# Table of Contents

Chapter 1 - Overview.................................................................................................................... 1  
   Purpose ....................................................................................................................................... 1  

Chapter 2 – Logon Procedure...................................................................................................... 3  
   Web Intelligence Logon Screen .................................................................................................. 3  
   How to Log On to Web Intelligence............................................................................................ 3  
   Changing Your Password ........................................................................................................... 4  

Chapter 3 – Creating Queries...................................................................................................... 7  
   Folder Structure .......................................................................................................................... 7  
   Creating a New Document/Query............................................................................................... 8  
   Java Report Panel Overview .................................................................................................... 12  
   Universe Overview .................................................................................................................... 14  
      Select Fields to Display on Query/Report ............................................................................ 15  
      Add Objects .......................................................................................................................... 15  
      Delete Objects ....................................................................................................................... 17  
   Select Query Filters .................................................................................................................. 18  
      Overview ............................................................................................................................... 18  
      Filter Components ................................................................................................................. 18  
      Query Filter Operators ......................................................................................................... 19  
      Descriptions of Query Filter Operators ............................................................................... 19  
   Building Query Filters .............................................................................................................. 21  
      Filter Using Equal To............................................................................................................ 21  
      Filter Using a List ................................................................................................................. 22  
      Filter Using a Range ............................................................................................................. 27  
   Filters Using Wildcards with Strings ........................................................................................ 28  
   Run Query ................................................................................................................................. 31  
   Cancelling a Query .................................................................................................................... 32  

Chapter 4 - Save and Edit Queries............................................................................................ 34  
   Save a New Query ..................................................................................................................... 34  
   Save Query before Running ....................................................................................................... 36  
   Save an Existing Query ............................................................................................................. 37  
   Close Document without Saving ............................................................................................. 38
Modify a Query ...................................................................................................................................... 39
Editing a Document from View Mode ................................................................................................ 40
Send a Document to Business Objects Inbox ..................................................................................... 44

Chapter 5– Advanced Query Techniques .......................................................................................... 47
Combining Filters .................................................................................................................................. 47
Combining Filters Using Wildcards with Strings ............................................................................... 50
Adding Prompts to Filters .................................................................................................................. 51

Chapter 6 – Working with Report Tables .......................................................................................... 57
Add and Remove Columns/Rows ......................................................................................................... 57
Move or Swap Columns/Rows .............................................................................................................. 60
Replace Columns or Rows ..................................................................................................................... 62
Format Numbers .................................................................................................................................... 64
Using Report Filters ............................................................................................................................. 66
Insert a Calculation ............................................................................................................................... 68
Remove a Calculation ........................................................................................................................... 69
Create a Crosstab ................................................................................................................................... 70
Export Report Data ............................................................................................................................... 71
Copying Data to Other Applications as an Image ............................................................................... 72

Chapter 7– Using Sections, Breaks and Sorts ................................................................................... 74
Create a Section ..................................................................................................................................... 74
Navigating From Section to Section ...................................................................................................... 75
Create a Break ........................................................................................................................................ 78
Using Sort Feature ............................................................................................................................... 80

Chapter 8 – Working with Multiple Queries .................................................................................... 81
Add a Query .......................................................................................................................................... 81
Rename a Query ...................................................................................................................................... 85
Duplicate a Query .................................................................................................................................. 88
Move a Query ......................................................................................................................................... 89
Delete a Query ........................................................................................................................................ 90

Chapter 9- Merge Dimensions .......................................................................................................... 91
Merge Dimensions Described ................................................................................................................. 91
How to Merge Dimensions................................................................. 92
Edit Merged Dimension .......................................................................... 97
Delete Merged Dimension ................................................................. 98
Using Merged Dimensions in Reports ........................................... 99
Purge Data from a Query ..................................................................... 102

Chapter 10 Formulas and Variables ...................................................... 104
Create Variables .............................................................................. 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
Print a Report .................................................................................. 118
View Page Layout ............................................................................ 119

Chapter 12 – Logoff .......................................................................... 119
  Logoff Procedure .......................................................................... 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 on 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

