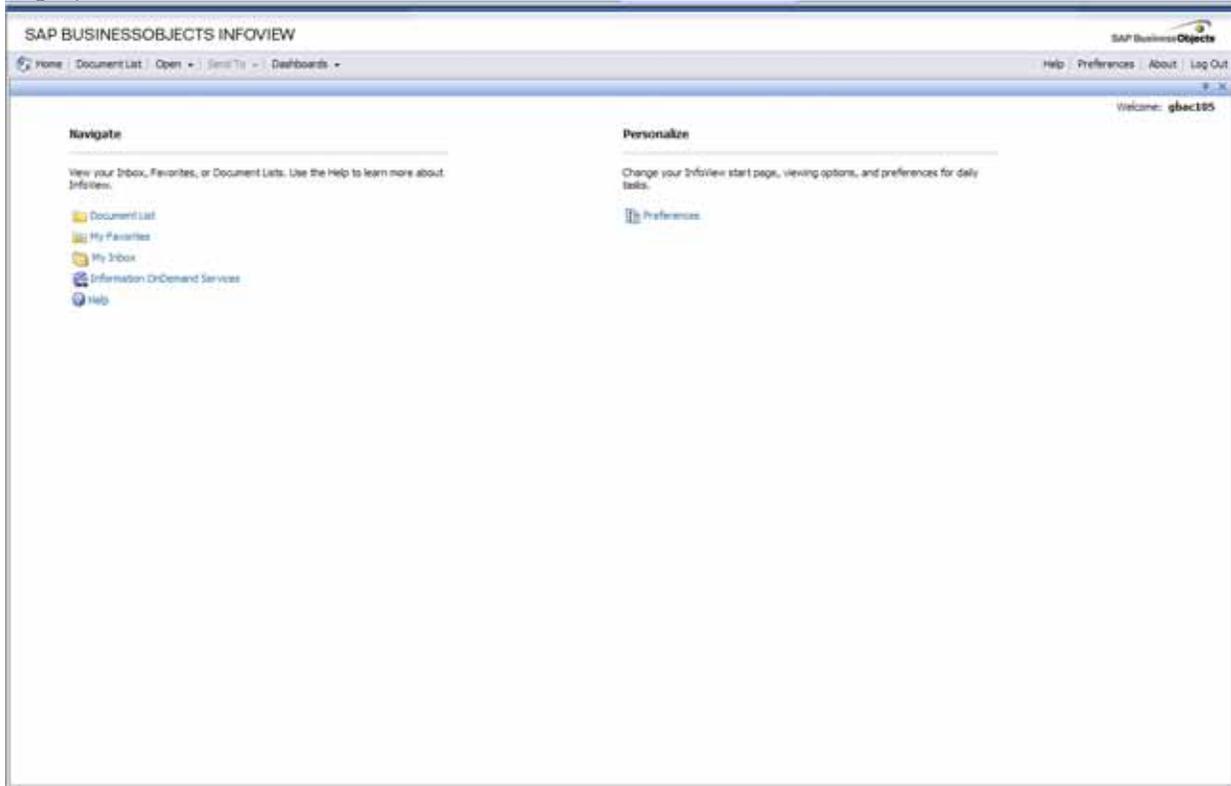
The screenshot shows the SAP BusinessObjects login interface. At the top right is the SAP BusinessObjects logo. Below it, the text "Log On to InfoView" is on the left and "Help" is on the right. The main content area displays a message: "You must change your password." followed by a sub-message: "(Either your administrator has assigned a temporary password which must be changed, or your password has expired.)". Below this message are four input fields: "User Name:" with a placeholder "User Name", "Old Password:" with a placeholder "Enter Old Password", "New Password:" with a placeholder "Enter New Password", and "Confirm New Password:" with a placeholder "Retype New Password". An "OK" button is centered below the input fields.

The hardened password criteria are as follows:

1. Password must be at least eight characters long.
2. 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.
3. Password must be changed every 120 days.
4. After five incorrect logon attempts, your user account will be locked. Please call the Enterprise Reporting Help Desk at (360) 664-7791 for assistance with resetting your password.

Enter your old password in the **Old Password** field, enter a new password in the **New Password** field, and confirm it in the **Confirm New Password** field. Then click on **Submit**.

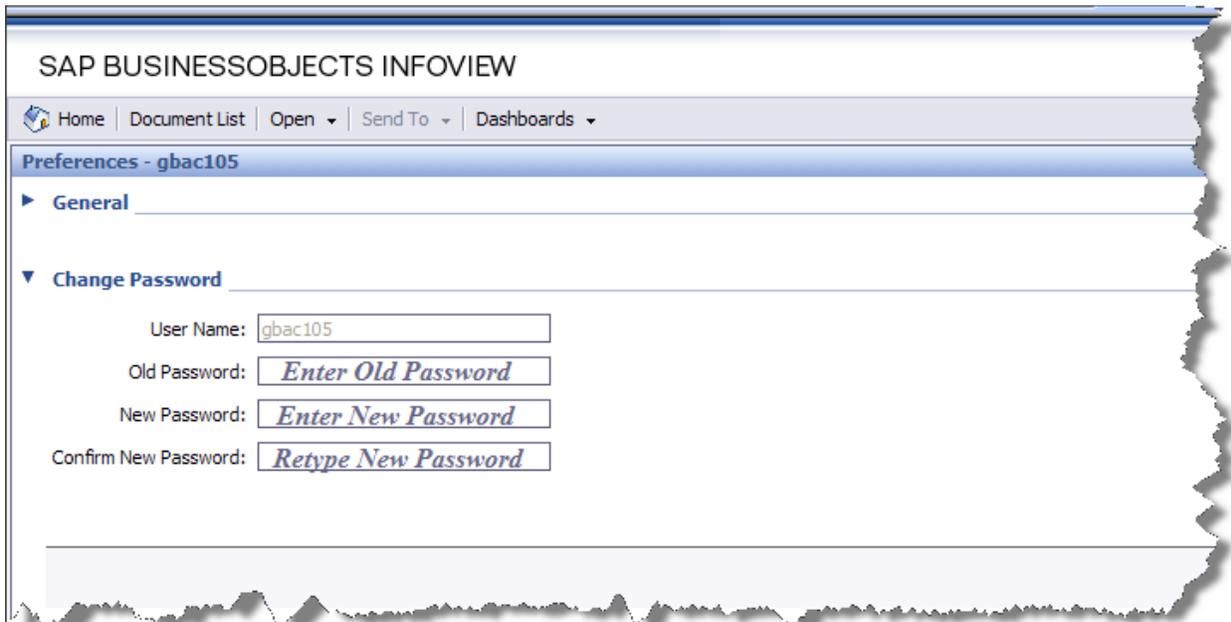
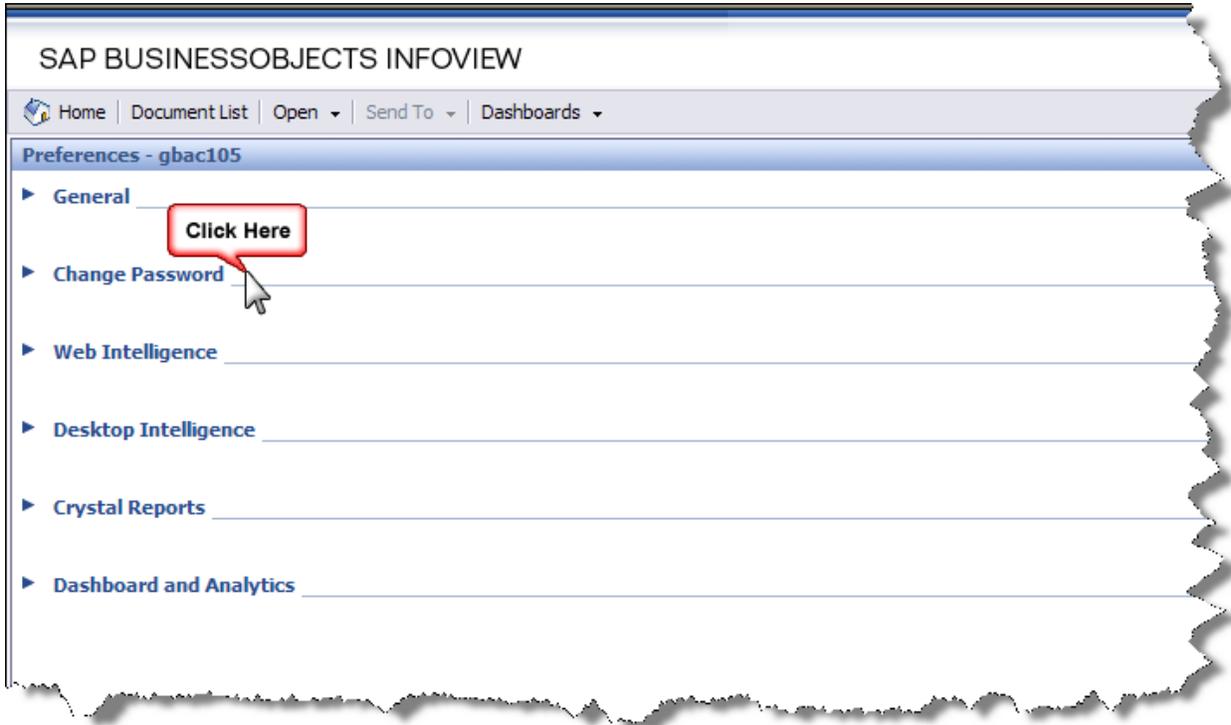
After you have successfully changed your password, the InfoView home page shown below will display.



You may also access the Change Password screen by clicking on the **Preferences** button under the Personalize header on the right side of the screen. This will display the Preferences page, as illustrated below.



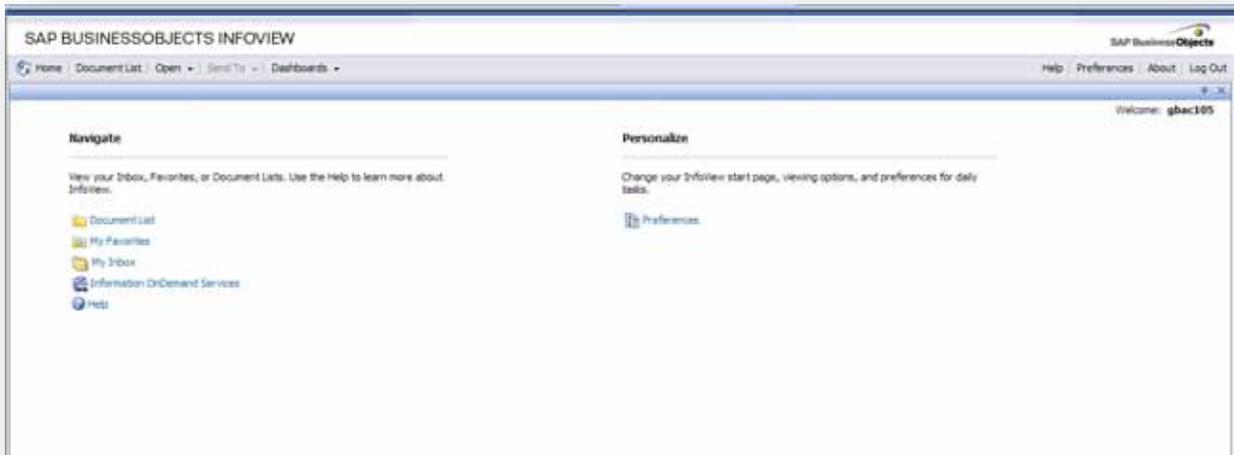
Select the **Password** tab to access the Change Password screen. Change your password as described on the previous page.



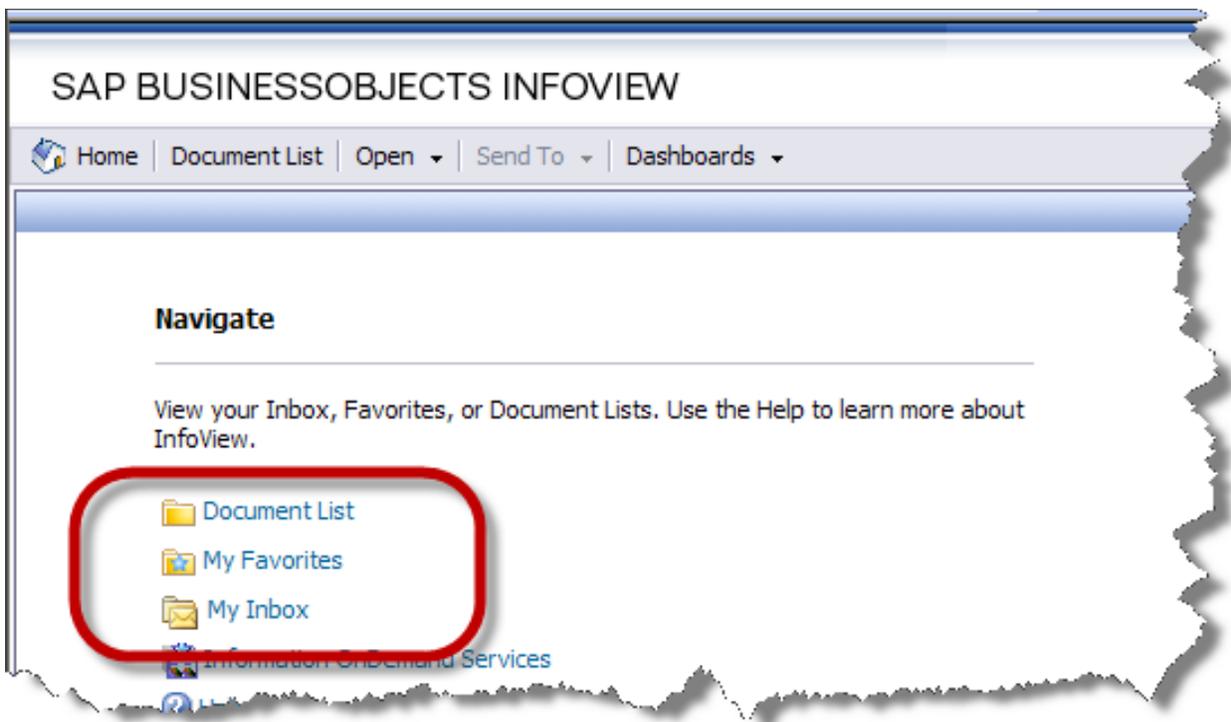
Chapter 3 – Creating Queries

Folder Structure

After successfully logging in, the InfoView home page shown below will display.



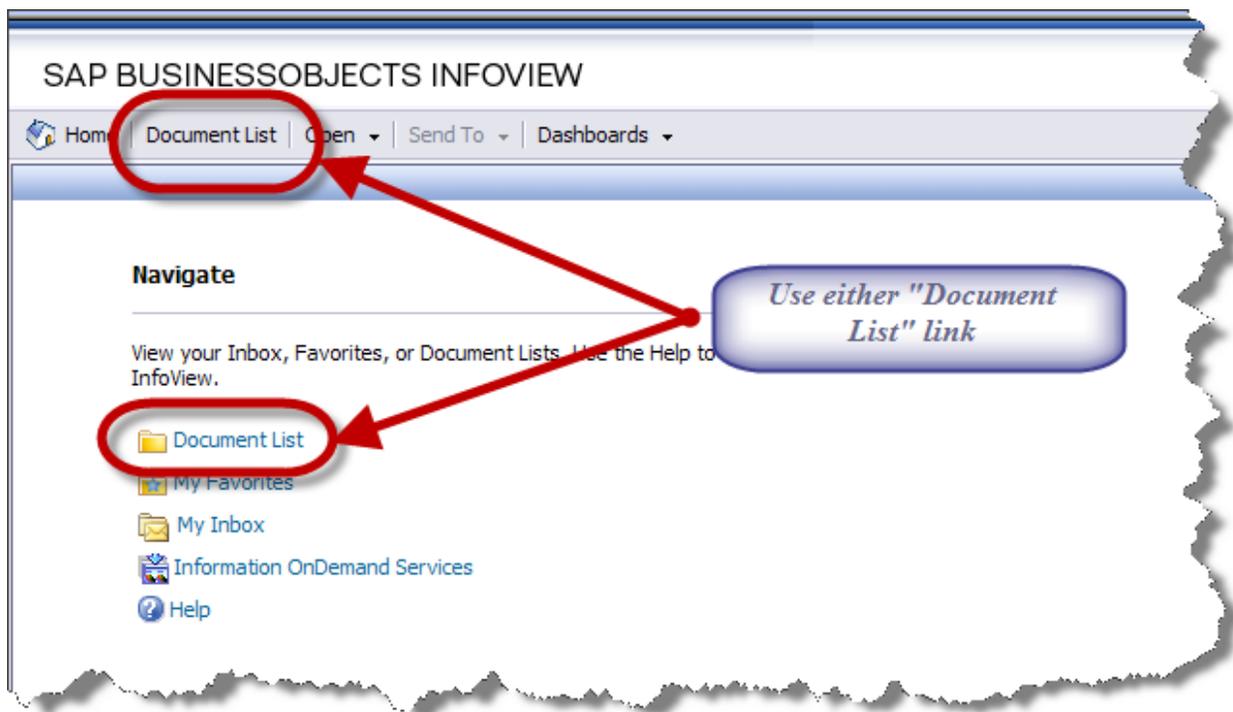
To open folders at the top level click on "Document List"; or favorites or Inbox can be accessed directly by clicking the "My Favorites" or "My Inbox" links.



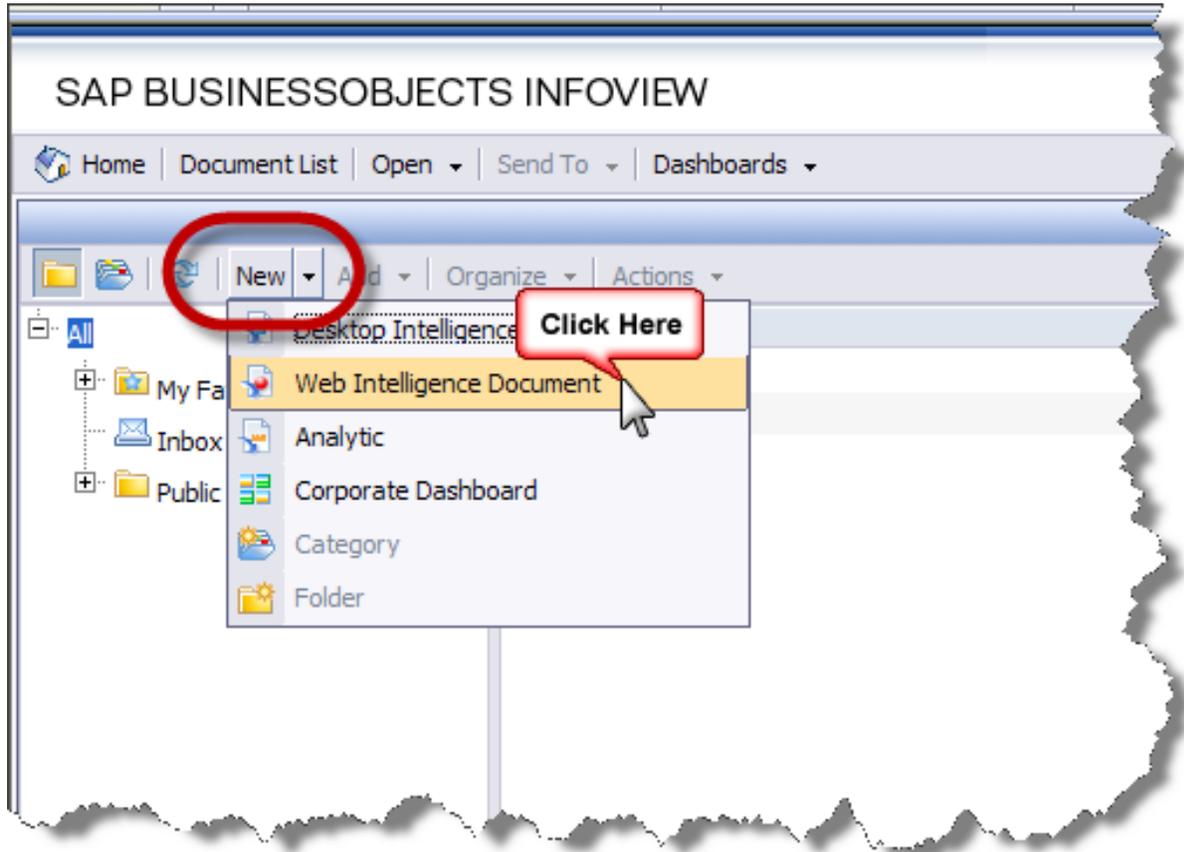
Creating a New Document/Query

When you build a Web Intelligence document, or query, you create a request for information from a database. A query can be very simple or very complex, depending on the user's business need at the time. When you run the query, the request is sent to the database in SQL (Structure Query Language). Users do not need to know SQL in order to run a query. The database is represented in the tool in a structure called a universe, with objects that have meaningful names and meanings. You build queries using the universe objects. Then when you run the query, the request is sent to the database, and the result is returned to the tool in a report, in the form of a table, consisting of columns and rows.

To create a new web document or query, click "Document List" in the Header panel, shown in the following illustration.

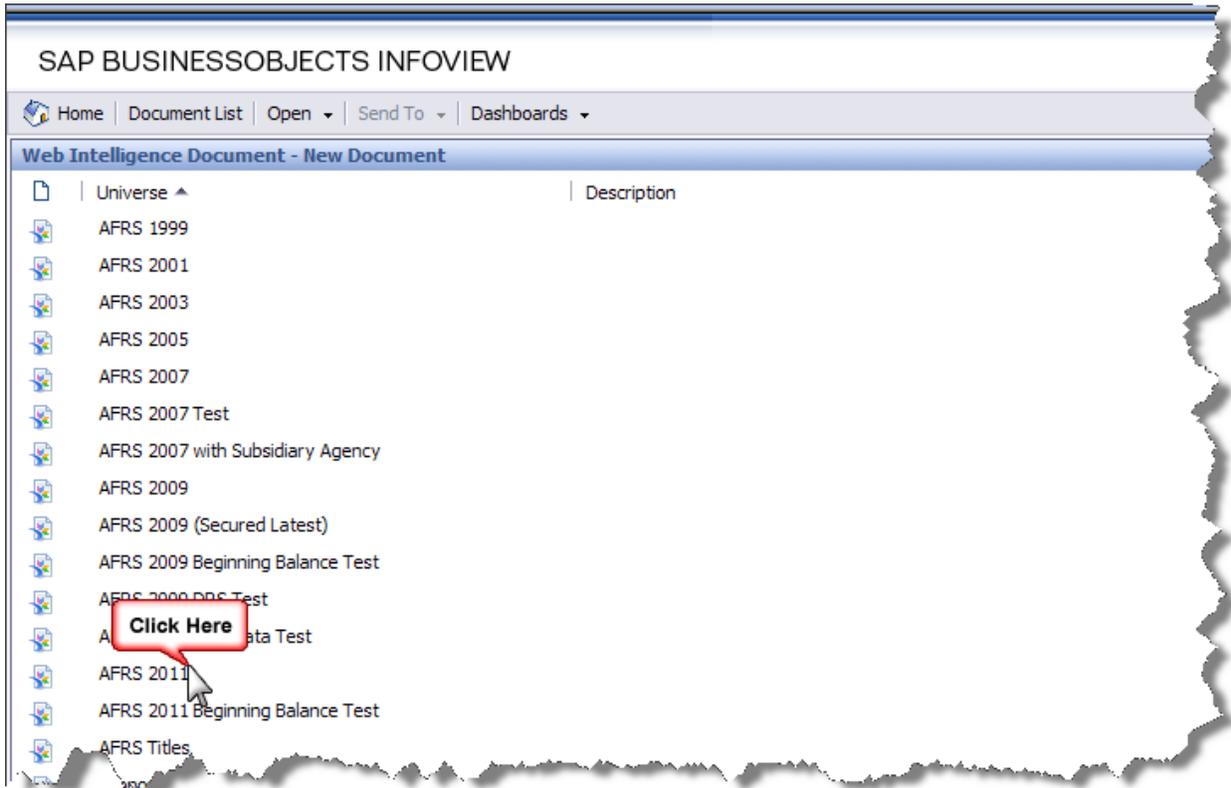


Click on "New" in the InfoView Workspace Toolbar and select "**Web Intelligence Document**" from the drop-down list that displays.

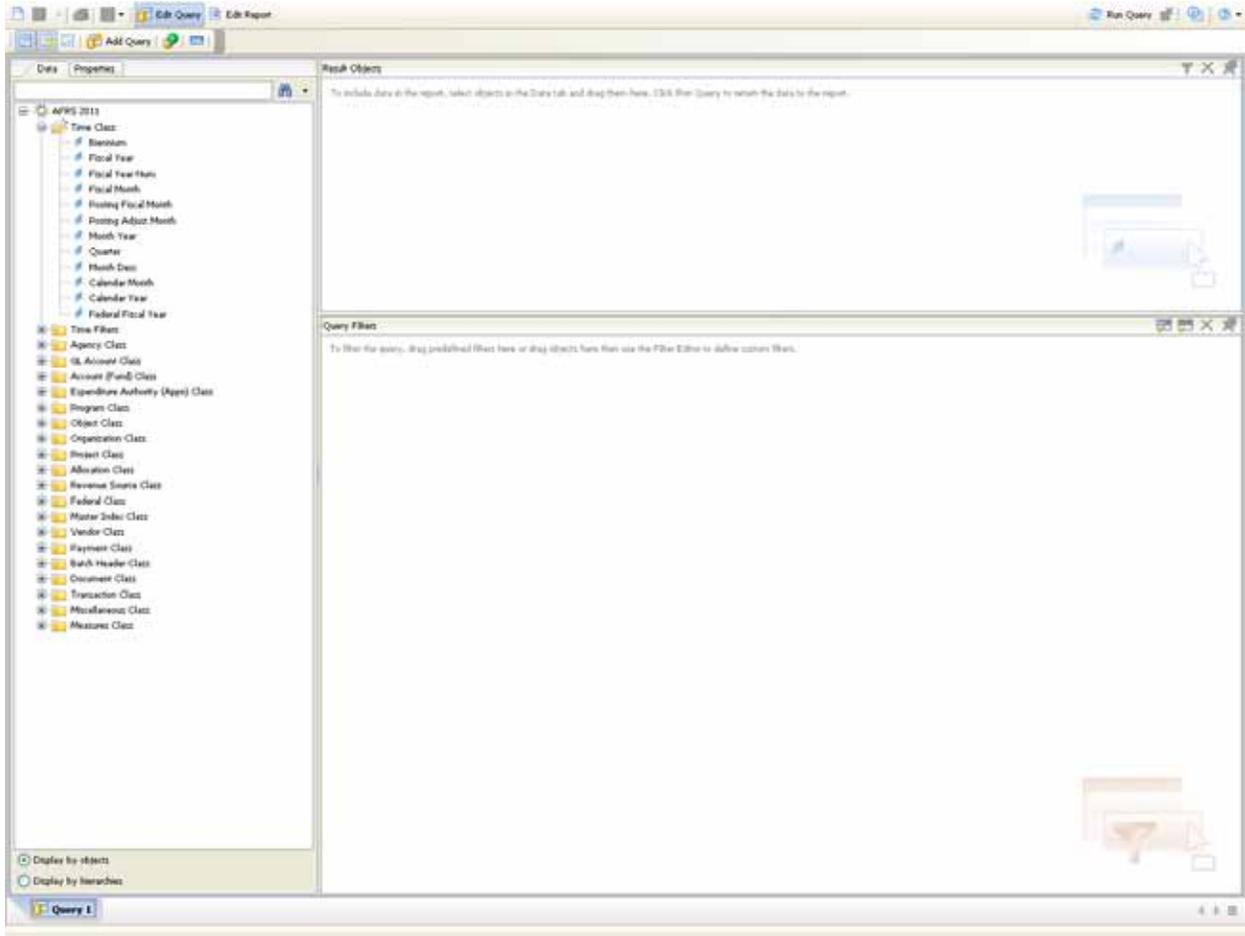


The right panel will display all the universes that you are authorized to use to create your Web Intelligence Document or query, as shown in the following illustration. As explained previously, a universe is a collection of data elements available in a database. The design of the universe determines how the data is retrieved.

Select a Universe.

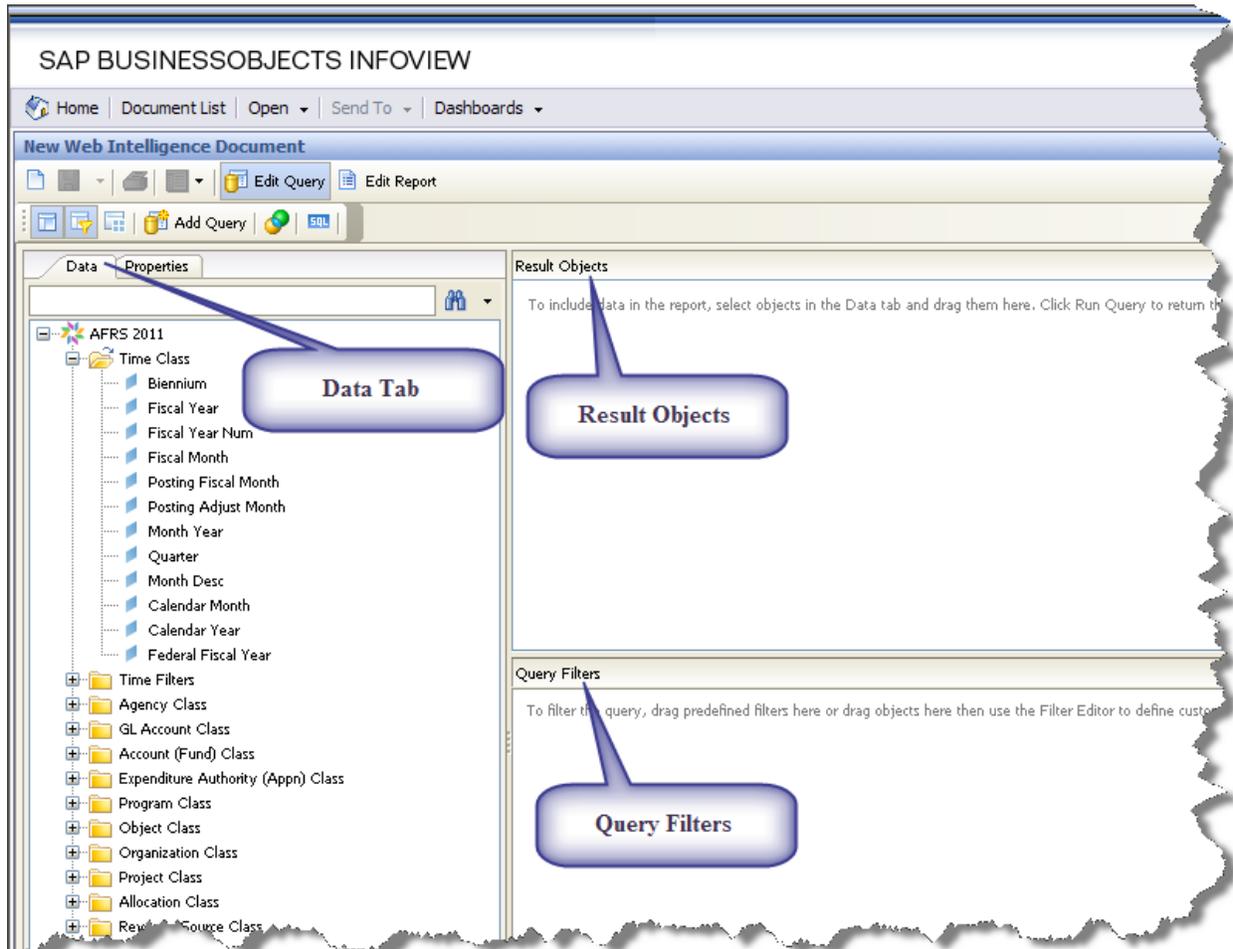


After the Java component files have been successfully downloaded, the screen shown below will display.

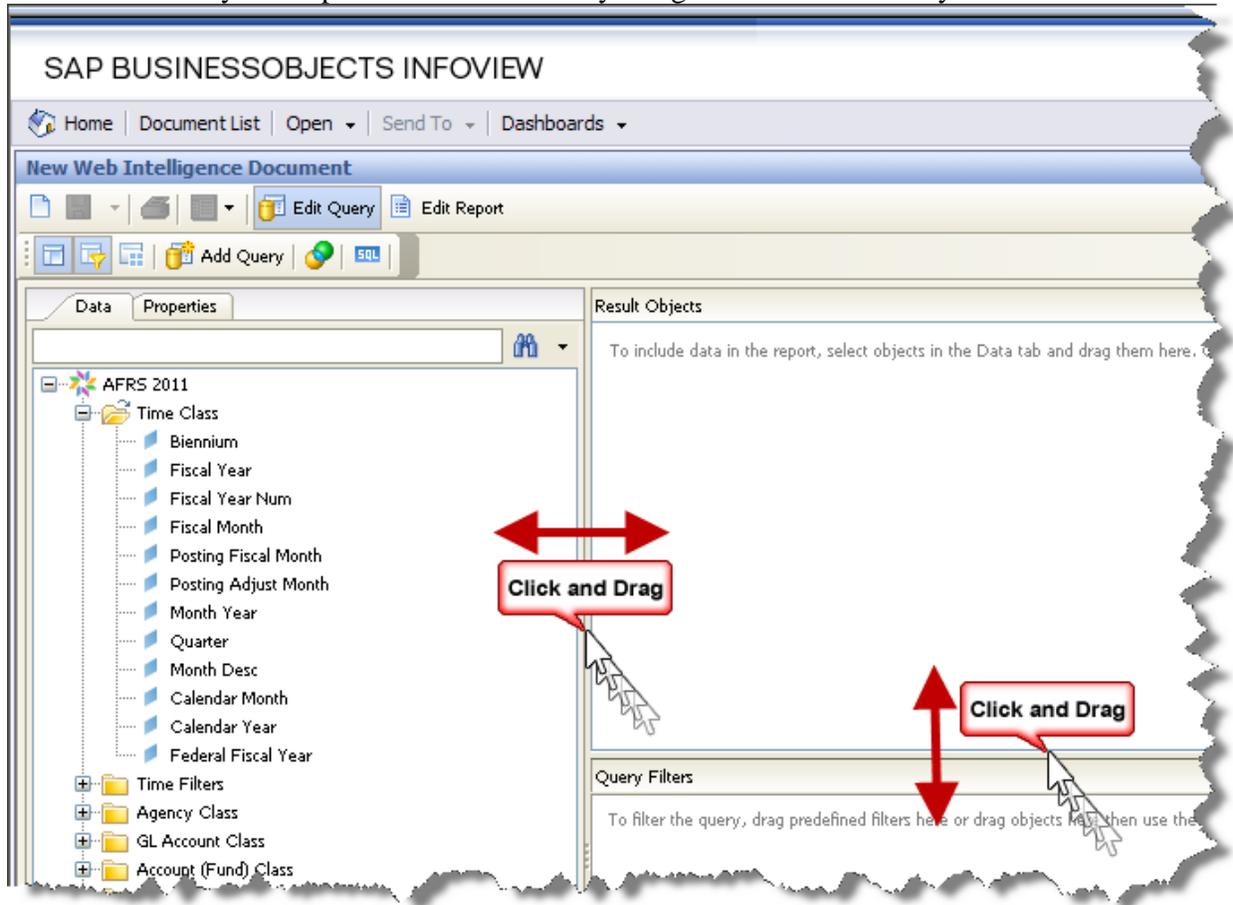


Java Report Panel Overview

You build queries in the Java Report Panel using objects in the universe. The universe objects appear on the left side of the panel under the **Data** tab. The upper right half of the panel is the **Result Objects** area, where you select objects to be displayed on the report output. The lower right half of the panel is the **Query Filters** area, where you define how to limit your data selections.



You can resize any of the panels on this screen by using the double arrow key.



Universe Overview

A universe is a representation of the information available in a database. A universe is comprised of *objects* and *classes*; these are technical terms for data elements and the way they are organized.

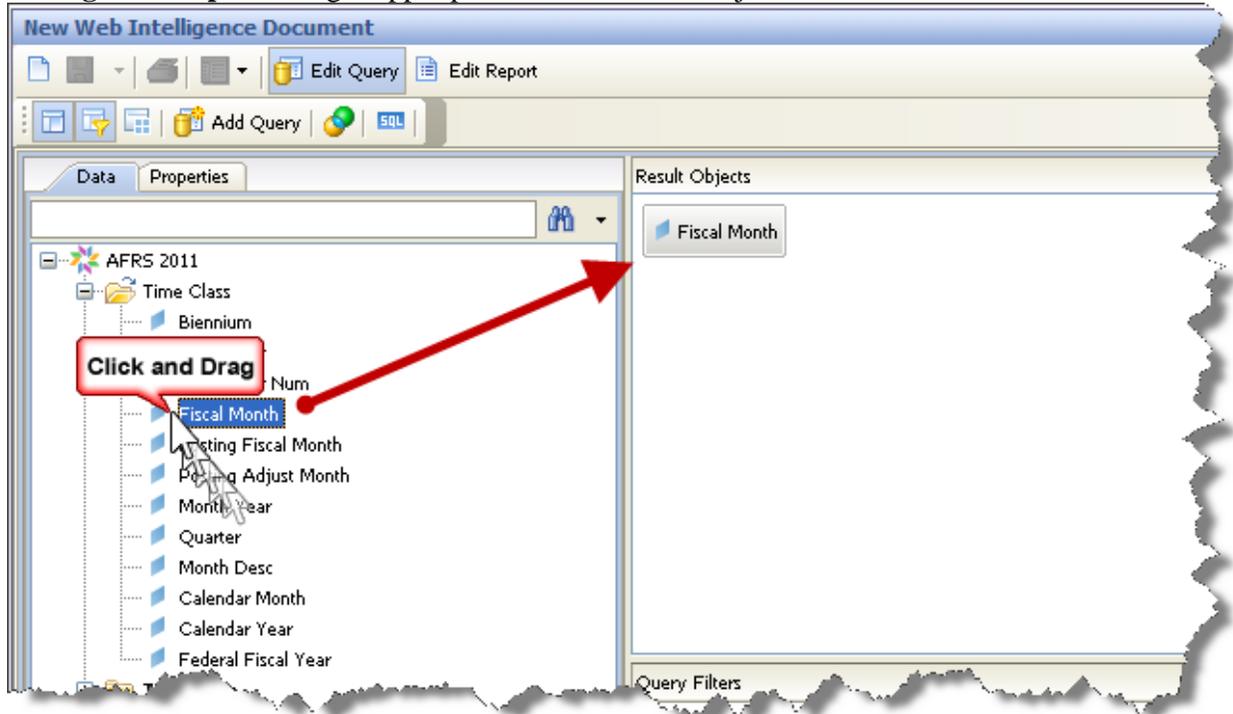
There are different types of objects for use in a query:

<u>Icon</u>	<u>Description</u>
	<p>Class - Logical grouping of objects. Each class has a meaningful name, for example; Agency Class, Object Class, or Measure Class.</p>
	<p>Dimension - Retrieves the data that will provide the basis for analysis in a report. Dimension objects typically retrieve character-type data.</p>
	<p>Detail - Provides descriptive data about a dimension. A detail is always attached to the dimension for which it provides additional information.</p>
	<p>Measure - Retrieves numeric data that is the result of calculations on data in the database. Measure objects are often located in a Measures class.</p>
	<p>Query Filter – Restricts the information returned by objects, such as limiting data concerning amounts to a specific time interval.</p>

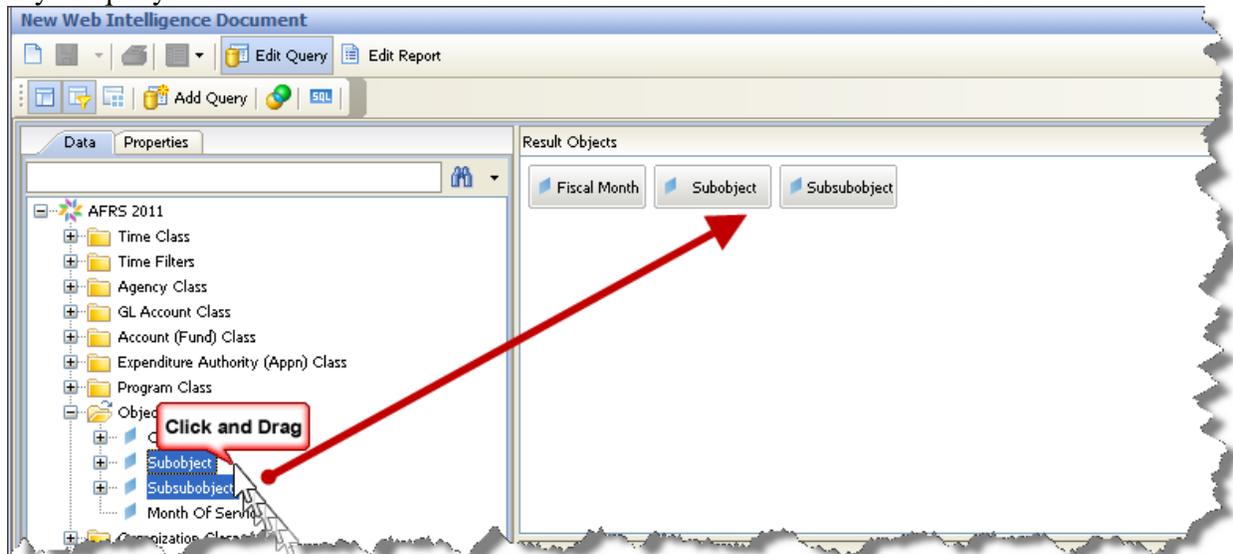
Select Fields to Display on Query/Report

Add Objects

To select the data elements to display on the report or query, **double click** on the desired dimension or **drag and drop** to the right upper panel in the “Result Objects” area.

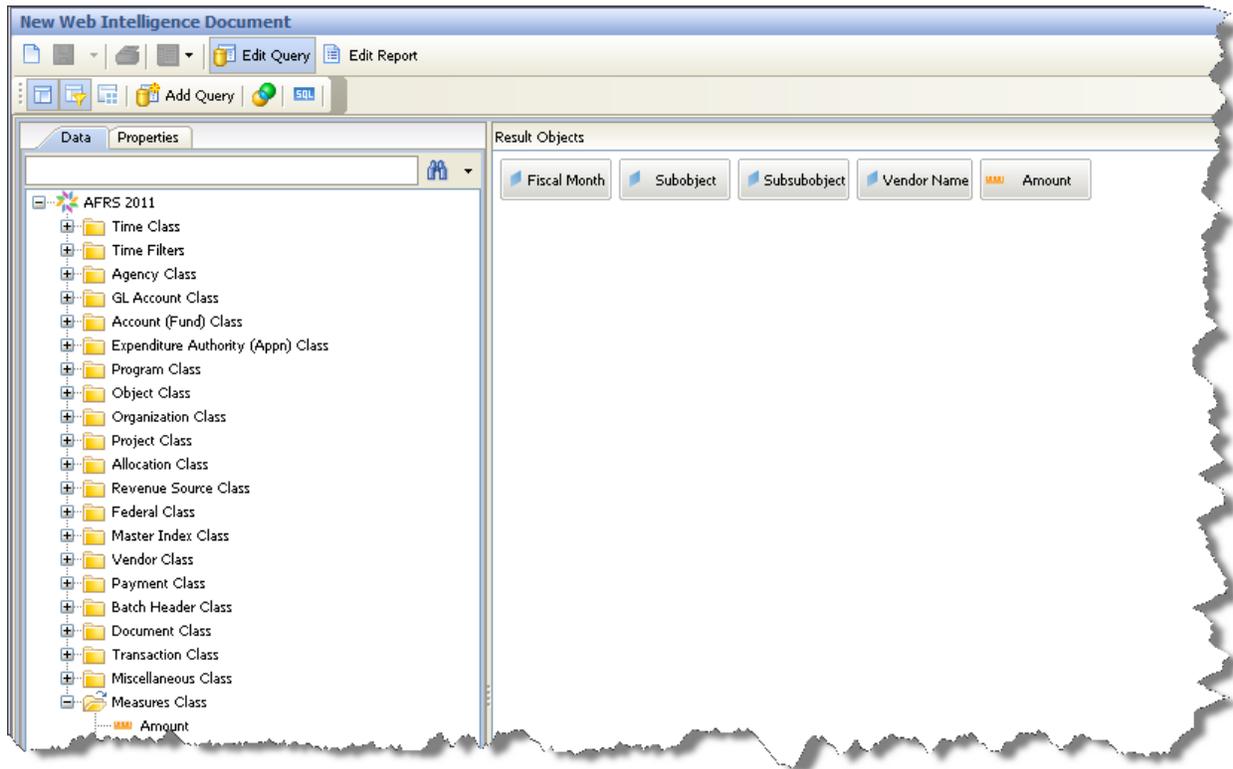


To choose the next data element, close the existing folder by clicking "-" and open the desired folder by clicking "+" beside the folder. Then double click the dimension, or data element, you wish to use in your query.



Continue to select the data elements that you wish to see on the query/report by double clicking, or using drag-and-drop, for the desired dimensions or titles and amount. The Amount data element is in the Measures class, at the bottom of the list.

Please note that the amount field will be automatically rolled up by the data columns selected for display on the query/report.



Helpful Hint: When selecting dimensions for the query, you may drag and drop each class folder such as “Agency” if you wish to get all components under the Agency category, such as Agency, Title and Sub Agency. If you wish to see “Agency” only, then you would need to expand the “+” box by Agency and select only the Agency dimension below it.

In the following illustration, all of the dimensions in the Agency class were moved to the Result Objects area by dragging and dropping the Agency folder.

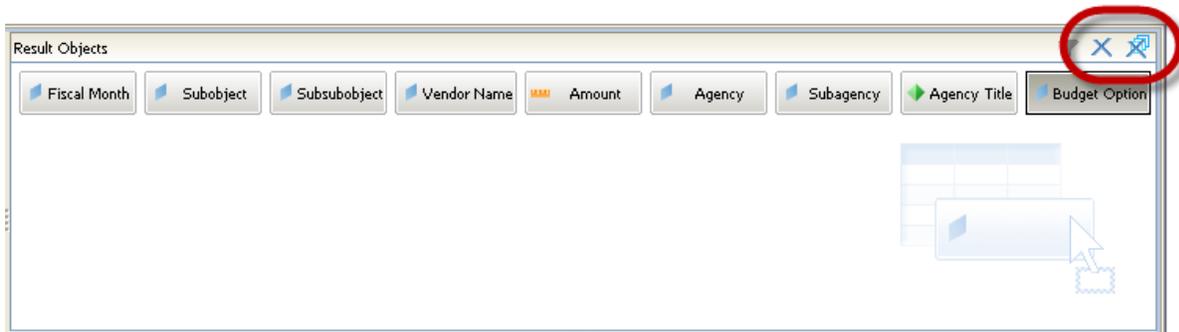


Delete Objects

To delete a selected field from the Result Objects area, select the object and drag it over to the Data tab. Another method is to click **Delete** after selecting the object. In the illustration below, Agency, Sub Agency, and Agency Title need to be deleted from the query.



Another method is to click "Remove" after selecting the object. You can also use the "Remove All" button to clear the Result Objects and start over.



Select Query Filters

Overview

You limit the data returned by a query by specifying filters when you define the query. When the query runs, the tool returns only the values that meet the query filter definitions. Query filters retrieve a sub-set of data from the database and return the specified values to the Web Intelligence report. Query filters enable you to retrieve only the data needed to answer your business question. This is especially important when using the AFRS universes, since each universe contains detailed statewide data for an entire biennium.

Filter Components

You use the Query Filters of the report panel to define filters. A filter has three components:

- q A filtered object, or data element
- q An operator
- q A value or comparison object

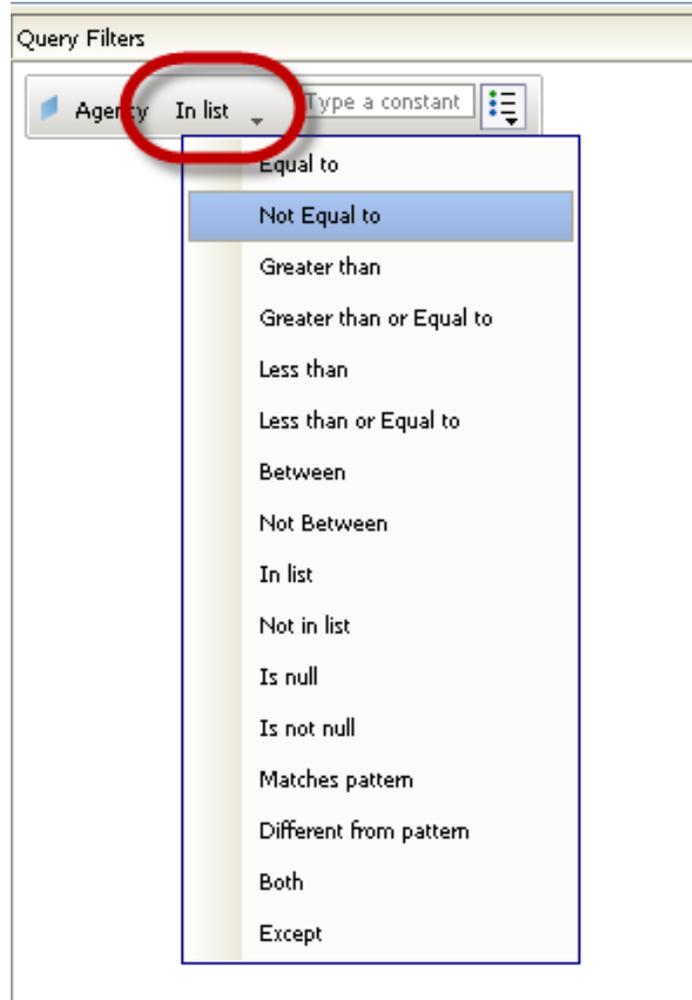
An example of a filter is "Agency equal to 105", where the filtered object is "Agency", the operator is "equal to", and the value is "105".

You can use any dimension, detail, or measure listed in the Data tab when defining filtered objects.

Caution: You will need to expand the desired class and select the individual dimension or detail object at the lowest level. You cannot filter on all the dimensions and details within a category. For example, you won't be able to drag the Vendor class as a restriction in the query since there are multiple components under this class.

Query Filter Operators

There are several operators available when specifying a filter, providing the ability to perform many different types of comparisons. They include:



Descriptions of Query Filter Operators

<u>Operator</u>	<u>Retrieves Data</u>	<u>Example</u>
Equal To	Equal to the specified value	{Fiscal Month} Equal To 10 retrieves data for fiscal month 10
Not Equal To	Not equal to the specified Value	{Fiscal Month} Not Equal To 10 retrieves data for all fiscal months other than 10
Greater Than	Greater than the specified value	{Fiscal Month} Greater Than 10 retrieves data for fiscal months 11 and higher

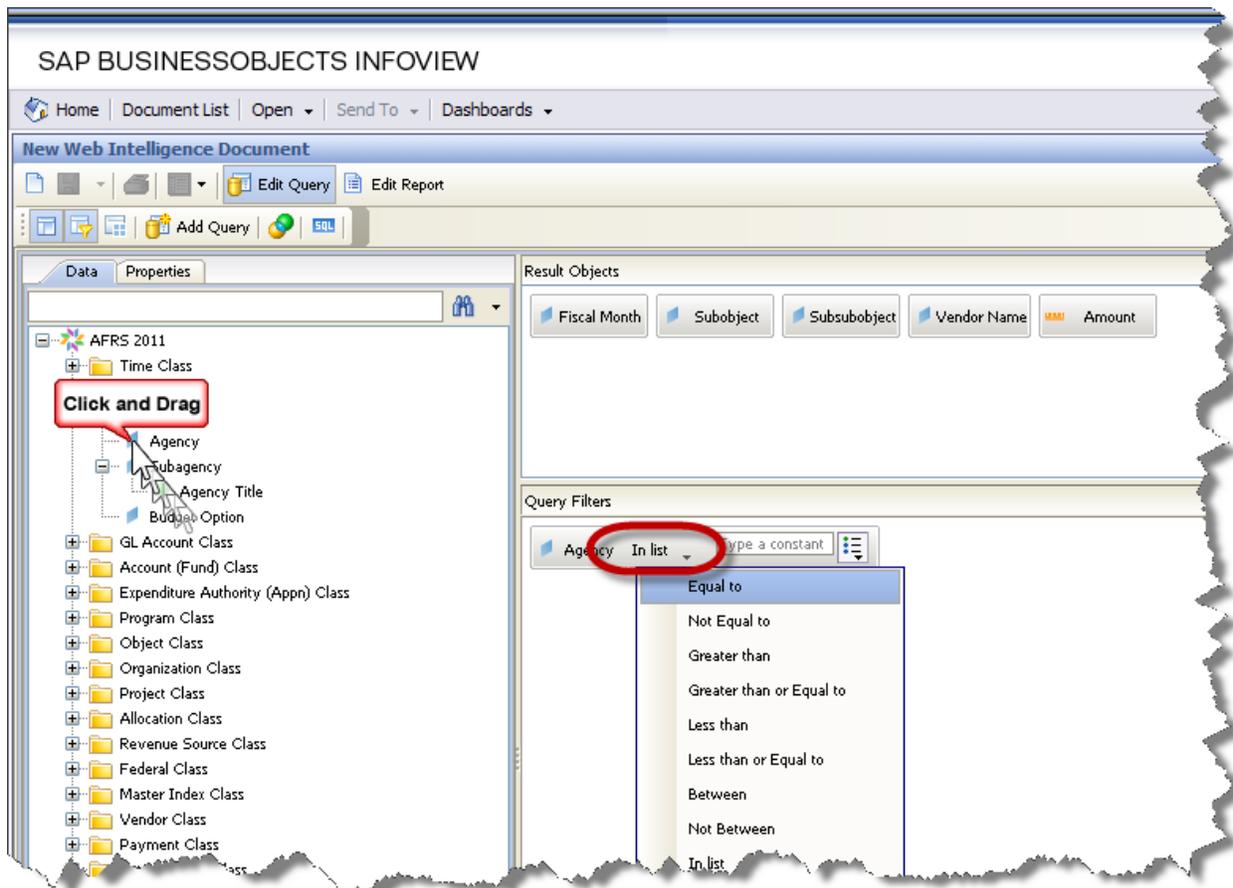
Greater Than or Equal To	Greater Than or Equal to the specified value	{Fiscal Month} Greater Than or Equal to 10 retrieves data for fiscal months 10 and higher
<u>Operator</u>	<u>Retrieves Data</u>	<u>Example</u>
Less Than	Lower then the specified value	{Fiscal Month} Less then 10 retrieves data for fiscal months 01 through 09
Less Than or Equal To	Lower or equal to the specified value	{Fiscal Month} Less Than or Equal To 10 retrieves data for fiscal months 01 through 10
Between	Between two values; including these values	{GL Account} Between 6500 and 6600 retrieves data for GL Accounts 6500 through 6600
Not Between	Outside the range of two specified values	{GL Account} Between 6500 and 6600 retrieves data for all GL Accounts not between 6500 and 6600
In List	Same as values specified	{Agency} In List '225;310;477' retrieves data only for Agencies 225,310, and 477
Not In List	Everything other then values specified	{Agency} Not In List '225;310;477' retrieves data for all excluding Agencies 225,310, and 477
Is Null	Which there is no value entered in the database	Is Null does not apply to the AFRS Universes
Is Not Null	For which a value	Is Not Null does not apply to the AFRS Universes
Matches Pattern	Includes a specific string that is like a value	{Program Index} Matches Pattern '15%' retrieves data for any Program Index that begins with 15
Different From Pattern	Excludes a specific string that is like a value	{Program Index} Different From Pattern '15%' retrieves data for any Program Index that does not begin with 15
Both	Corresponds to two specific values	{Budget Option} Both "1" and "2" retrieves data for budget options one and two
Except	Corresponds to one specified value and does not correspond to another specified value	{Budget Option} Except Option "1" retrieves data for budget options other than one

Building Query Filters

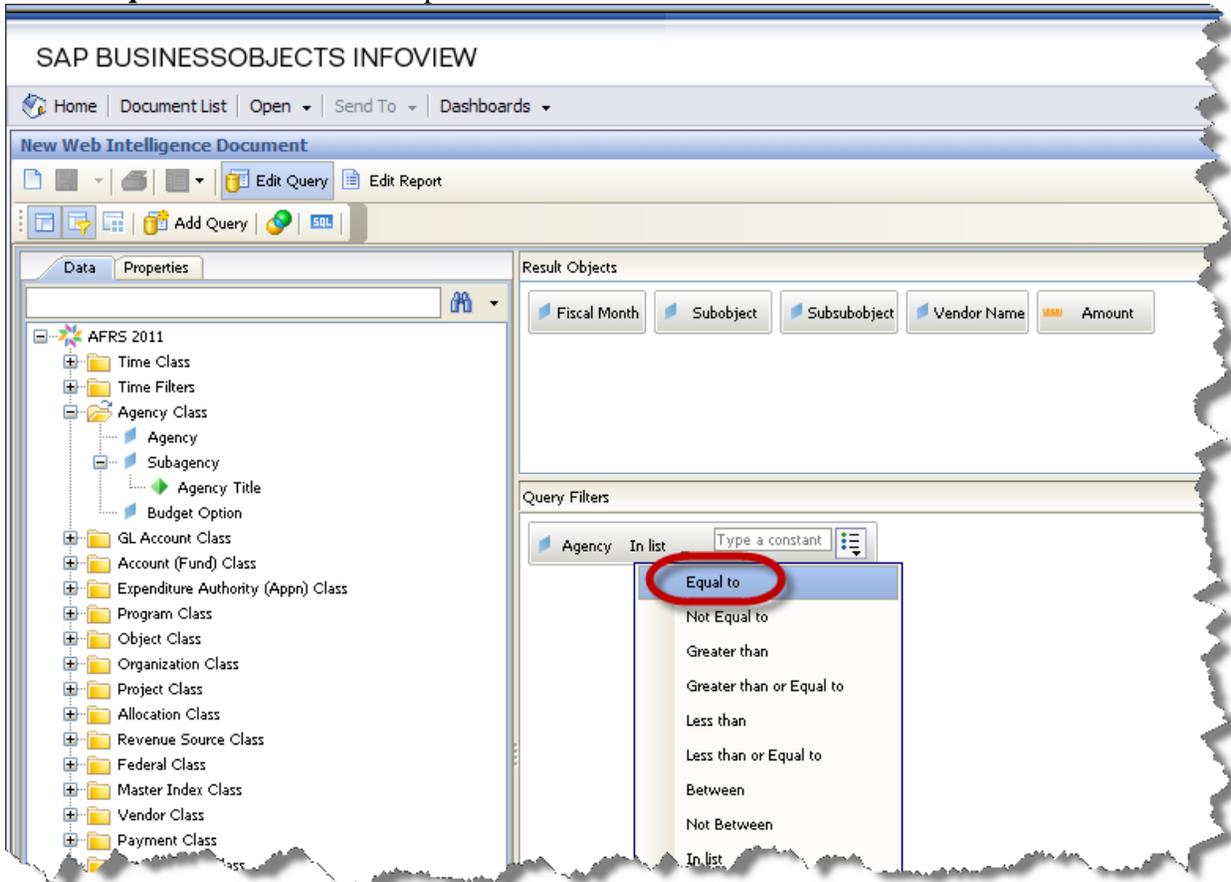
Use the Query Filters portion of the report panel, located in the bottom right half of the screen, to build filters.

Filter Using Equal To

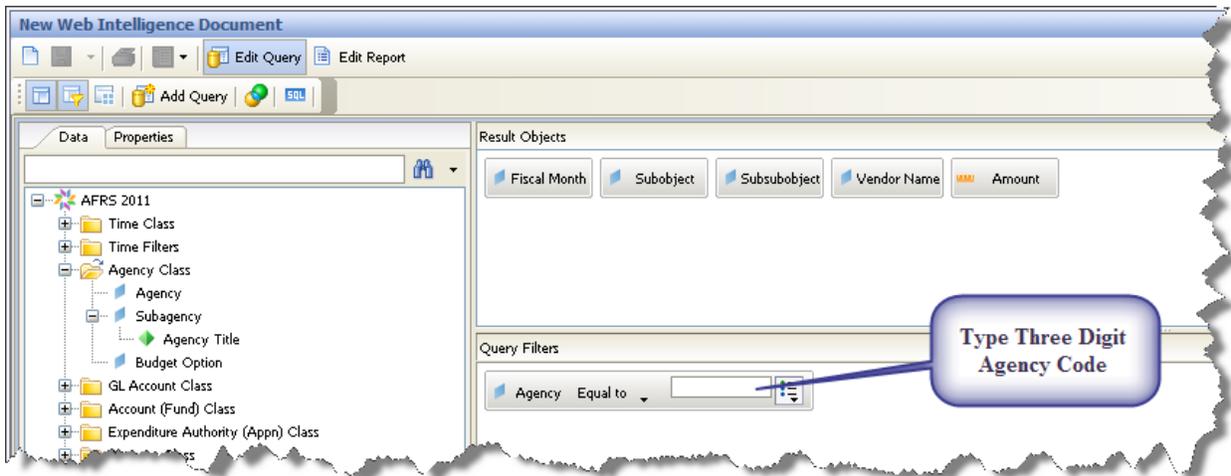
First, select a dimension, or data element, by which to restrict the query. Drag the selected dimension to the Query Filters area. In the example below, **Agency** is selected for the filtered data element. After a data element is selected, a filter editor box will display as illustrated below. This is where you select the operator and values needed for your query. The default operator is "In list". To view the complete list of operators, click on the arrow by the drop down box.



Choose **Equal to** from the list of operators.



Type your Agency Code in the blank field. The filter limiting **Agency** will now be shown in the Query Filter panel.



Filter Using a List

You can specify one or multiple filters in a query. When using the AFRS universe, it is highly recommended you specify a filter by General Ledger Account (GL). If you don't specify a filter for

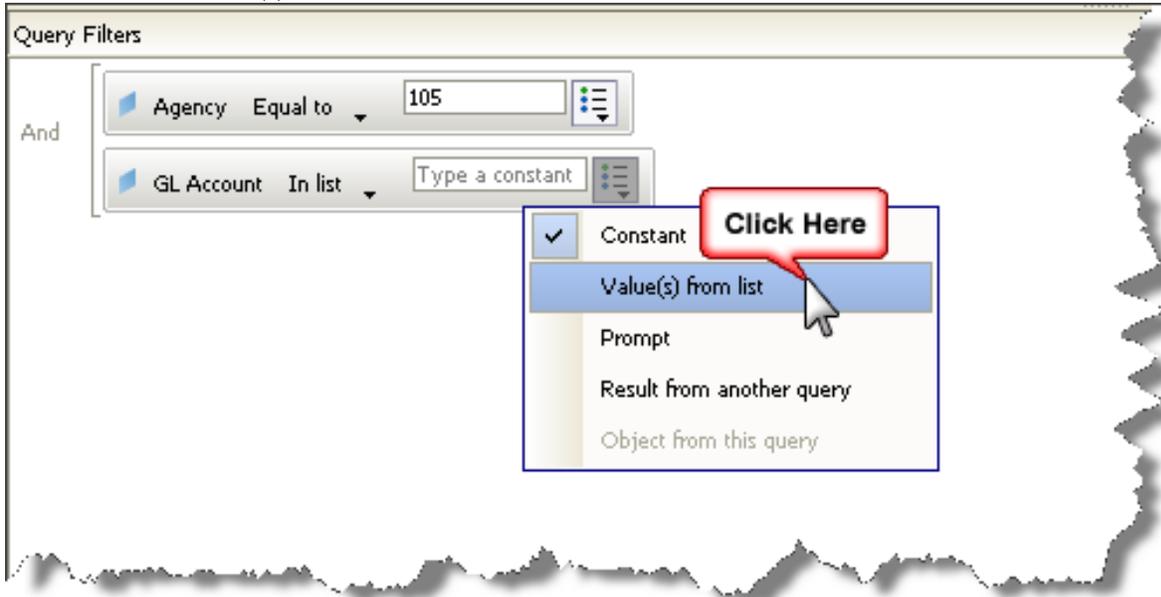
GL, your query will return values for all GL's in the universe, making it difficult to interpret the results returned.

In the example above, assume the query should be limited to cash expenditures and actual accruals. The corresponding GL values are 6510 for cash expenditures and 6505 for actual accruals. Follow the steps below to build this filter, using the **In list** operator.

1. Click on the "+" by the GL Account class to expand the folder.
2. Drag **GL Account** to the Query Filters area. Leave the comparison operator at the default value of **In list**.
3. Click on the down-arrow to the right of the blank field. A list of options will display as illustrated below.

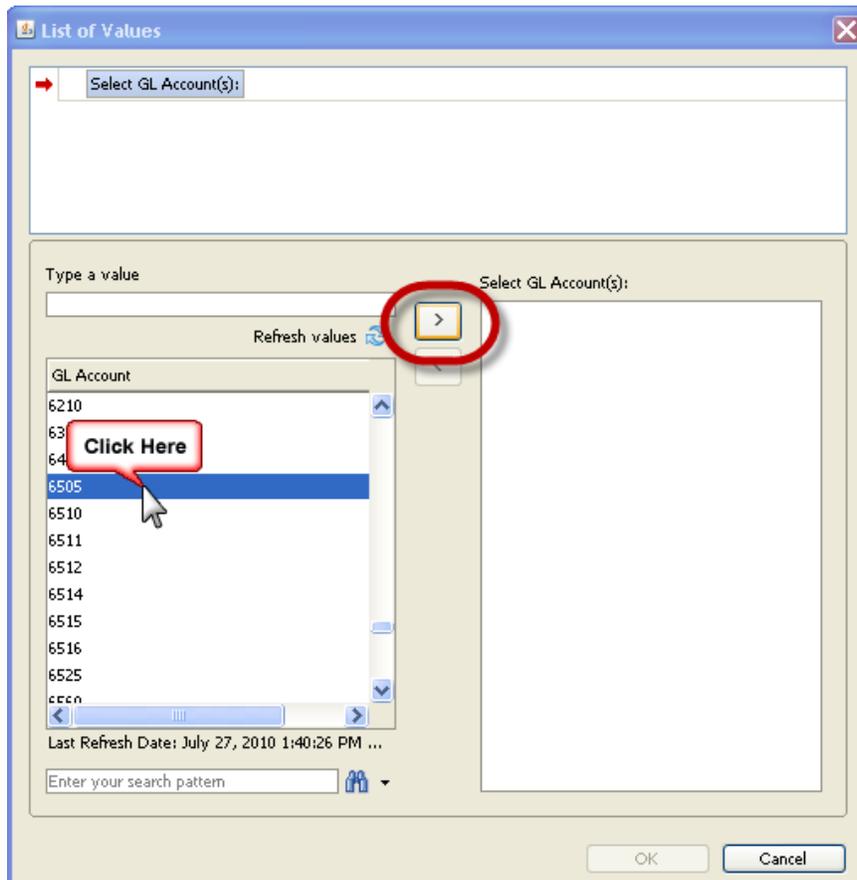


4. Select **Value(s) from list**.

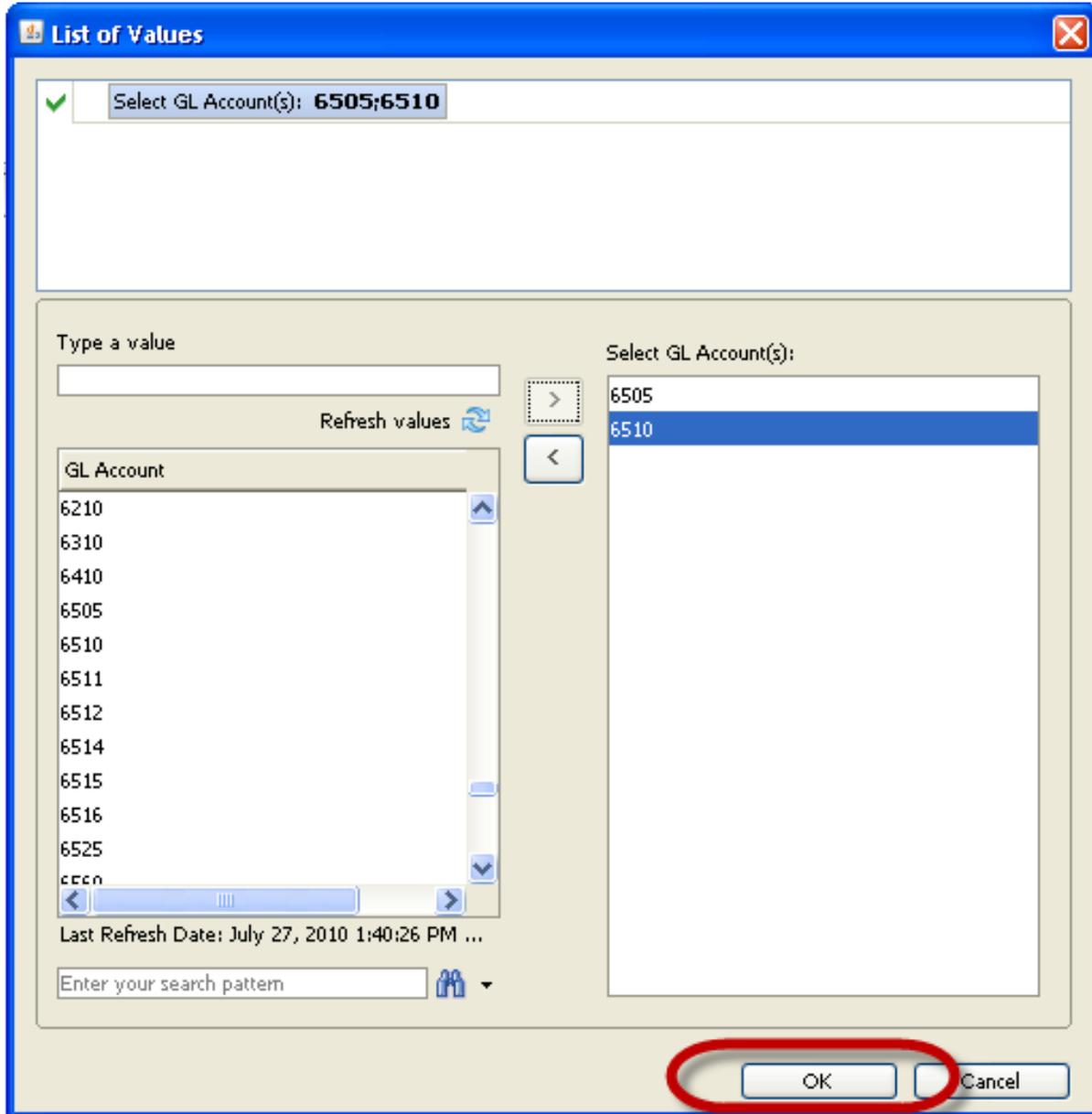


A **List of Values** screen displays. This provides a list of all the values in the universe for GL Account.

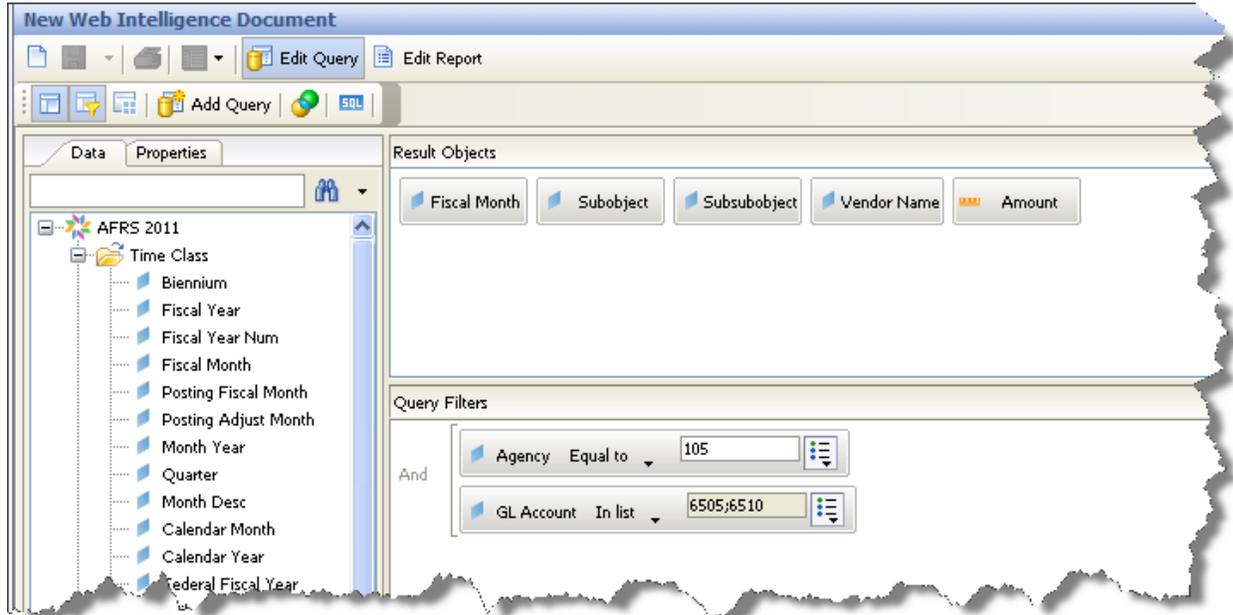
Scroll down the list and select **GL 6505**. Click on the arrow to move this value to the **Values Selected** area. Repeat the same steps for **GL 6510**. Note: You can also manually enter the values in the blank field at the top of this screen and move them to the **Values Selected** list.



Click on **OK** to close the screen.



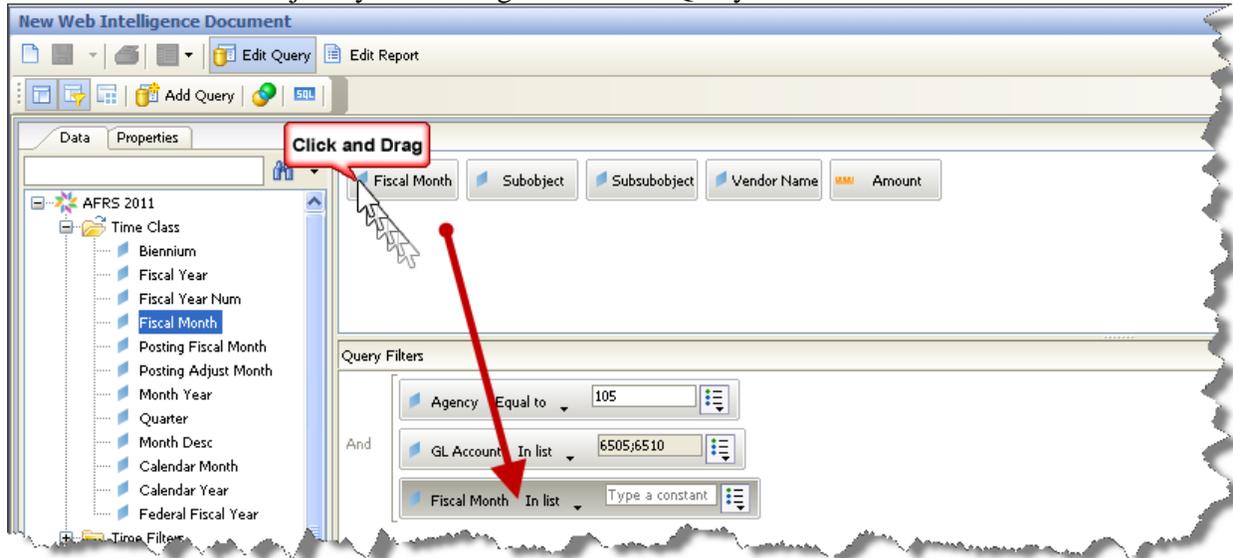
The resulting filter will limit the GL Account selection to GL's 6505 and 6510.



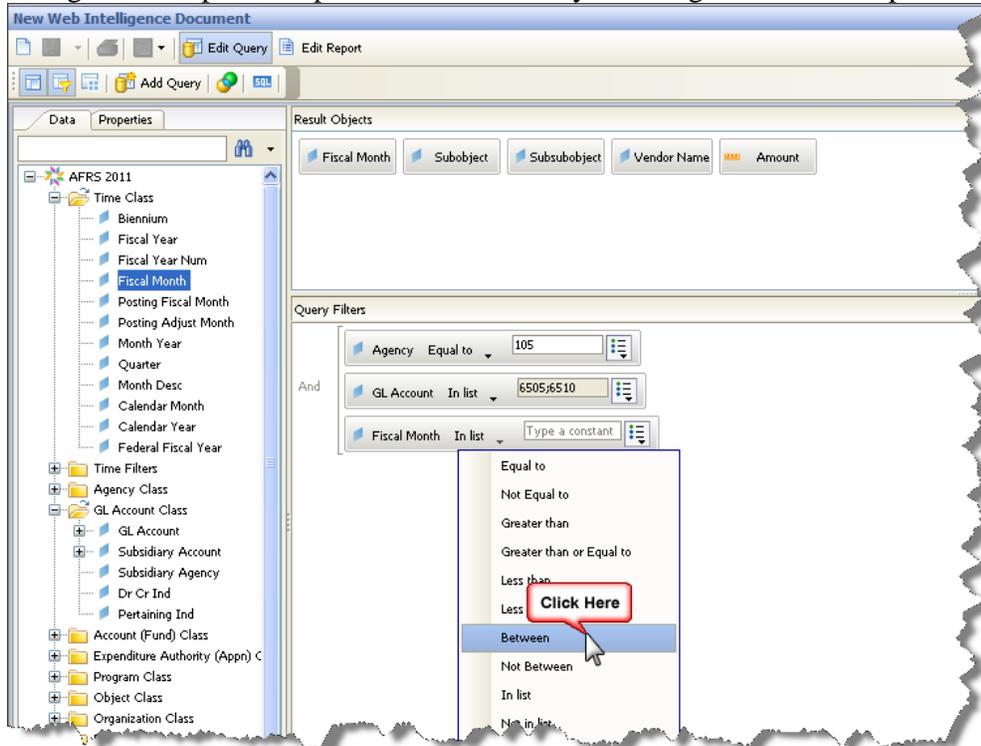
Filter Using a Range

To set a filter using a range of values use the **"Between"** operator. This example will create a filter to limit the Fiscal Month selection to fiscal months 01 through 12. Here are the steps to create this filter.

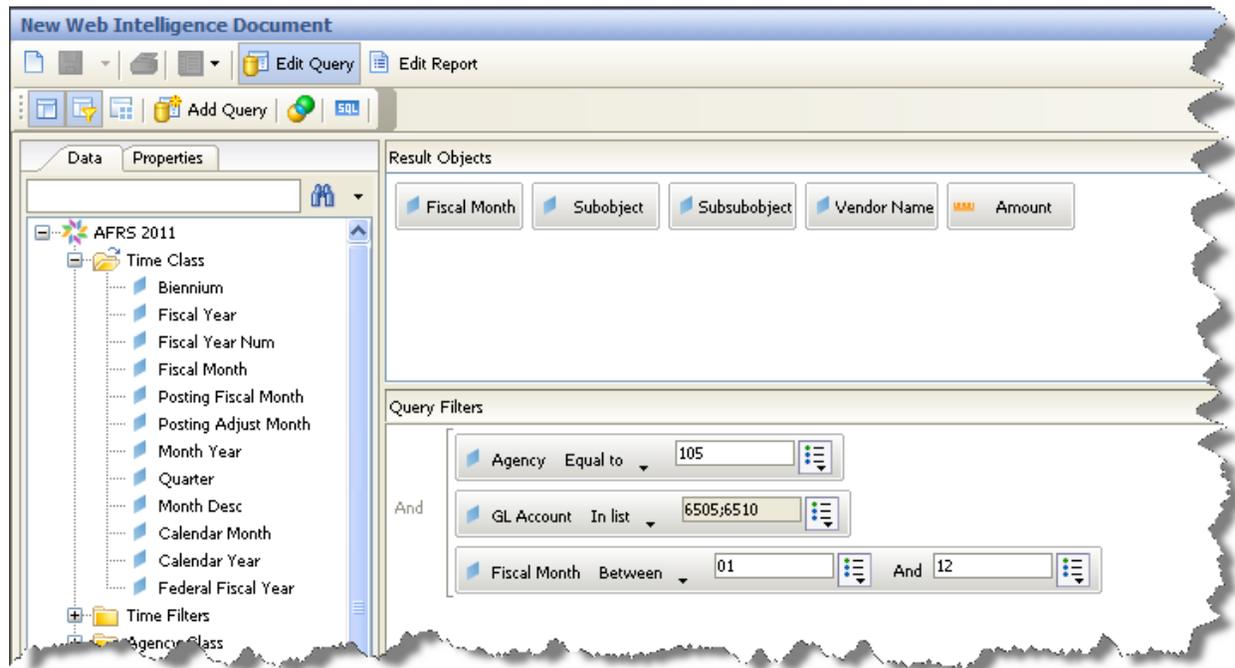
Fiscal Month from the Results Objects to the Query Filters area. Since you have placed Fiscal Month in the Result Objects you can drag down to the Query Filter Box.



Change the comparison operator to **Between** by selecting it from the drop down list of operators.



Note that the filter editor box now displays two fields for entering values. Enter "01" in the first box and "12" in the second box.



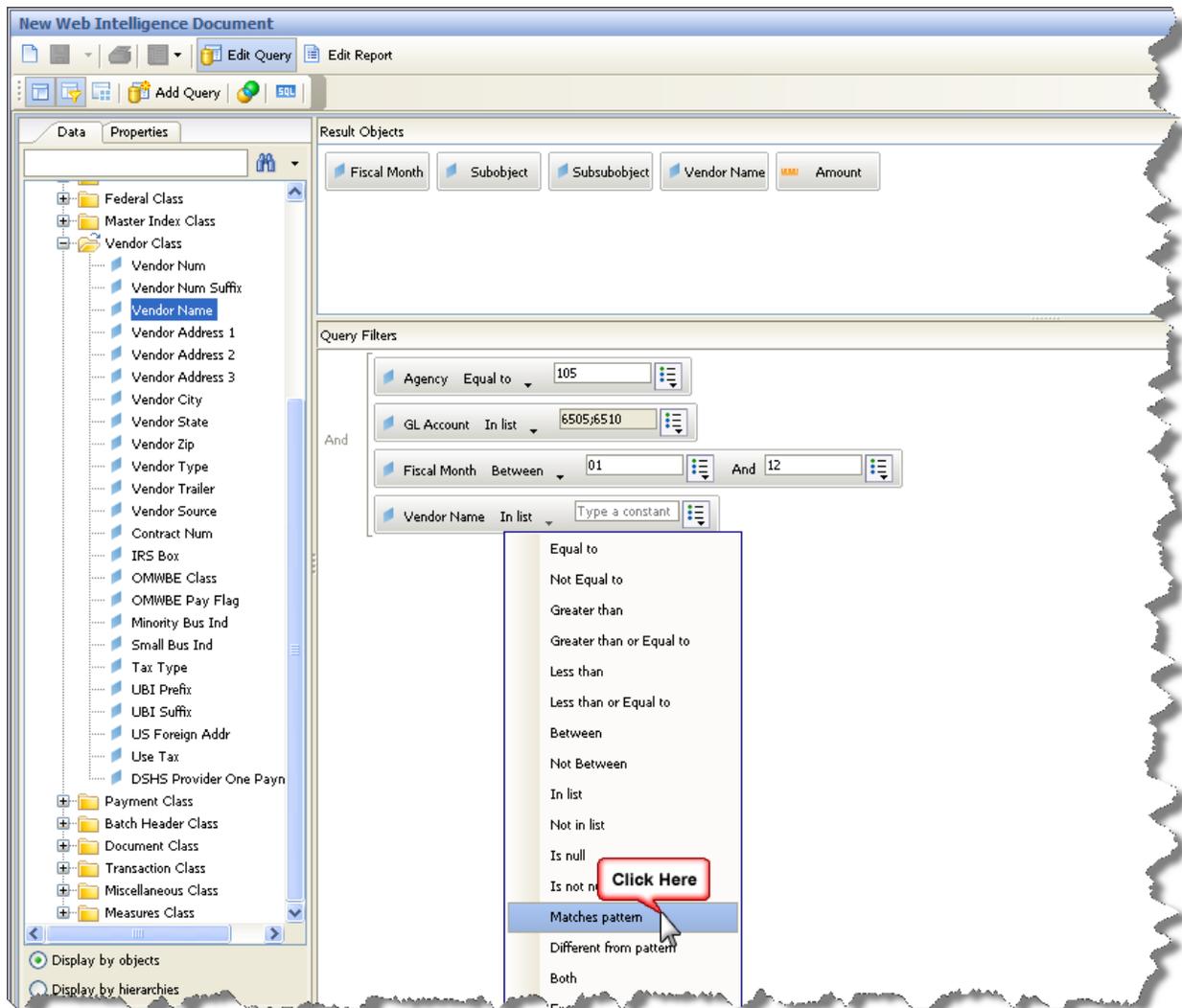
Filters Using Wildcards with Strings

To retrieve data for values that include a specific alphanumeric string, use the **Matches pattern** operator. You can include wildcard characters with the string value to further define the filter. This is very useful when you are trying to find data that begins with, ends with, or contains a specified string. For example, you may create a filter to find all vendors that contain certain words, such as "Qwest" or "Verizon". You can easily do this using the **Matches pattern** operator and wildcard characters. Please note that using text in filters is not case sensitive. So using "Qwest" or "qwest" will produce the same results.

Note: The "%" character is a wildcard value representing zero to many characters (same as "*" in ER Financial Reports). To specify a substitution character, representing a single character, use the "_" (underscore; same as "?" in Financial Reports).

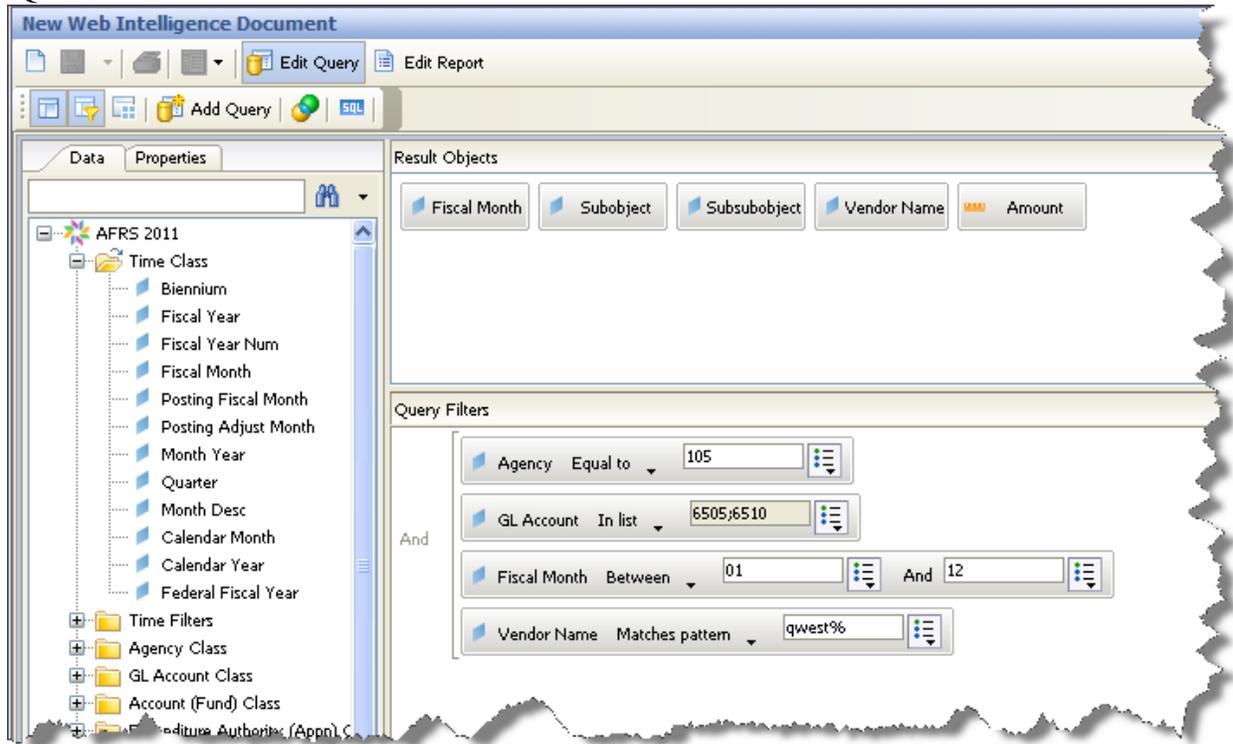
Here is an example on how to create a filter to retrieve data containing a specified string. In this example, we will set up filter to find Vendors that contain either "Qwest" or "Verizon".

1. Expand the **Vendor** class folder by click on the "+" to the left of the folder.
2. Drag **Vendor Name** to the Query Filters area.
3. Change the operator to **Matches pattern** by selecting it from the drop-down list of operator values.



4. Type in **Qwest%** in the Value entry field. This will select values that begin with "Qwest" followed by any other characters.

Shown as follows, the newly created filter limits Vendor Name to values containing the string "Qwest".

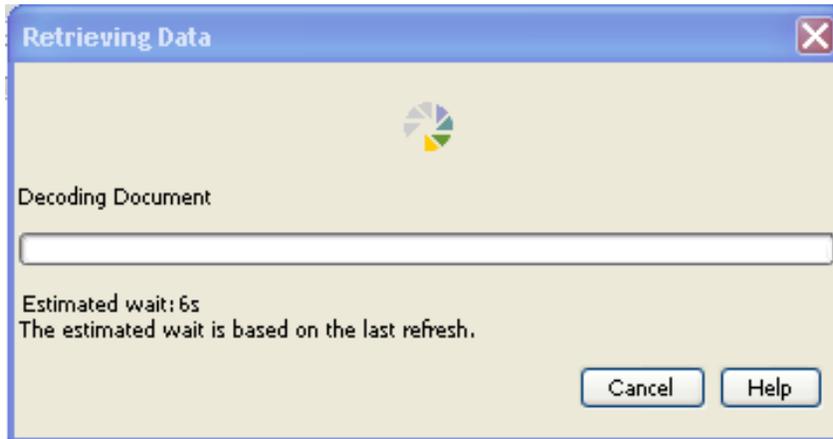


Run Query

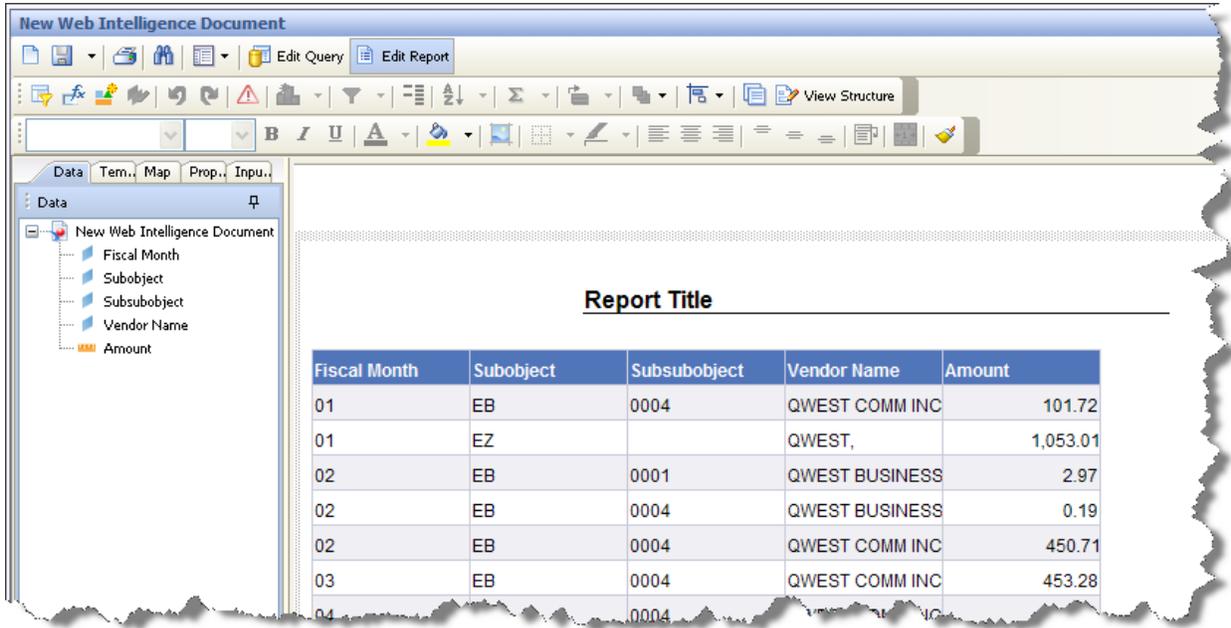
After completing the selection of the data elements in **the Result Objects** area and defining the filters in the **Query Filters** area, you are now ready to run the query. Click on the **Run Query** icon in the upper right corner of the report panel.



A **Retrieving** displaying the processing status

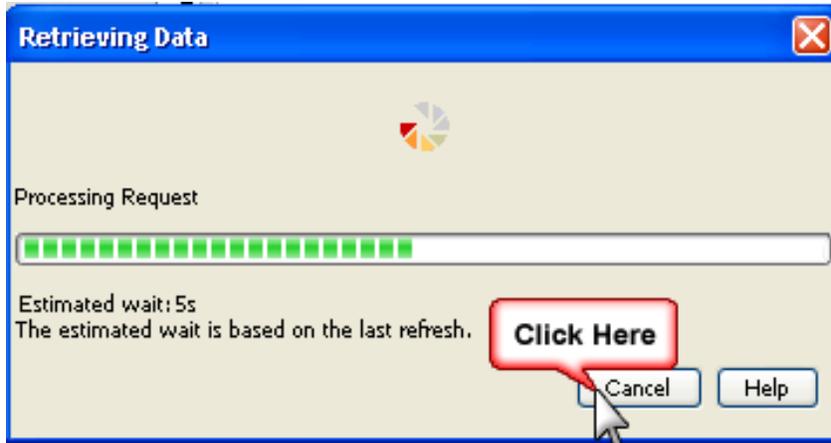


After the query finishes processing, the result report will be displayed in the form of a table in the Report View window on the right half of the screen, in a. For more information on working with reports, refer to Chapters 6 through 10 of this manual.

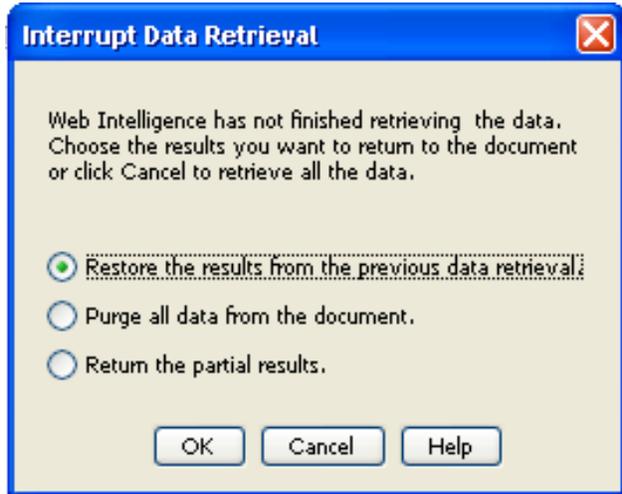


Canceling a Query

You can interrupt a query while it is processing. If you choose to do this, only partial results will be returned to the report document, and they will not accurately reflect the query definition. To cancel a query, click on the **Cancel** button in the Retrieving Data dialog box.



The **Interrupt Data Retrieval** dialog box displays.



Three options are available:

1. **Restore the results from the previous data retrieval:** the tool will return data to the document based on the values retrieved the last time the query was run. So the report will not reflect the information based on the latest database values.
2. **Purge all data from the document:** the tool displays an empty report.
3. **Return the partial results:** the tool returns data retrieved so far to pertinent parts of the report. The rest of the report will reflect data returned the last time the query was run.

Select the desired option and click **OK**. The tool will return the results based on the option selected.

Chapter 4 - Save and Edit Queries

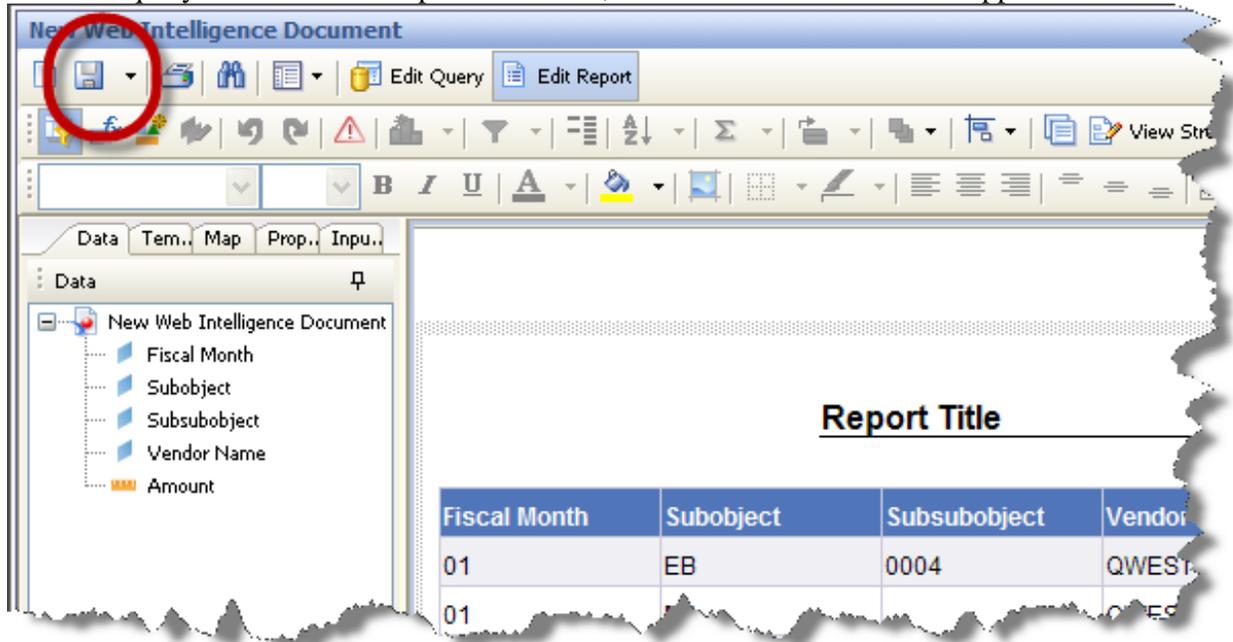
This chapter covers how to save and edit query documents. You can save a document containing the query definition and resulting report to one of the folders in the tool. You can then open a saved document and edit it.