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://adhocreporting.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 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:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Folder" /> or <img src="image" alt="Class" /></td>
<td><strong>Class</strong> - Logical grouping of objects. Each class has a meaningful name, for example; Agency Class, Object Class, or Measure Class.</td>
</tr>
<tr>
<td><img src="image" alt="Dimension" /></td>
<td><strong>Dimension</strong> - Retrieves the data that will provide the basis for analysis in a report. Dimension objects typically retrieve character-type data.</td>
</tr>
<tr>
<td><img src="image" alt="Detail" /></td>
<td><strong>Detail</strong> - Provides descriptive data about a dimension. A detail is always attached to the dimension for which it provides additional information.</td>
</tr>
<tr>
<td><img src="image" alt="Measure" /></td>
<td><strong>Measure</strong> - Retrieves numeric data that is the result of calculations on data in the database. Measure objects are often located in a Measures class.</td>
</tr>
<tr>
<td><img src="image" alt="Query Filter" /></td>
<td><strong>Query Filter</strong> – Restricts the information returned by objects, such as limiting data concerning amounts to a specific time interval.</td>
</tr>
</tbody>
</table>
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:
- A filtered object, or data element
- An operator
- 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

<table>
<thead>
<tr>
<th>Operator</th>
<th>Retrieves Data</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal To</td>
<td>Equal to the specified value</td>
<td>{(Fiscal Month) Equal To 10 retrieves data for fiscal month 10 }</td>
</tr>
<tr>
<td>Not Equal To</td>
<td>Not equal to the specified Value</td>
<td>{(Fiscal Month) Not Equal To 10 retrieves data for all fiscal months other than 10 }</td>
</tr>
<tr>
<td>Greater Than</td>
<td>Greater than the specified value</td>
<td>{(Fiscal Month) Greater Than 10 retrieves data for fiscal months 11 and higher }</td>
</tr>
<tr>
<td>Operator</td>
<td>Retrives Data</td>
<td>Example</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Greater Than or Equal To</td>
<td>Greater Than or Equal to the specified value</td>
<td>{Fiscal Month} Greater Than or Equal to 10 retrieves data for fiscal months 10 and higher</td>
</tr>
<tr>
<td>Less Than</td>
<td>Lower than the specified value</td>
<td>{Fiscal Month} Less then 10 retrieves data for fiscal months 01 through 09</td>
</tr>
<tr>
<td>Less Than or Equal To</td>
<td>Lower or equal to the specified value</td>
<td>{Fiscal Month} Less Than or Equal To 10 retrieves data for fiscal months 01 through 10</td>
</tr>
<tr>
<td>Greater Than or Equal To</td>
<td>Greater Than or Equal to the specified value</td>
<td>{GL Account} Between 6500 and 6600 retrieves data for all GL Accounts 6500 through 6600</td>
</tr>
<tr>
<td>Between</td>
<td>Between two values; including these values</td>
<td>{GL Account} Between 6500 and 6600 retrieves data for all GL Accounts not between 6500 and 6600</td>
</tr>
<tr>
<td>Not Between</td>
<td>Outside the range of two specified values</td>
<td>{Agency} In List ‘225;310;477’ retrieves data only for Agencies 225,310, and 477</td>
</tr>
<tr>
<td>In List</td>
<td>Same as values specified</td>
<td>{Agency} Not In List ‘225;310;477’ retrieves data for all excluding Agencies 225,310, and 477</td>
</tr>
<tr>
<td>Not In List</td>
<td>Everything other then values specified</td>
<td>{Agency} Not In List ‘225;310;477’ retrieves data for all excluding Agencies 225,310, and 477</td>
</tr>
<tr>
<td>Is Null</td>
<td>Which there is no value entered in the database</td>
<td>Is Null does not apply to the AFRS Universes</td>
</tr>
<tr>
<td>Is Not Null</td>
<td>For which a value</td>
<td>Is Not Null does not apply to the AFRS Universes</td>
</tr>
<tr>
<td>Matches Pattern</td>
<td>Includes a specific string that is like a value</td>
<td>{Program Index} Matches Pattern ‘15%’ retrieves data for any Program Index that begins with 15</td>
</tr>
<tr>
<td>Different From Pattern</td>
<td>Excludes a specific string that is like a value</td>
<td>{Program Index} Different From Pattern ‘15%’ retrieves data for any Program Index that does not begin with 15</td>
</tr>
<tr>
<td>Both</td>
<td>Corresponds to two specific values</td>
<td>{Budget Option} Both &quot;1&quot; and &quot;2&quot; retrieves data for budget options one and two</td>
</tr>
<tr>
<td>Except</td>
<td>Corresponds to one specified value and does not correspond to another specified value</td>
<td>{Budget Option} Except Option &quot;1&quot; retrieves data for budget options other than one</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Data</th>
<th>Properties</th>
<th>Result Objects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Year</td>
<td>Fiscal Month</td>
<td>Vendor Name</td>
</tr>
</tbody>
</table>