Save a New Query

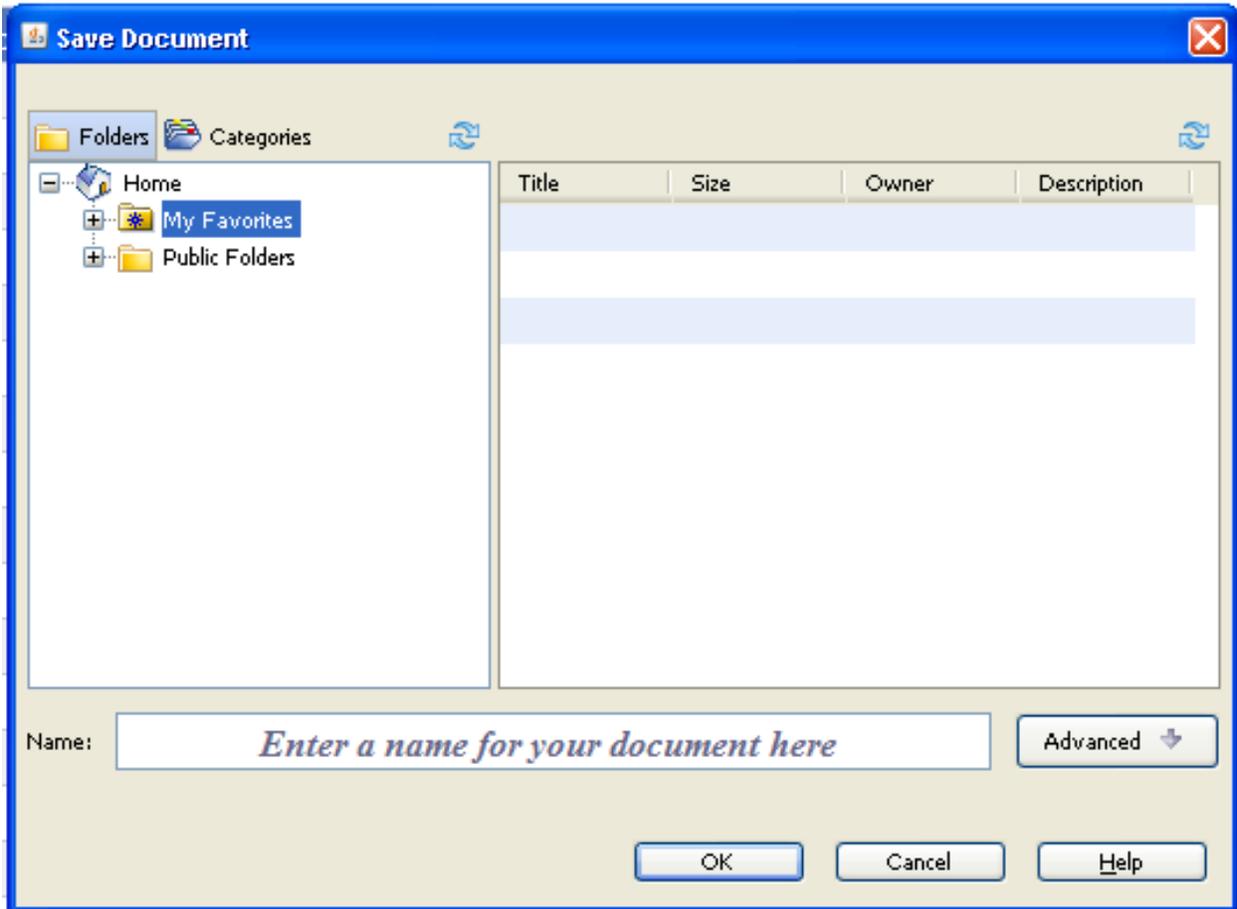
Depending on your security profile, you can save a document to either a personal or a public folder within the tool. If you are a regular user, you can save a file to a folder under **My Folders**. If you are a power user, you can save to either to a folder in **My Folders** or to one in **Public Folders**.

In order to save a document to a personal or public folder, you should run the query first. Refer to page 31 for information on running queries. After a query is run, the results will be displayed in the Report View window.

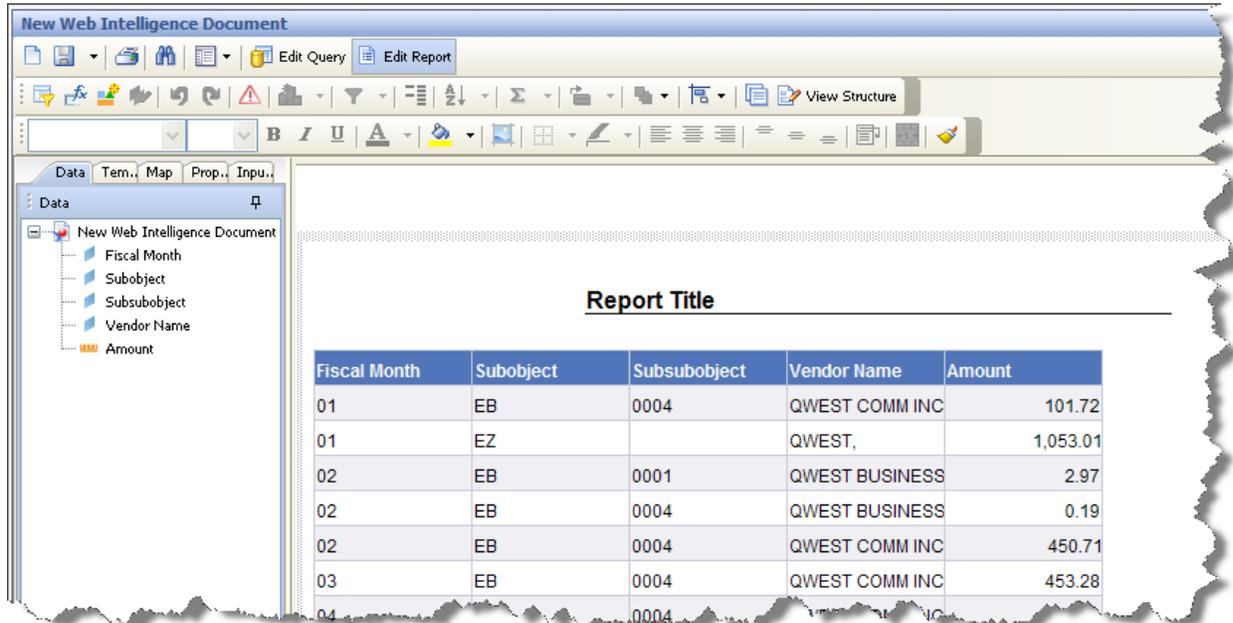
To save a query or document to a personal folder, click the **Save** button on the upper left corner .



The following Save Document dialog box will appear. Enter the **Title** for the Document and click **OK** on the bottom. Document title can only contain numbers and letters; it cannot contain special characters. Note that the **My Favorites** folder is highlighted so that is the default location where the document or query will be saved. You can choose another folder to which you have access, if you wish.

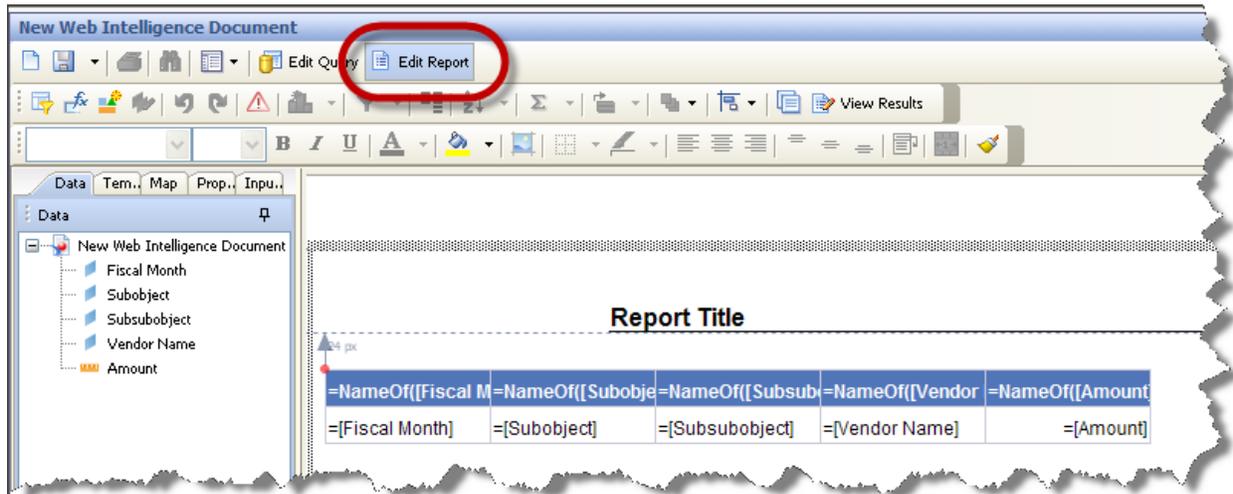


The Save Document dialog box will close, returning you to the Report View window.



Save Query before Running

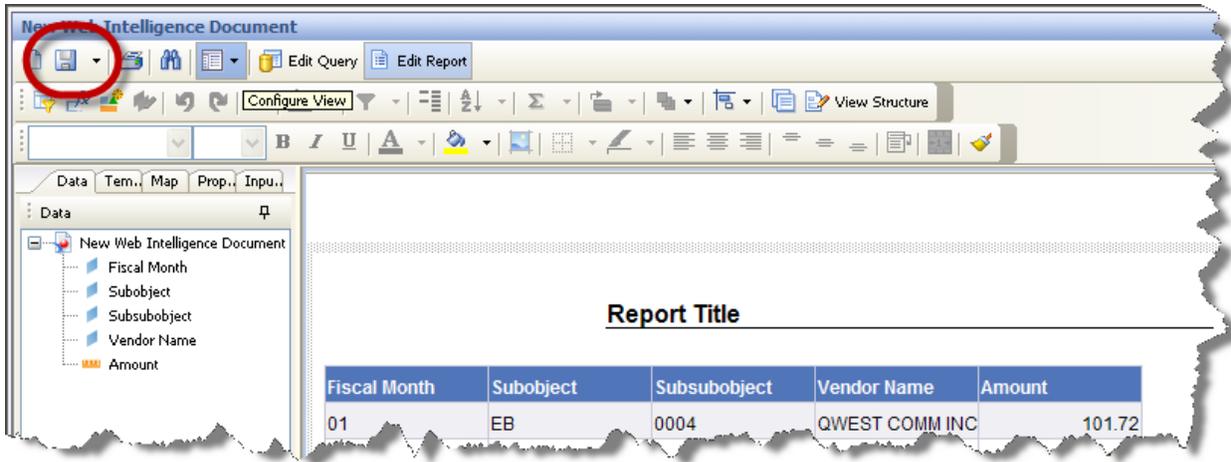
You can save a query to a selected folder before running it. Build the query in the Query View window, and then click on the **Edit Report** button. The report will display, as illustrated below, since there is no data to populate the report yet.



Click on the **Save** button and select **Save as**. Follow the instructions in Save a New Query section to save the file.

Save an Existing Query

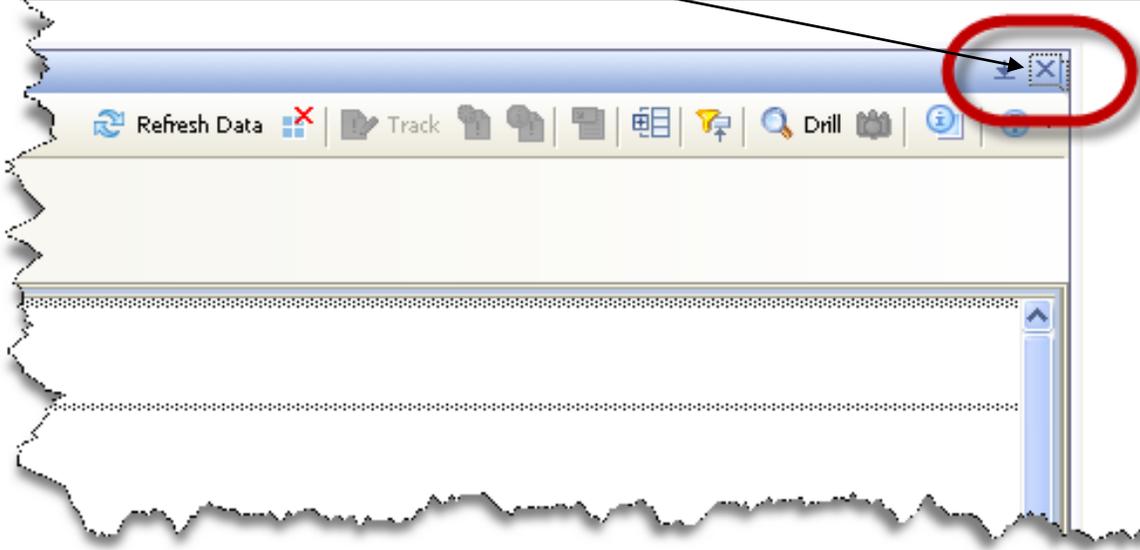
To save a document that has previously been saved, click the Save button from the toolbar. The document will be saved under the existing file name.



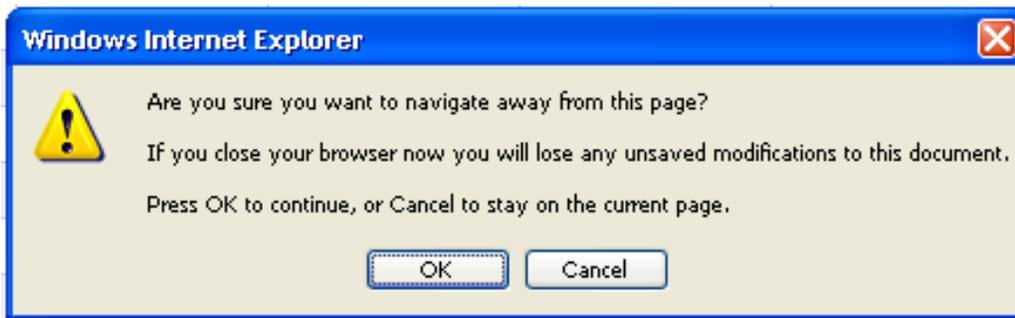
Helpful Hint: *There is a 60-minute timeout period if the system does not detect certain activity. Save your documents often in order to avoid being automatically logged off.*

Close Document without Saving

To close a document without saving it, click on the "X" in the upper right corner.



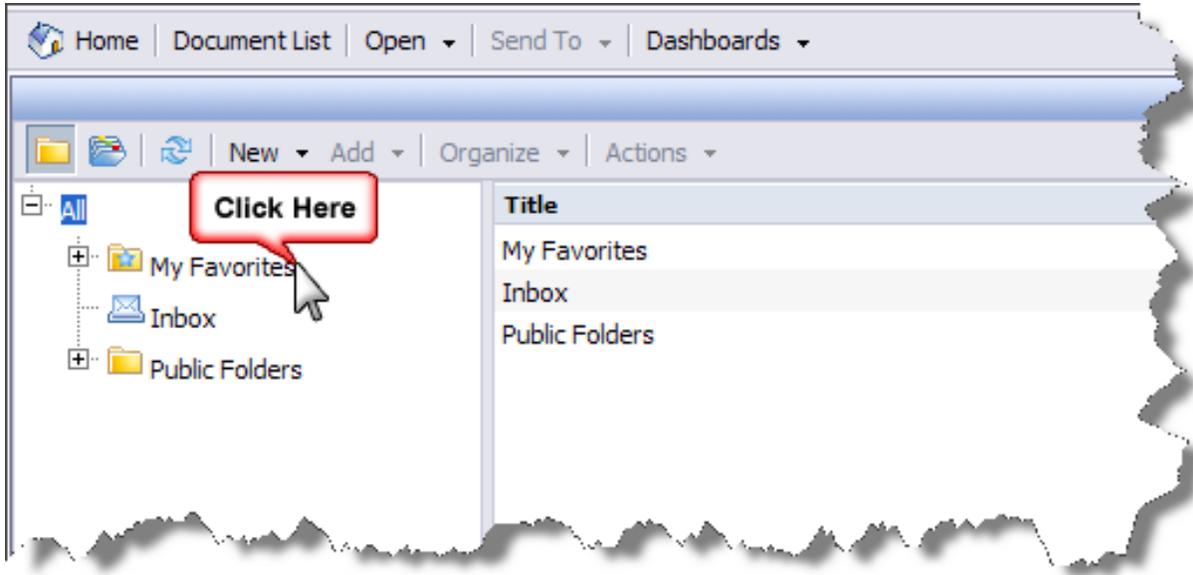
The following prompt message will appear.



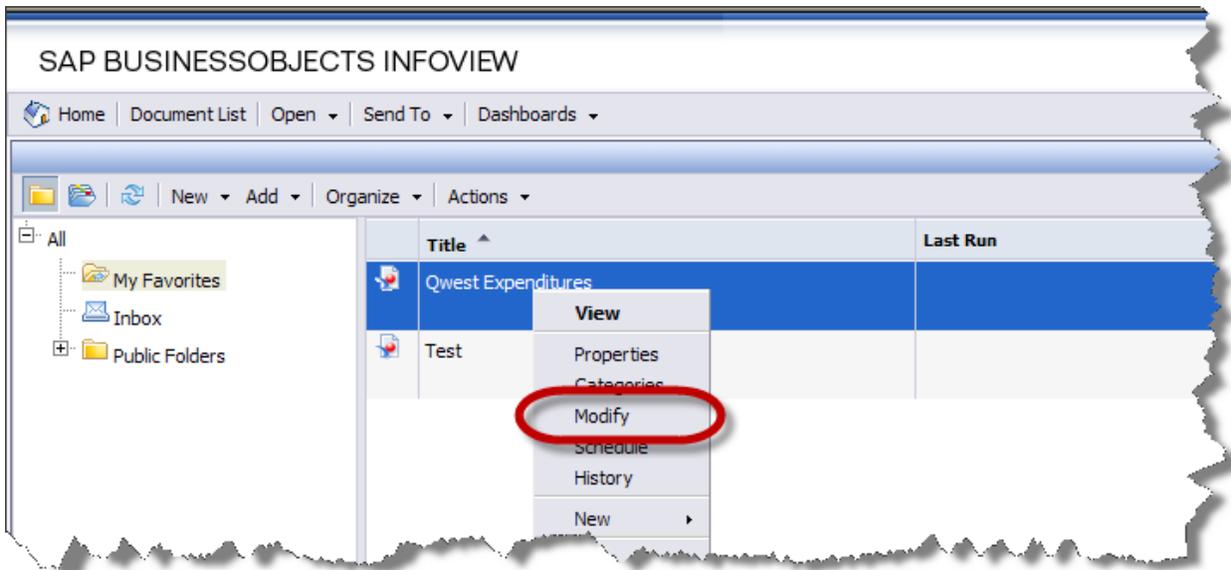
Click **OK** to continue without saving. Click **Cancel** to remain in the Report View window.

Modify a Query

To open a query, click on the **My Favorites** Folder from the main page.

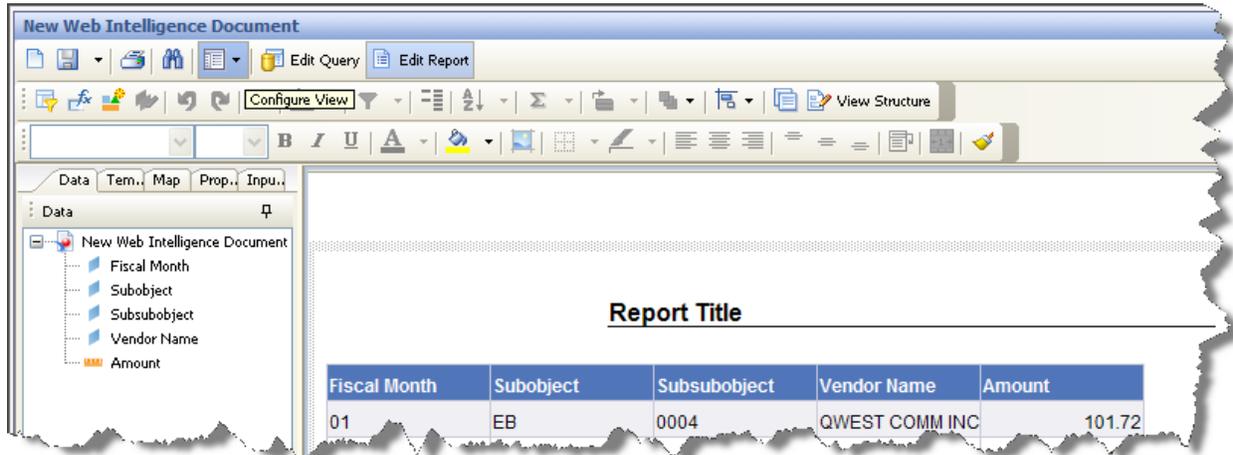


To modify that query, right click on the query and select **Modify** from the list.



Note: The Schedule function allows you to run the query as a report and History will show all the report instances you have submitted for this report or query title.

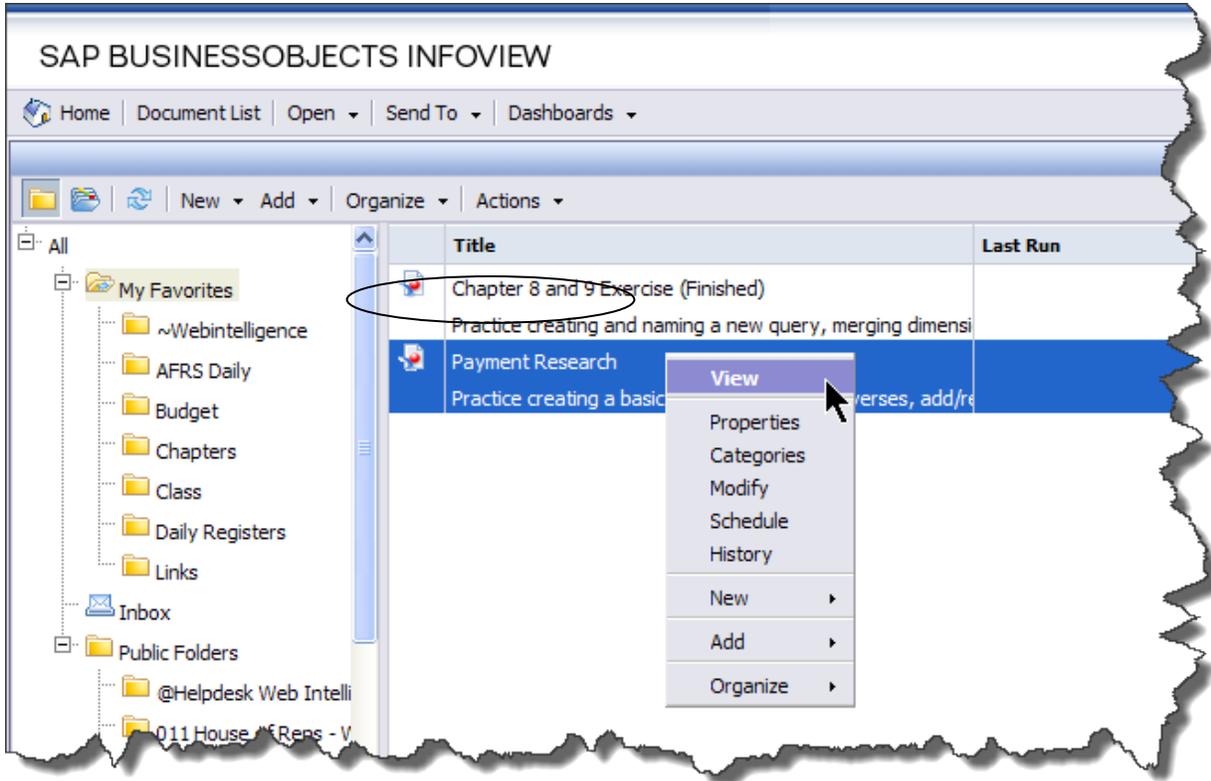
After clicking **Modify**, the existing query will be displayed in the **Edit Report** mode, as illustrated below.



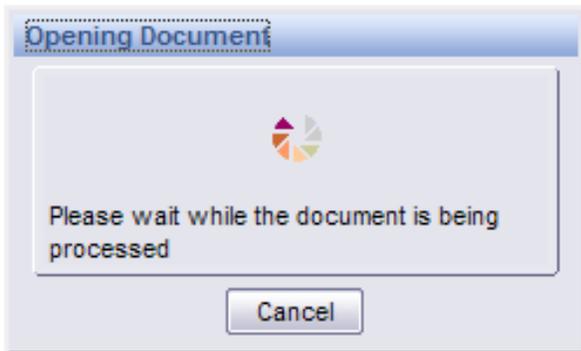
You can click on **Edit Query** and modify the query as needed, using the techniques explained in Chapter 3, to add or delete objects, or to add, change, or delete filters.

Editing a Document from View Mode

You can also edit a query you own by first viewing the document and then switching to Edit mode. To do this, right click on the title of the document you wish to modify and select view. In the example below, the file "Payment Research" is selected.



A dialog box displays indicating the document is being processed.



After processing, the data displays in the Report Panel. Note that the menu options are different than those previously illustrated, since the report is being displayed in View mode.

Document - View 100% Edit Refresh Data Track

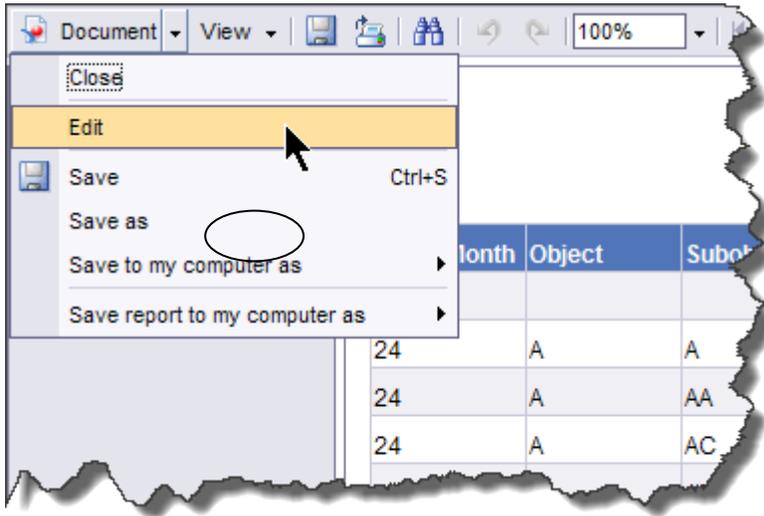
Navigation Map
Payment Research

Report Title

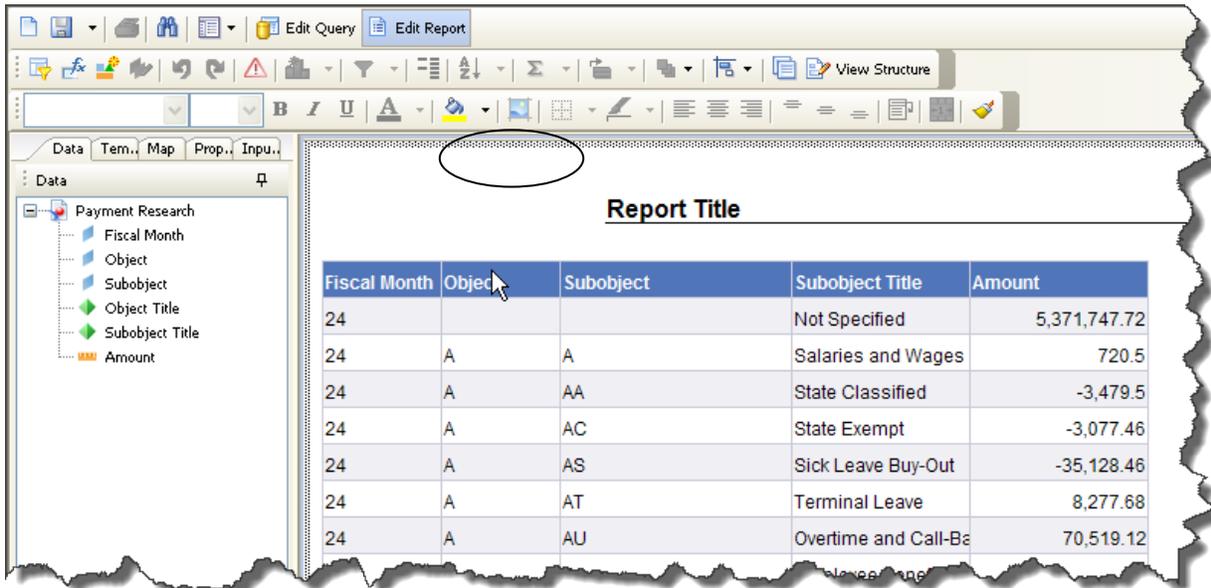
Fiscal Month	Object	Subobject	Subobject Title	Amount
24			Not Specified	6,371,747.72
24	A	A	Salaries and Wages	720.5
24	A	AA	State Classified	-3,479.5
24	A	AC	State Exempt	-3,077.48
24	A	AS	Sick Leave Buy-Out	-35,128.46
24	A	AT	Terminal Leave	8,277.68
24	A	AU	Overtime and Call-B	70,519.12
24	B	B	Employee Benefits	0
24	B	BA	Old Age and Survivor	3,082.96
24	B	BB	Retirement and Pen	847.82
24	B	BC	Medical Aid & Industr	1,284.48
24	B	BD	Health, Life & Disabil	1,311
24	B	BE	Allowances	5,410
24	B	BF	Unemployment Com	35,923.5
24	B	BH	Hospital Insurance if	721.48
24	B	BT	Shared Leave Provid	0
24	B	BU	Shared Leave Provid	0
24	B	BV	Shared Leave Provid	0
24	C	C	Personal Service Co	0
24	C	CA	Management/Organiz	-44,094
24	C	CC	Financial Services	0
24	C	CD	Computer/Informatio	74,270.5
24	C	CE	Social Research Ser	-5,961.52
24	C	CF	Technical Research	-13,584.4
24	C	CH	Communications Se	1,357.5
24	E	EA	Supplies and Materi	12,885.74
24	E	EB	Communications	44,058.5
24	E	EC	Utilities	0
24	E	ED	Rentals and Leases	38,462.54
24	E	EE	Repairs, Alterations	-29,316.72
24	E	EF	Printing and Reprod	1,798.7
24	E	EG	Employee Prof Dev &	25,237.52

Report 1

Click on **Document** from the pull down menu in the upper portion of the Report Panel. Select **Edit** from the pick list of values.



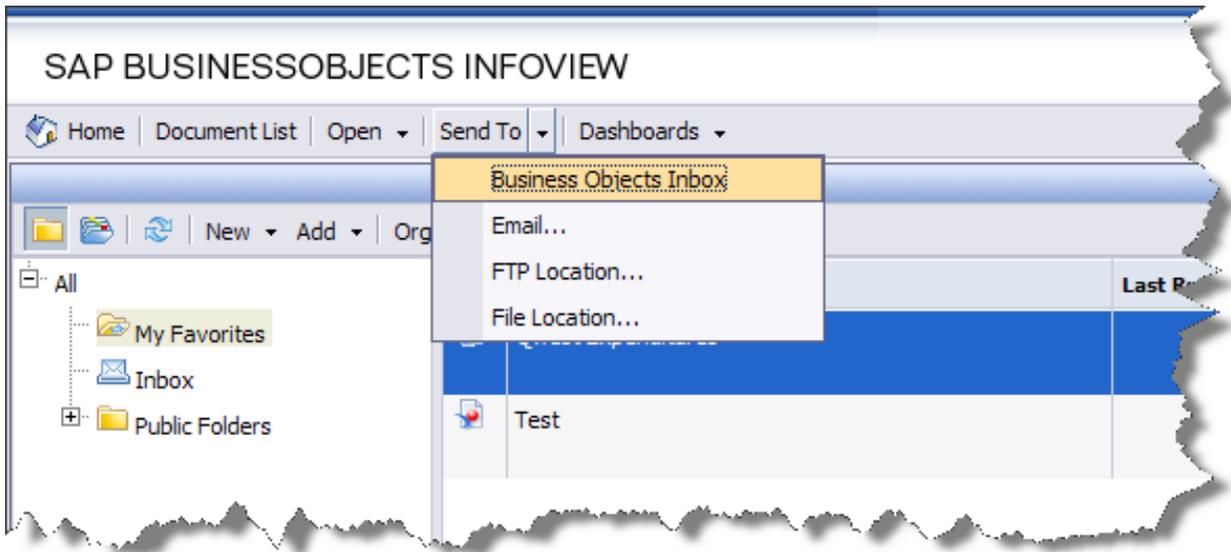
The report will process and then appear with an **Edit Query** option, as well as an **Edit Report** option. Click on the **Edit Query** button to modify the query as desired.



Send a Document to Business Objects Inbox

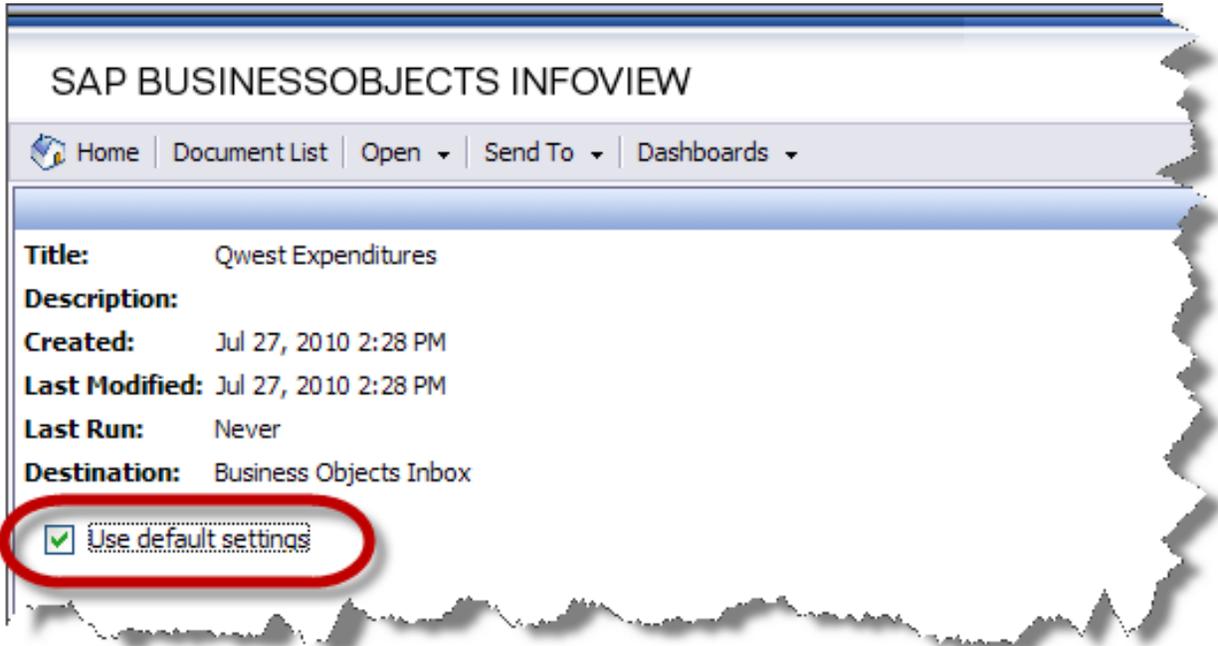
You can share a Web Intelligence document with other users by sending it to their Inbox inside the tool. The document comes over as read-only, but the user can then open it up and save it under another file name to a different folder, where it can be modified. Following is an explanation of how to use the Send to Inbox feature.

Navigate to the Folder panel in the tool, as illustrated below. You will see the folder structure on the left side, and the individual files within the selected folder on the right side. Click on the file you want to send. Click on the down-arrow in the Send button. A sub-menu will display. Select **"Business Objects Inbox"**.

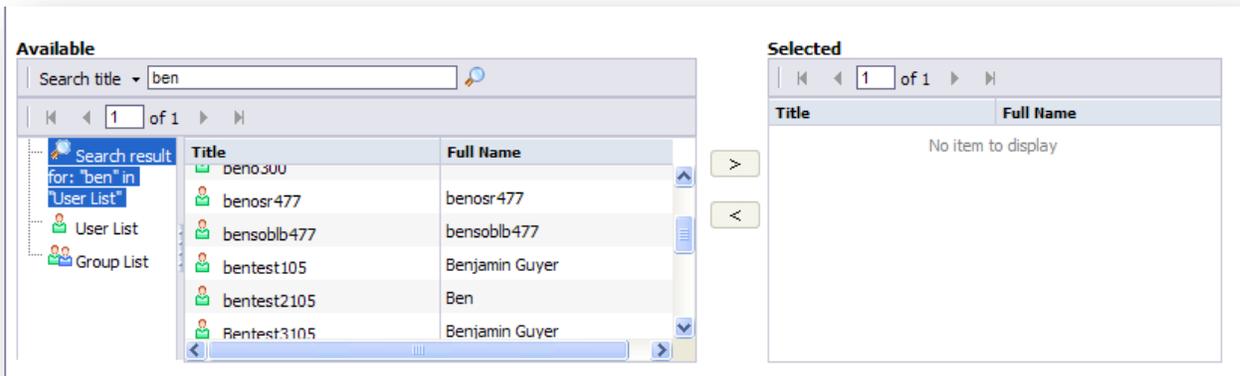


The Send window displays. Make the following entries:

1. Uncheck "Use default settings"



2. Select the userid of the recipient from the Available Recipients list. You may send to more than one recipient, if needed. You can use the "Search title" toolbar to search for a specific user id. Once you have found the user id you are looking for click on the user id and click the arrow in between the two boxes.



3. Select "Use Automatically Generated Name" for Target Name.

Target Name:

Use Automatically Generated Name

Use Specific Name

4. For Send As, select **Copy**. If you are sending a document from your favorites you are the only one who can access the contents of your favorites folder. If you send a shortcut to someone from your favorites they will not be able to use it.

Send As:

Shortcut

Copy

5. Click on **Send** in the lower right corner.

Description:
Created: Jul 27, 2010 2:28 PM
Last Modified: Jul 27, 2010 2:28 PM
Last Run: Never
Destination: Business Objects Inbox

Use default settings

Available

Search title: ben

Title	Full Name
benjamin105	Benjamin Guyer
bennerr380	
bennl490	
beno300	
benosr477	benosr477

Selected

Title	Full Name
bentest105	Benjamin Guyer

Target Name:

Use Automatically Generated Name

Use Specific Name

Send As:

Shortcut

Copy

6. The file will be sent to the selected recipients.

Chapter 5– Advanced Query Techniques

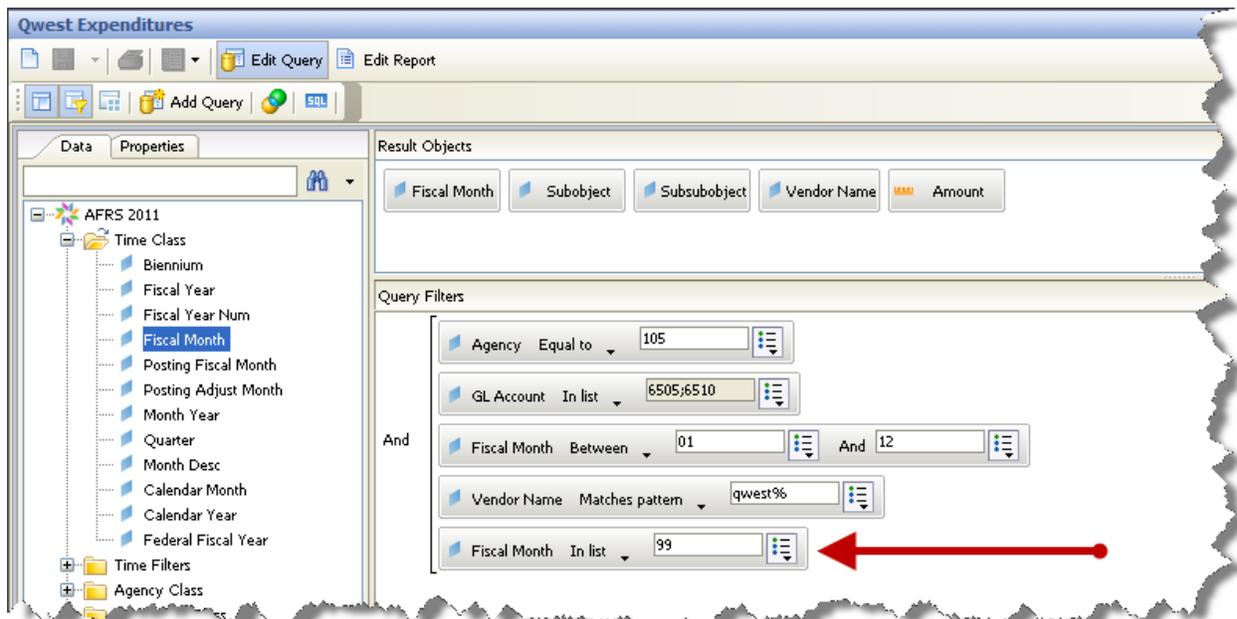
Combining Filters

You can group filters together and then combine them with other filters to retrieve data that meet multiple criteria. In the example used above, three filters were created and combined together with "And". This means that data returned from the query must meet all of the criteria specified by the three filters: Agency equal to 105, GL Account equal to either 6505 or 6510, and Fiscal Month in the range between 01 and 12.

Let's assume that we also want to include data for Fiscal Month (FM) 99, the adjustment month for the first fiscal year, in the query. Since FM 99 does not follow right after FM 12 in a sorted list of FM values, the **Between** operator cannot be used. A separate filter for FM 99 needs to be created and then combined with the existing Fiscal Month filter specifying a range. Following are the steps to do this.

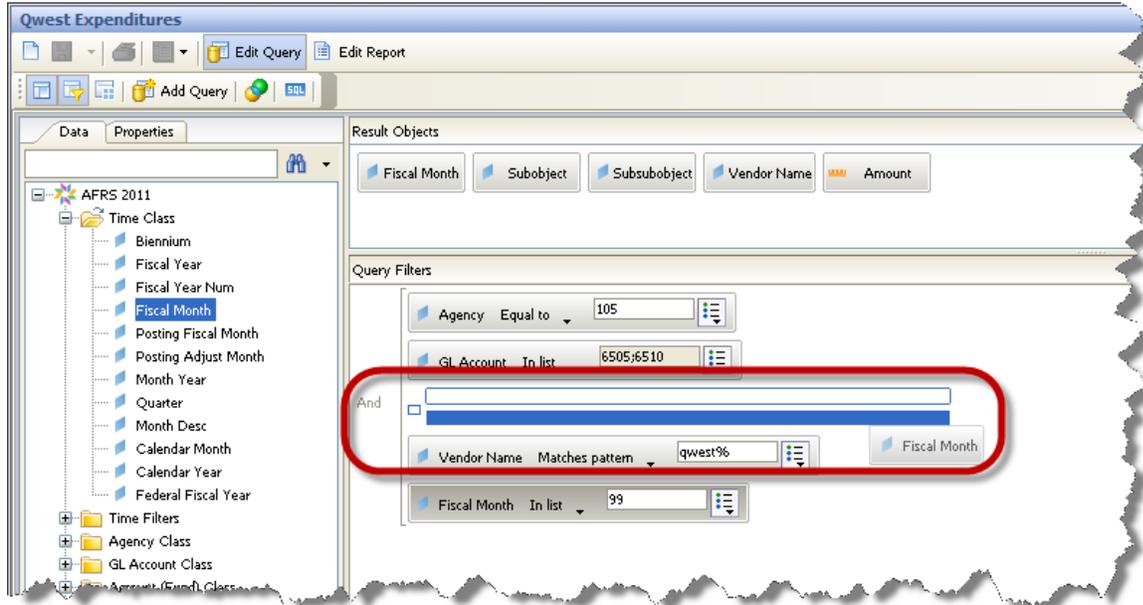
1. Expand the **Time** class folder by click on the "+" to the left of the folder.
2. Drag **Fiscal Month** to the Query Filters area.
3. Change the operator to **Equal to** by selecting it from the drop-down list of operator values.
4. Click on the arrow to the right of Value entry field and select "Value(s) from list" from the drop-down list.
5. In the **List of Values** screen, select **99** and move it to the **Value Selected** field. Click **OK** to close this screen.

A filter for Fiscal Month equal to 99 has been created.

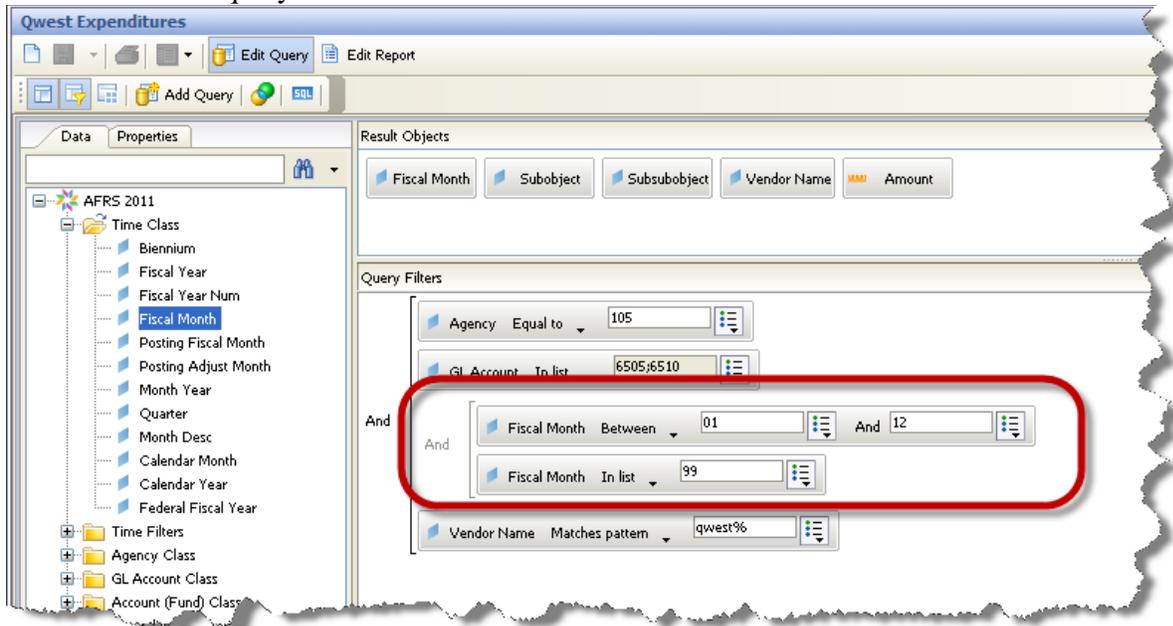


The two Fiscal Month filters now need to be grouped together as a compound filter to retrieve data for the range between FM 01 and FM 12, plus FM 99. **Without proper grouping, the query would not return any data, since a transaction cannot both be in the specified range and also equal to FM 99.**

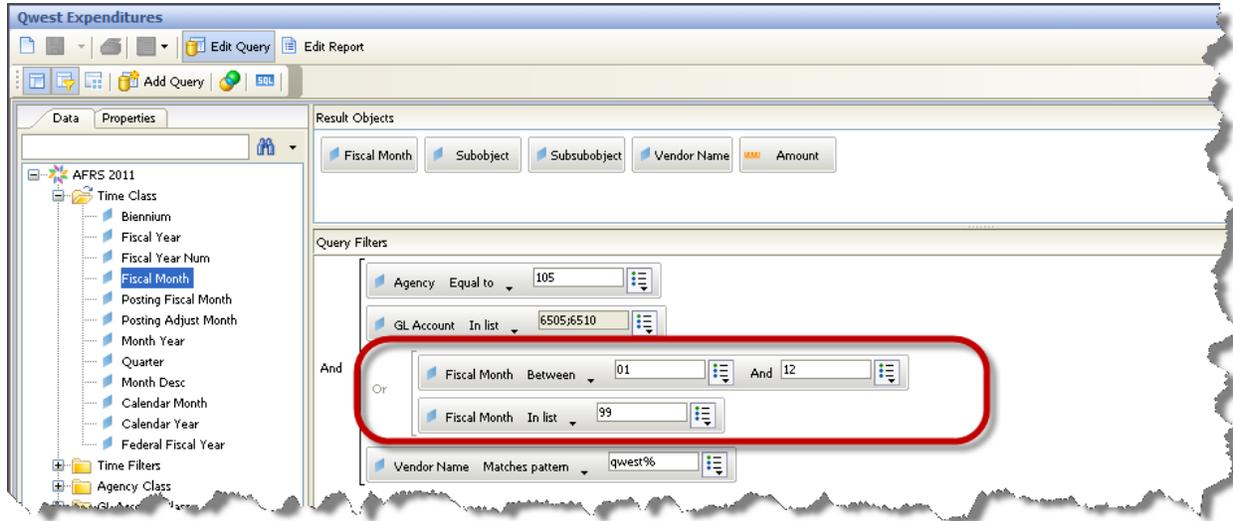
To create the compound filter, **drag** the "AFRS Fiscal Month equal to 99" filter on top of the AFRS Fiscal Month filter for the range as shown below.



The two Fiscal Month filters are now indented underneath the other filters. Note the "And" connecting the two Fiscal Month filters. This needs to be changed to "Or" so the proper data will be retrieved from the query.



Double-click the "And" to change it to "Or". The Fiscal Month filters should display as illustrated below. The filter will restrict values for Fiscal Month to the range between FM 01 and FM 12 or FM 99.



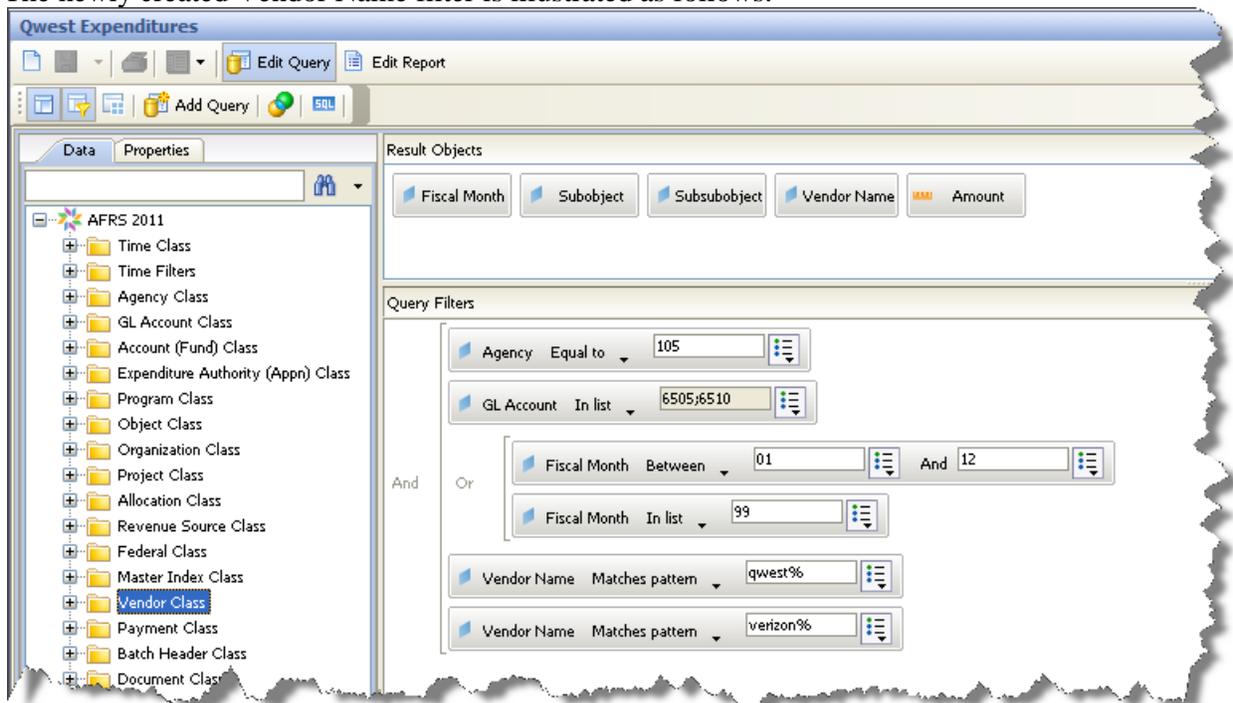
Combining Filters Using Wildcards with Strings

The previous example created a filter name for Vendor Name for one condition, a string containing "Qwest". Now we need to set up a filter to find data containing "Verizon" and combine the two filters.

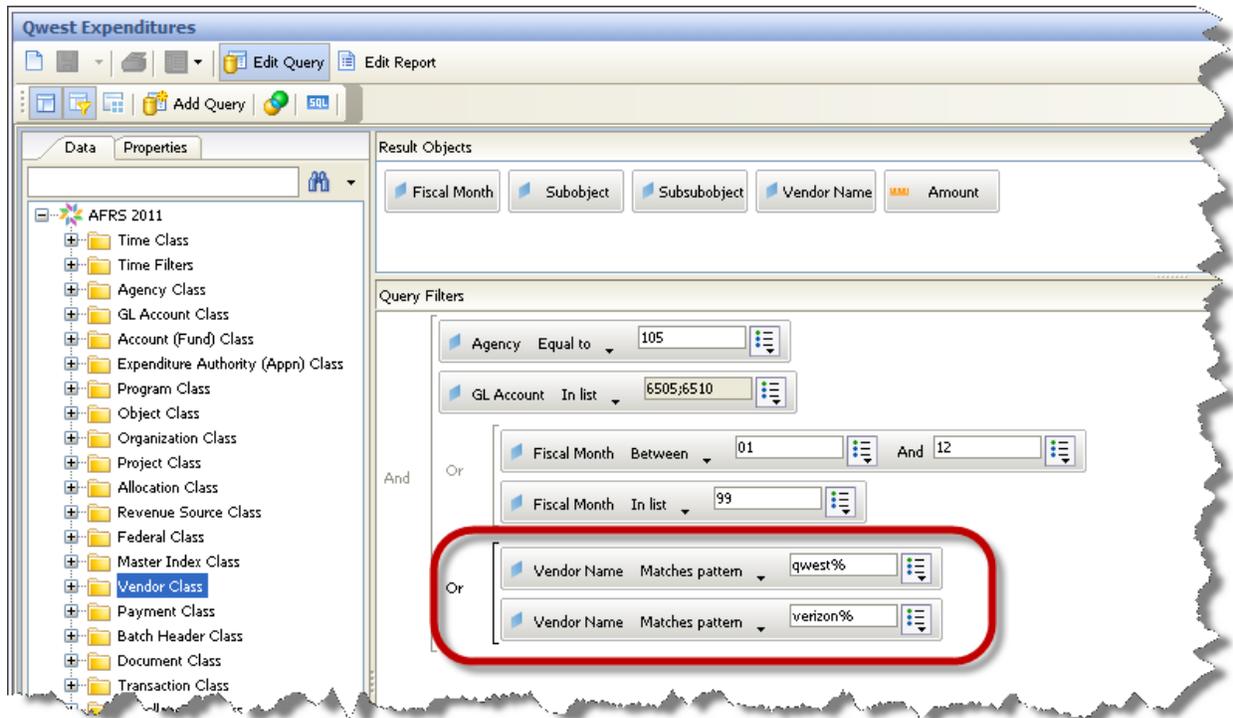
To create a filter for Vendor Name values containing 'Verizon', do the following:

1. Expand the **Vendor** class folder by click on the "+" to the left of the folder.
2. Drag **Vendor Name** to the Query Filters area.
3. Change the operator to **Matches pattern** by selecting it from the drop-down list of operator values.
4. Type in **Verizon%** in the Value entry field.

The newly created Vendor Name filter is illustrated as follows:



To combine the two Vendor Name filters so they will retrieve the proper data, perform steps similar to those used to combine the Fiscal Month filters. **Drag the Vendor Name filter for "Verizon%" to the top of the Vendor Name filter for "Qwest%".** Change the "And" to "Or" beside the two filters. The Vendor Name filters now display as illustrated below. The filters will limit the values for Vendor Name to those beginning with the string "Qwest" or "Verizon".



Adding Prompts to Filters

You can add a prompt to a filter, so that every time the query is run, the data is refreshed with the value specified by the prompt. This allows multiple users to use the same query, but view different results based on the prompt values entered. For example, a prompt can be used to limit data to certain time periods (e.g., a range of fiscal months) or coding element values (e.g., specified Program Indexes or Sub Objects). A query can contain multiple prompts, and you can specify the order by which they are displayed to the user.

To create a filter with a prompt, you need to define three components:

1. A filtered object (e.g., a dimension, detail, or measure)
2. An operator
3. A prompt message

You can define prompts on any dimension, measure, or detail object listed on the **Data** tab in the report panel. The same operators used for filters without prompts can be used for filters with prompts, except for "Is null" and "Is not null".

You can also determine how prompts display. The following options are available:

1. Display a list of values associated with the filtered object. A user can either select from the list or manually enter a value.
2. Display the last value selected the last time the query was run, but allow the user to select a different value.
3. Display a default value, allowing the user to select a different value.
4. Display a list from which the user must select.

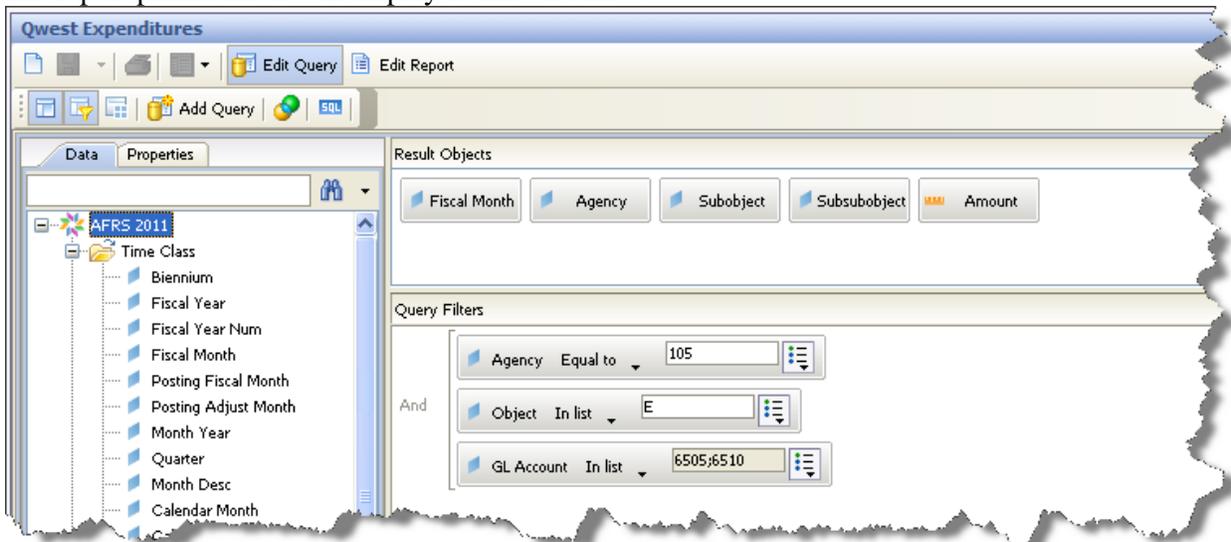
For more information on creating filters with prompts, refer to the Business Objects user guide, Chapter 10.

The following example will describe how to set up a prompt using a list of values. The query will return cash expenditure data (GL 6510) for Agency 105 for Object E, displaying Agency, Fiscal Month, Sub Object, Sub Sub Object, and Amount for the output. The query will prompt the user for a Fiscal Month when the query is run.

To create this query, follow the steps below:

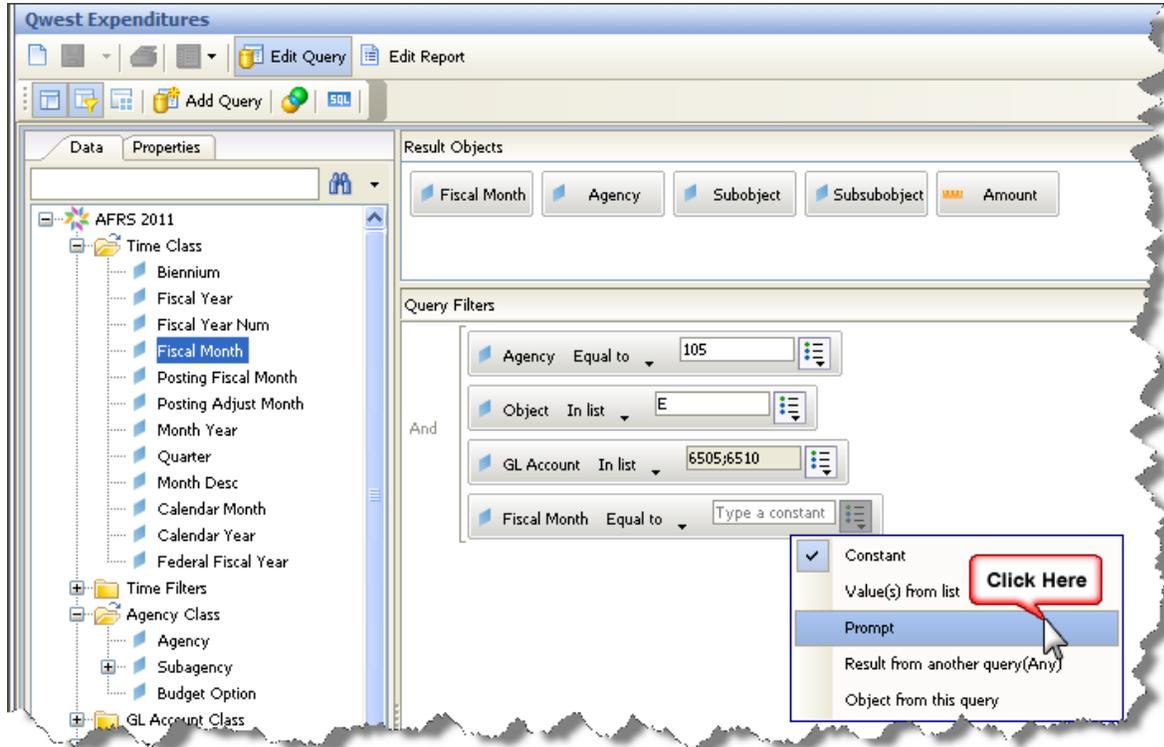
1. Select the dimensions for **Agency**, **Fiscal Month**, **Sub Object**, **Sub Sub Object**, and **Amount** in the **Result Objects** area by double-clicking or using drag-and-drop from the **Data** tab.
2. In the Query Filters area, set up the following filters:
 - q Agency equal to 105
 - q Object equal to E
 - q GL Account equal to 6510

The report panel screen will display as shown below.

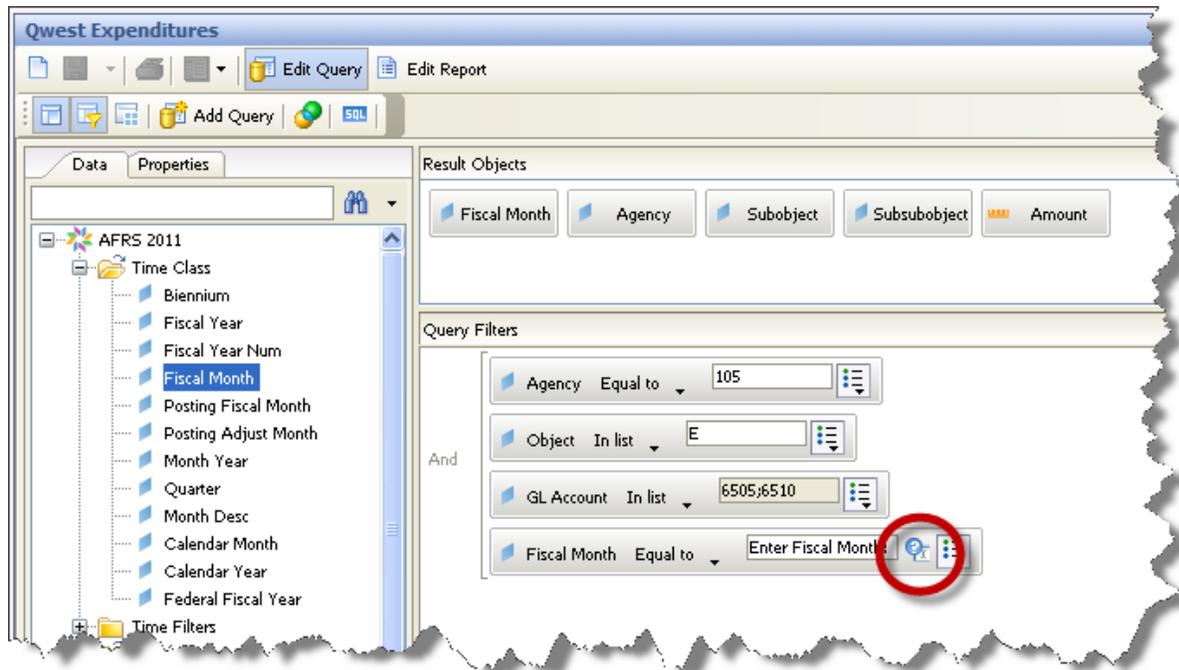


Steps 3 through 11 below will create the Fiscal Month filter with a prompt:

3. Drag **Fiscal Month** dimension in the **Time** class to the **Query Filters** area.
4. Change the operator to **Equal to**.
5. Click on the arrow to the right of the Value entry text box. Select **Prompt**.



6. Click on the icon next to the Value text box.

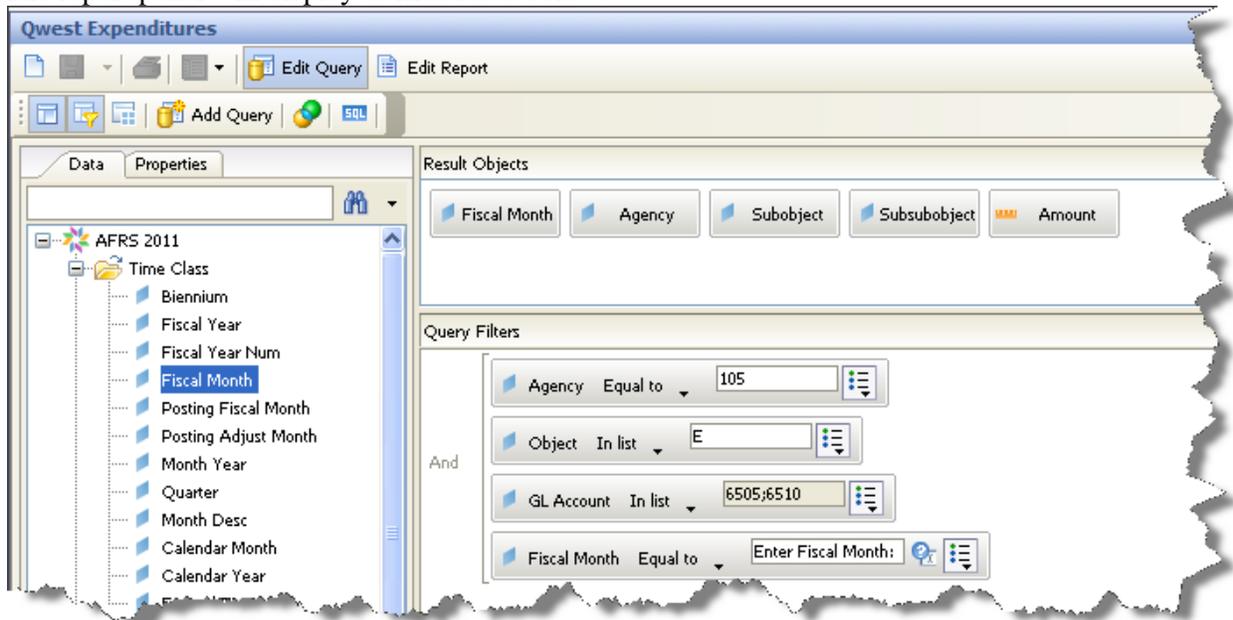


The **Prompt** menu screen will display.

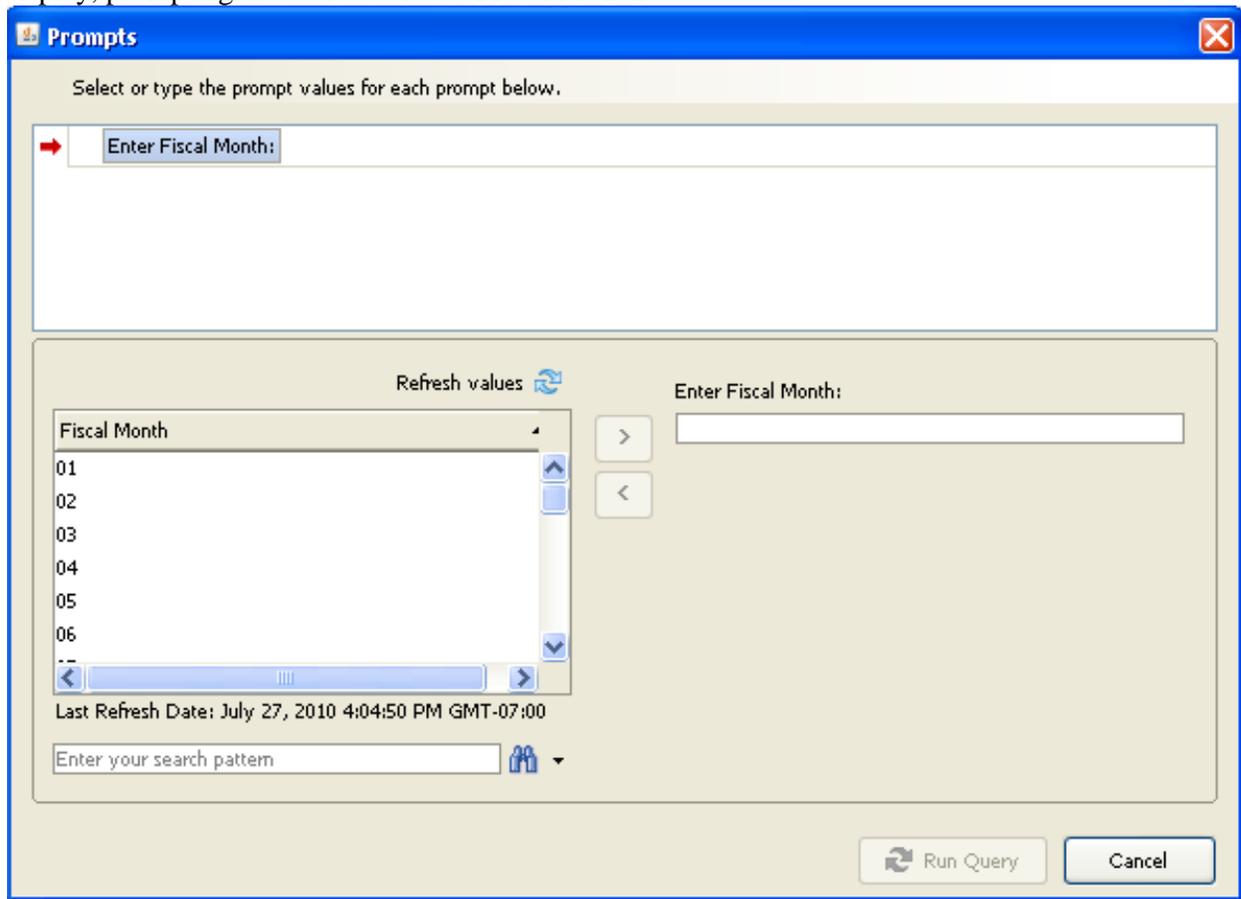
The screenshot shows the 'Prompt' dialog box. The 'Prompt text:' field contains 'Enter Fiscal Month;'. Under 'Prompt Properties:', the following options are checked: 'Prompt with List of Values', 'Keep last values selected', 'Select only from list', and 'Optional prompt'. The 'Set default values' option is unchecked. The 'Type a value' section is empty. The 'OK', 'Cancel', and 'Help' buttons are visible at the bottom.

7. The text box under "**Prompt text:**" allows you to enter a customized message to users when the prompt displays. For this example, the default message of "**Enter value(s) for Fiscal Month:**" will be retained.
8. The **Prompt with List of Values** option that is checked will display a list of Fiscal Month values to the user.
9. If the **Select only from list** box is checked, the user will be restricted to select values only from the list provided.
10. **Keep last value selected** will display the value selected the last time the query was run.
11. **Optional Prompt** allows the user to skip prompts they do not wish to filter on.
12. **Set default value** allows you to specify a default value for the prompt. The user can change the default value before running the query. No default value will be specified in this example.
13. Click **OK** to close the screen.

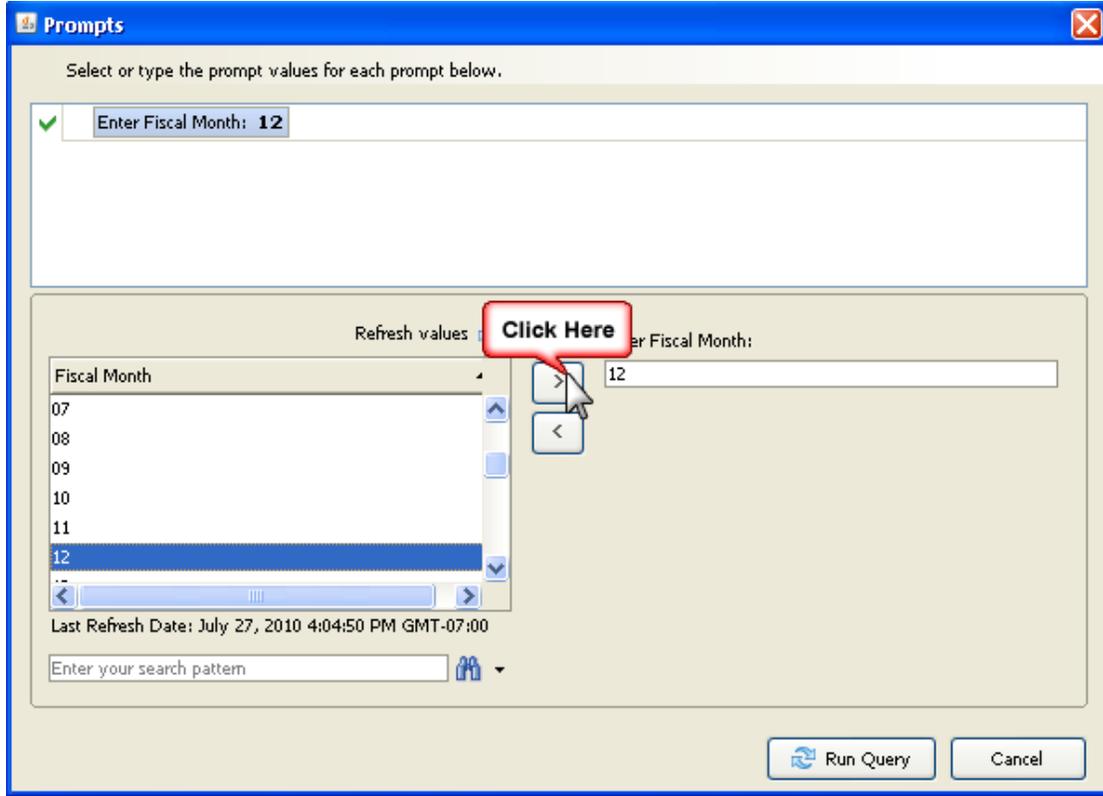
The report panel will display as illustrated below.



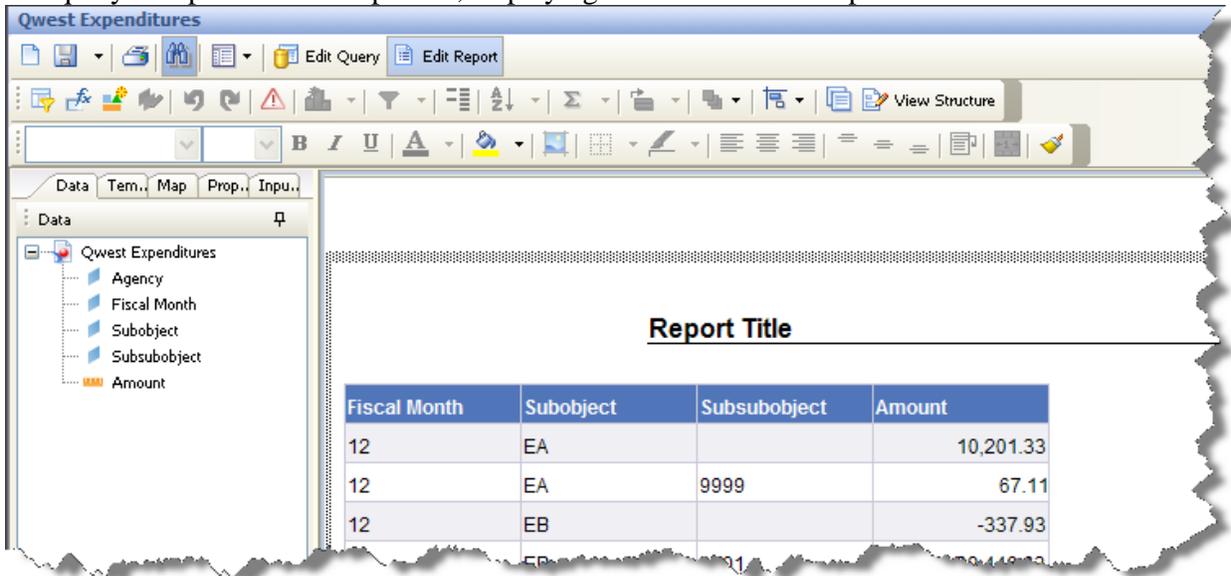
Click on **Run Query**. The query will begin processing, then the following **Prompts** screen will display, prompting the user to select a **Fiscal Month**.



You can select a value from the "List of Values" pick list and click on the double arrow to move it to the **Enter Fiscal Month** text box. Or you can enter a Fiscal Month in the text box. For this example, Fiscal Month 12 is selected. After selecting the Fiscal Month, click on **Run Query** in the lower right corner of the window.



The query will process to completion, displaying the results in the Report View window.



Chapter 6 – Working with Report Tables

When you create a new query, the tool generates a new report in the form of a vertical table. This initial table includes the data for all of the objects specified in the Results Objects panel of the Query View window.

You can edit the table contents, change the formatting, perform calculations, turn the table into a different type, insert, copy, or remove tables, and export report data to other file formats. This chapter explains how to:

- q Add and remove columns or rows
- q Move and swap columns or rows
- q Format tables, including table cells, headers and footers
- q Format numbers and time
- q Perform simple calculations
- q Create a crosstab table
- q Export report data
- q

Note: You must be in the Report View window when working with tables. When in Report View, the Edit Report button is depressed and the Report toolbar is displayed near the top of the screen.

Add and Remove Columns/Rows

You can add a new column or row using one of two methods: by using drag and drop, or by using the Insert feature from the toolbar.

In the following example, a query has been run to display Program, Object, Sub Object, and Amount. Note that the default table format is a vertical table, where the header cells are displayed at the top and the corresponding data is displayed in columns.

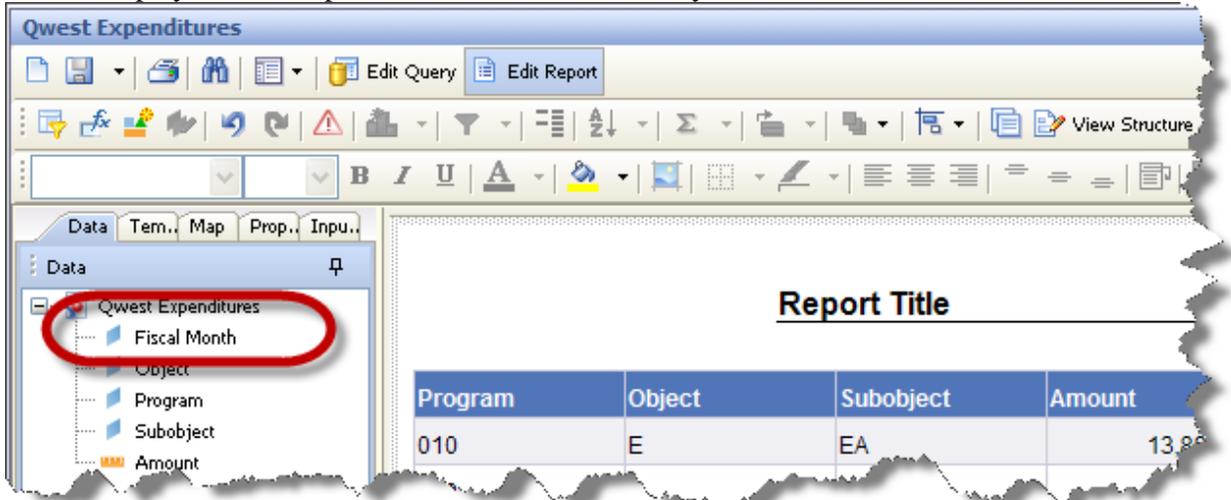
The screenshot shows a software interface for a report titled "Qwest Expenditures". The interface includes a toolbar with buttons for "Edit Query" and "Edit Report". Below the toolbar is a menu bar with options: "Data", "Tem...", "Map", "Prop...", "Inpu...". On the left side, there is a "Data" pane showing a tree view of the query structure: "Qwest Expenditures" (expanded) containing "Object", "Program", "Subobject", and "Amount". The main area of the report displays a table with the following data:

Program	Object	Subobject	Amount
010	E	EA	748.2
010	E	EB	11.84
010	E	EH	106.81

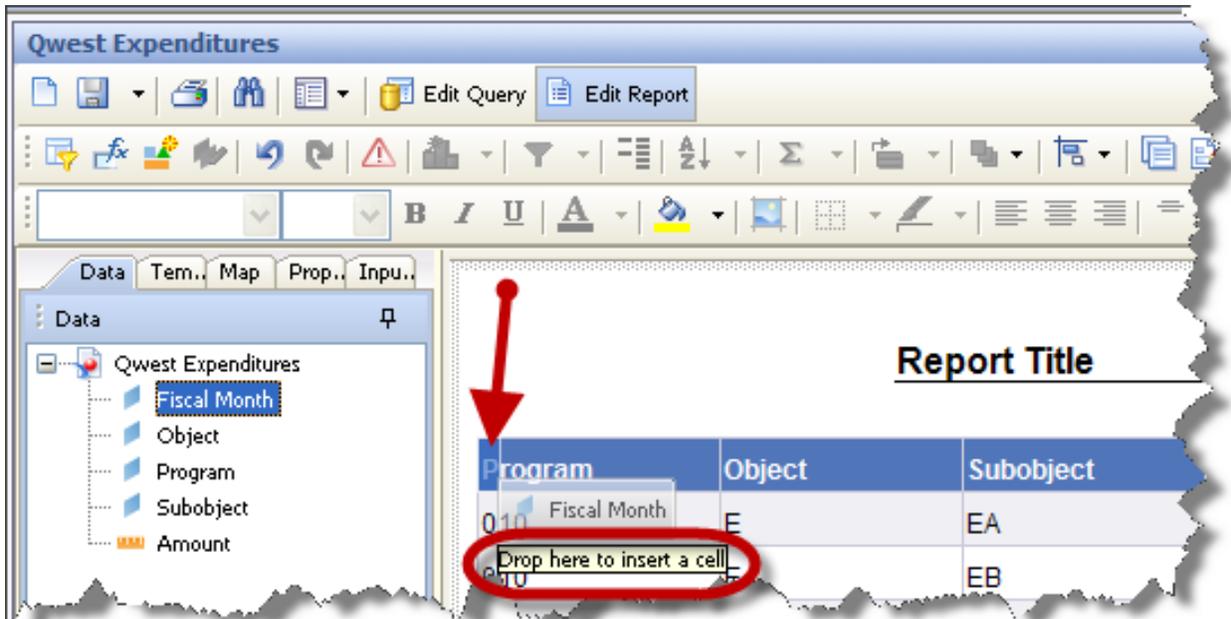
Assume we now want to display the Fiscal Month in the report table. Note that Fiscal Month is not shown in the Data tab, signifying this dimension was not originally selected in the Result Objects for the query. The query needs to be modified and rerun to include this dimension, so it can be selected for displaying on the report.

Shown below is the Report View window after the query has been modified as described above.

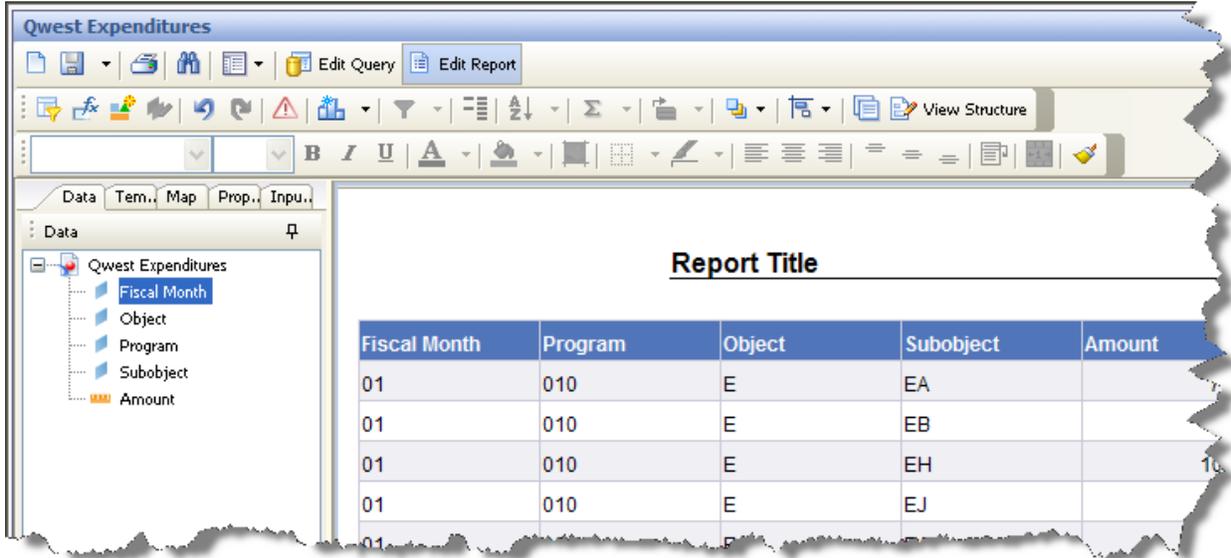
Note that Fiscal Month is now shown in the Data tab as one of the objects available for the report, but it is not displayed in the report table. It must be manually added.



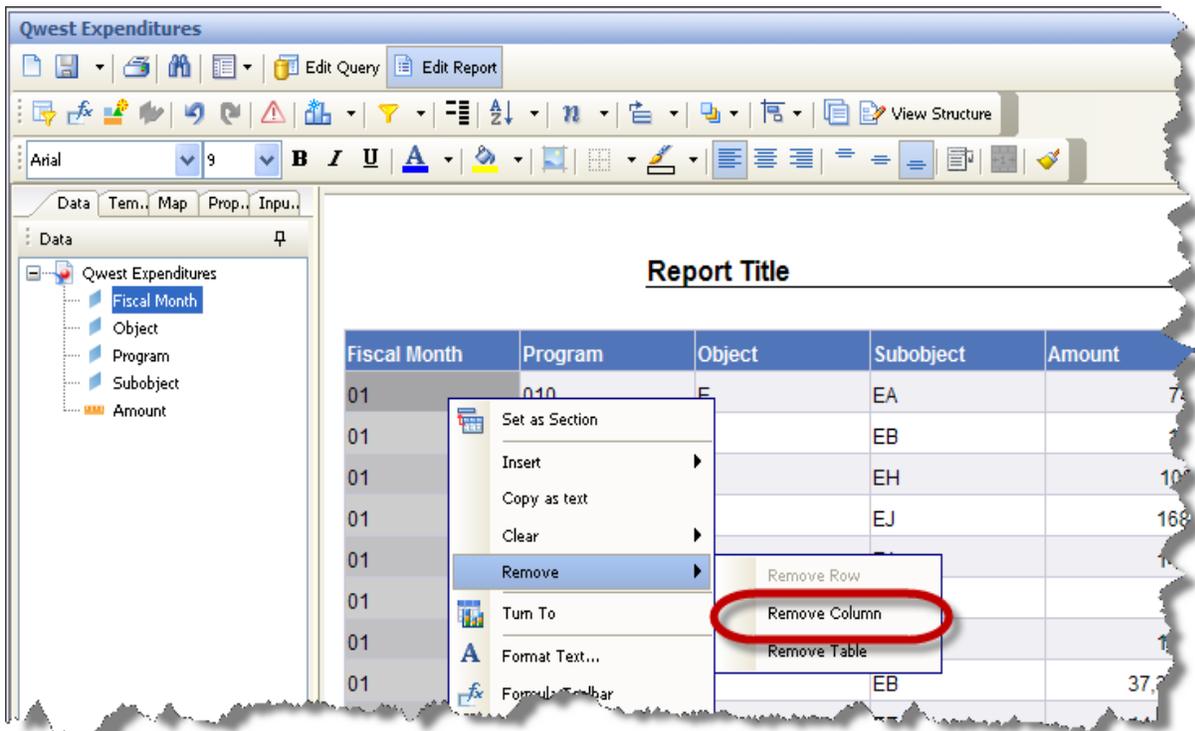
We can add this to the table by adding another column. Click on and then drag Fiscal Month to the report table where you want to add it, hook it on the edge of the cell next to it (You see a box with the words, "Drop here to insert a cell").



Drop the object at the desired spot. Shown below is the Fiscal Month added to the left of the Program column.



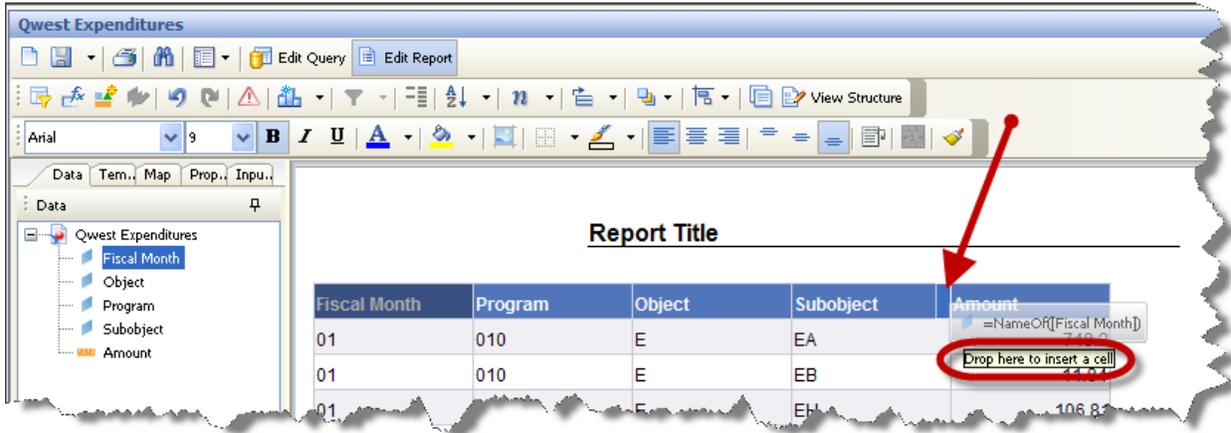
You may remove column(s) by dragging the column back to the left panel. You can select the column, right click and choose **Remove Column**, as shown below.



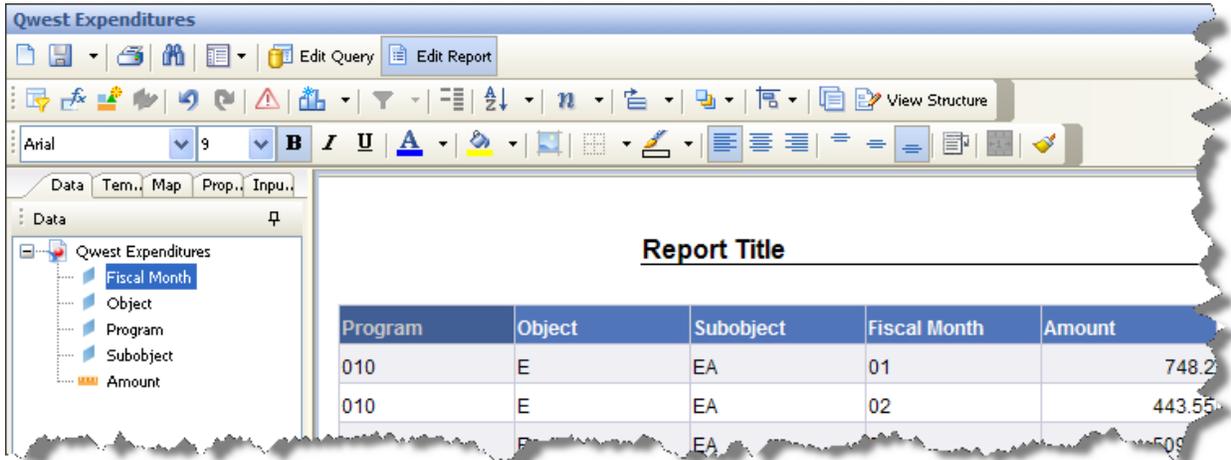
Move or Swap Columns/Rows

You can re-order the table information by moving columns or rows or by swapping columns or rows. The example below illustrates how to move a column.

Select the column you wish to move. Drag it to the desired location, before or after another column until you see the words, "Drop here to insert a cell".

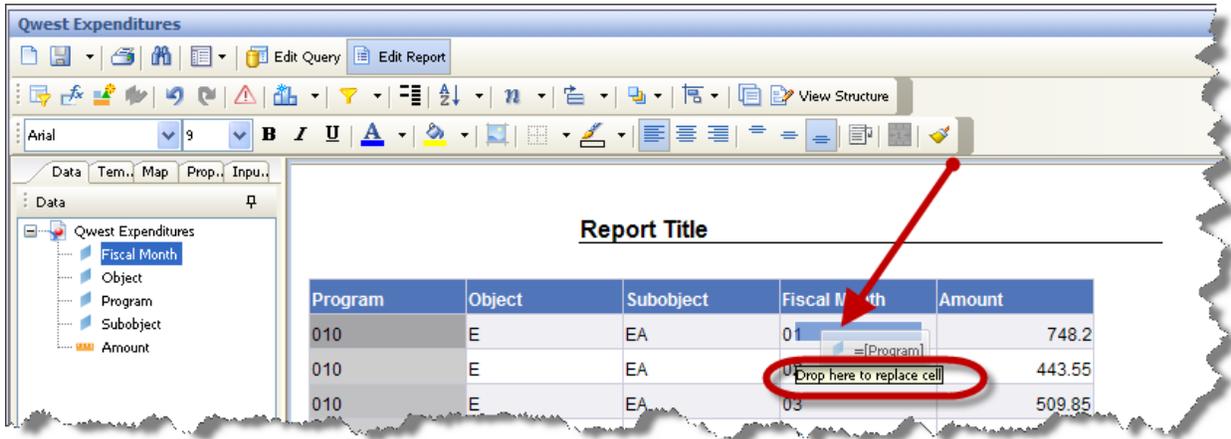


Illustrated below is result of moving Posting Fiscal Month before the Amount column.

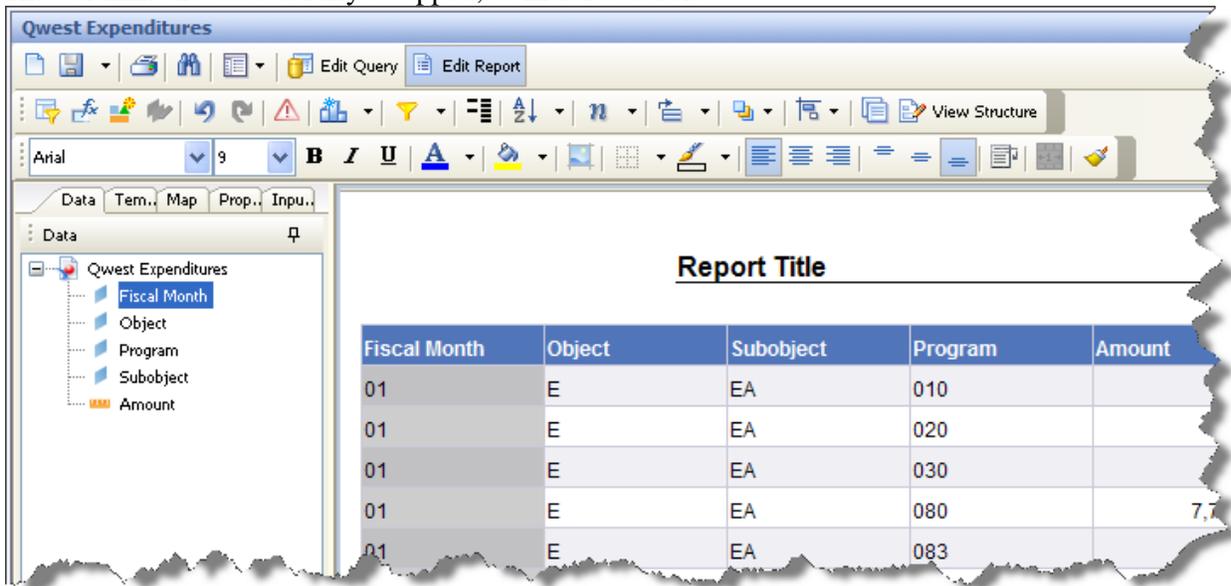


You can also swap a column or row. The following example illustrates swapping a column.

Select one of the columns you want to swap. Drag it onto the other column to be swapped, until you see the words, "Drop here to replace cell". Shown below, the Program column is dragged on top of the Posting Fiscal Month column.

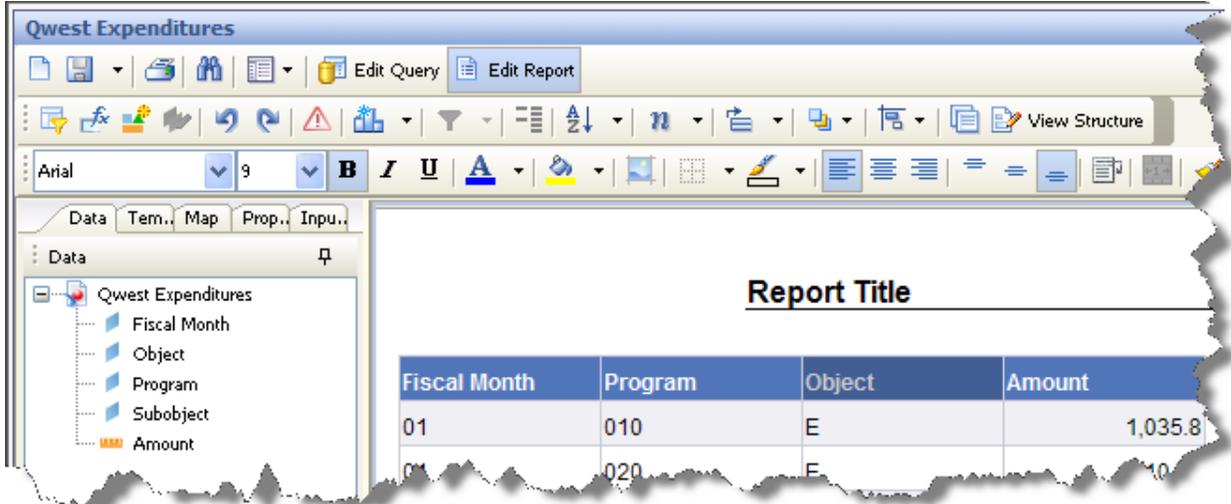


The columns are successfully swapped, as illustrated below.