**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.
**Cancelling 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.

![Interrupt Data Retrieval](image)

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 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.
### Report Title

<table>
<thead>
<tr>
<th>Fiscal Month</th>
<th>Object</th>
<th>Subobject</th>
<th>Subobject Title</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>A</td>
<td></td>
<td>Not Specified</td>
<td>5,371,147.72</td>
</tr>
<tr>
<td>24</td>
<td>A</td>
<td>AA</td>
<td>State Classified</td>
<td>-3,479.5</td>
</tr>
<tr>
<td>24</td>
<td>A</td>
<td>AC</td>
<td>State Exempt</td>
<td>-3,077.41</td>
</tr>
<tr>
<td>24</td>
<td>A</td>
<td>KS</td>
<td>Sick Leave Buy-Out</td>
<td>-35,128.46</td>
</tr>
<tr>
<td>24</td>
<td>A</td>
<td>KT</td>
<td>Terminal Lease</td>
<td>8,277.88</td>
</tr>
<tr>
<td>24</td>
<td>A</td>
<td>MJ</td>
<td>Over time and Call</td>
<td>70,719.52</td>
</tr>
<tr>
<td>24</td>
<td>B</td>
<td>D</td>
<td>Employees Benefit</td>
<td>3</td>
</tr>
<tr>
<td>24</td>
<td>B</td>
<td>BA</td>
<td>Old Age and Survivor</td>
<td>3,003.96</td>
</tr>
<tr>
<td>24</td>
<td>B</td>
<td>BB</td>
<td>Retirement and Pensions</td>
<td>547.82</td>
</tr>
<tr>
<td>24</td>
<td>B</td>
<td>BC</td>
<td>Medical Aid &amp; Indus</td>
<td>1,284.48</td>
</tr>
<tr>
<td>24</td>
<td>B</td>
<td>BD</td>
<td>Health, Life &amp; Disability</td>
<td>1,371.36</td>
</tr>
<tr>
<td>24</td>
<td>B</td>
<td>BE</td>
<td>Allowance</td>
<td>5,419.24</td>
</tr>
<tr>
<td>24</td>
<td>D</td>
<td>DF</td>
<td>Unemployment Comp</td>
<td>35,003.63</td>
</tr>
<tr>
<td>24</td>
<td>B</td>
<td>RH</td>
<td>Hospital Insurance</td>
<td>721.48</td>
</tr>
<tr>
<td>24</td>
<td>B</td>
<td>BT</td>
<td>Shared Leave Prov</td>
<td>3</td>
</tr>
<tr>
<td>24</td>
<td>B</td>
<td>BU</td>
<td>Shared Leave Prov</td>
<td>3</td>
</tr>
<tr>
<td>24</td>
<td>B</td>
<td>BV</td>
<td>Shared Leave Prov</td>
<td>3</td>
</tr>
<tr>
<td>24</td>
<td>C</td>
<td>C</td>
<td>Personal Service Chi</td>
<td>3</td>
</tr>
<tr>
<td>24</td>
<td>C</td>
<td>CD</td>
<td>Management (Mgmt)</td>
<td>-14,094</td>
</tr>
<tr>
<td>24</td>
<td>C</td>
<td>CD</td>
<td>Financial Services</td>
<td>3</td>
</tr>
<tr>
<td>24</td>
<td>C</td>
<td>CE</td>
<td>Computer Informat</td>
<td>74,270.5</td>
</tr>
<tr>
<td>24</td>
<td>C</td>
<td>CF</td>
<td>Social Research Ser</td>
<td>-5,961.92</td>
</tr>
<tr>
<td>24</td>
<td>C</td>
<td>CF</td>
<td>Technical Research</td>
<td>-13,684.4</td>
</tr>
<tr>
<td>24</td>
<td>C</td>
<td>CH</td>
<td>Communications Des</td>
<td>1,207.73</td>
</tr>
<tr>
<td>24</td>
<td>E</td>
<td>EA</td>
<td>Supplies and Materials</td>
<td>12,068.75</td>
</tr>
<tr>
<td>24</td>
<td>E</td>
<td>EB</td>
<td>Communications</td>
<td>44,068.3</td>
</tr>
<tr>
<td>24</td>
<td>E</td>
<td>EC</td>
<td>Utilities</td>
<td>3</td>
</tr>
<tr>
<td>24</td>
<td>E</td>
<td>ED</td>
<td>Rentals and Leases</td>
<td>36,462.54</td>
</tr>
<tr>
<td>24</td>
<td>E</td>
<td>EE</td>
<td>Repairs, Alterations</td>
<td>-29,116.72</td>
</tr>
<tr>
<td>24</td>
<td>E</td>
<td>EP</td>
<td>Printing and Repro</td>
<td>-17,867</td>
</tr>
<tr>
<td>24</td>
<td>E</td>
<td>ED</td>
<td>Employees Prof Dev &amp; Education</td>
<td>26,037.52</td>
</tr>
</tbody>
</table>
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".