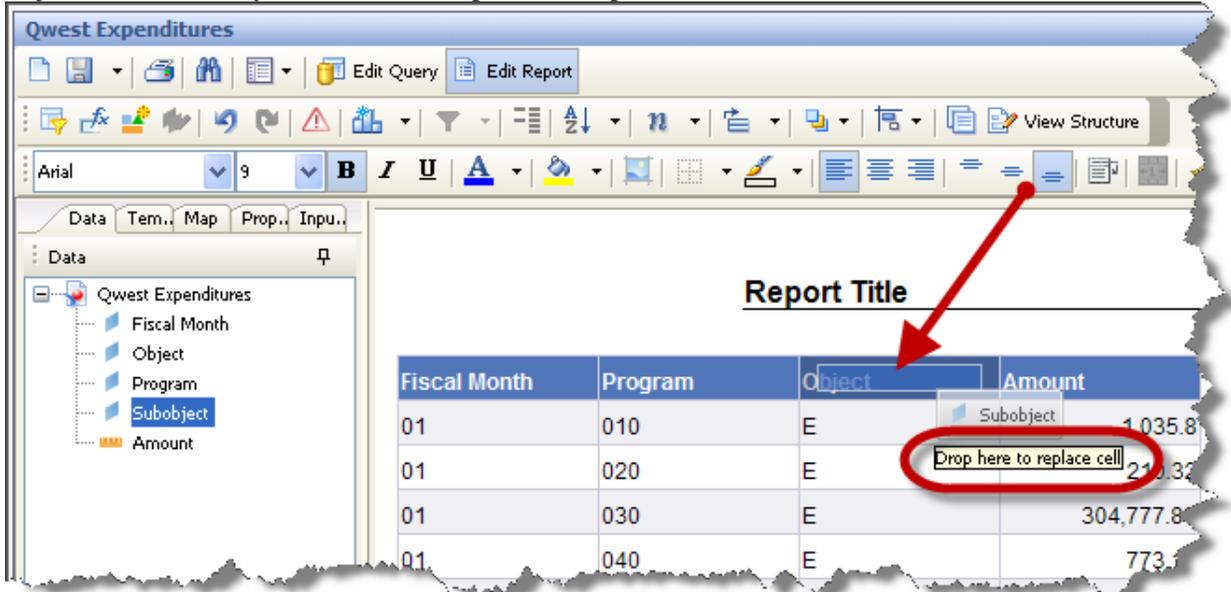


Replace Columns or Rows

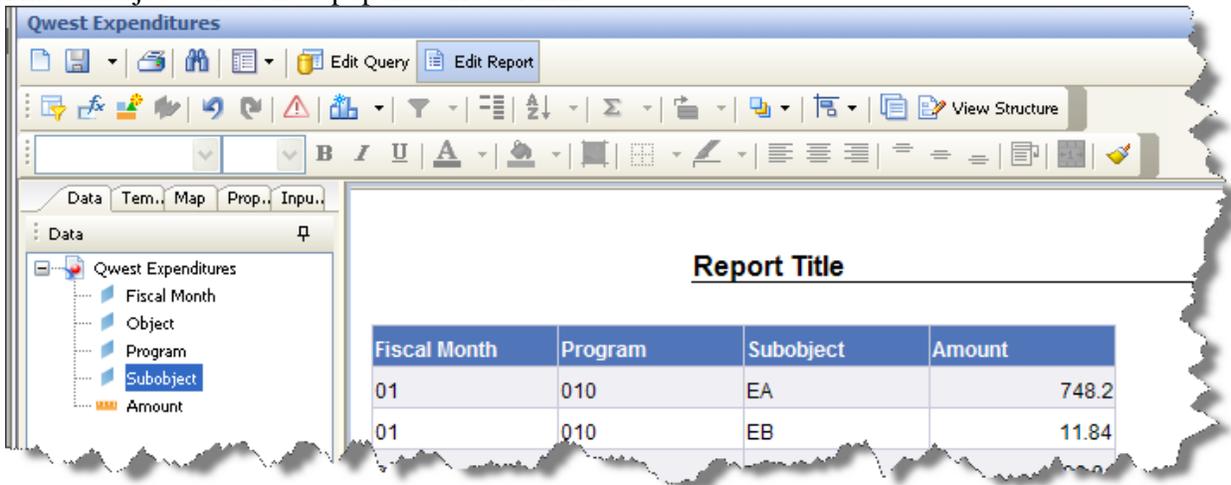
You can replace columns or rows with different data. The following example illustrates replacing a column. The report currently displays Fiscal Month, Program, Object, and Amount in a vertical table.



We will replace the Object column with Sub Object data. Drag Subobject from the Data tab onto the Object column until you the text, "Drop here to replace a cell".

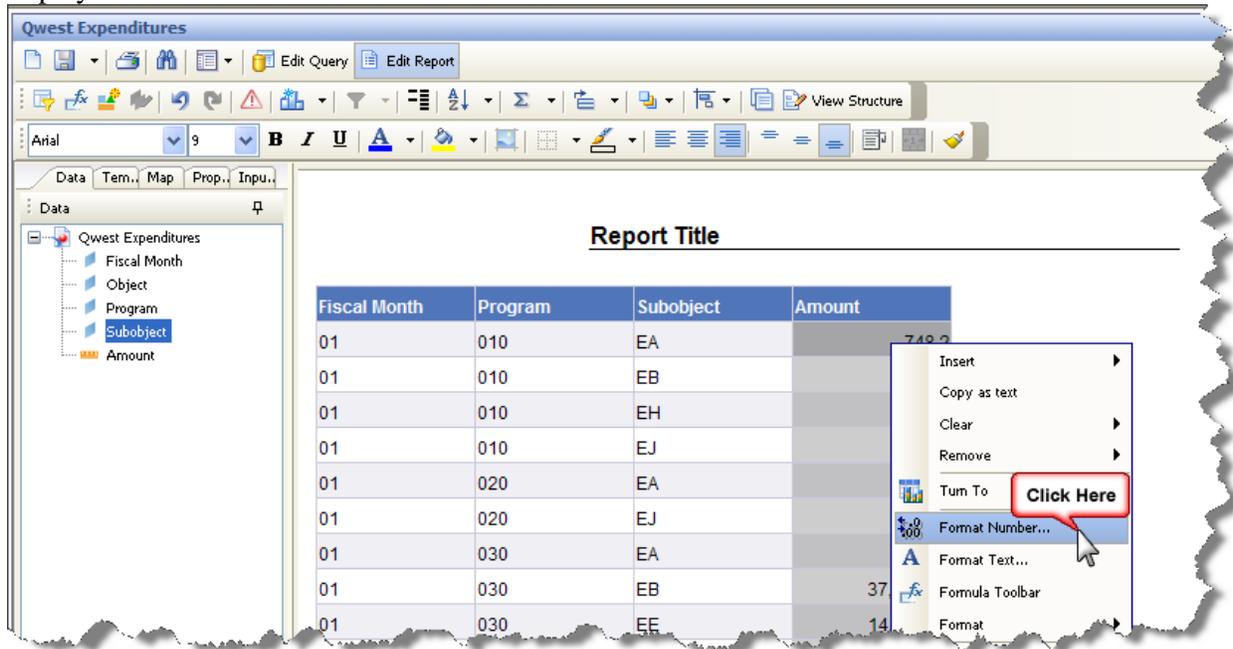


The Subobject values now populate the column.

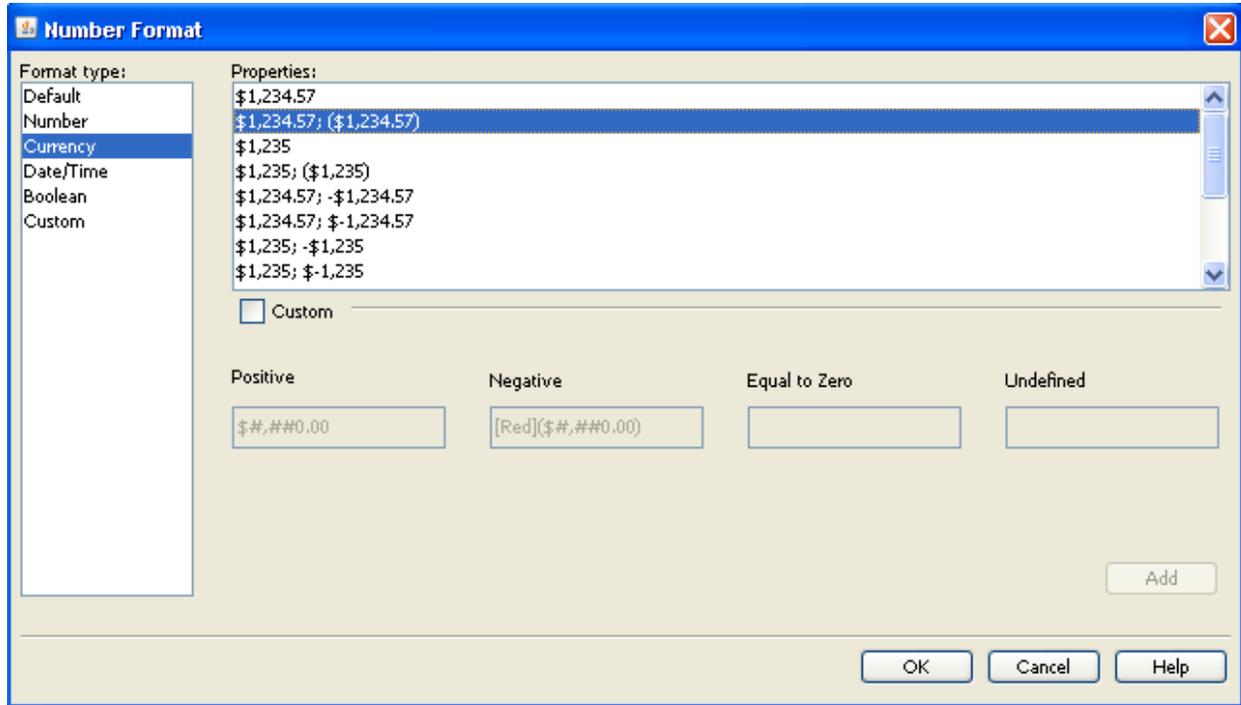


Format Numbers

You may reformat the numbers in the Amount column by clicking that column then right click to display a submenu. Choose **Format Number**.



The Number Format dialog box will display. Select the desired format, and then click OK to close the window.



The numbers in the column will be reformatted as specified.

The screenshot shows the SAP Business Intelligence report editor interface. The title bar reads "Qwest Expenditures". Below the title bar is a toolbar with various icons for editing and viewing. A menu bar includes "Data", "Tem..", "Map", "Prop..", and "Inpu..". On the left, a tree view shows the report structure with "Qwest Expenditures" expanded to show "Fiscal Month", "Object", "Program", "Subobject", and "Amount". The main area displays a report titled "Report Title" containing a table with the following data:

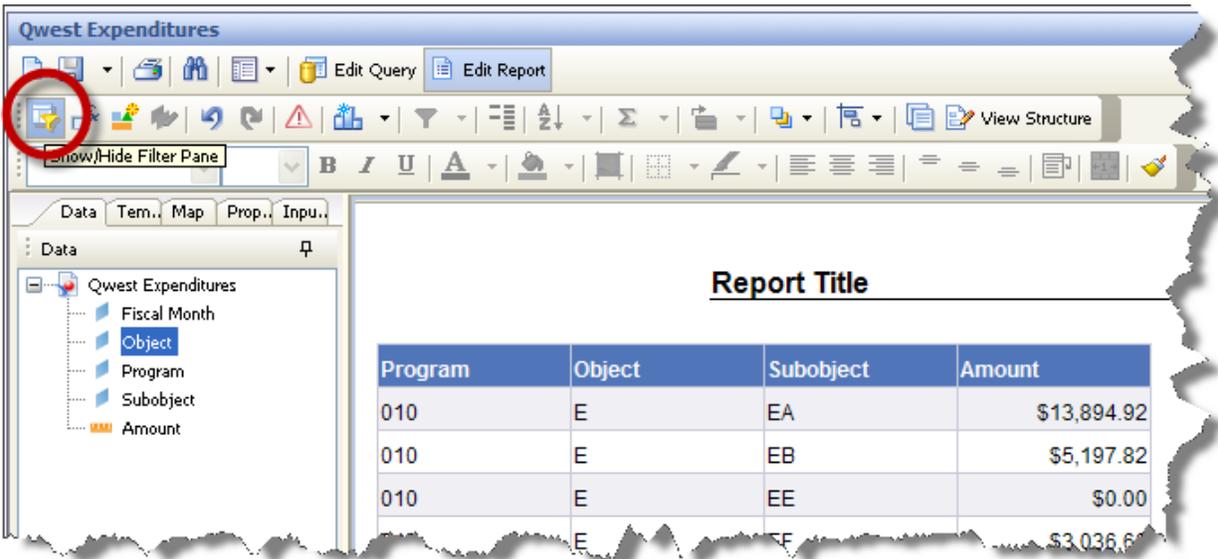
Fiscal Month	Program	Subobject	Amount
01	010	EA	\$748.20
01	010	EB	\$11.84
01	010	EH	\$106.81
01	010	EJ	\$168.95
01	020	EA	\$140.38
		EJ	

Using Report Filters

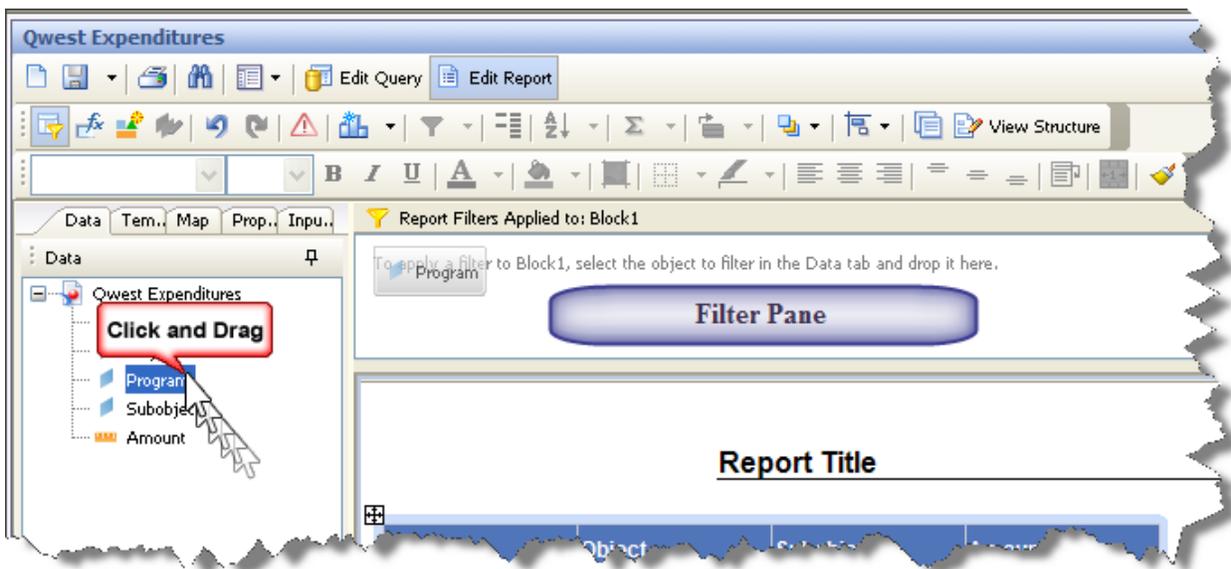
Report filters allow you to restrict data shown in the report simply by hiding the data you are not interested in. The data is still contained within the report; it is just not being displayed while the filter is active.

In the example below the Query Results Objects selected are Program, Object, SubObject and Amount.

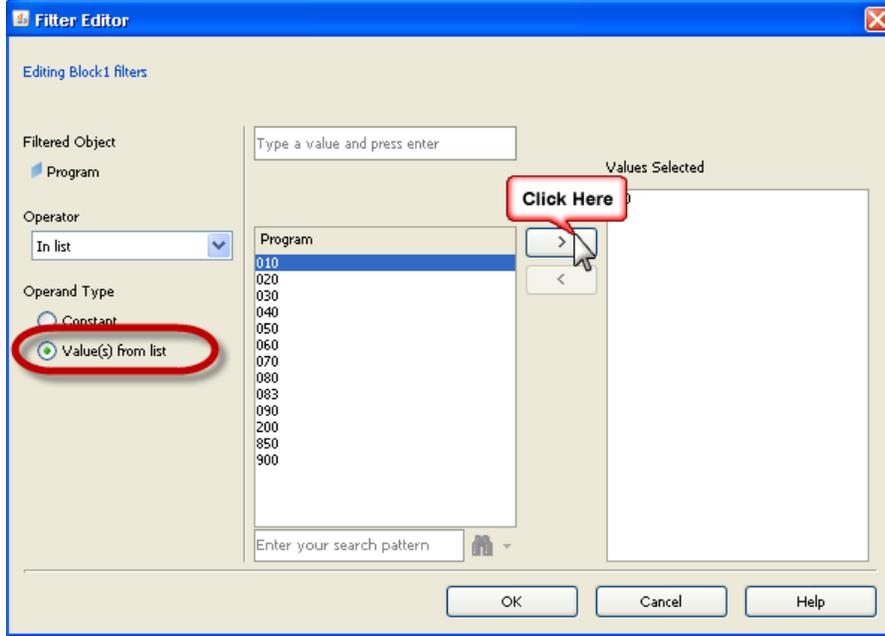
Click on the “Show/Hide Filter Pane” icon to open the Report Filters Window.



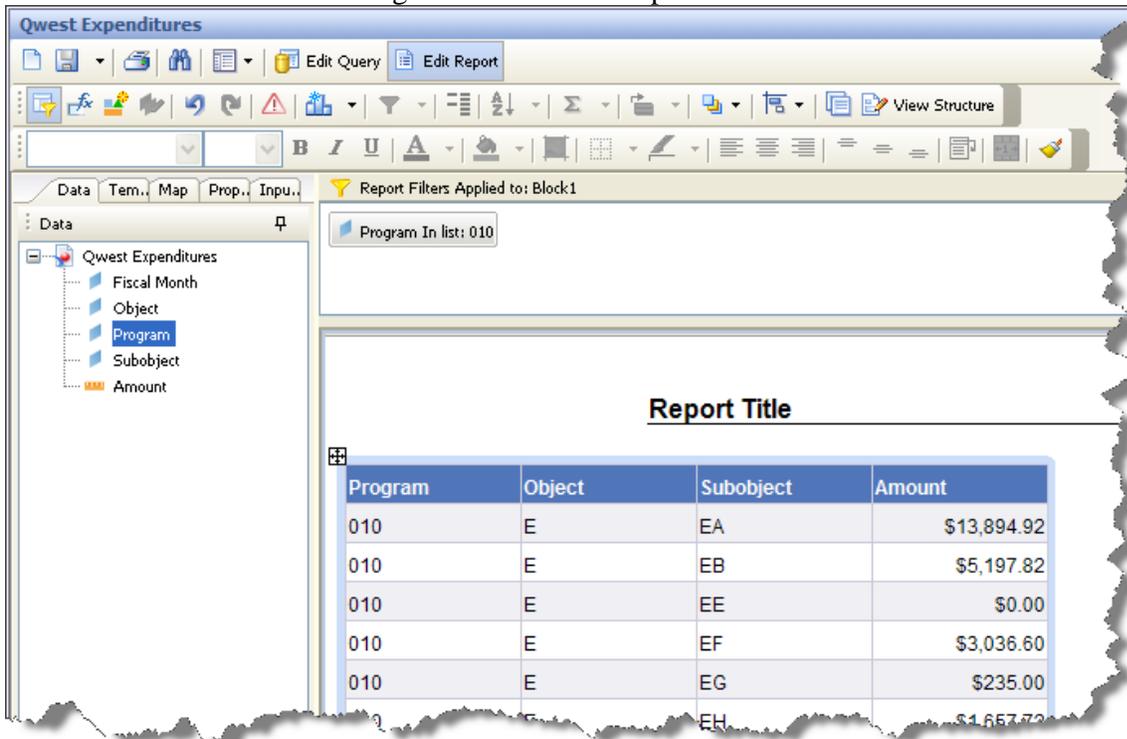
Click and drag the dimension you wish to filter on into the Filters Pane (Program is used for this example). Once you release the dimension the Filter Editor will open.



Click on “Value(s) from list” to display the list of values that are available in the report. Select the value you wish to limit to in the report. After selecting a value click OK at the bottom of the Report Editor window.



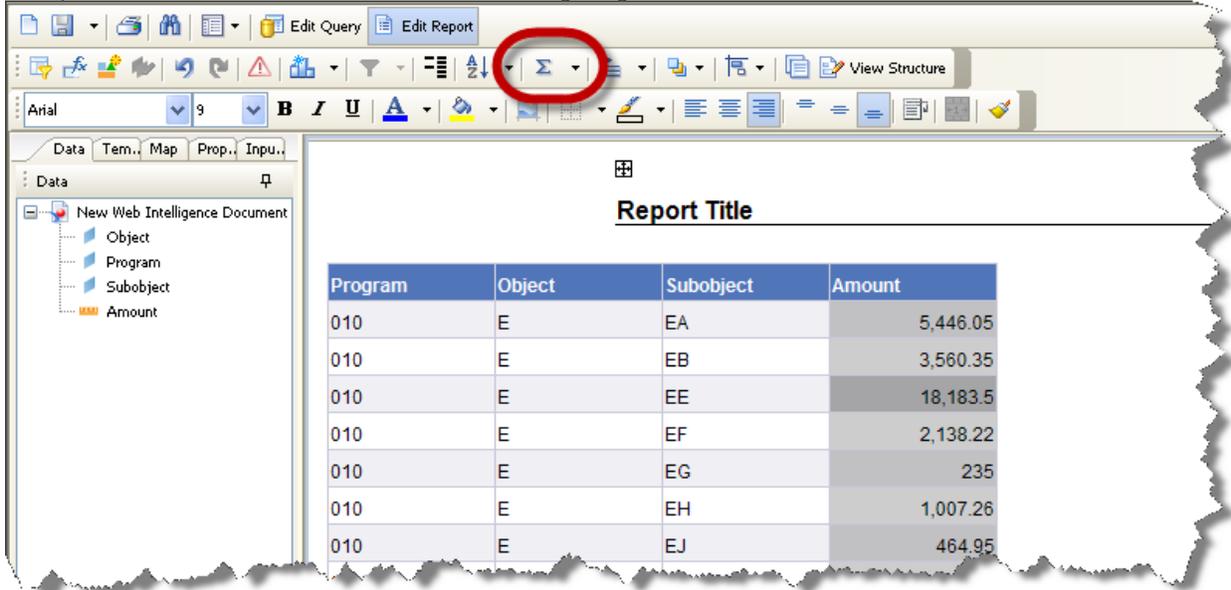
Your report will now be limited to the values you selected, and you will see the dimension you selected with the value it is being limited to in the Report Filters Window.



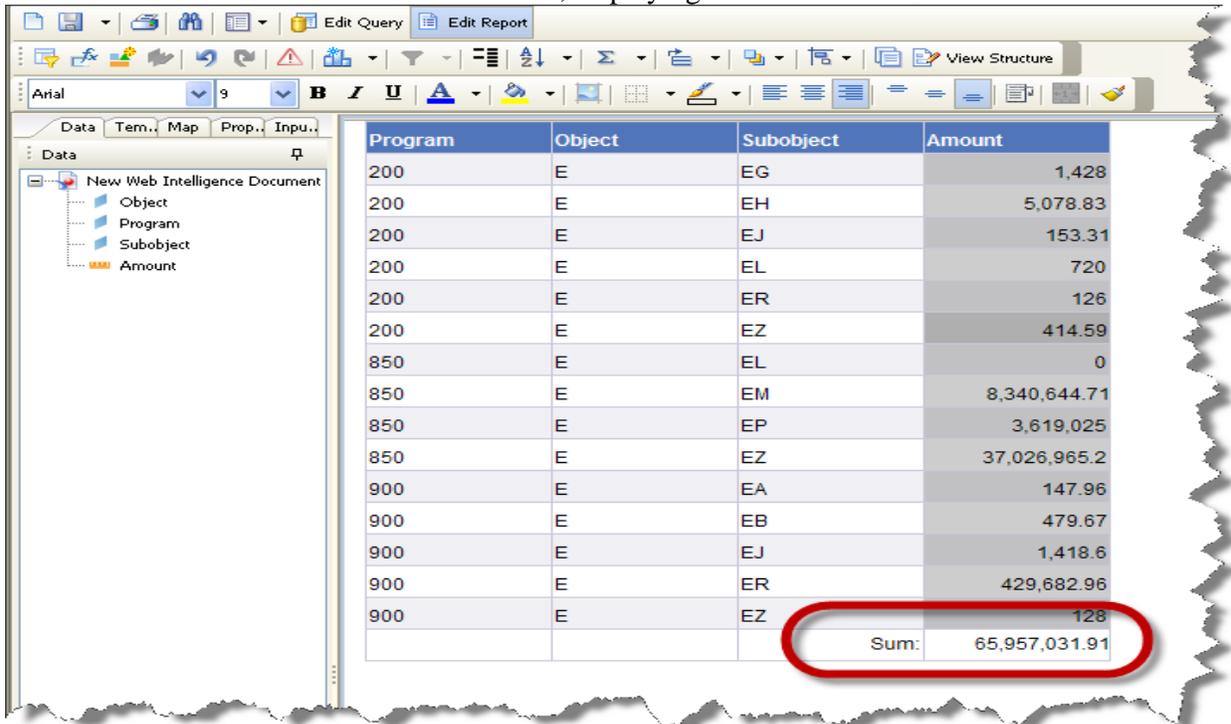
Insert a calculation

The tool provides the ability to insert standard business calculations in a report. The following calculations are available from the Report toolbar, and provide a way to make quick calculations on report data: Sum, Count, Average, Minimum, Maximum, and Percentage.

The following example illustrates how to insert a calculation for a Sum. Click on a cell that contains data you want to sum. Click **Sum** from the report panel toolbar.

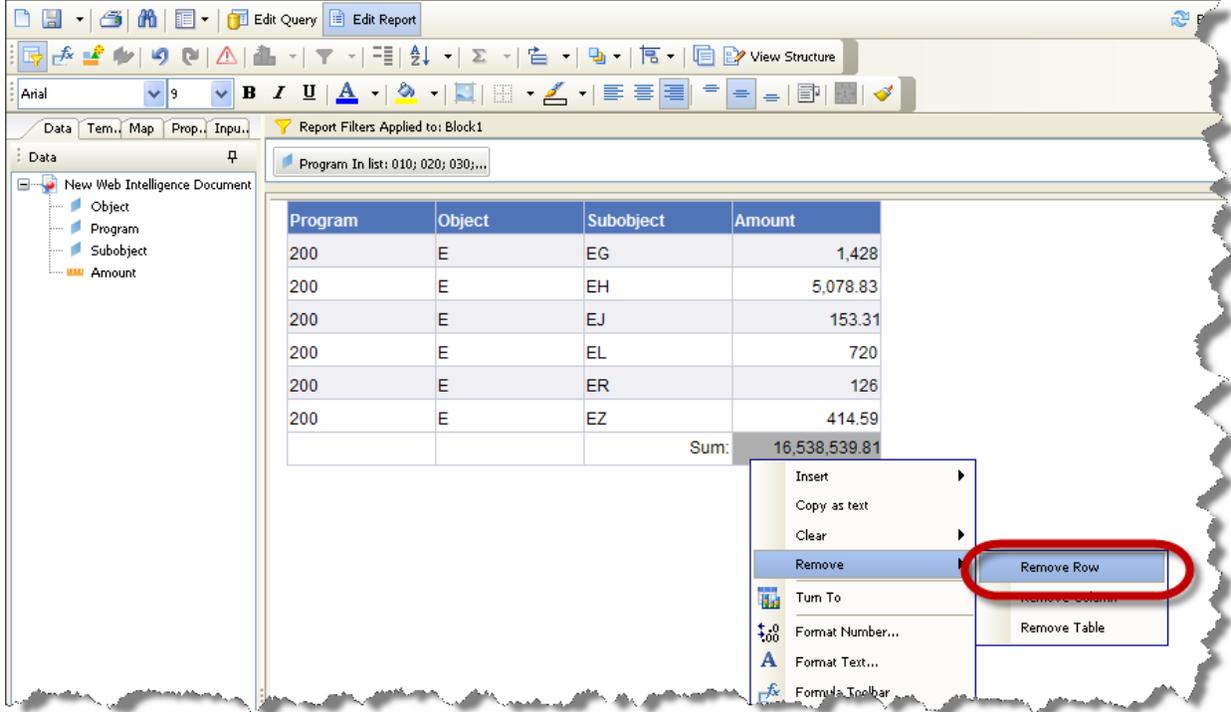


A new row is added at the bottom of the table, displaying the result of the Sum calculation.

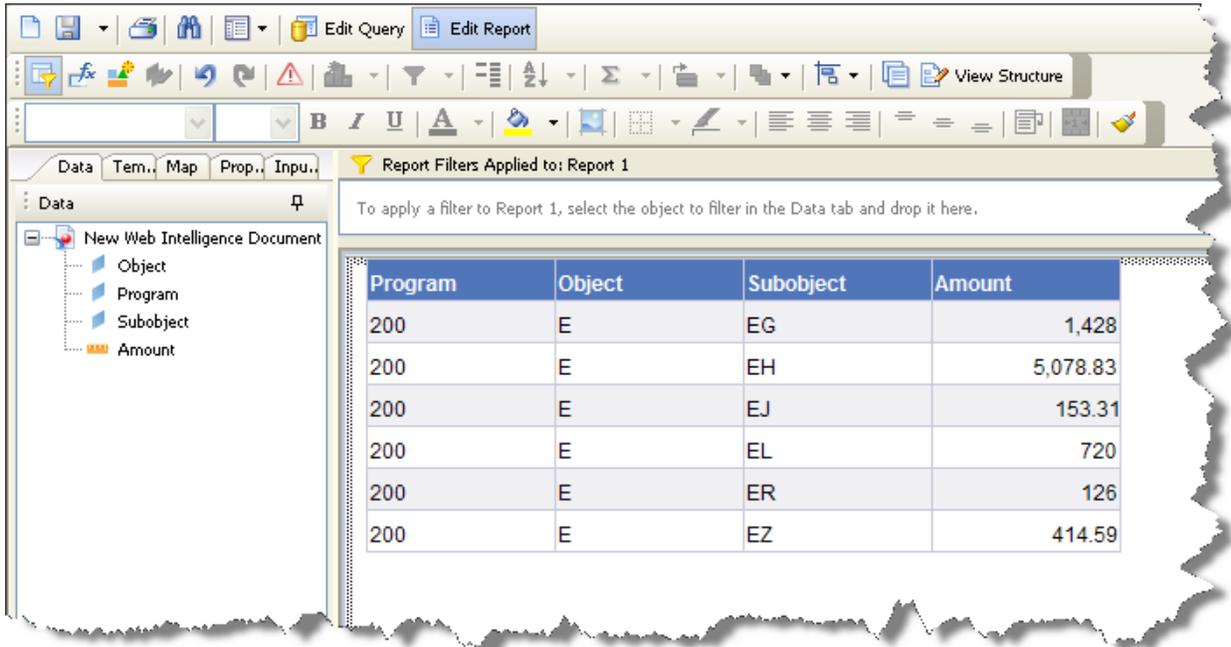


Remove a Calculation

You can remove a calculation from a report by deleting the row or column containing the calculation. To remove the Percentage calculation illustrated above, click on the column containing the Percentage data. Right click to display the sub-menu, and then select **Remove** then **Remove Row**.



The column is removed.

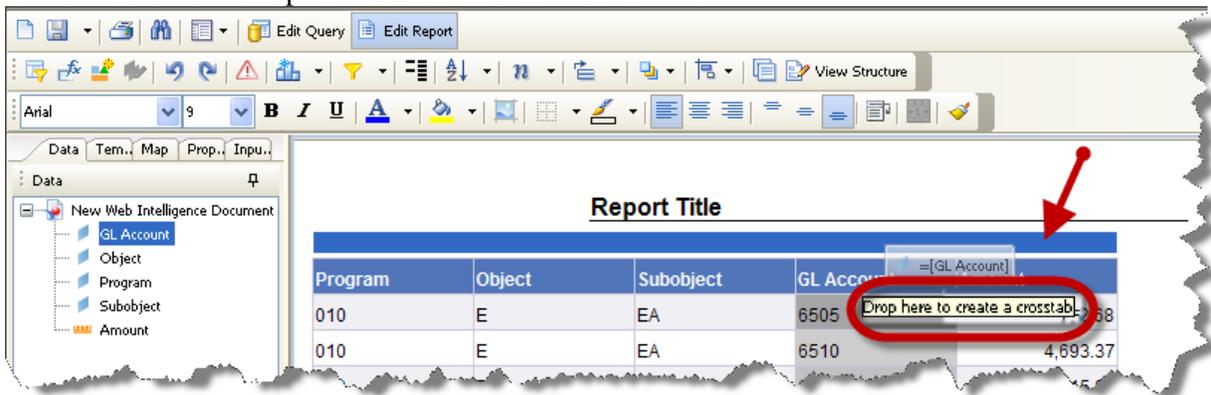


Create a Crosstab

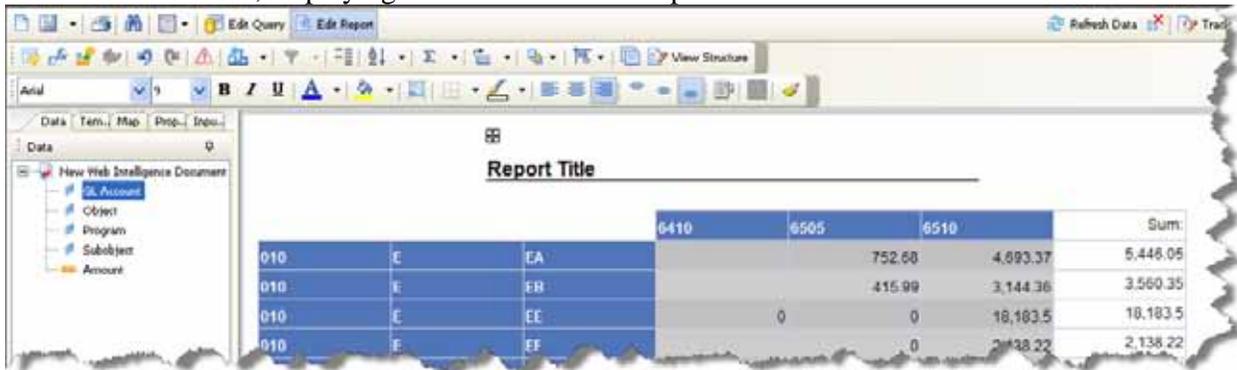
Up to the point, we have been working with vertical tables, which display header cells at the top and the corresponding data in columns. A crosstab is another type of table, which displays values for dimensions across the top axis and on the left axis. The body of the report displays values corresponding to the intersection of the dimensions. You can reformat a vertical table into a crosstab, if you wish.

The example will demonstrate how to create a crosstab displaying GL Account across the top, and the other dimensions on the left side.

Select the GL Account column. Drag it to the top edge of the table until you see, "Drop here to create a crosstab". Drop the column onto the table header.



A crosstab is created, displaying GL Account on the top axis.

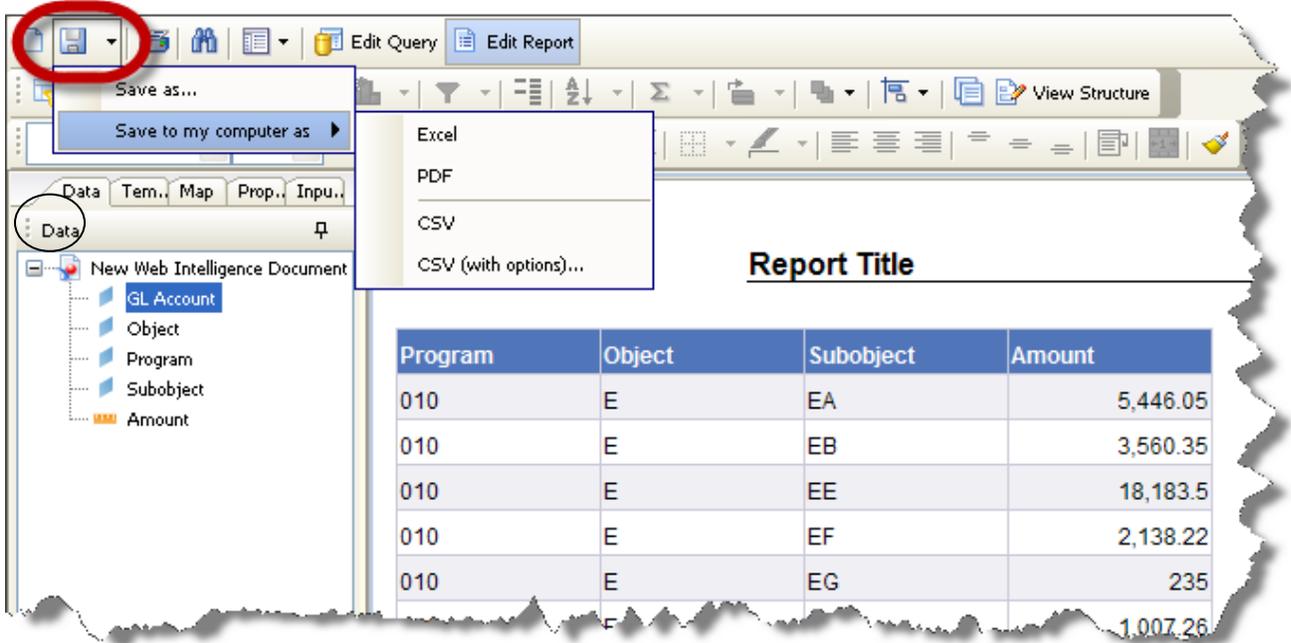


Export Report Data

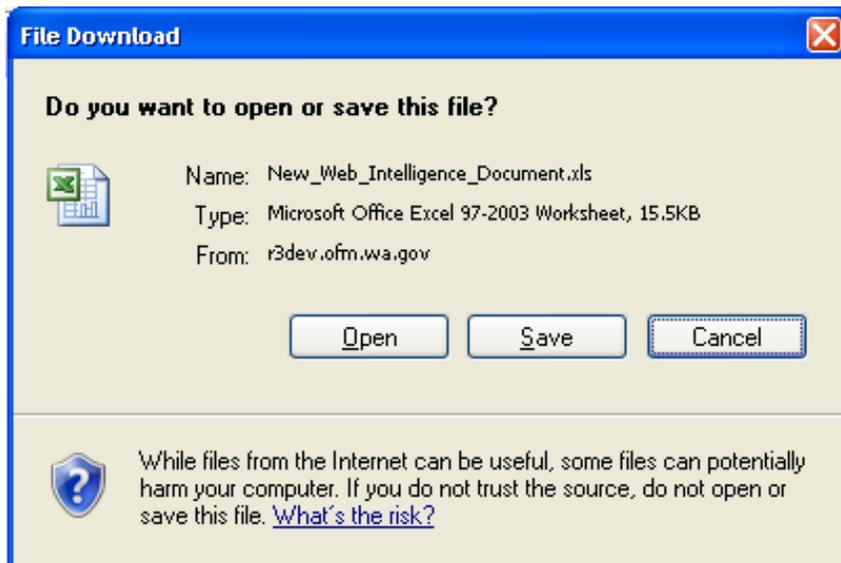
You can export the data in a report to an Excel or Adobe Acrobat PDF file. Using this method, you are only saving the report data and not the underlying query.

The following example illustrates saving report data to an Excel file. Make sure you are in the Report View window.

Click on the 'Save' button on the Web Intelligence toolbar near the top of the screen. Select **Save to my computer as** from the Save menu. Select **Excel** from the file option menu.



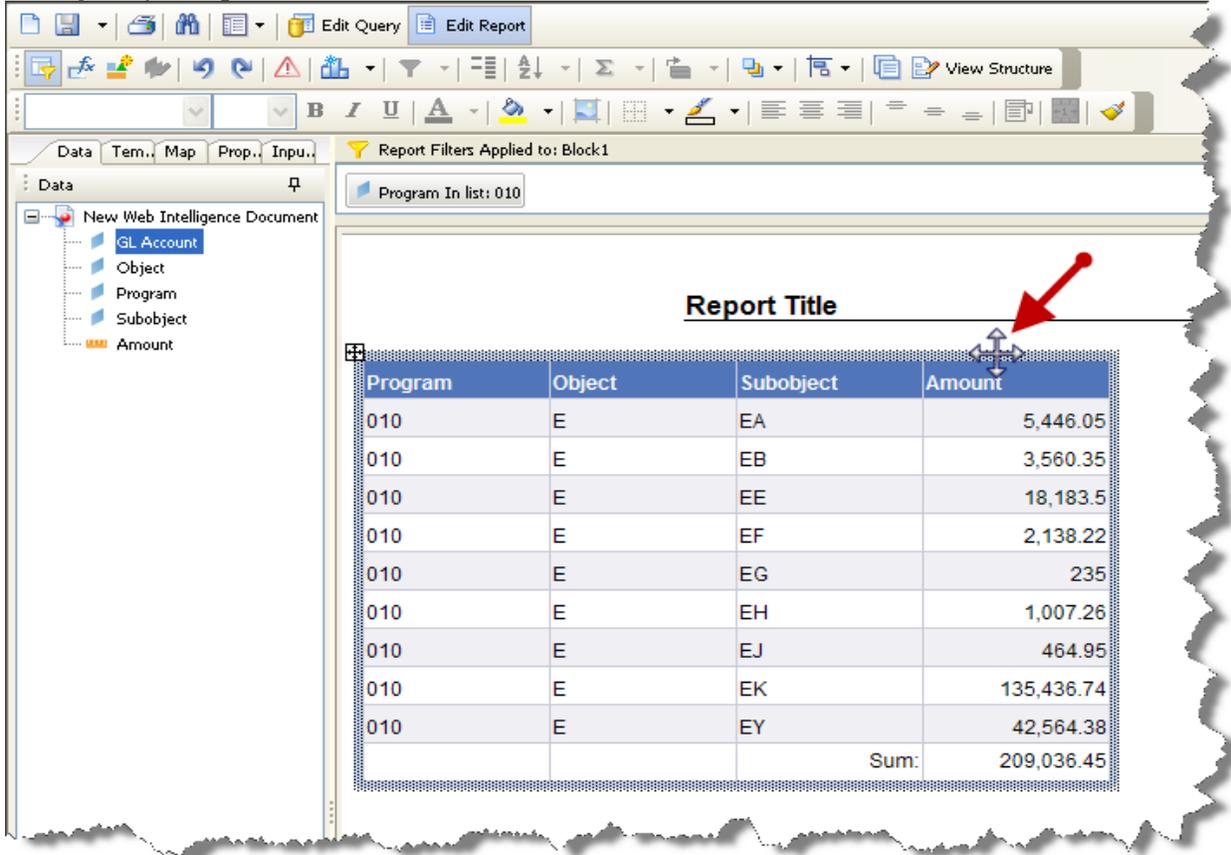
The **File Download** dialog box displays. Select Open and View data in Excel.



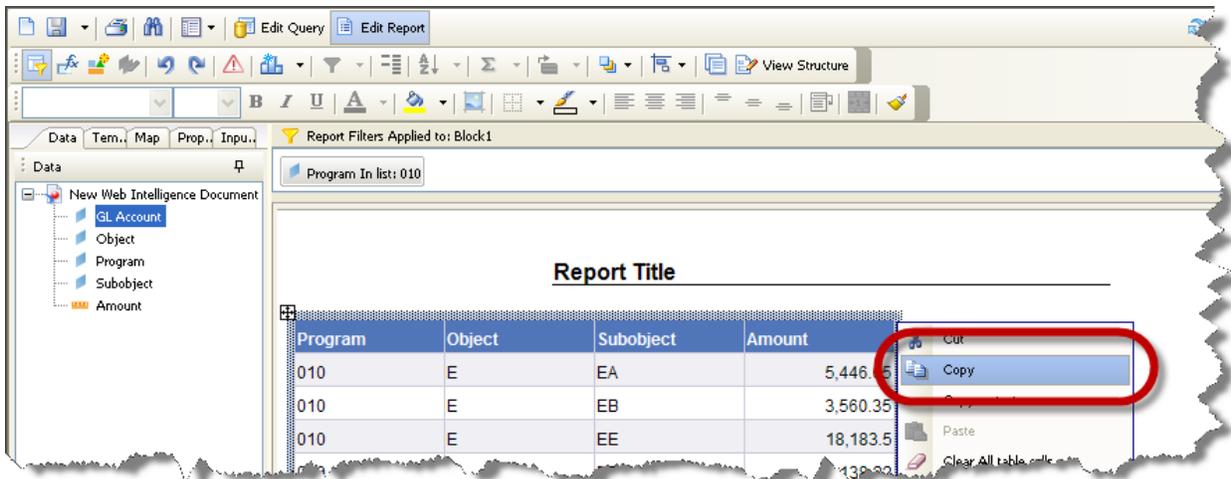
Copying Data to Other Applications as an Image

You can easily copy data from your report into other applications such as Microsoft Word, Excel and PowerPoint as an image. This can assist in presenting your analysis to others.

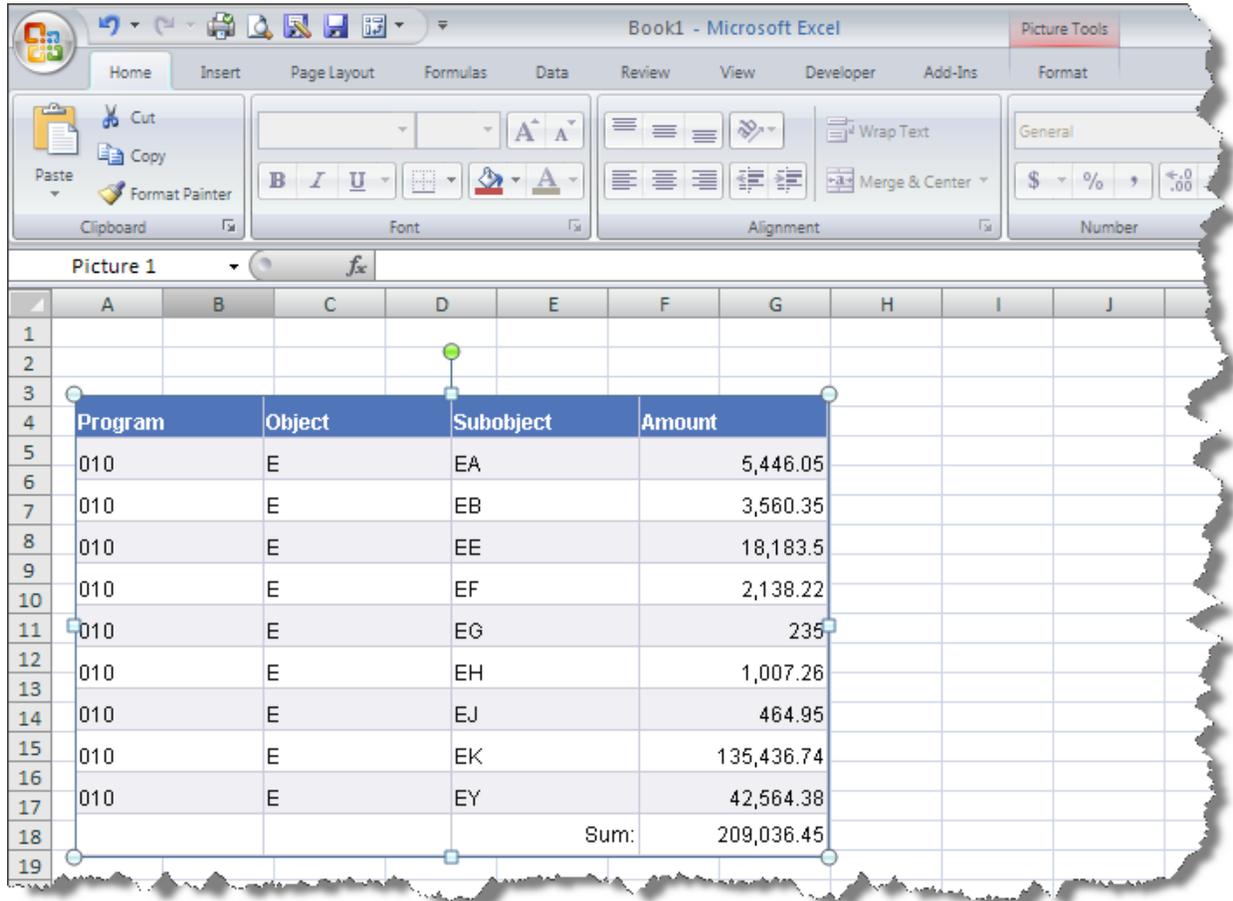
First select the Report Block by moving your cursor to the edge of your report until you see  on the edge of you report block and left click.



Once you have the Report Block selected right click on the gray bar and select copy from the drop down menu.



You can now paste you data into the document of your choice.



Chapter 7–Using Sections, Breaks and Sorts

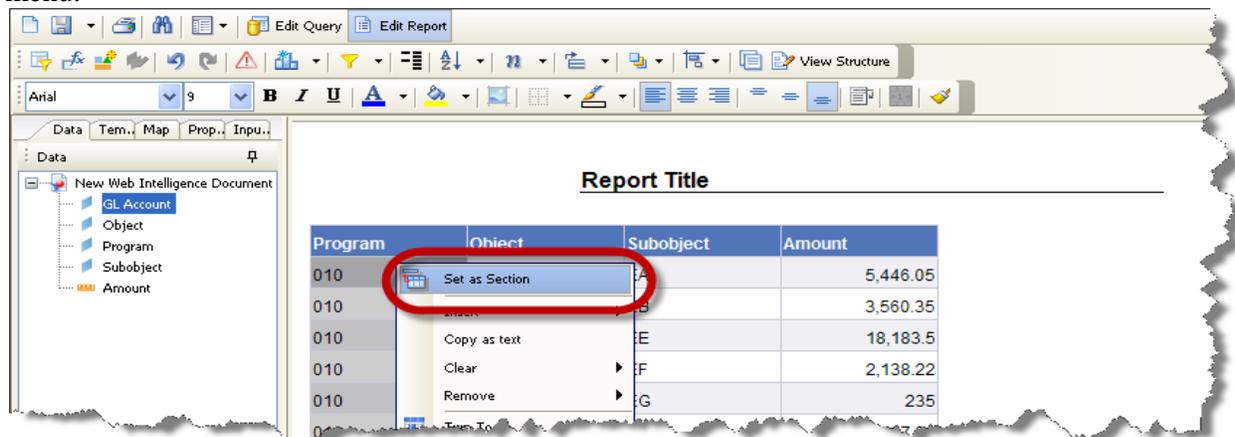
This chapter explains how to use sections, breaks, and sorts to group and organize data on reports, making the reports easier to read and navigate.

Create a Section

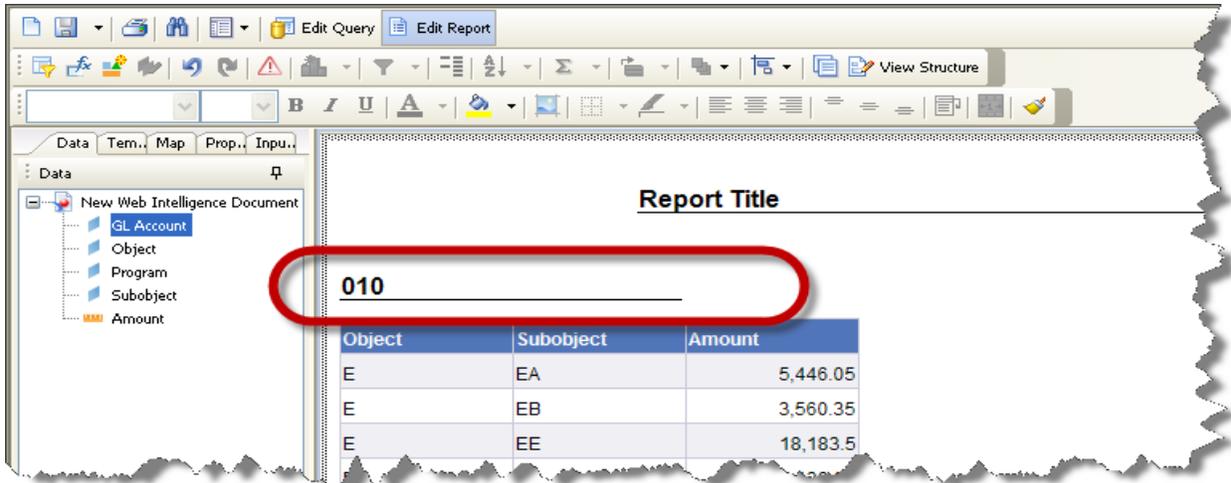
Sections in a report group related data together, so it is easier to navigate. For example, you might want a report that groups all data for each Program into a separate section, with totals for each program. A section consists of a section cell and the section data itself. The section cell is a single cell, called a free-standing cell, displaying a value for the selected dimension (e.g., a Program code). The section data would be a table containing the coding elements and amounts for each selected dimension.

The following report displays Amounts by Program, Object, and Subobject. Let's create a section by Program.

Right Click on the data in the Program column and select “Set as Section” from the drop down menu.

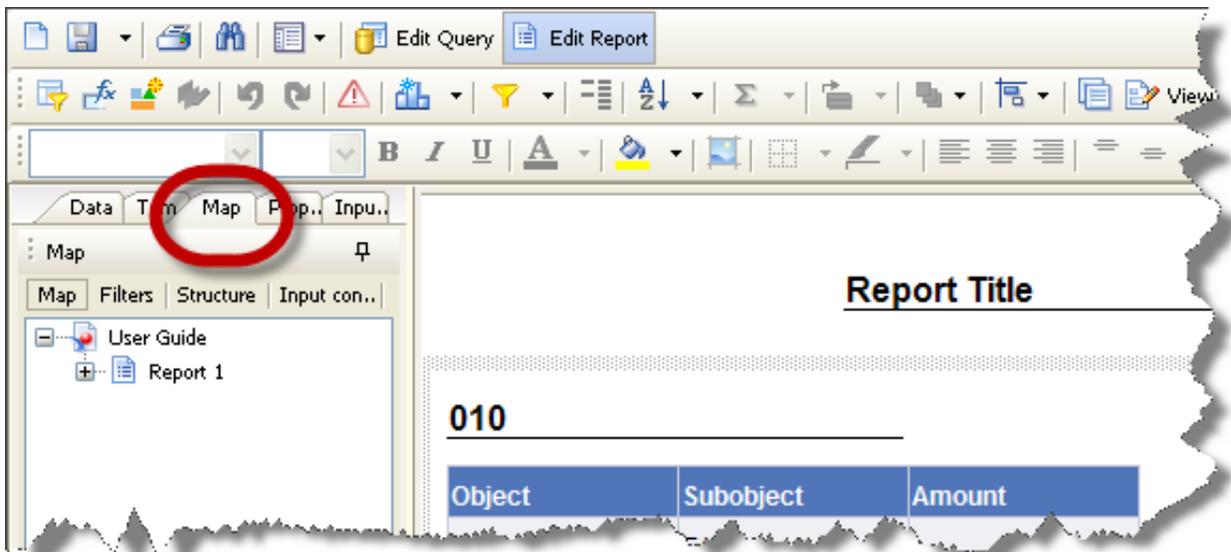


A section by Program is created. **Note:** Scroll down the screen to see the rest of the Program sections.

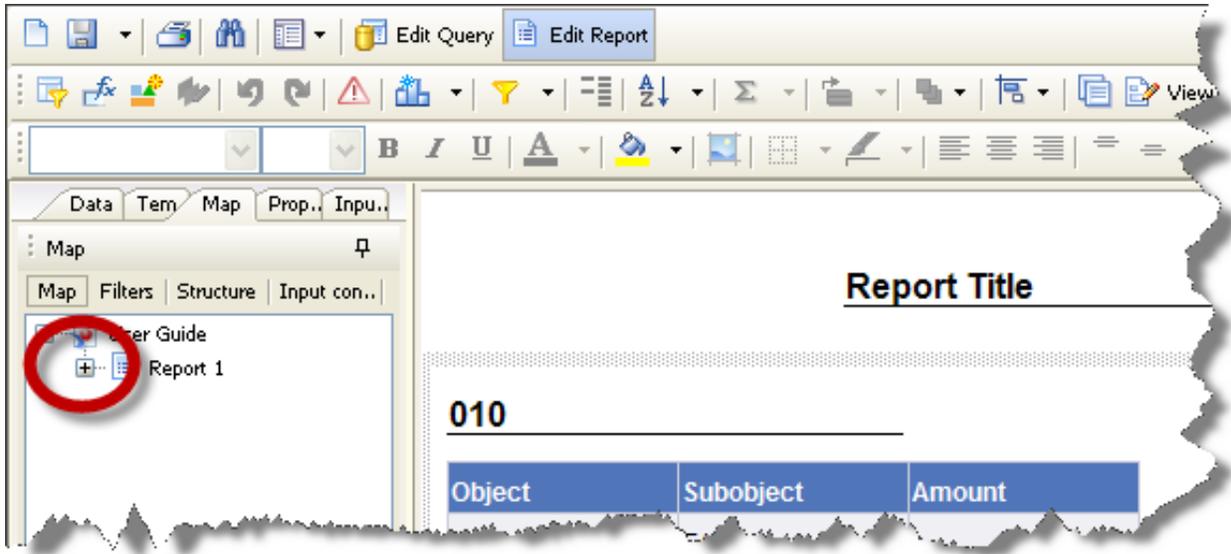


Navigating From Section to Section

You can navigate from section to section within in your report by clicking on the Map tab in the report manager.



Expand the “+” next to Report 1



You can now click on the section you need to navigate directly to.

The screenshot displays the SAP Business Intelligence Web Intelligence interface. On the left, the 'Map' pane shows a tree structure under 'User Guide' with 'Report 1' expanded. A red rounded rectangle highlights a list of report sections: 010, 020, 030, 040, 050, 060, 070, 080, 083, 090, 200, 850, and 900. The main report area shows a title 'Report Title' followed by a section header '010'. Below this is a table with three columns: Object, Subobject, and Amount.

Object	Subobject	Amount
E	EA	5,446.05
E	EB	3,560.35
E	EE	18,183.5
E	EF	2,138.22
E	EG	235
E	EH	1,007.26
E	EJ	464.95
E	EK	135,436.74
E	EL	

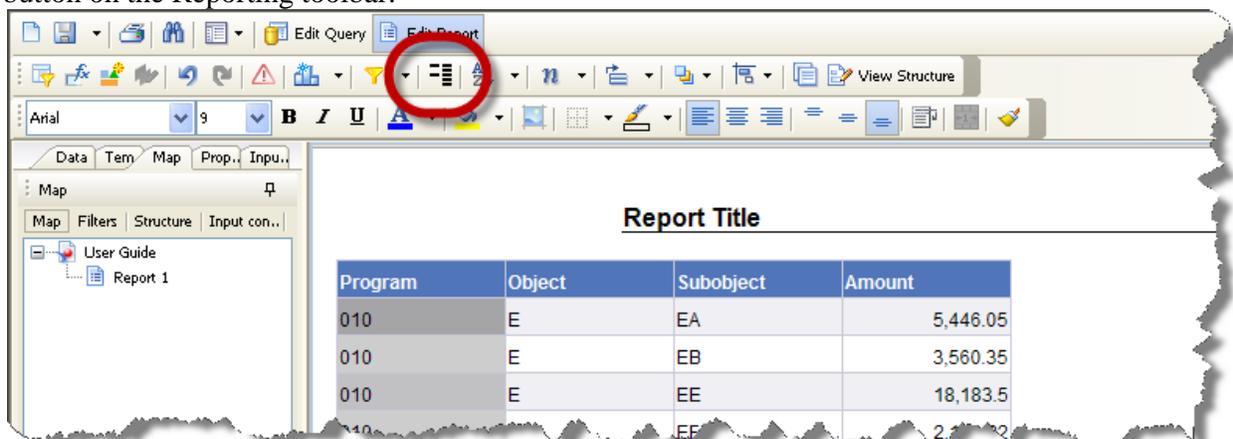
Helpful Hint: You can also use the map to navigate from Report to Report by clicking on the title or section of a different report.

Create a Break

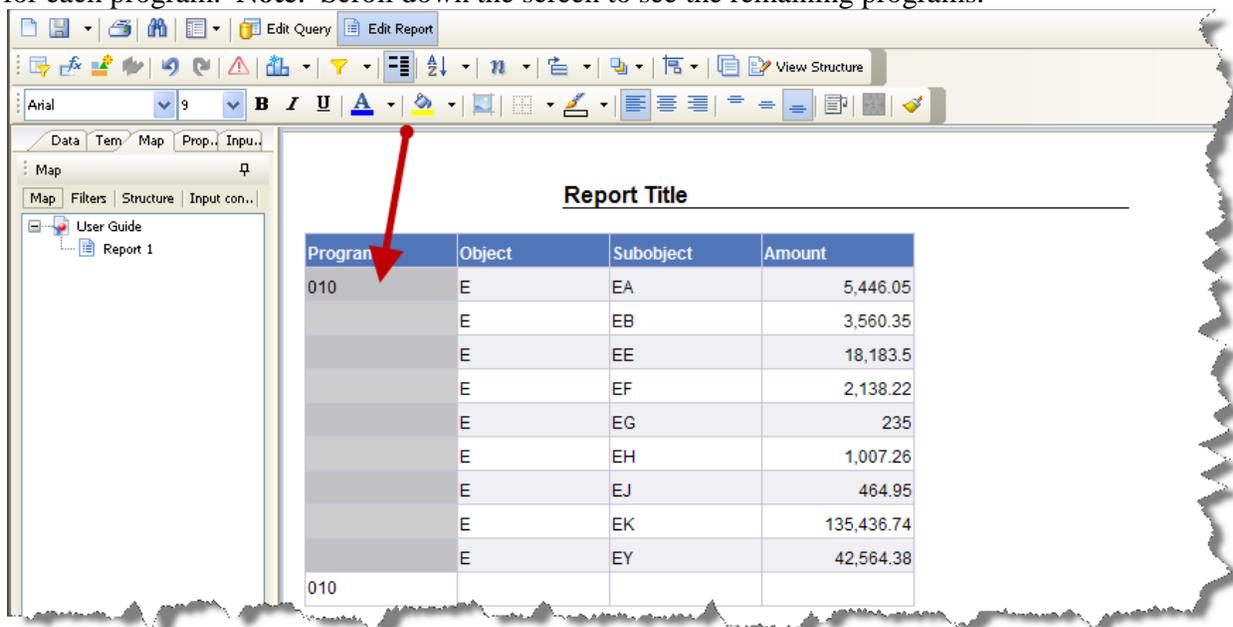
A break divides a large table into smaller sub-tables based on a selected dimension value. Using a break, you can display subtotals by the specified value, as well as a grand total for all values. When using a break, the data remains in one block. When using a section, the data for each section is a separate block. In a block, the data is automatically sorted in ascending order by the dimension values when a break is inserted, but you have the option to change the sort order.

The following report displays Amounts by Program, Object, and Subobject. Let's create a break by Program.

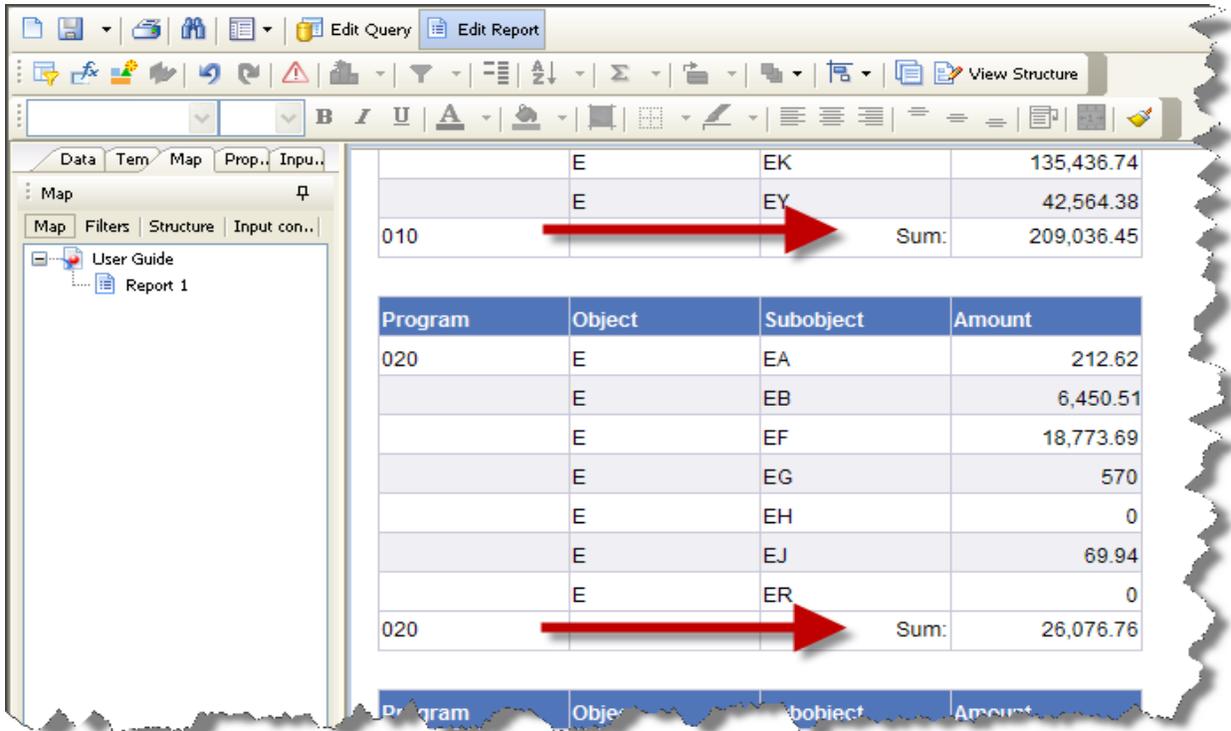
Click on a cell in the **Program** column to highlight the column. Click on the **Insert/Remove Break** button on the Reporting toolbar.



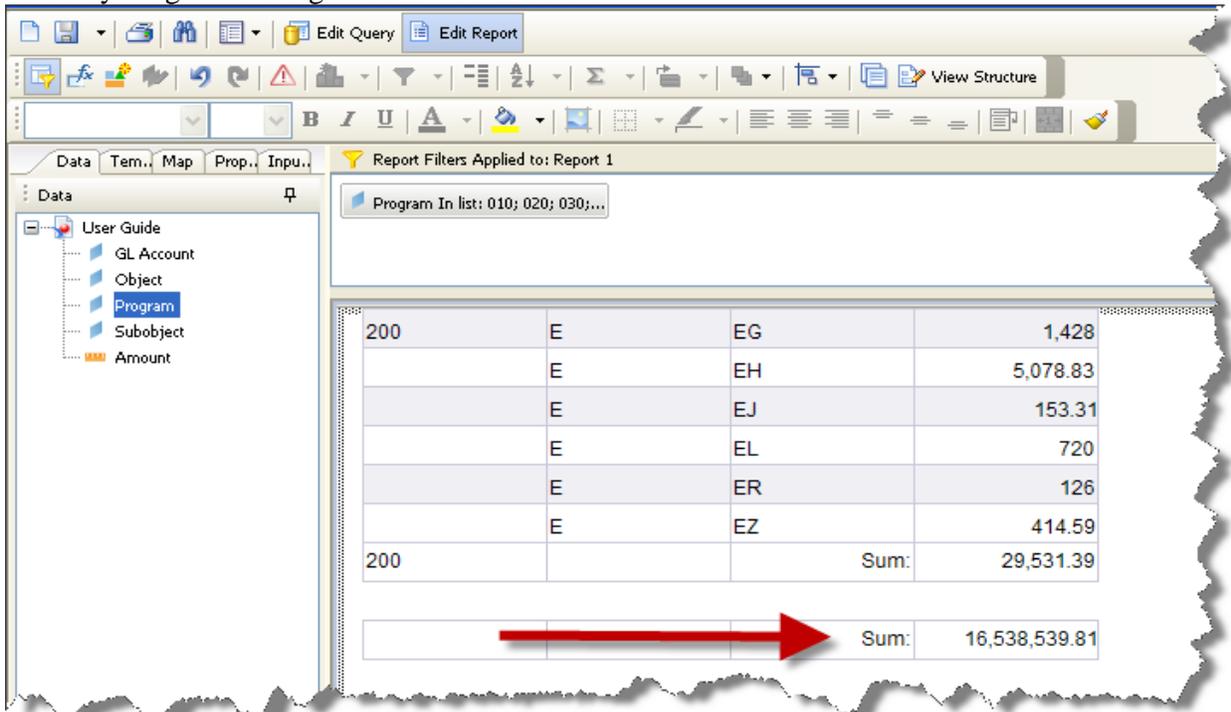
The tool creates a break by each Program. Note how the table is split into mini-tables, one mini-table for each program. **Note:** Scroll down the screen to see the remaining programs.



You can insert a Sum calculation for the Amount column to obtain totals for each Program and a grand total for all Programs. Select the Amount column, and then click on the Sum button from the Reporting toolbar.



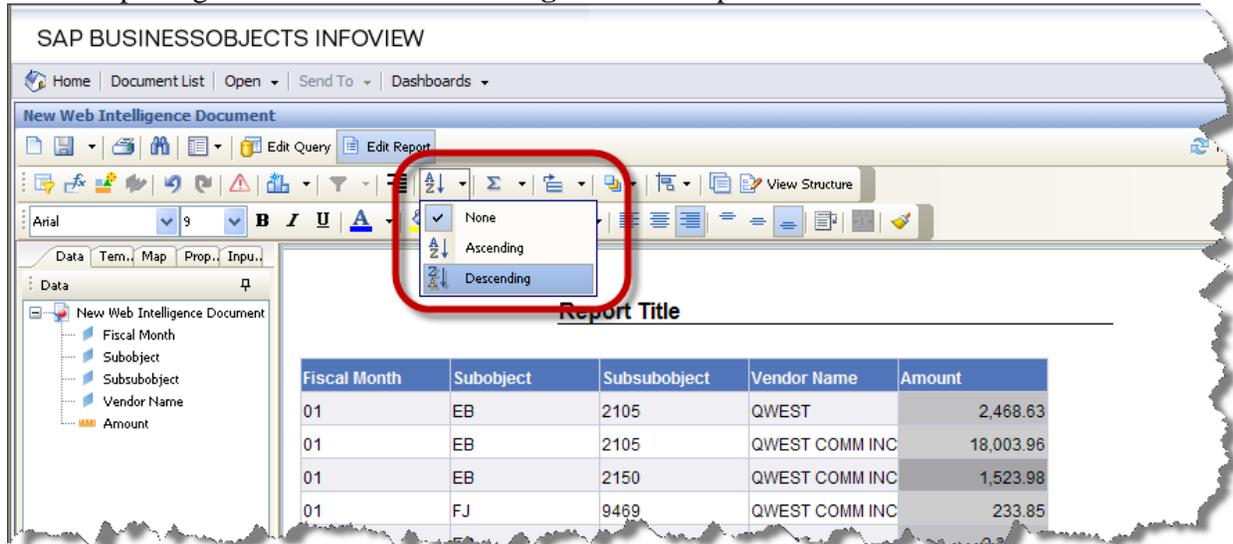
Totals by Program and a grand total are calculated.



Using Sort Feature

You can use the Sort feature to organize data on a report. You can apply sorts to tables or to section cells. Sorts can be used with any dimension, detail or measure in a table.

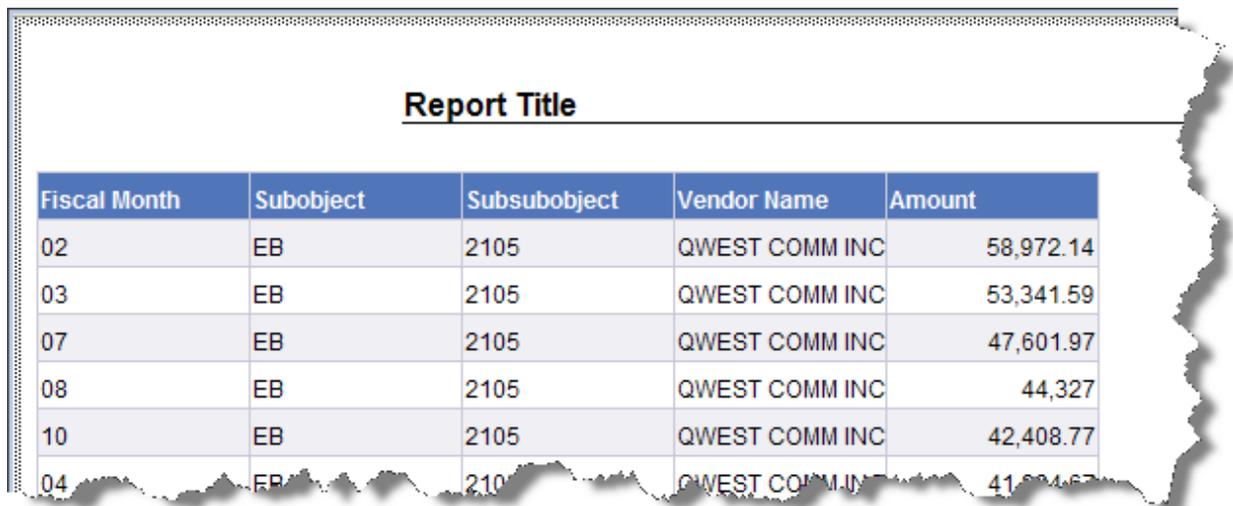
We will sort the data so the Amount column displays from highest to lowest. Select a cell in the Amount column to highlight the column. Click the down arrow by the **Apply/Remove Sort** button on the Reporting toolbar. Select **Descending** from the drop-down list.



The screenshot shows the SAP BusinessObjects InfoView interface. The 'New Web Intelligence Document' toolbar is visible, with the 'Apply/Remove Sort' button highlighted. A dropdown menu is open, showing the 'Descending' option selected. Below the toolbar, a table is displayed with the following data:

Fiscal Month	Subobject	Subsubobject	Vendor Name	Amount
01	EB	2105	QWEST	2,468.63
01	EB	2105	QWEST COMM INC	18,003.96
01	EB	2150	QWEST COMM INC	1,523.98
01	FJ	9469	QWEST COMM INC	233.85

The data is sorted by the values in the Amount column, from highest to lowest.



The screenshot shows the report after sorting. The data is sorted by the Amount column in descending order. The table is titled 'Report Title' and contains the following data:

Fiscal Month	Subobject	Subsubobject	Vendor Name	Amount
02	EB	2105	QWEST COMM INC	58,972.14
03	EB	2105	QWEST COMM INC	53,341.59
07	EB	2105	QWEST COMM INC	47,601.97
08	EB	2105	QWEST COMM INC	44,327
10	EB	2105	QWEST COMM INC	42,408.77
04	EB	2105	QWEST COMM INC	41,624.67

Chapter 8 – Working with Multiple Queries

You can define more than one query in a single document. This is especially useful if you want to use data from more than one universe in a single document, or use data in different formats from a single universe. You can present information on one or multiple reports, depending on your business need.

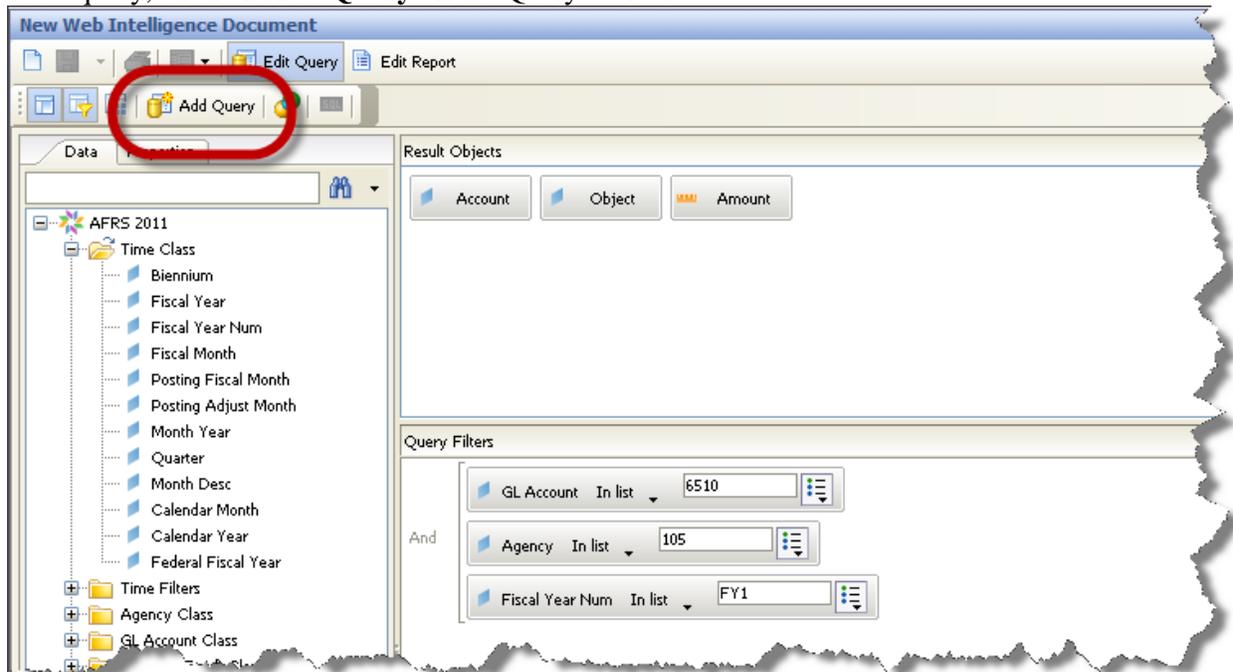
This chapter explains how to

- q add a new query
- q rename a query
- q duplicate a query
- q move a query

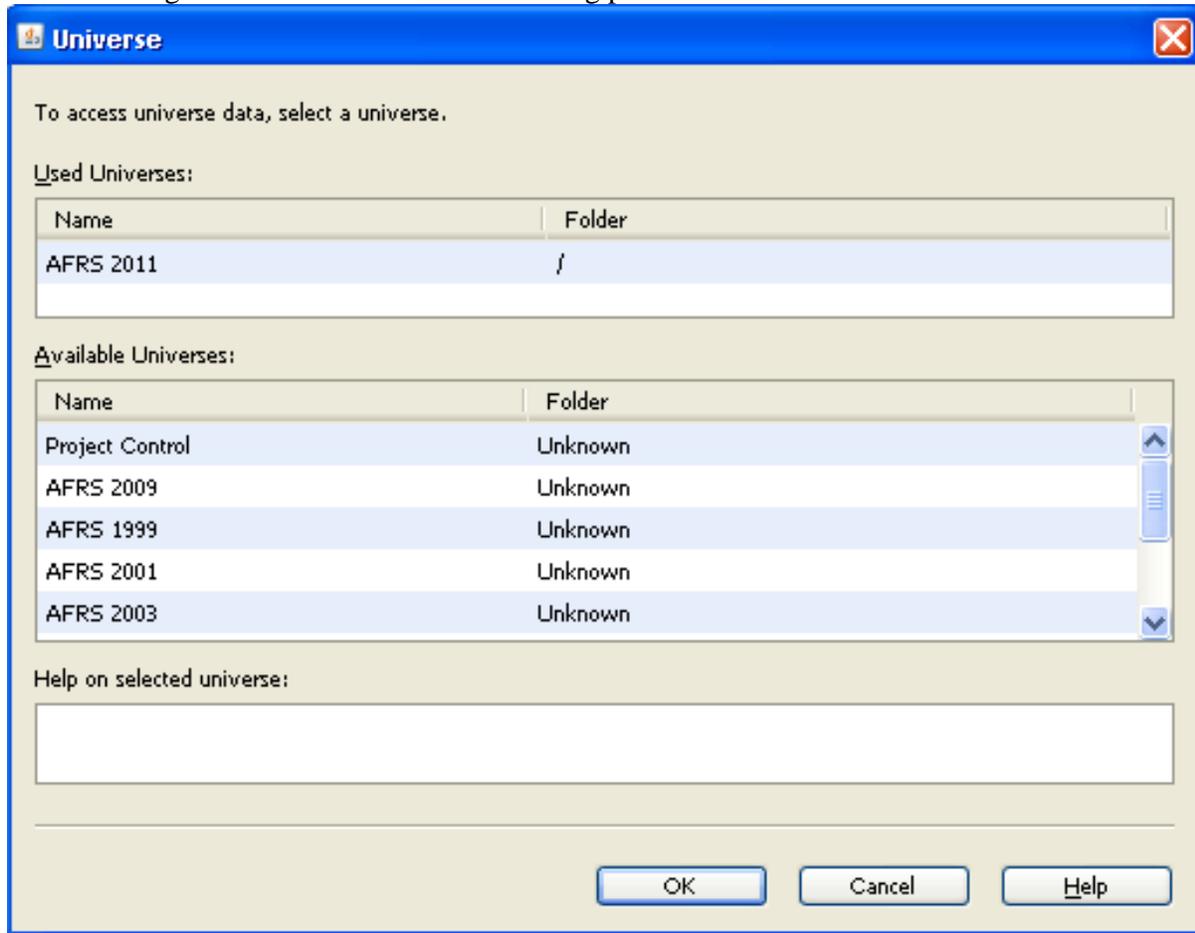
Note: This chapter explains how to do the above for a document that already includes one query.

Add a Query

This section explains how to add a query to an existing document. In the example below, a simple query was created to extract cash expenditures by Fund and Object for agency 105 for the first fiscal year of the biennium. The Query View window currently appears as illustrated below. (Note: The Edit Query button is depressed when in Query View.) Let's assume we want to add a query that provides cash expenditure data by Fund and Object for the first fiscal year of another biennium. To add a query, click on **Add Query** on the Query toolbar.

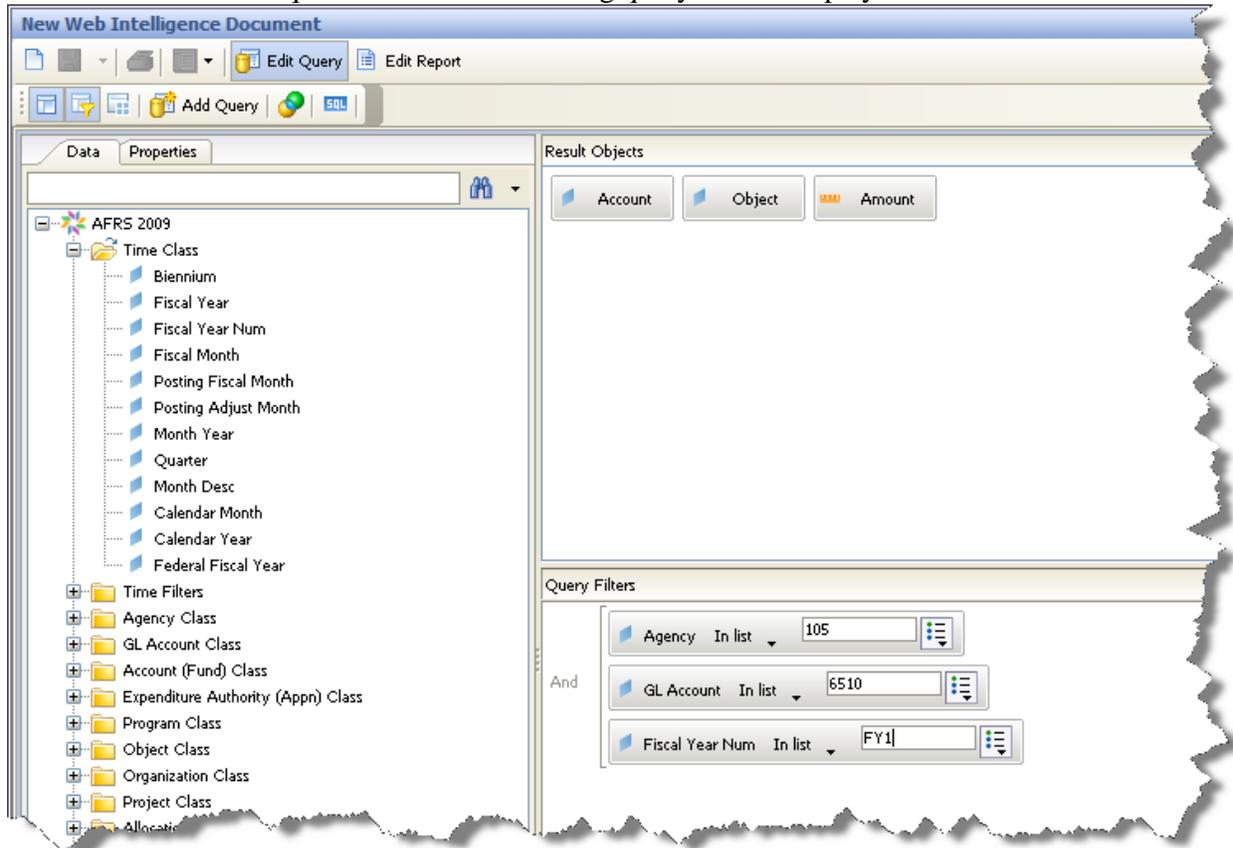


The following dialog box displays, prompting you to select a universe. Note that there are two places for selecting a universe. The top window displays the universe already used in the existing documents. The bottom window displays all the available universes the user can access. Note: You can use the right scroll bar to view the remaining pick list values in the second window.

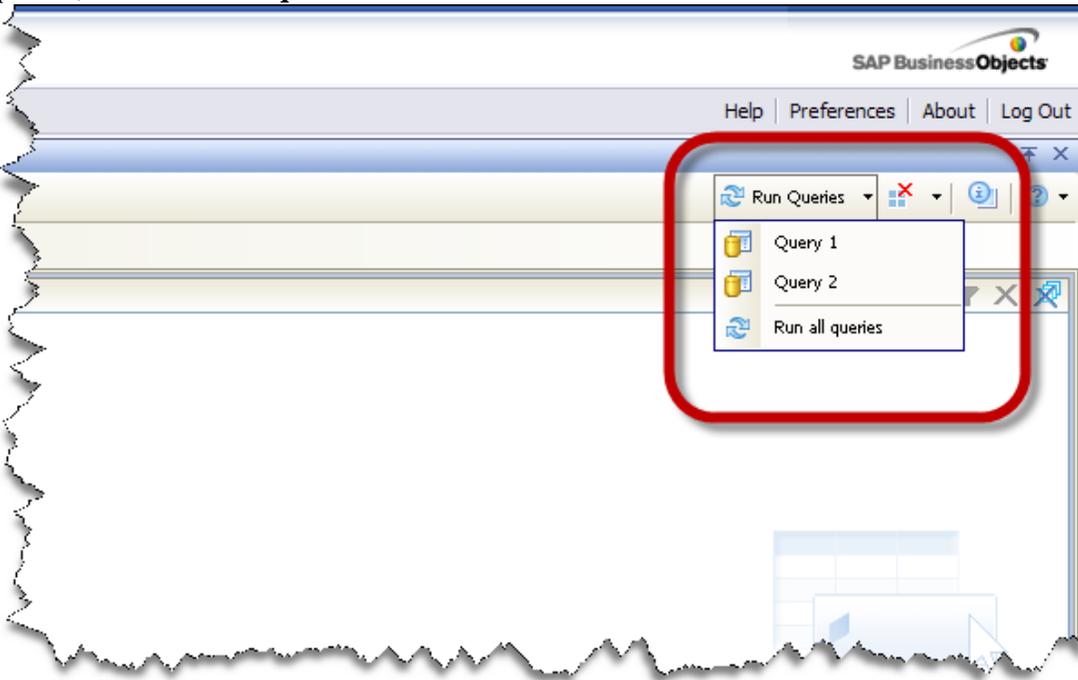


Highlight a universe and then click **OK**. A new Query View window will display with a tab in the lower left corner labeled "Query 2". Note that there is also a tab for the original query entitled "Query 1".

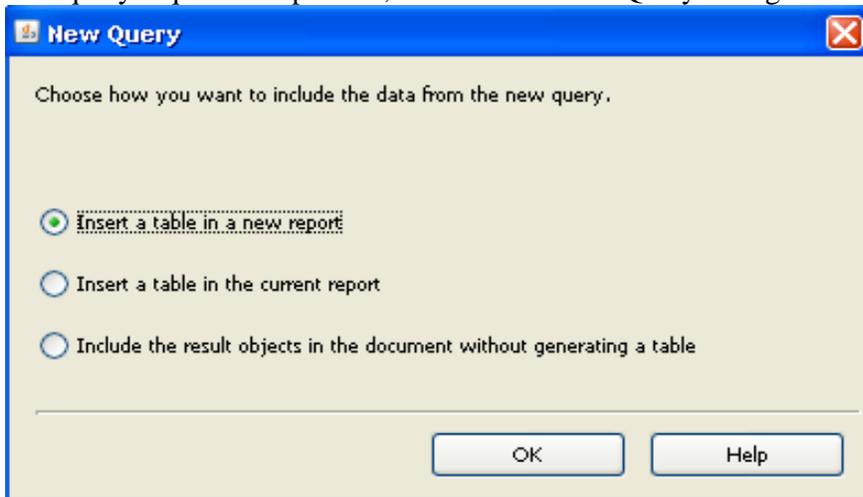
Create a new query using the similar fields as the original query: Drag Fund, Object, and Amount to the Result Objects pane. For the Query Filters, set Agency equal to 105, GL Account equal to 6510, and Fiscal Year Num equal to FY1. The resulting query should display as shown below.



You can choose to run only the newly added query by clicking on **Run Queries** in the upper left corner of the toolbar and selecting **Query 2** from the drop-down box. If you wish to run both queries, select **Run all queries**.



The query request will process, and then the New Query dialog box will appear as shown below.



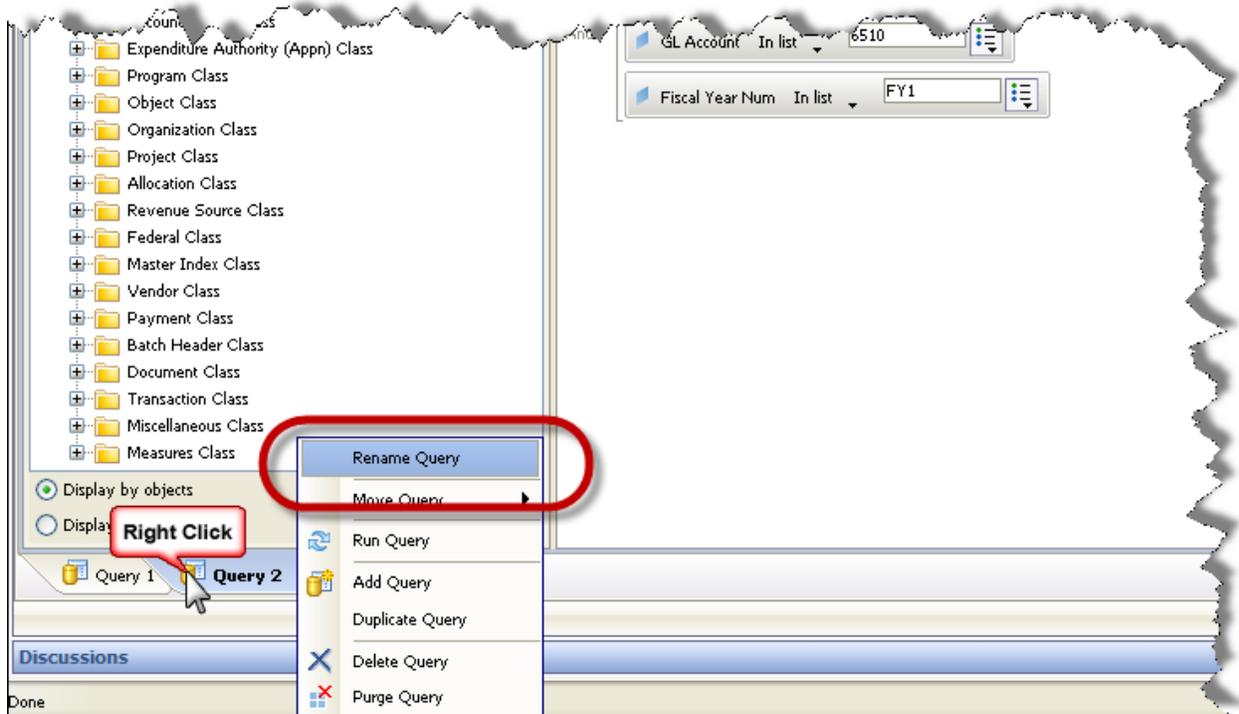
Here you must choose how you want to include the data from the new query into the document. The options are as follows:

1. **Insert a table in a new report:** display the data on a new report in the document.
2. **Insert a table in the current report:** displays the data on a currently selected report in a new table
3. **Insert the results object in the document without generating a table:** includes the data in the document without generating a table. You can then add a report later.

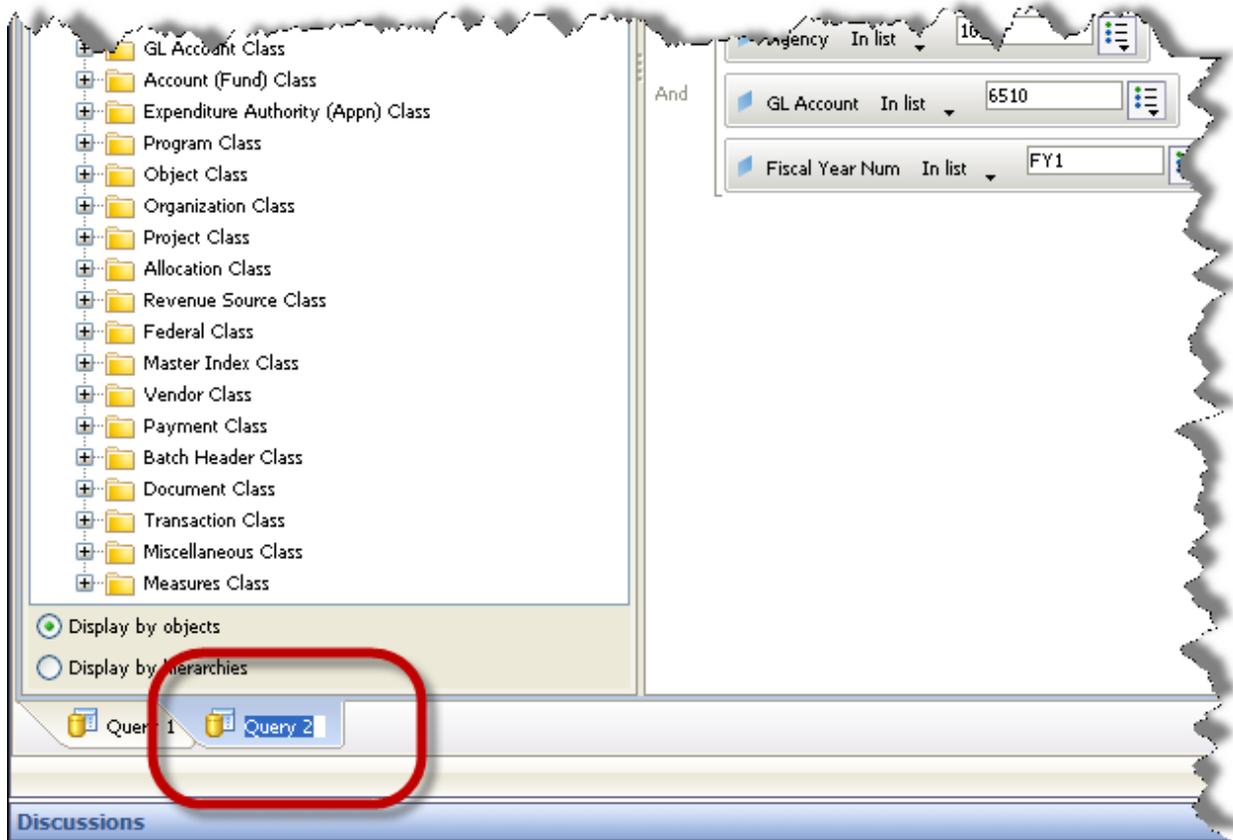
Select the desired option. The query will process to completion and display the report data based on the option selected.

Rename a Query

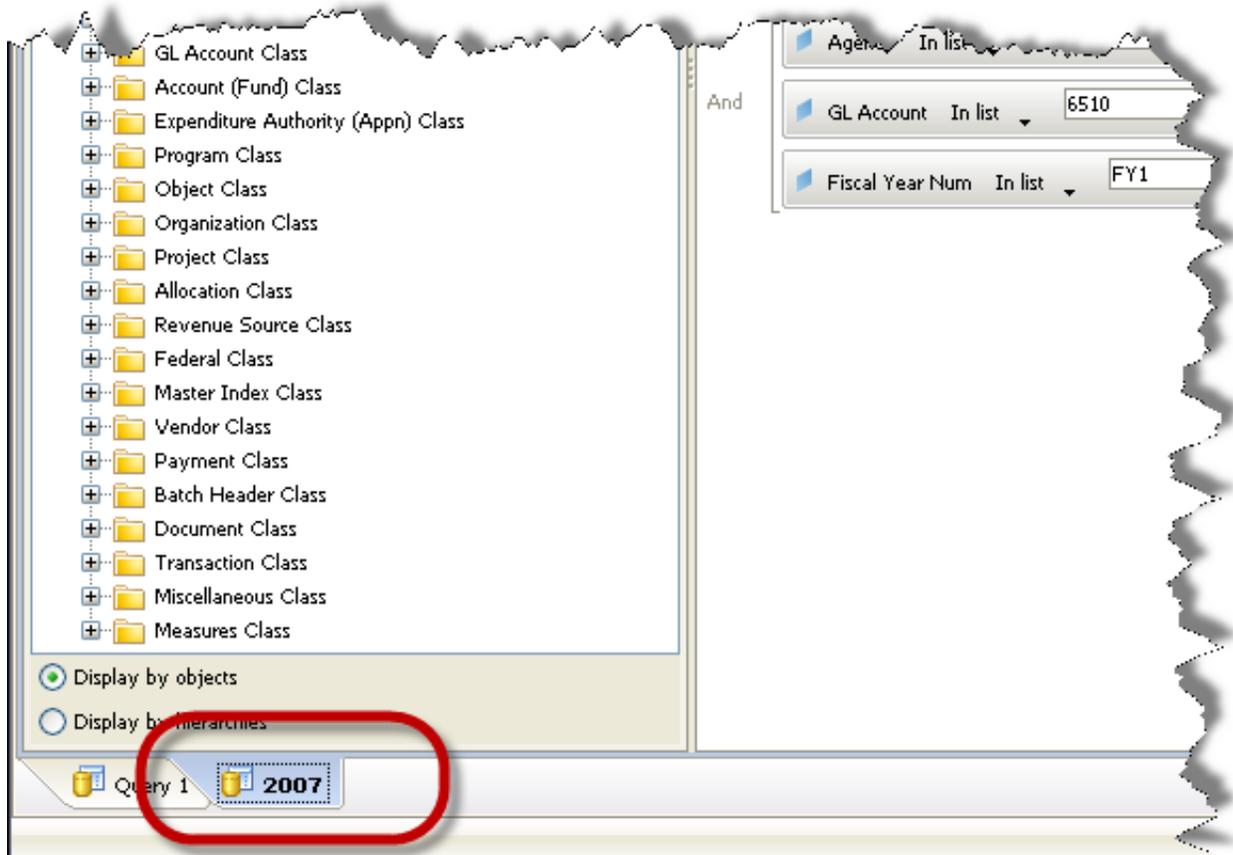
Web Intelligence labels each query in a document using sequential numbers: e.g., Query 1, Query 2, displayed on the query tabs in the lower right corner of the Data tab. You can change query names to more meaningful titles, if you wish. To rename a query, make sure you are in Query View mode. Right-click on the tab of the query you want to rename, located on the bottom left side of the screen. The sub-menu displayed below will appear. Click on **Rename Query**



The name of the query is now highlighted. Enter a new name for the query and press enter.



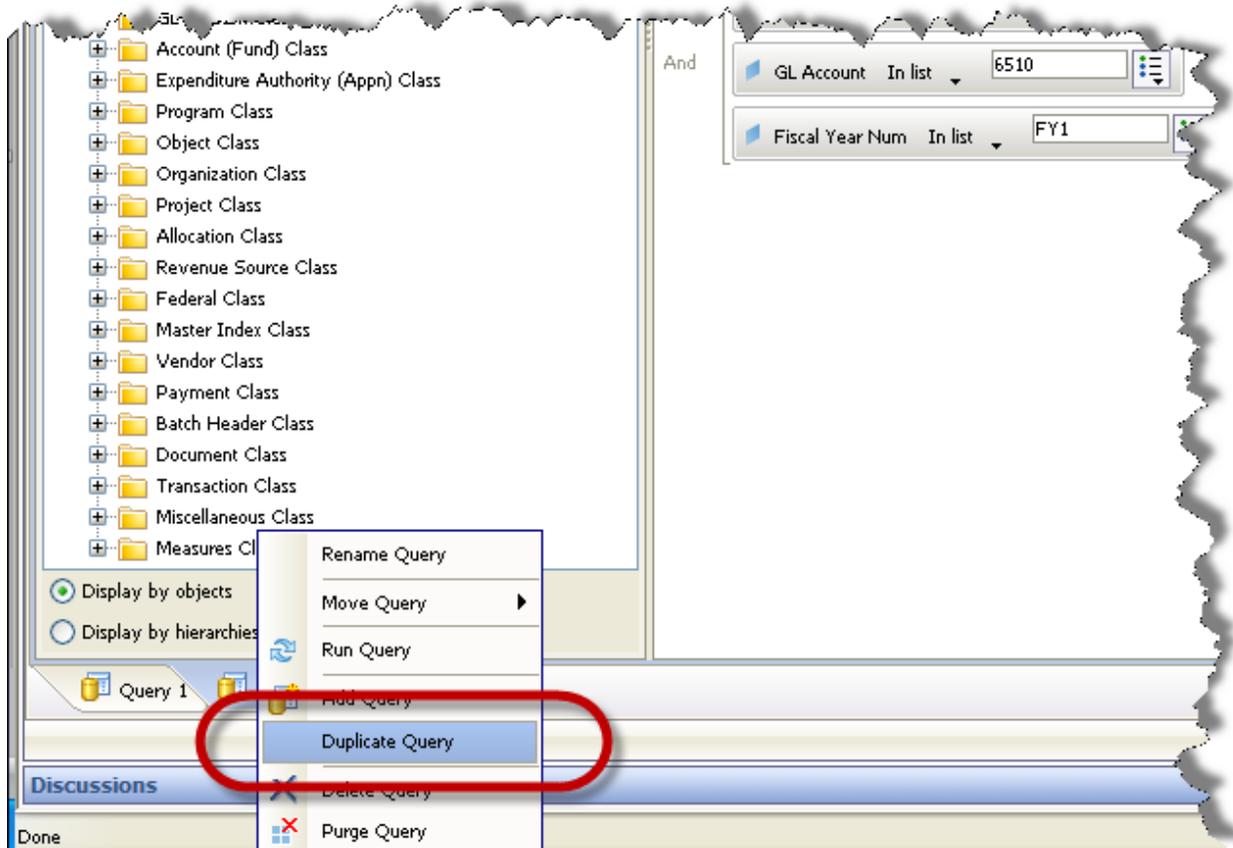
The tab will display the newly entered name.



Duplicate a Query

You can duplicate an existing query already built into a document. You can then modify the duplicated query, instead of having to build a query from scratch.

Make sure you are in Query View window. Right-click on the tab of the query you want to duplicate. From the sub-menu that appears, choose **Duplicate Query**. The tool creates a duplicate query and adds it to the report panel.

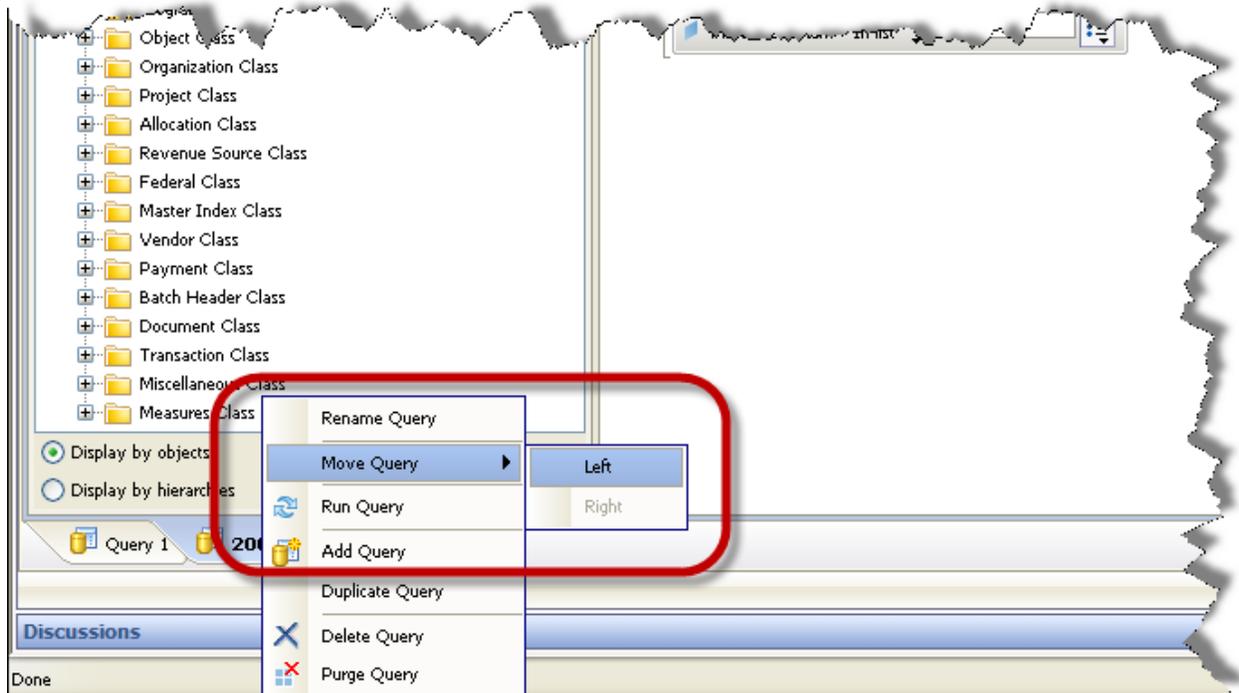


Note: All duplicated queries must use the same universe. If the universe is changed for one duplicated query it will change the universe for all other related queries.

Move a Query

You can change the order in which the queries run by moving them before or after one another. This can be useful if any of the queries include prompts, or if the order in which the queries are run is important.

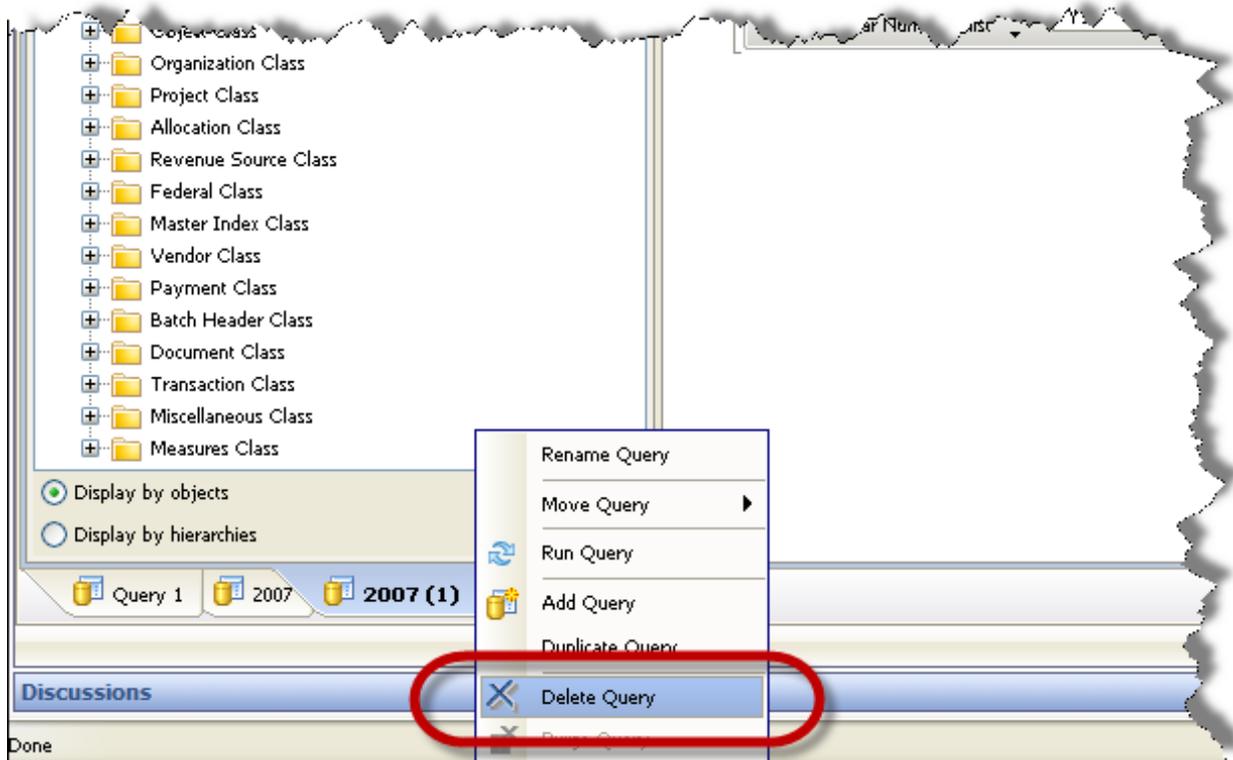
To move a query, first ensure you are in the Query View window. Right-click the tab of the query to be moved. Select **Move Query** from the sub-menu that appears.



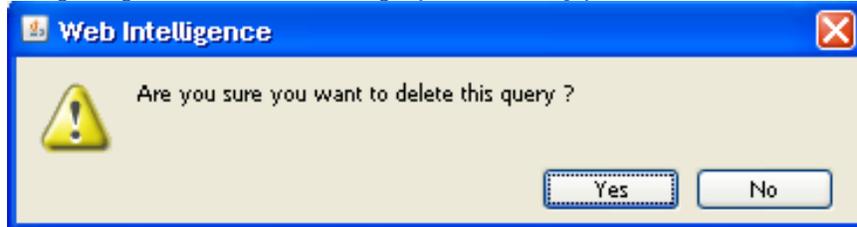
Select the direction to move the query. In the example above, the selected query is moved to the left.

Delete a Query

You can delete a query by using the same sub-menu as the previous examples. From the Query View window, right-click on the tab of the query to be deleted. Select the **Delete Query** option from the sub-menu pick list values.



The prompt box below will display confirming you want to delete the query.



Select **Yes**. The query is deleted.

Chapter 9- Merge Dimensions

Merge Dimensions Described

The tool provides a powerful feature for merging common dimensions from multiple queries. When merging dimensions, the tool creates a new dimension that contains all the values from the original dimensions that comprise the merged one. The newly merged dimension can be used like any other object on a report.

For example, assume you have a report using the AFRS 2005 universe that displays Account (formerly Fund), Object, and Amount. You have another report in the same document that displays similar information from the 2007 AFRS universe. You can merge the common dimensions, Account and Object, and use these merged dimensions to show data from both biennia on the same report.

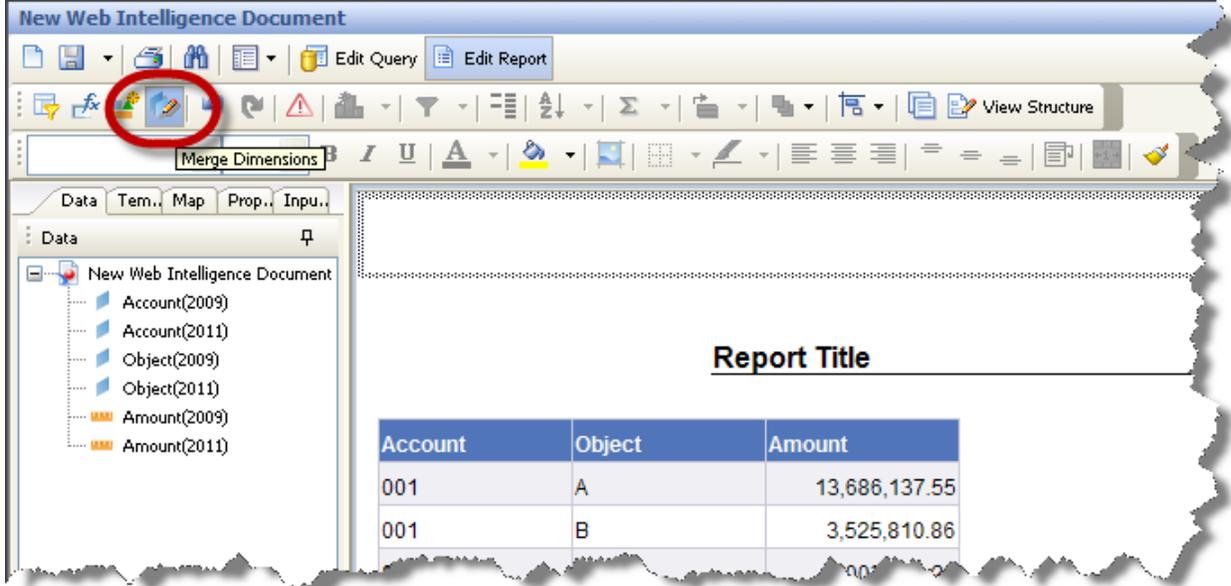
One restriction the tool imposes on merged dimensions is that they must be of the same data type; e.g., character data. However, you should make sure you merge dimensions that are truly related. It would not make sense to merge a dimension for Program with one for Object, for example.

Although merged dimensions usually have the same name in both universes, this is not required. So you could merge a dimension for Account in an AFRS universe with a dimension for Fund in another universe, as long as they refer to the same data definition.

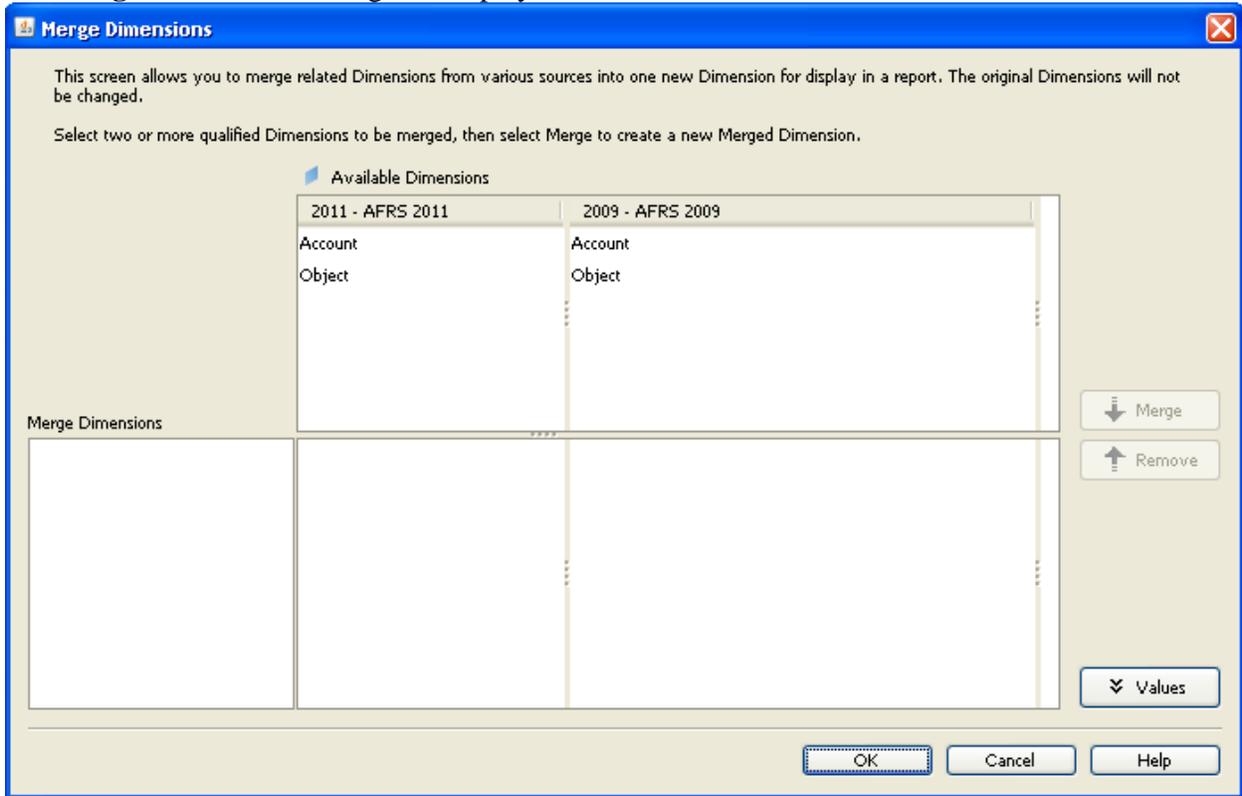
It is also important to merge all common dimensions across queries, in order to produce valid report results. Refer to the example above where Account and Object are displayed in each of the reports for the two biennia. You would need to merge each of the common dimensions, Account and Object, in order to display the report data properly.

How to Merge Dimensions

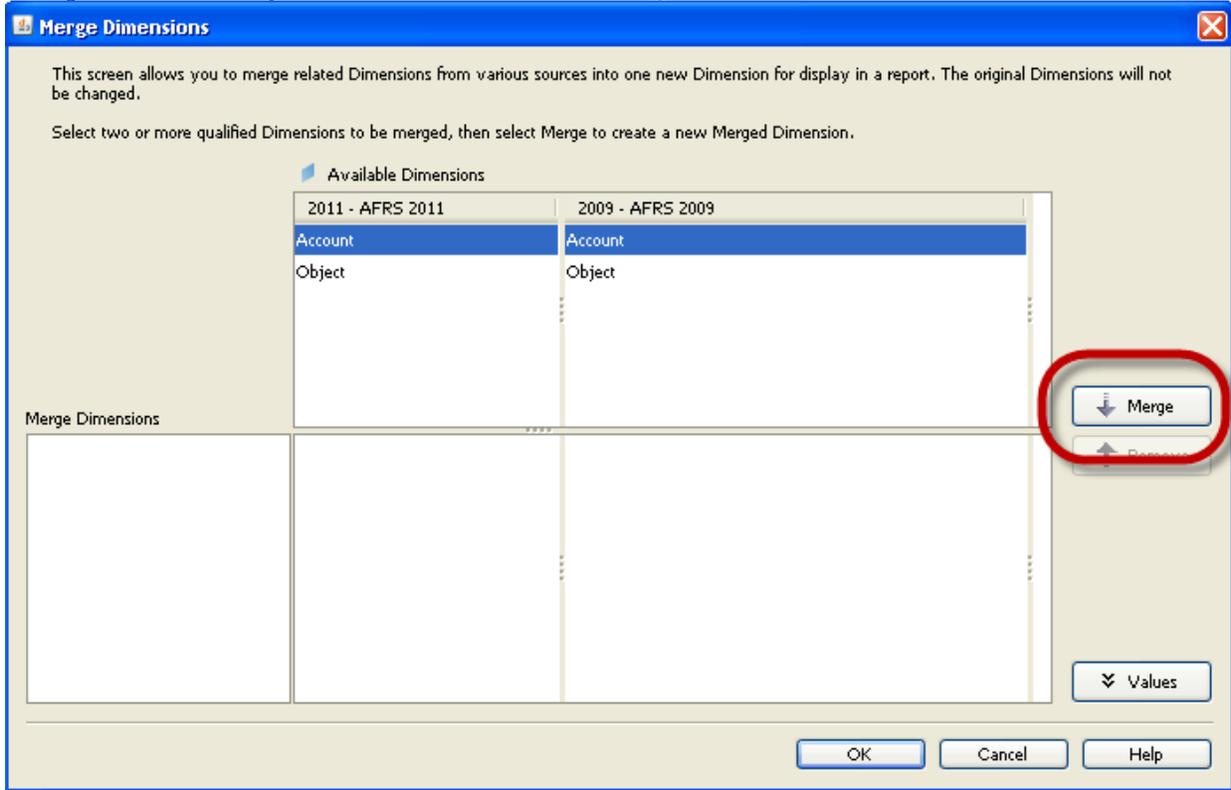
In order to use the Merge feature, you must be in the Report View window. The **Edit Report** window is depressed when in this window. Click on the **Merge Dimensions** button on the toolbar.



The **Merge Dimensions** dialog box displays.



Highlight the first dimension to be merged from the boxes at the top of the dialog box. For this example, we will merge Account first. Click on **Merge**.



The Create Merged Dimension dialog box appears. Click OK.

Edit Merged Dimension

Select a source dimension to provide default properties for the merged dimension:

Source Dimension

Account (2011 - AFRS 2011)

Merged Dimension Name

Account

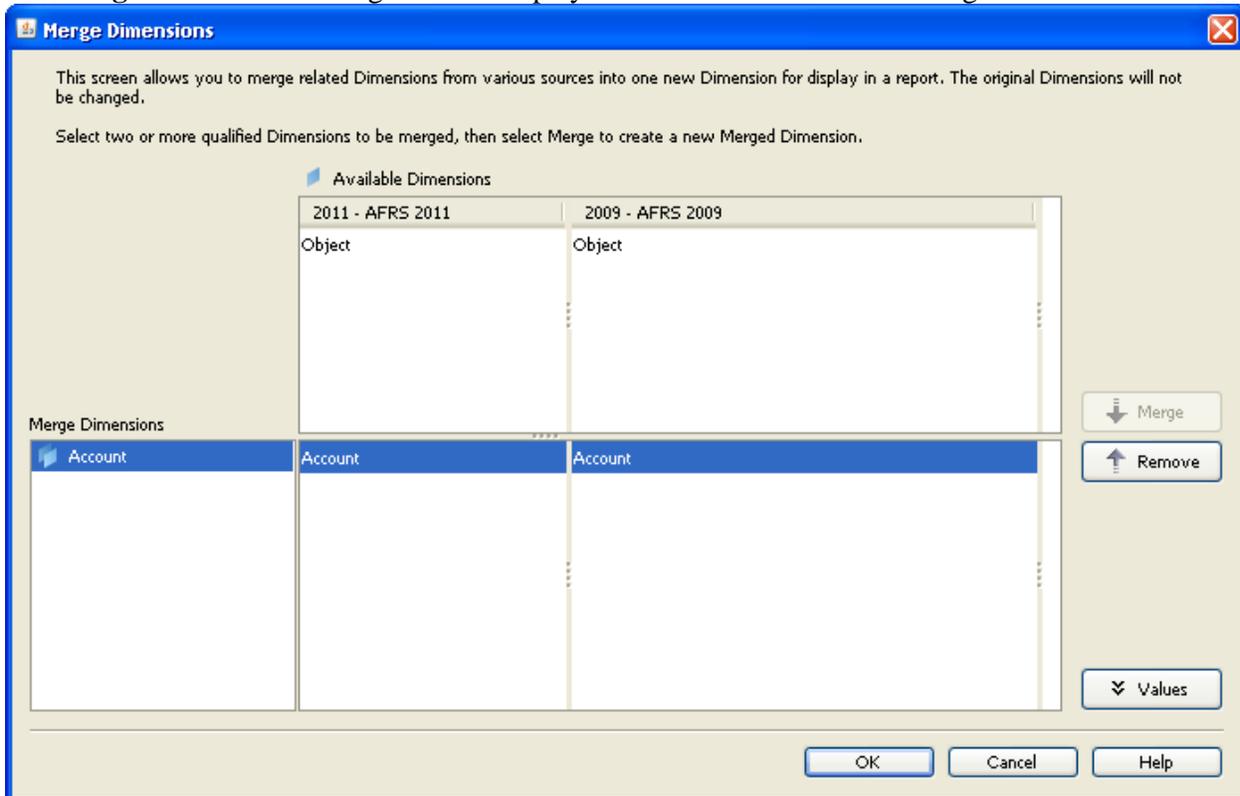
Description

Data type: string

Number Format:

OK Cancel Help

The **Merge Dimensions** dialog window displays. Click **OK** to close this dialog box.

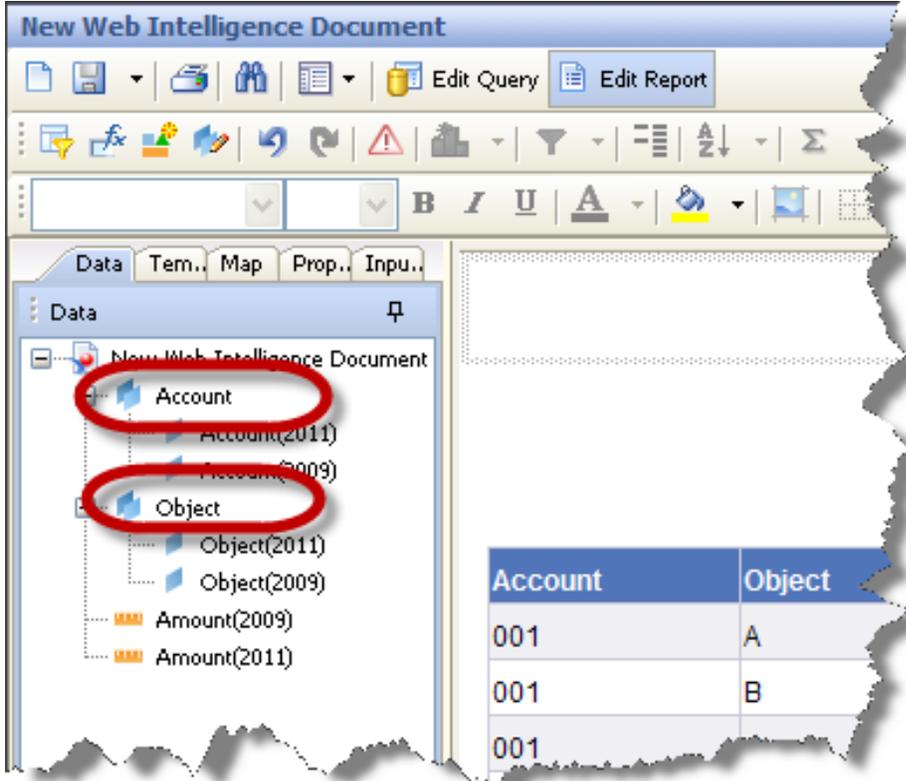


The Account dimension is successfully merged.

Since Object is also a common dimension for these two queries, this dimension must also be merged. Follow similar steps to merge the Object dimension.

1. Click on **Merge Dimensions** in the toolbar.
2. Select Object from both boxes at the top of the **Merge Dimensions** window and then click on **Merge**.
3. Click **OK** to close this window.
4. Click **OK** to close the **Merge Dimensions** window.

The Object dimension is successfully merged. In the **Data** tab, note how the merged dimensions (Account and Object for this example) display in the first level of the tree structure and the individual dimensions comprising each merged dimension display underneath in the second level. You can now use these merged dimensions in a report.

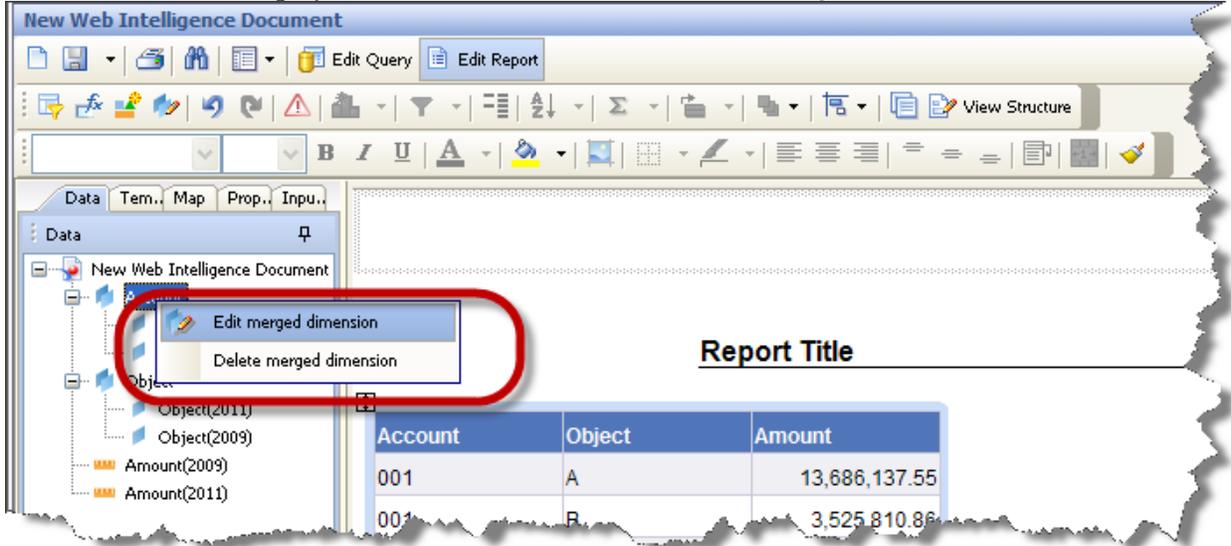


The screenshot shows the 'Data' tab in the Web Intelligence interface. The Data tree on the left displays a hierarchy where 'Account' and 'Object' are merged dimensions at the top level, each circled in red. Under 'Account', there are sub-items 'Account(2011)' and 'Account(2009)'. Under 'Object', there are sub-items 'Object(2011)' and 'Object(2009)'. Below the tree, a preview table is shown with the following data:

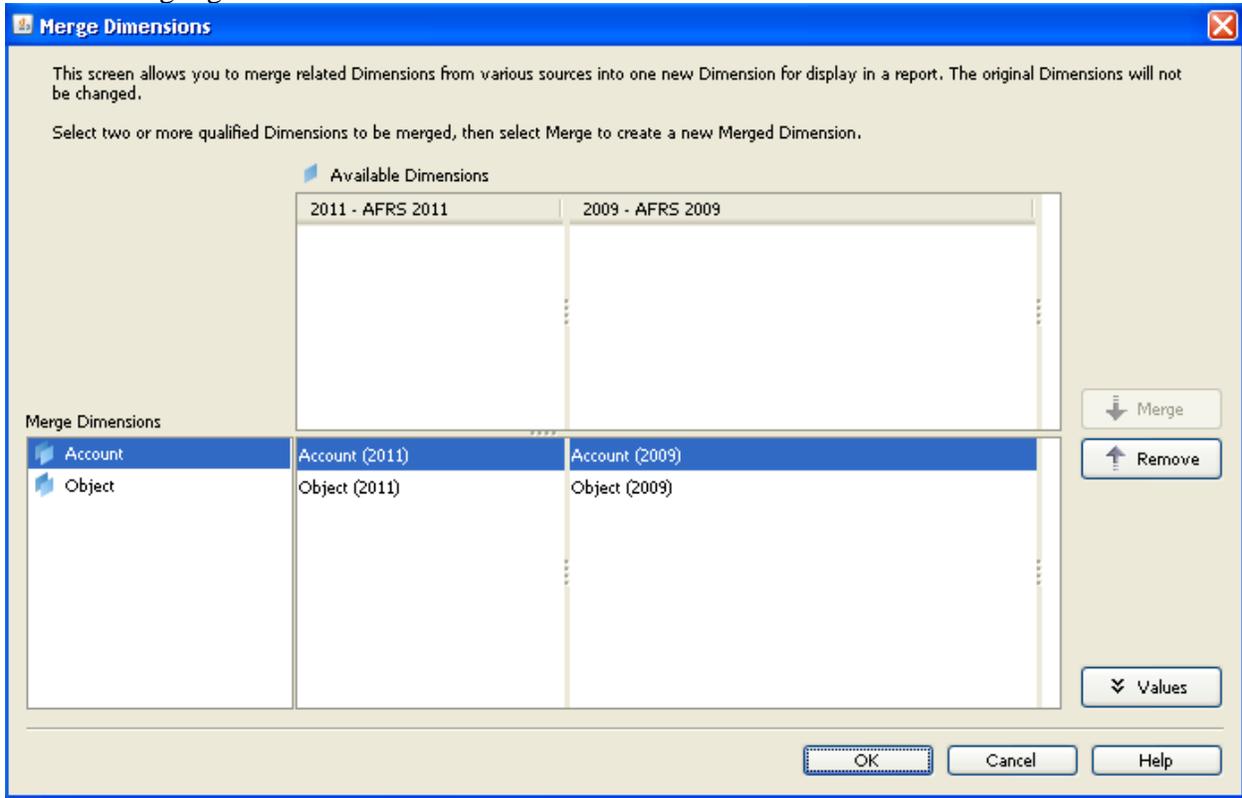
Account	Object
001	A
001	B
001	

Edit Merged Dimension

If needed, you can edit a merged dimension. Make sure you are in the Report View window. In the **Data** tab on the left side of the screen, highlight the merged dimension you wish to edit and right click. A sub-menu displays as illustrated below. Select **Edit merged dimension**.



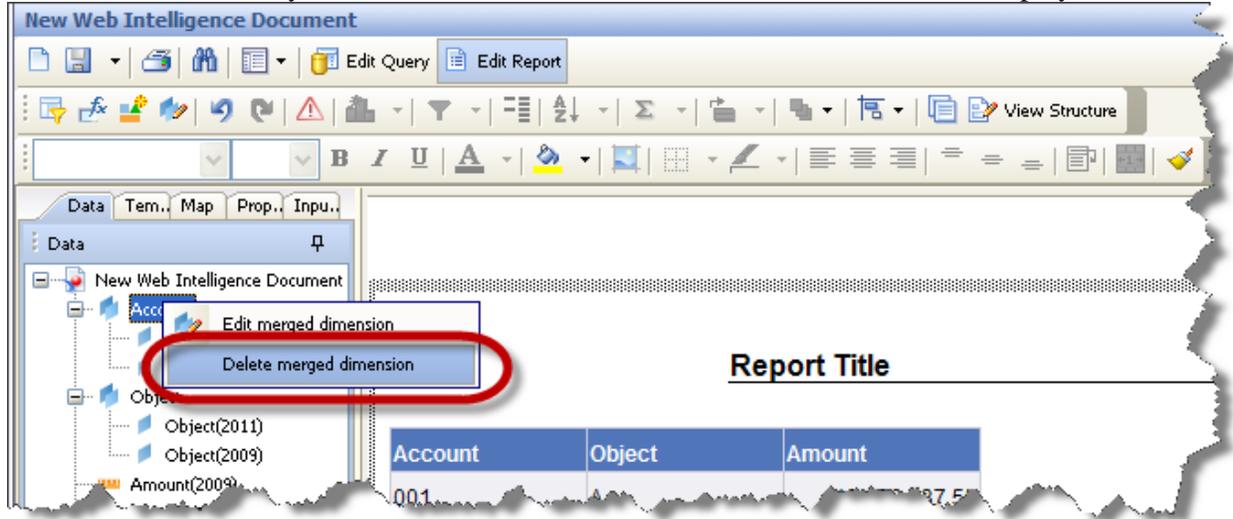
Select **Edit merged dimension**. The Merge Dimensions dialog box appears, with the selected dimension highlighted.



Double-click on the highlighted dimension in the **Merge Dimensions** column on the left. The Create Merged Dimensions dialog box displays. Make any desired changes in **Source Dimension**, **Merged Dimension Name**, or **Description** fields, and then click **OK**. Click **OK** to close the Create Merged Dimension screen, and then click **OK** to close the Merge Dimensions dialog box. The merged dimension is successfully edited.

Delete Merged Dimension

You can also delete a merged dimension. From the Report View window, highlight and then right-click on the dimension you wish to delete in the Data tab. The sub-menu below displays.



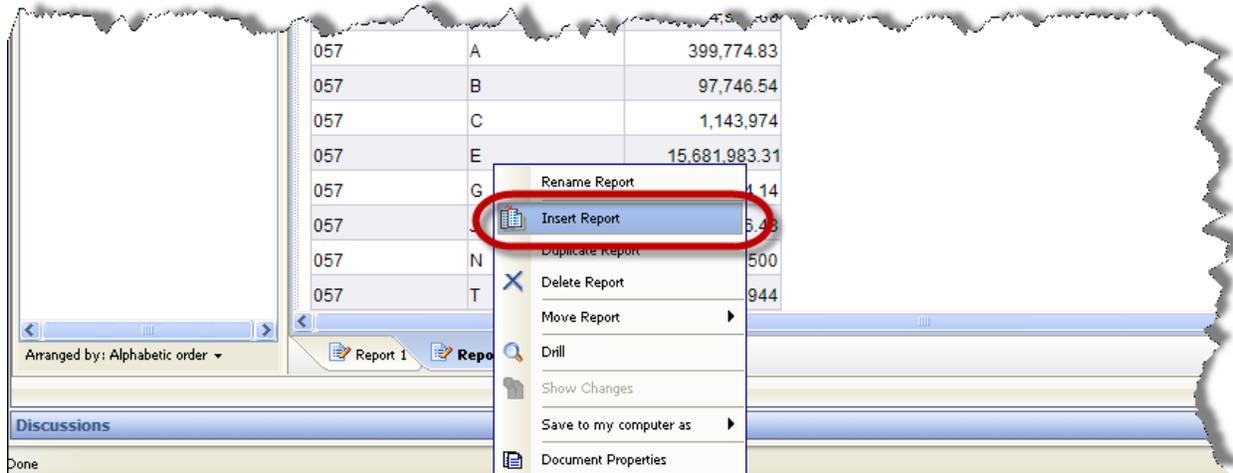
Select **Delete merged dimension**. The following prompt screen displays. Click **Yes** to delete the merged dimension.



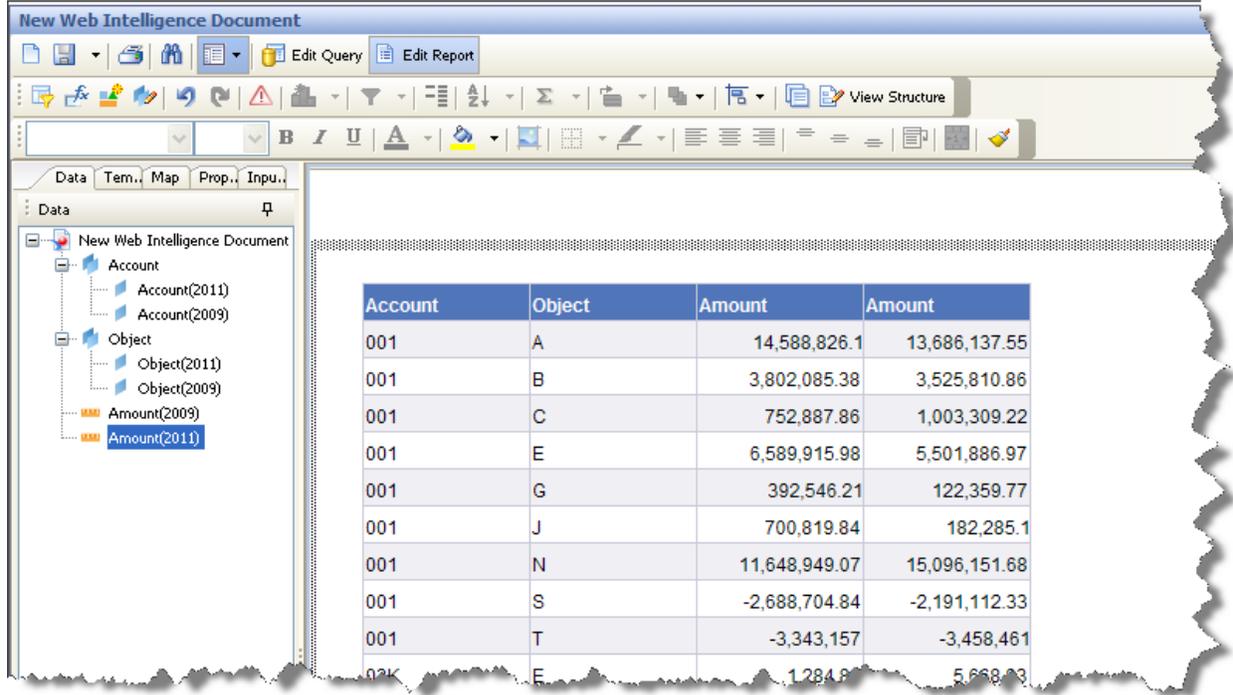
Using Merged Dimensions in Reports

After creating a merged dimension, you can then use it in a report just as you would any other object. As explained previously, merged dimensions appear in the Data tab. You can click on the "+" sign to expand each merged dimension and view its components. The following example illustrates how to use merged dimensions in a report.

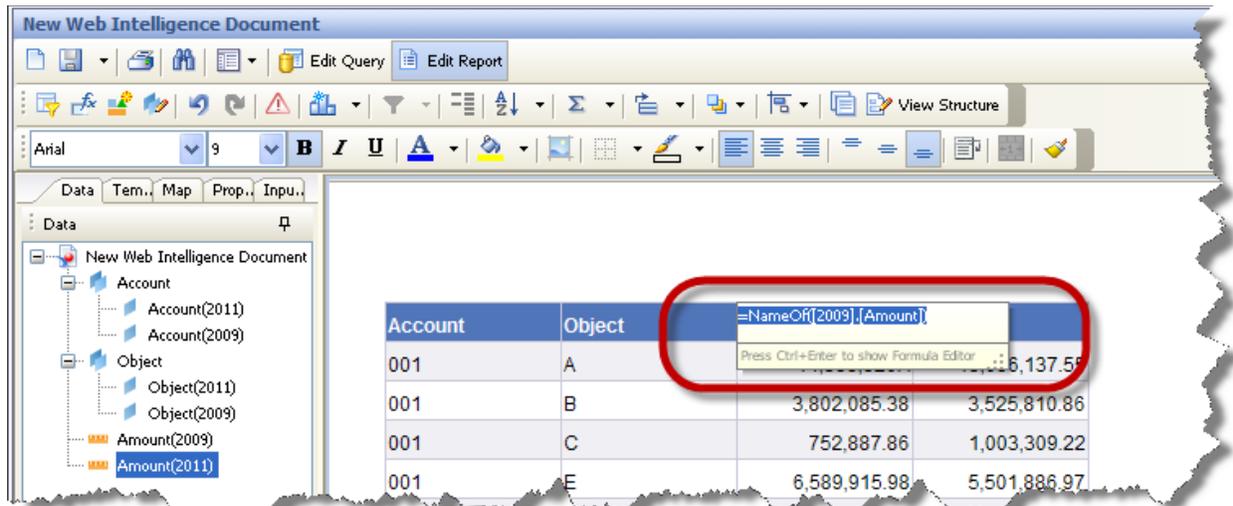
First, from the Report View window, insert a blank report in the document by right-clicking on one of the report tabs. The following sub-menu displays. Click on **Insert Report**. A blank report is inserted into the document.



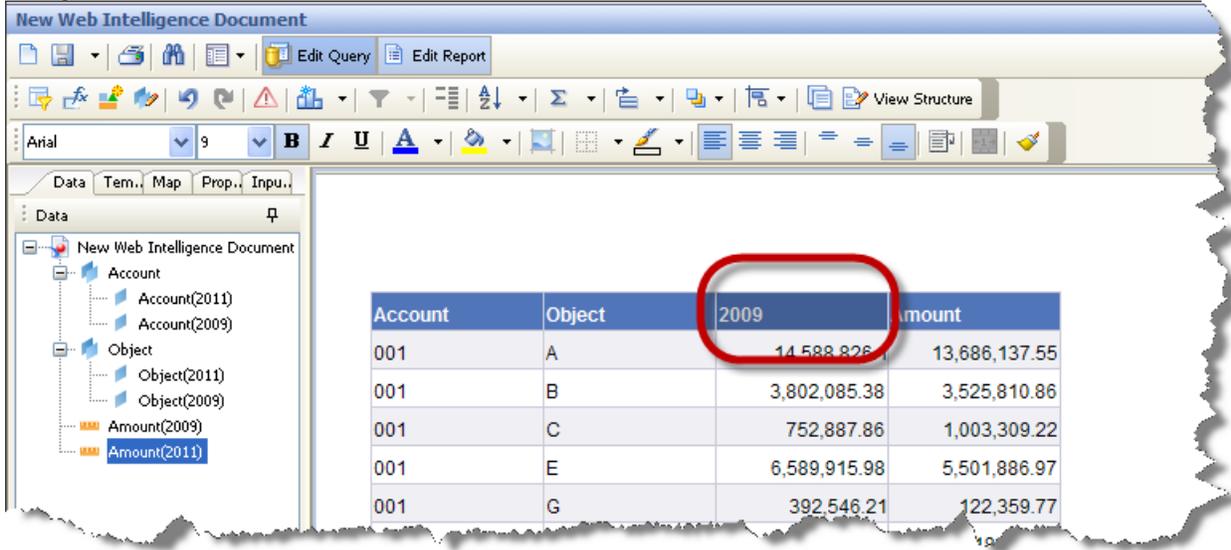
Drag the merged dimensions you want to use in the report to the blank report screen. Also drag any other fields needed on the report. In the example below, the merged dimensions Account and Object were selected, as well as both Amount fields.



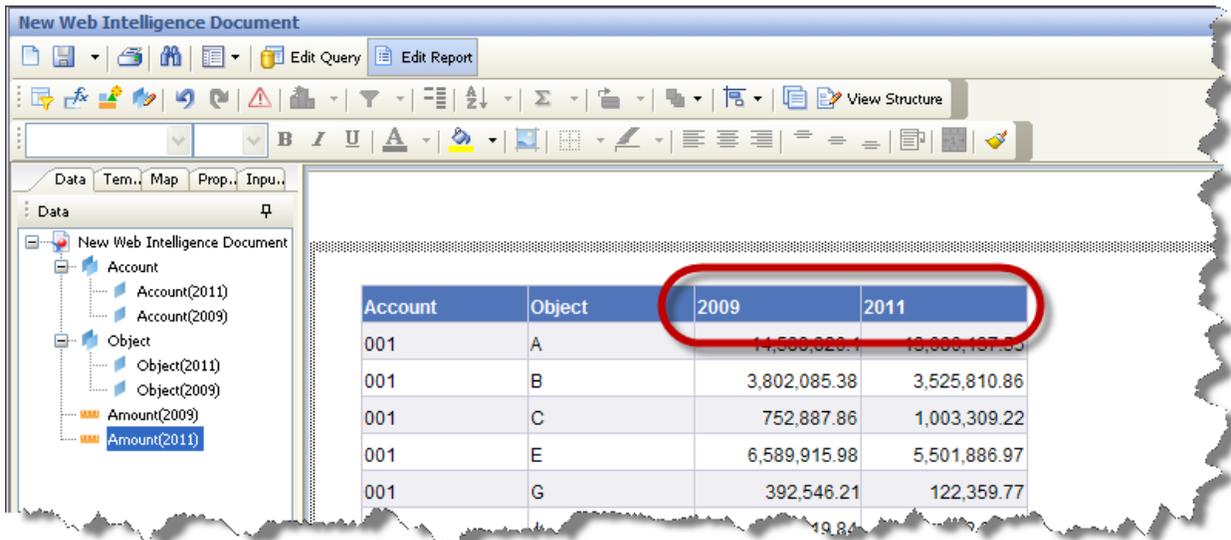
Since both Amount columns have the same name, you can rename them by double clicking on the column header. A formula will display reflecting the current formula for this field.



To change the formula, enter the title of your choice and press <Enter>. The title is successfully changed.



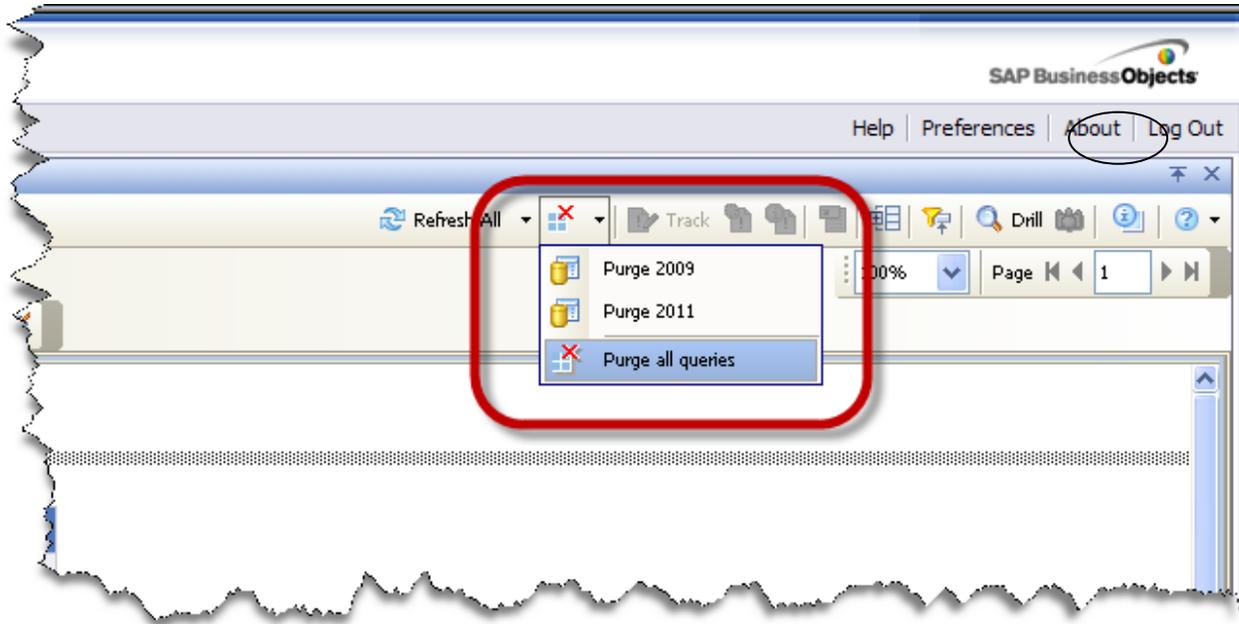
Follow similar steps to change the title of the second Amount Field. The screen below shows the successful renaming of the last column's title.



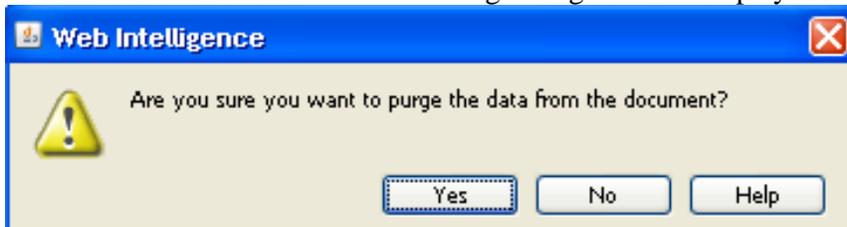
Purge Data from a Query

You can remove all the data in a document by using the Purge feature, while still leaving the document structure intact. If a document has multiple queries, you can purge data from specific queries or all queries.

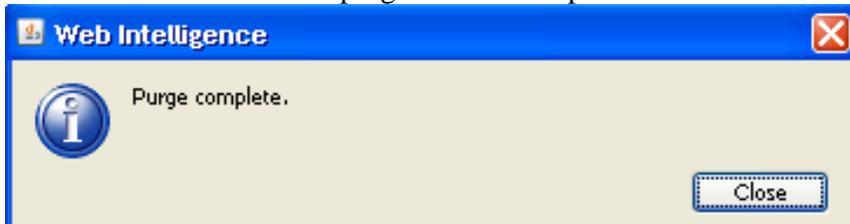
Click on the Purge button on the toolbar. This will display the options for purging. In the example below, there are two queries. So, you have the option of purging data from either of the queries or both queries



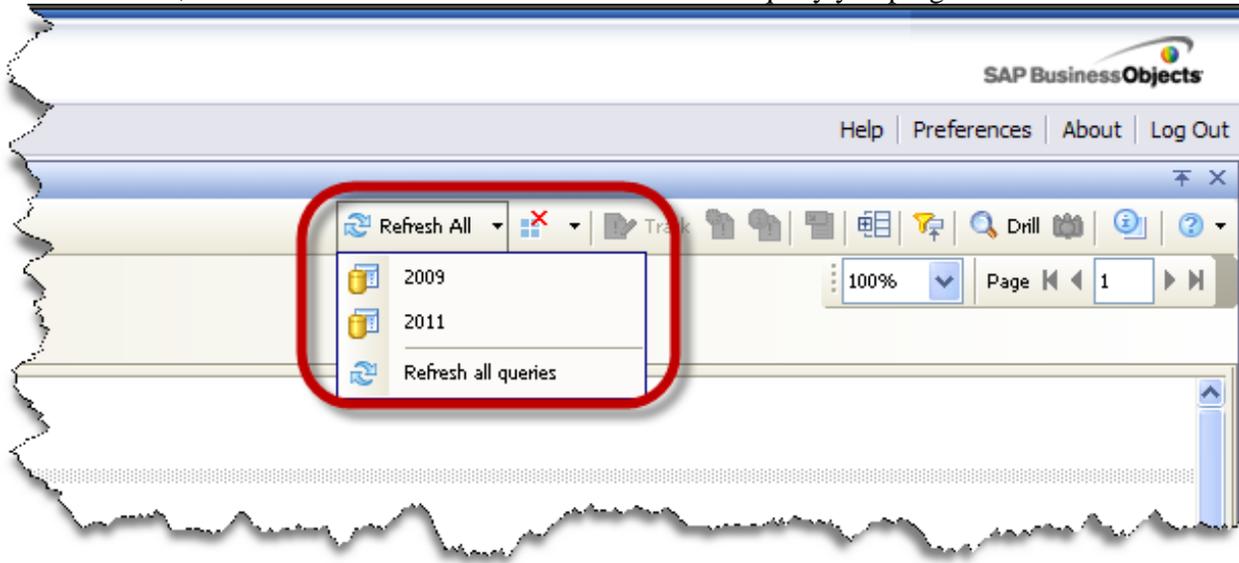
Select the desired choice. The following dialog box will display.



Click on **Yes**. Data will be purged from the report document for the selected query or queries.



To restore data, click on the **Refresh All** button and select the query you purged.



Chapter 10 Formulas and Variables

You can create formulas in your reports to incorporate custom calculations not available in the tool's standard calculations or the report's objects. The tool has an easy-to-use Formula Editor that facilitates formula building. You can save formulas as variables, which can then be reused throughout the document as needed, instead of having to continually re-enter the underlying formula.

Create Variables

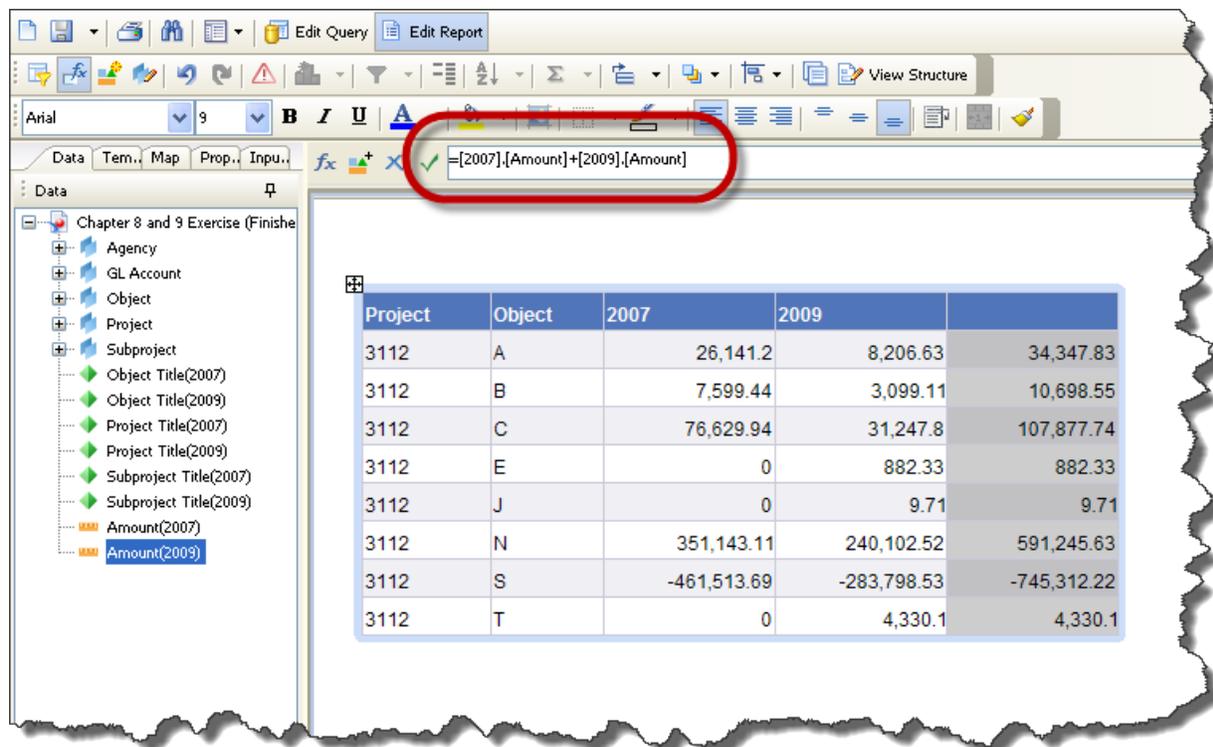
A variable is a named formula. Variables provide a mechanism for reusing formulas without having to set them up every time you use them in a report. You can also simplify complex formulas by breaking them down into variables.

There are two methods for creating a variable:

1. Use the Create Variable feature in the Formula Editor, mentioned previously, where you save an existing formula as a variable.
2. Use the Variable Editor, where you can create the formula and save it as a variable at the same time.

Create a Variable from the Formula Toolbar

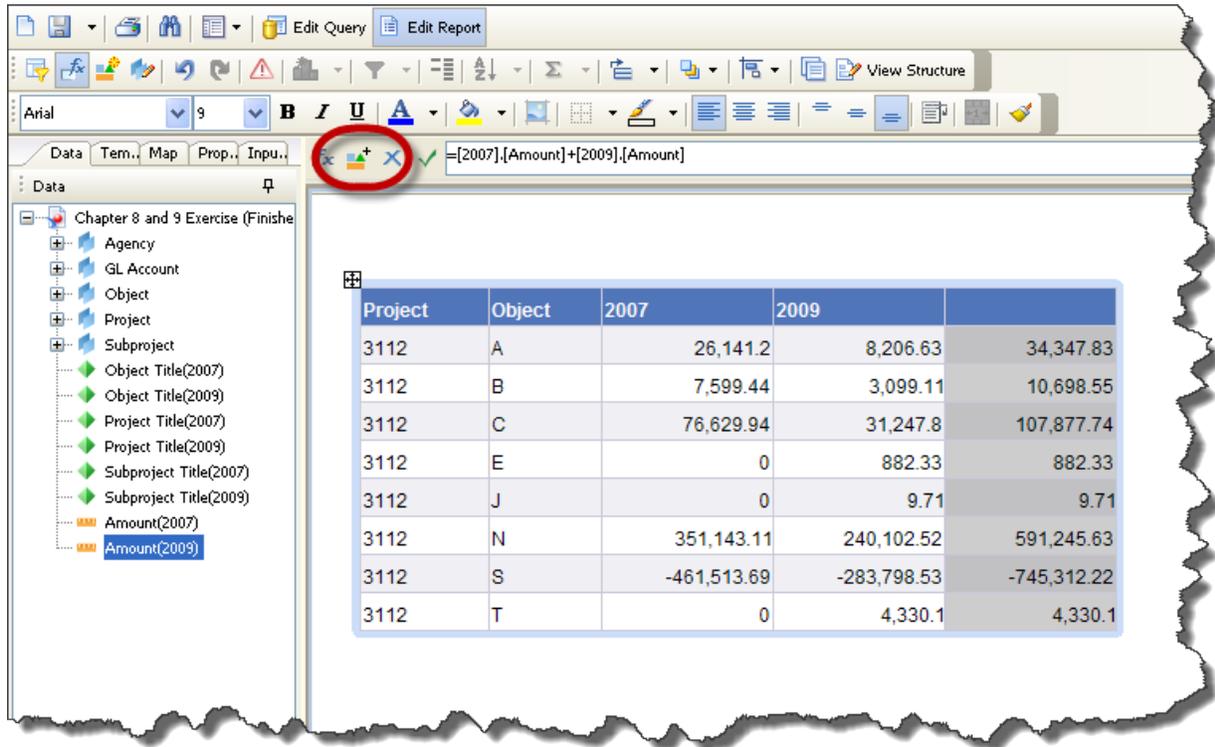
In the example below a formula has been created to sum the amounts from the two queries (2009 – AFRS 2009 and 2007 – AFRS 2007).



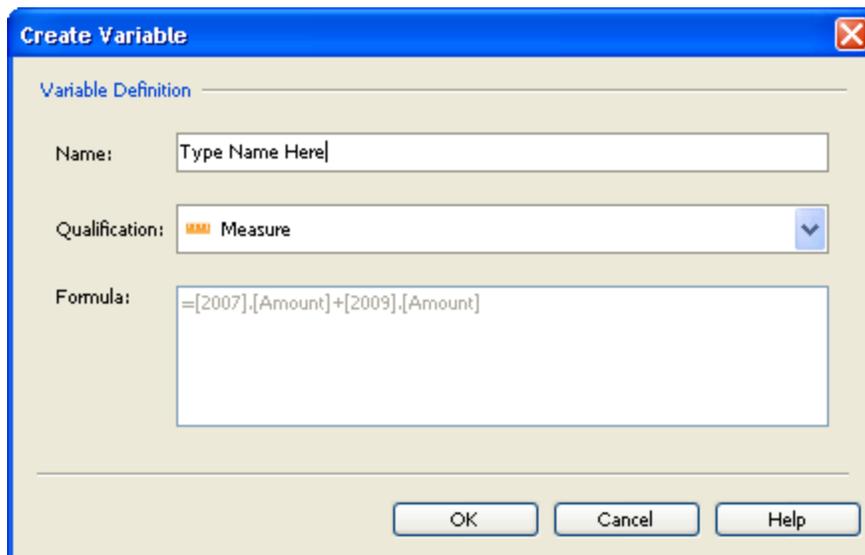
The screenshot shows a report editor interface. At the top, there is a toolbar with various icons. A red circle highlights the 'Create Variable' icon (a green checkmark with a plus sign) in the formula toolbar. Below the toolbar, a formula bar contains the text `=[2007].[Amount]+[2009].[Amount]`. The main area of the report displays a data table with the following columns: Project, Object, 2007, 2009, and a calculated column. The data rows are as follows:

Project	Object	2007	2009	
3112	A	26,141.2	8,206.63	34,347.83
3112	B	7,599.44	3,099.11	10,698.55
3112	C	76,629.94	31,247.8	107,877.74
3112	E	0	882.33	882.33
3112	J	0	9.71	9.71
3112	N	351,143.11	240,102.52	591,245.63
3112	S	-461,513.69	-283,798.53	-745,312.22
3112	T	0	4,330.1	4,330.1

Click on the “Create Variable” icon on the Formula Toolbar.



The Create Variable window will appear. Enter a title for your variable, and press OK.



The variable you just created now appears under the Variables folders in the Report Manager under the Data Tab. You can now use this variable on any additional report in this document.

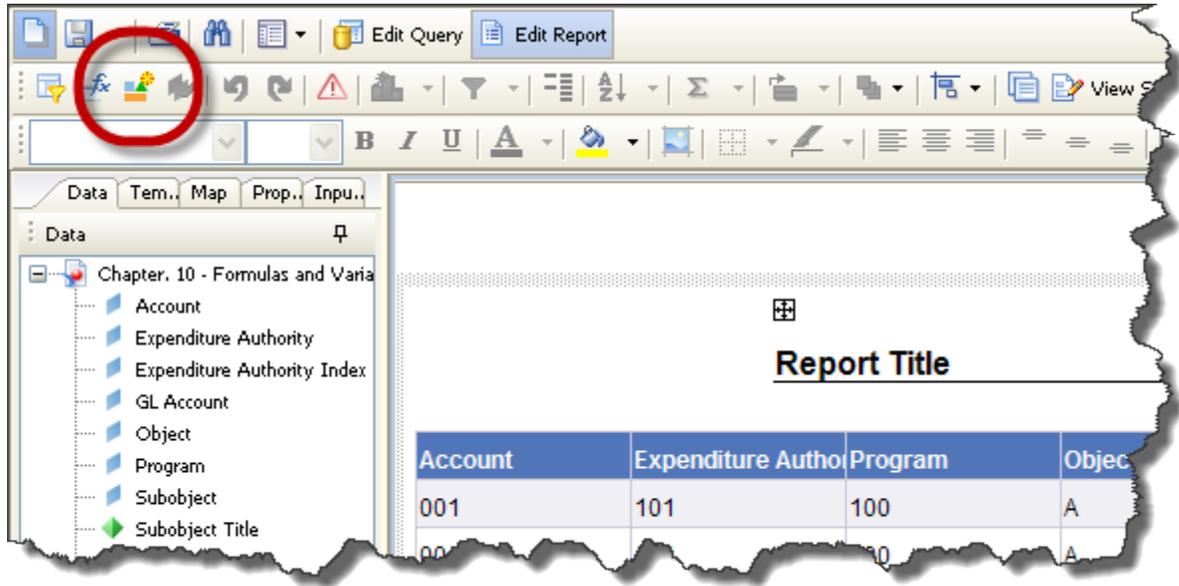
The screenshot shows the SAP Business Intelligence Report Manager interface. On the left, the 'Data' folder is expanded, and the variable 'Total Amount' is highlighted with a red circle. The main area displays a data table with the following columns: Project, Object, 2007, 2009, and Total Amount. The data rows are as follows:

Project	Object	2007	2009	Total Amount
3112	A	26,141.2	8,206.63	34,347.83
3112	B	7,599.44	3,099.11	10,698.55
3112	C	76,629.94	31,247.8	107,877.74
3112	E	0	882.33	882.33
3112	J	0	9.71	9.71
3112	N	351,143.11	240,102.52	591,245.63
3112	S	-461,513.69	-283,798.53	-745,312.22
3112	T	0	4,330.1	4,330.1

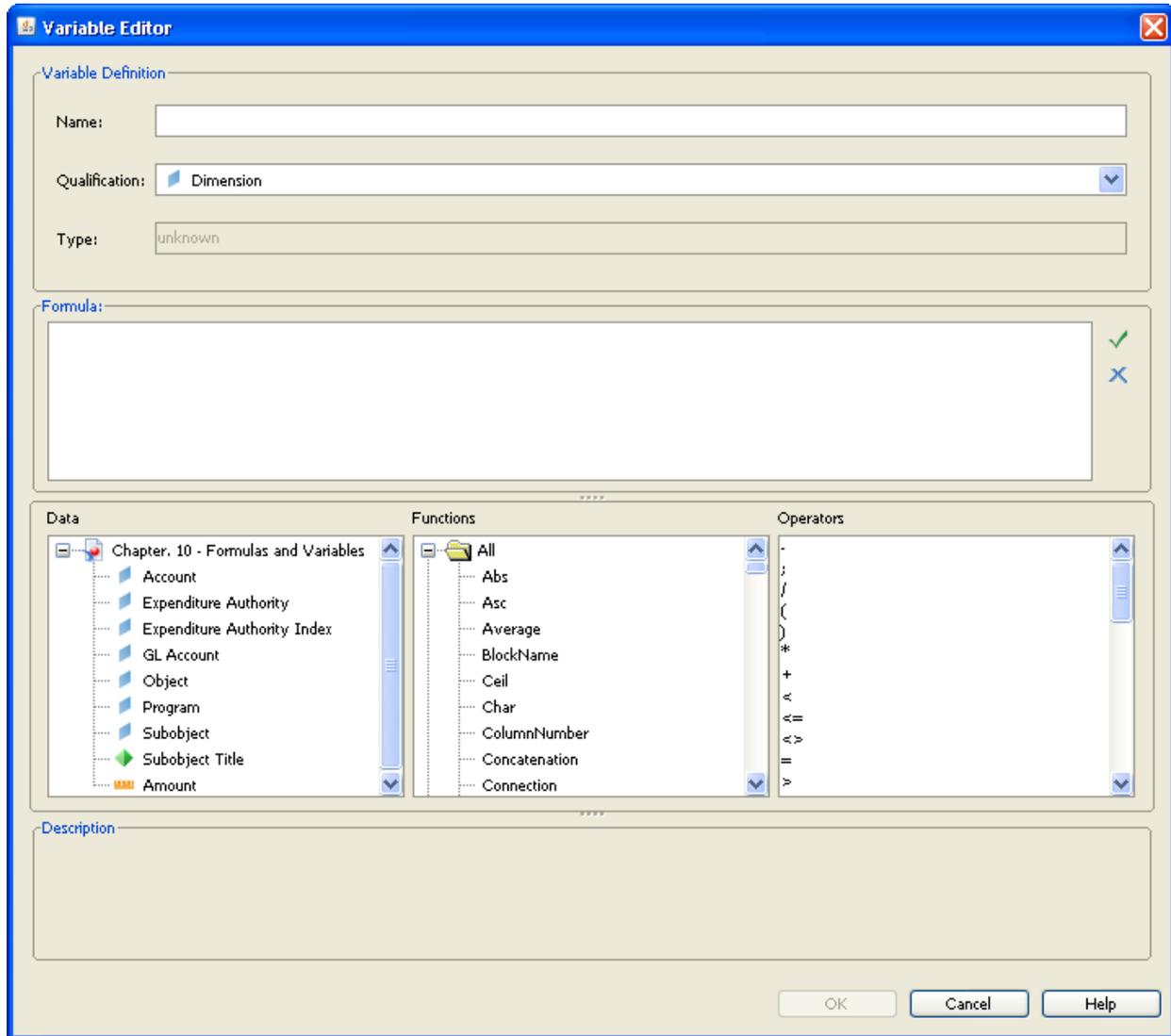
Create a Simple Variable

For this exercise, let's create a Variable to combine the SubObject Code and Title together as a field in the following report.

Click on the **Variable Editor** button in the toolbar.

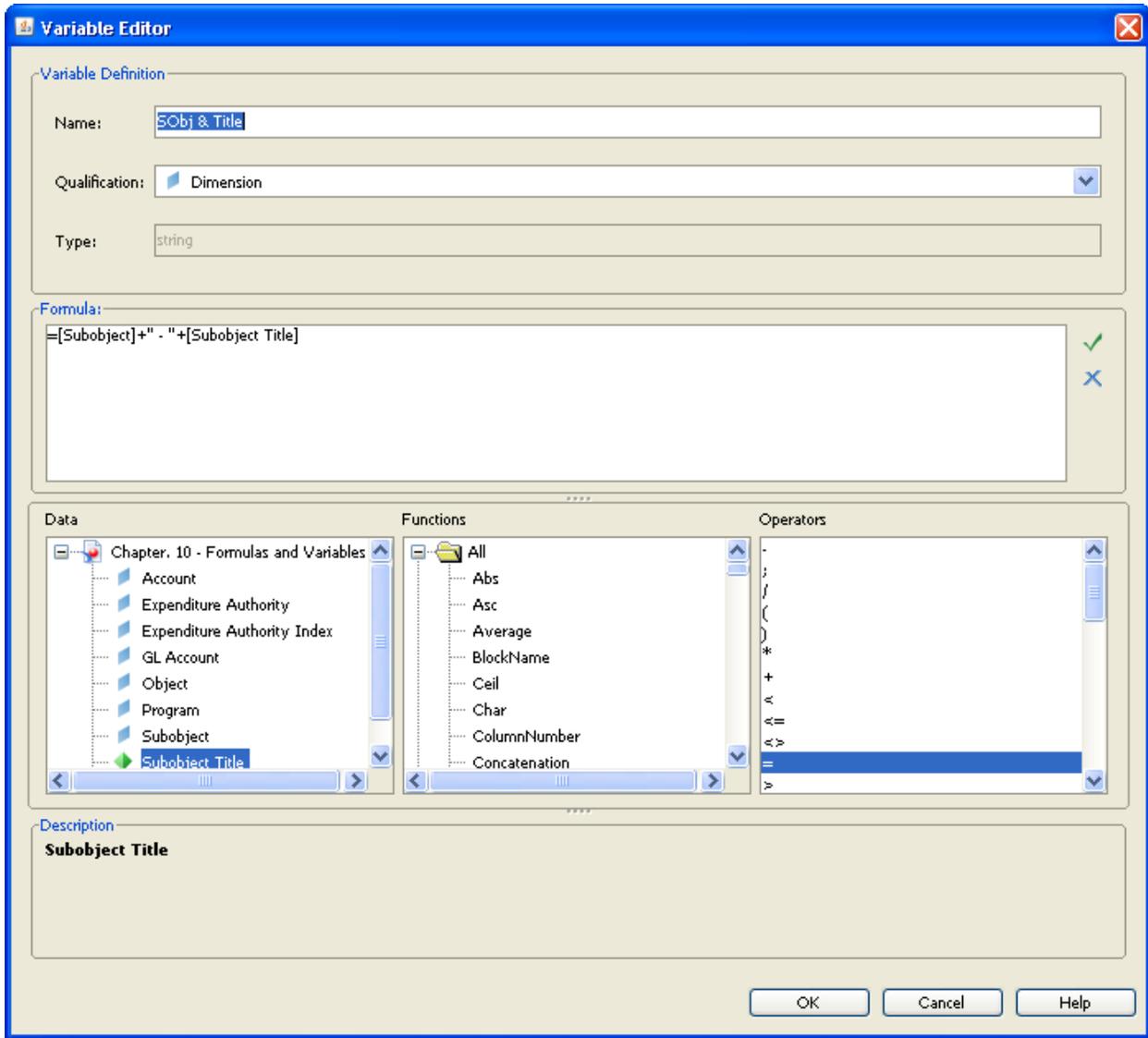


The Variable Editor window will show as follows:

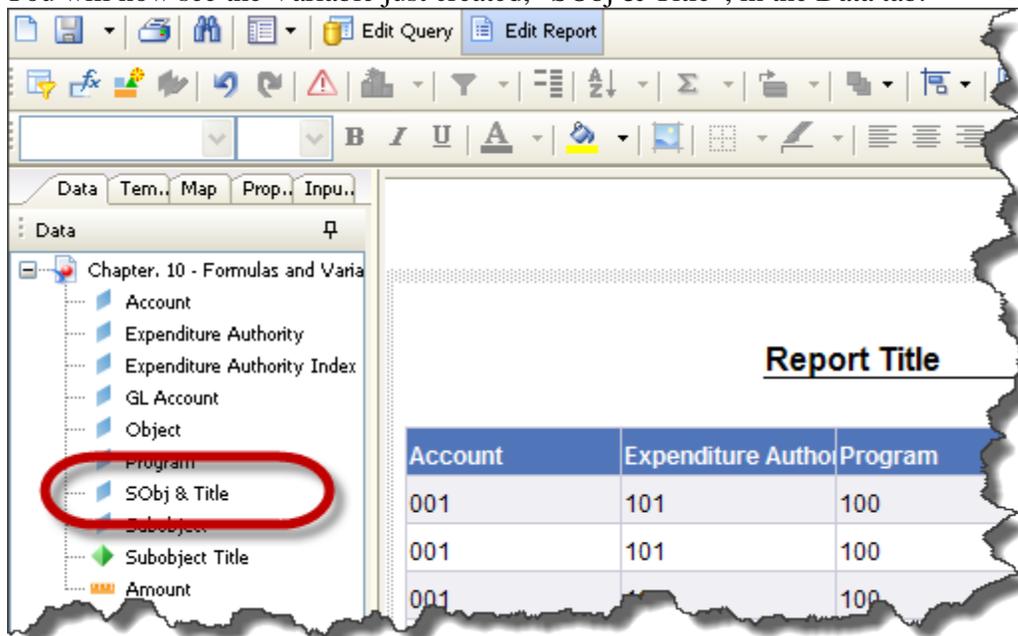


Do the following:

1. In the **Name** field, enter **SObj & Title**.
2. Leave the **Qualification** as **Dimension**.
3. Create the Formula in the Formula field as follows:
 - a. Enter =
 - b. Double click on the Subobject
 - c. Enter +
 - d. Enter “ – “. This is to separate the Subobject code and the title.
 - e. Enter +
 - f. Double click on the Subobject Title.
 - g. Click **OK** at the bottom of the screen.

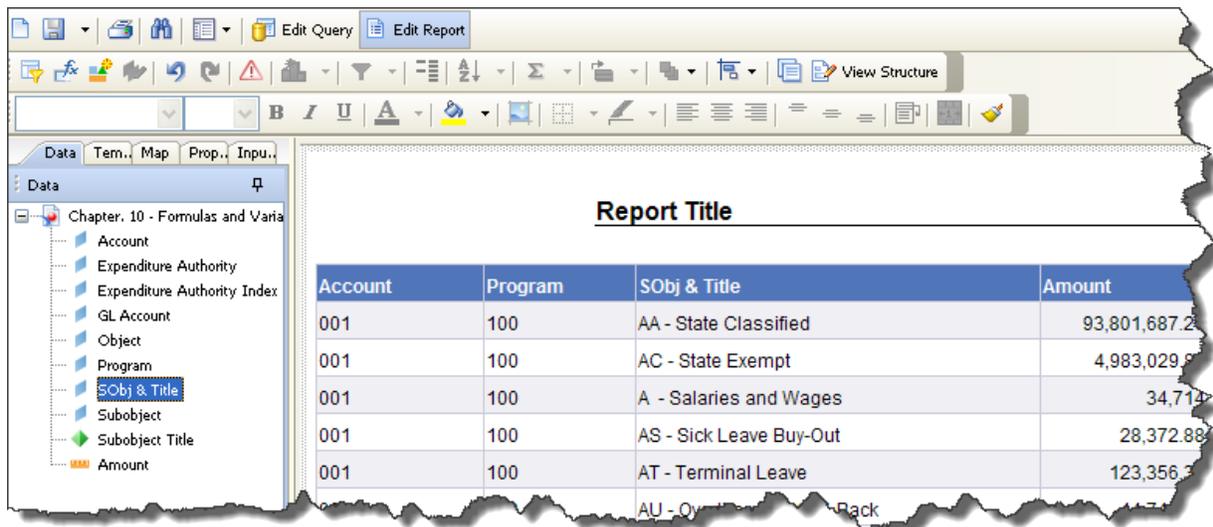


You will now see the Variable just created, “SObj & Title”, in the Data tab.

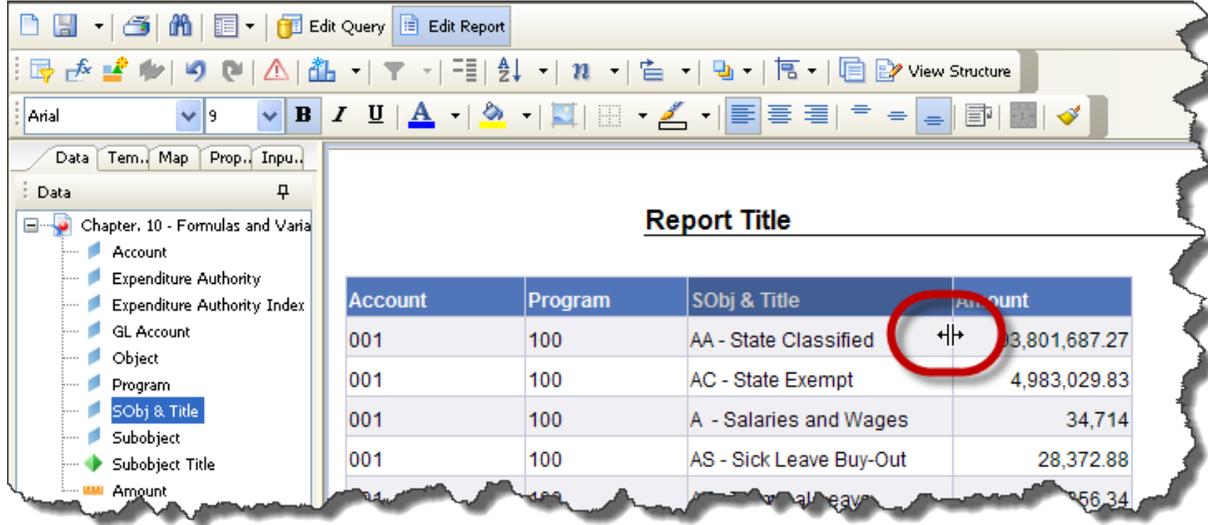


Let’s now remove the Subobject and Subobject Title columns from the existing report. To do so, right click on the Subobject column and choose **Remove Column**. Repeat the same step for the Subobject Title column.

Now let’s **drag the Variable of SObj & Title** and **insert** it between the Program and Amount columns. The report below now shows the new combined Subobject Code and Title as one column.



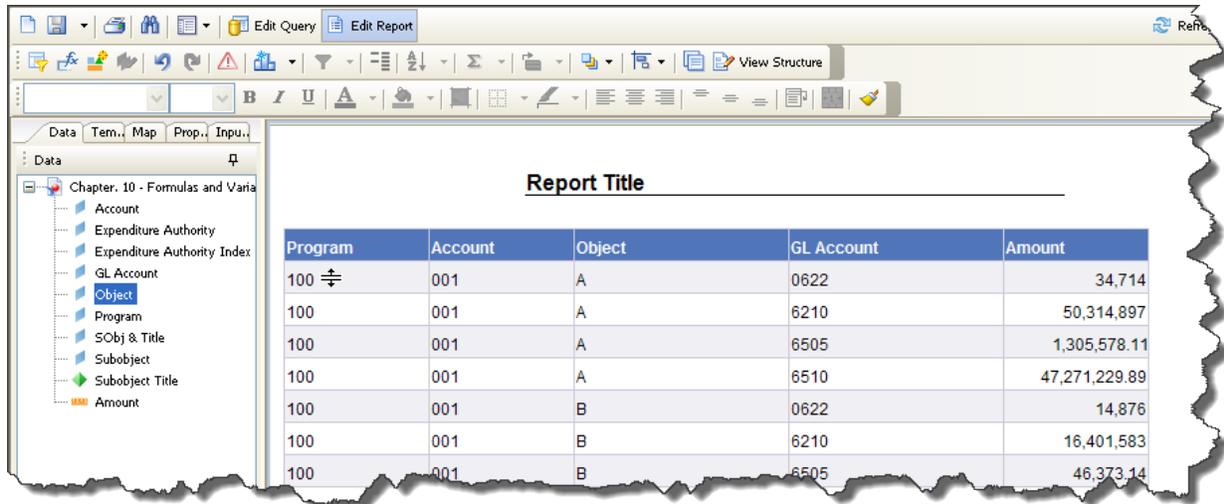
You may expand the column width of the new column by using the double arrow in between the columns.



Creating Variables for Allotment, Expenditure and Variance

The examples below illustrate a scenario where you can create variables to compare allotments with expenditures and show the variance between the two.

NOTE: The use of text in variables is case sensitive. So if you are creating a variable containing dimensions, you must be sure to use the proper case to ensure the variable works properly. So it works best to select data fields by selecting them from the Data list.



Program	Account	Object	GL Account	Amount
100	001	A	0622	34,714
100	001	A	6210	50,314,897
100	001	A	6505	1,305,578.11
100	001	A	6510	47,271,229.89
100	001	B	0622	14,876
100	001	B	6210	16,401,583
100	001	B	6505	46,373.14

Please note that the above report returned all GL's as a column. To create the variables to show a separate column for Allotments, Expenditures and Variance, follow the instructions and illustrations below.

1. Click on the **Show/Hide Variable Editor** and the screen on the following page will appear.
2. Enter **Allotment** in the Variable Name.
3. Select **Measure** for the Qualification field.
4. The formula for Allotment will be **=Sum(If([GL Account] InList("0622";"6210");[Amount];0))**. You can either enter this manually in the Formula field or select fields from the various tabs as explained below to populate the Formula.
5. From the Functions list double click on **Sum**, then double click on **If**.
6. From the Data list, double click on **GL Account**.
7. From the Operators list, double click on **InList**
8. Type in **("0622";"6210");**
9. Double click on **Amount** in the Data list.
10. Type in **;0** before the last two parentheses that have already been entered by selecting the fields above.
11. Verify the formula by clicking on the validate button (check mark).
12. Click **OK** to close the Variable Editor window..

Variable Editor
✕

Variable Definition

Name:

Qualification: Measure ▼

Type:

Formula:

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

✓
✕

<p>Data</p> <ul style="list-style-type: none"> Chapter. 10 - Formulas and Variables <ul style="list-style-type: none"> Account Expenditure Authority Expenditure Authority Index <li style="background-color: #e0e0e0;">GL Account Object Program SObj & Title Subobject 	<p>Functions</p> <ul style="list-style-type: none"> All <ul style="list-style-type: none"> Abs Asc Average BlockName Ceil Char ColumnNumber Concatenation 	<p>Operators</p> <div style="border: 1px solid #ccc; padding: 5px; min-height: 100px;"> <pre> - / (* + ^ < > v v </pre> </div>
---	--	---

Description

string RefValueUserResponse([dp:]prompt_string[:Index])

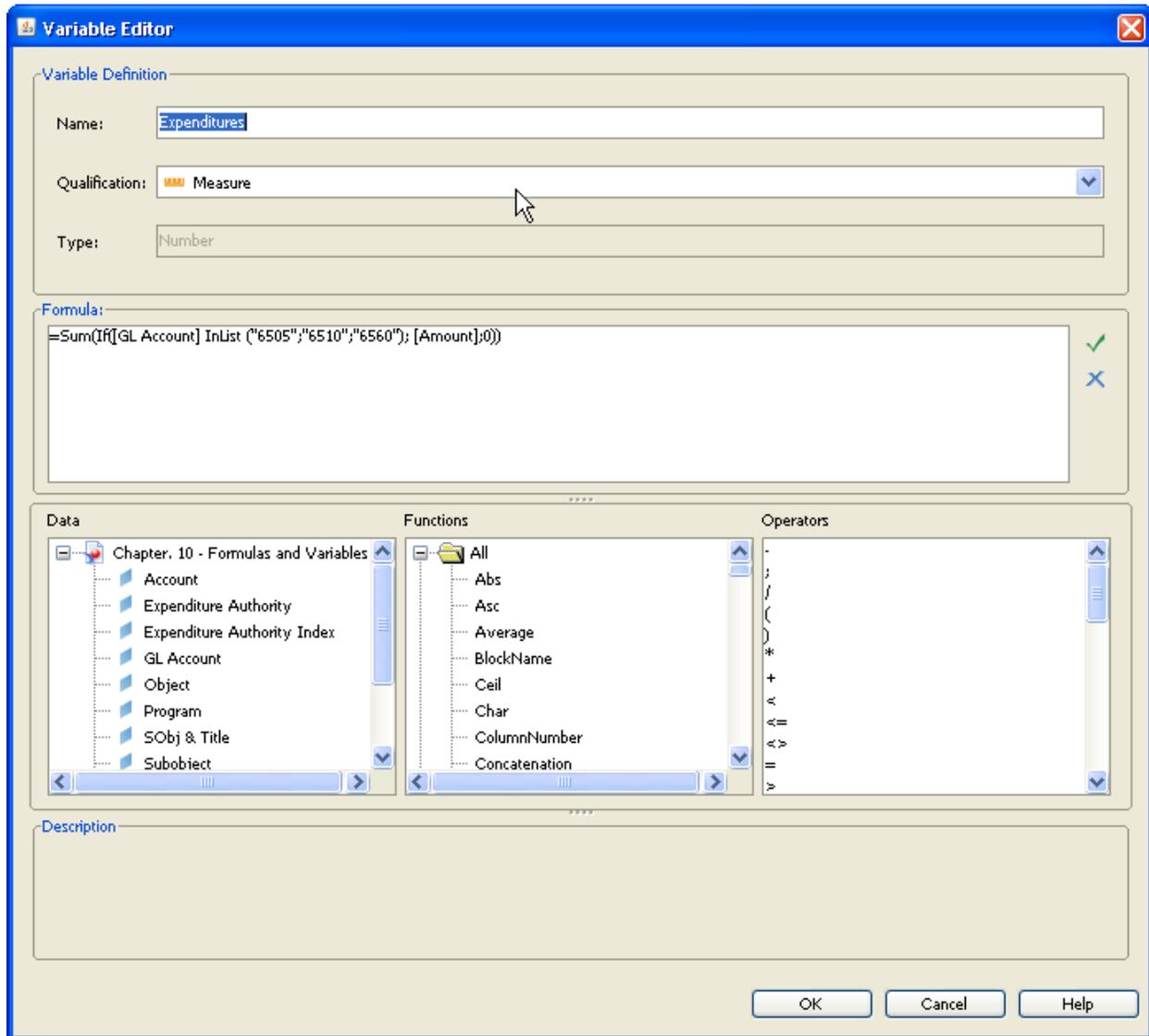
Returns the response to a prompt when the reference data was the current data

[? More on this function.](#)

Follow similar steps as above to create the **Expenditure** variable using the Variable Editor. The Formula for this variable is:

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

Be sure to validate the formula, then click OK to close the Variable Editor.



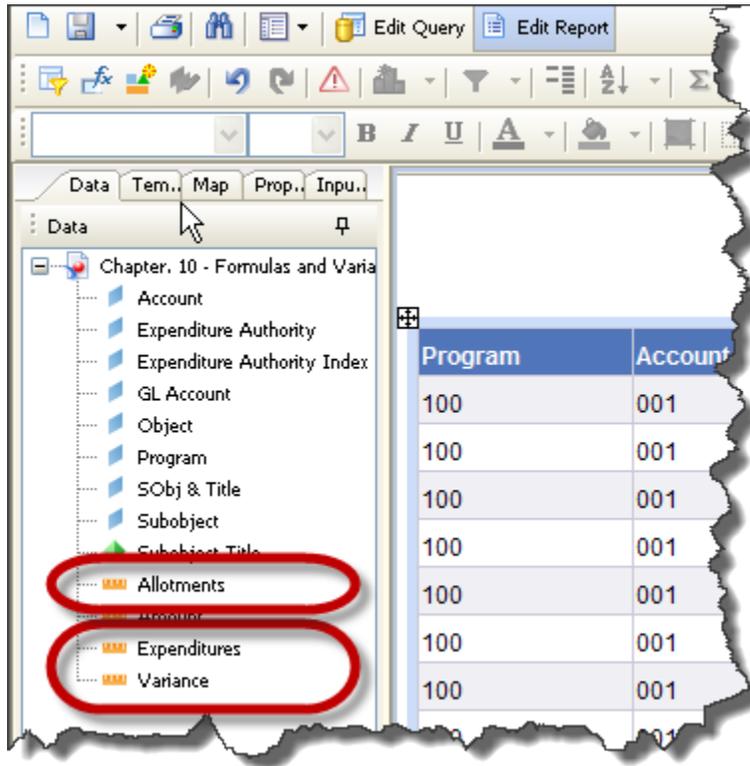
Follow similar steps to create the **Variance** Variable. In the Formula Definition, enter **=[Allotments]-[Expenditures]**. You may also double click on the actual Variable Name listed on the Data tab. Then click **OK**

The screenshot shows the 'Variable Editor' dialog box with the following configuration:

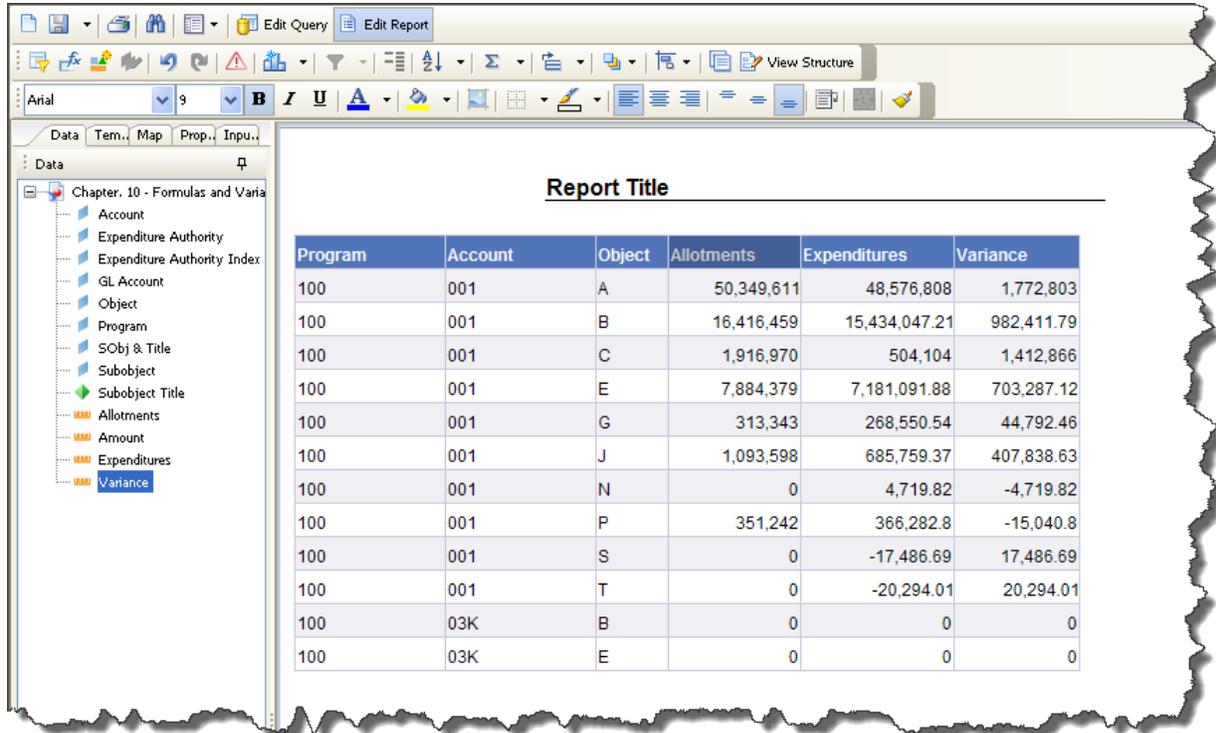
- Variable Definition:**
 - Name: Variance
 - Qualification: Measure
 - Type: Number
- Formula:**
 - =[Allotments]-[Expenditures]
- Data:**
 - Tree view showing: GL Account, Object, Program, SObj & Title, Subobject, Subobject Title, Allotments, Amount, Expenditures (selected).
- Functions:**
 - Tree view showing: All, Abs, Asc, Average, BlockName, Ceil, Char, ColumnNumber, Concatenation.
- Operators:**
 - Tree view showing: -, +, *, /, %, ^, &.
- Description:**
 - More on this function. (with a question mark icon)

Buttons at the bottom: OK, Cancel, Help.

You will notice that the variables for Allotments, Expenditures and Variance you have created are listed in the Data tab with the other report objects.



The next step is to **remove** the **GL Account** and **Amount** columns from the Report Panel. Now you can drag each of the Variables that you just created from the Data tab to the report panel on the right and insert them one after another. The report below now shows all three new columns using the Variables, as shown below.



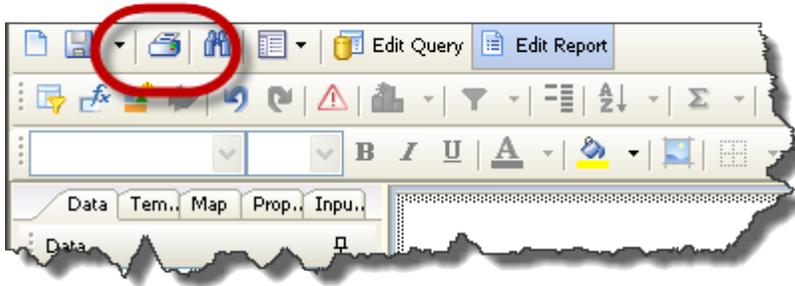
The previous examples are simple illustrations of variables. More complex variables can be set up to meet a wide variety of business needs.

Chapter 11 – Print Reports

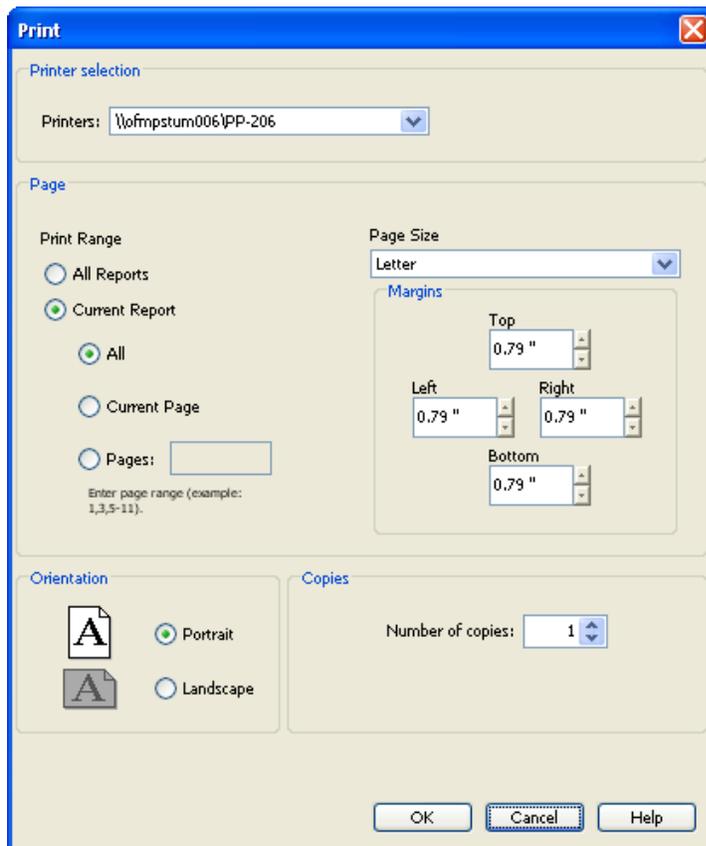
In order to print reports from the tool, you will need to **install the current ActiveX Print Control on your workstation**. The Print feature allows you to print one report or multiple reports from a single document.

Print a Report

From the Report View window, click the **Print** icon in the toolbar. This option allows you to print the report in a more predictable format.

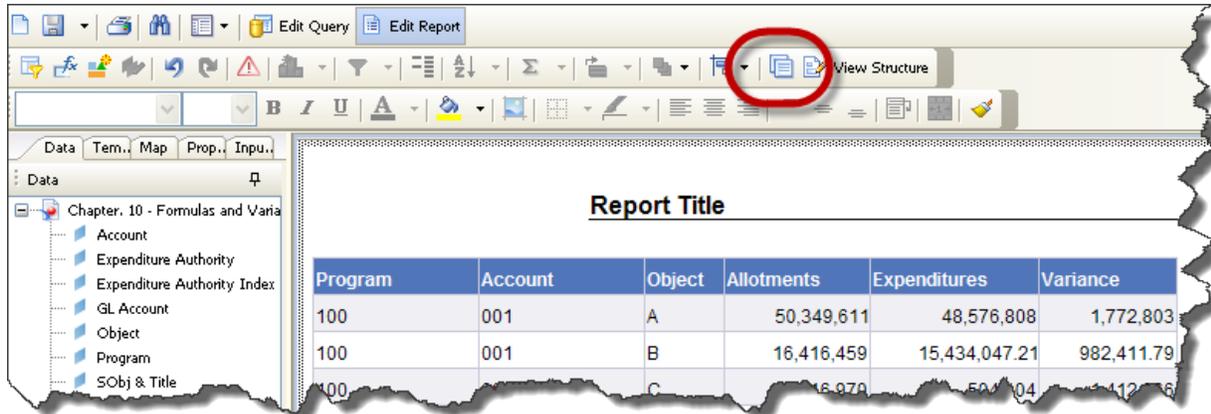


The print dialog box will display. Select the **Printer**, **Print Range**, **Page Size**, **Orientation**, **Margins** and **Number of Copies**. Then click **OK**.



View Page Layout

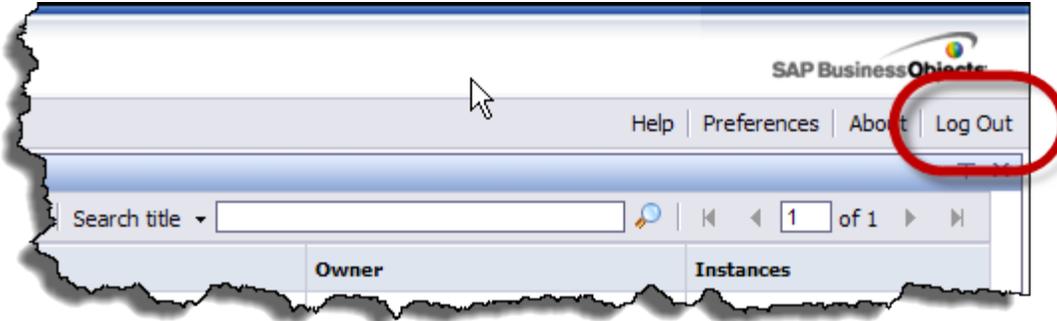
Before printing, you can view the report layout by clicking on the **View Page Layout** button to see if a report fits on one page. You can then resize the report, if needed, before printing.



Chapter 12 – Logoff

Logoff Procedure

When you are finished using the tool, click the **Logoff** button in the upper right corner.



You will be returned to the Logon Page.

Thanks for trying out the Web Intelligence Web Intelligence. Hope you had a pleasant experience--J