![SAP BusinessObjects InfoView](image)
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.

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.

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

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:
   - Agency equal to 105
   - Object equal to E
   - 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.

![Prompt Menu Screen](image)

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.

![Report Panel Illustration]

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:

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

**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.
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.
**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 your 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 your data into the document of your choice.

<table>
<thead>
<tr>
<th>Program</th>
<th>Object</th>
<th>Subobject</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>010</td>
<td>E</td>
<td>EA</td>
<td>5,446.06</td>
</tr>
<tr>
<td>010</td>
<td>E</td>
<td>EB</td>
<td>3,560.35</td>
</tr>
<tr>
<td>010</td>
<td>E</td>
<td>EE</td>
<td>18,103.5</td>
</tr>
<tr>
<td>010</td>
<td>E</td>
<td>EF</td>
<td>2,138.22</td>
</tr>
<tr>
<td>010</td>
<td>E</td>
<td>EG</td>
<td>235</td>
</tr>
<tr>
<td>010</td>
<td>E</td>
<td>EH</td>
<td>1,007.26</td>
</tr>
<tr>
<td>010</td>
<td>E</td>
<td>EJ</td>
<td>464.55</td>
</tr>
<tr>
<td>010</td>
<td>E</td>
<td>EK</td>
<td>135,436.74</td>
</tr>
<tr>
<td>010</td>
<td>E</td>
<td>EY</td>
<td>42,664.38</td>
</tr>
</tbody>
</table>

Sum: 200,036.45
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 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.

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 data is sorted by the values in the Amount column, from highest to lowest.
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
- add a new query
- rename a query
- duplicate a query
- 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.
The **Merge Dimensions** dialog window displays. Click **OK** to close this dialog box.

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

![Merge Dimensions dialog window](image)

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

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.

5. Click **OK** to close the **Merge Dimensions** window.

6. 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.
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).
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.
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.
CHAPTER 10 FORMULAS AND VARIABLES

Variable Editor

Variable Definition:
Name: [SUBJECT]
Qualification: [Dimension]
Type: [String]

Formula:
=[Subject] + "-" + [Subject Title]

Data
- Chapter 10: Formulas and Variables
- Account
- Expenditure Authority
- Expenditure Authority Index
- GL Account
- Object
- Program
- Subobject
- Subobject Title

Functions
- All
- Asc
- Average
- Between
- Ceiling
- Ceil
- Char
- ColumnNumber
- Concatenate

Operators
- =
- 
- >
- >=
- <=
- <>

Description
- Subject Title

OK  Cancel  Help
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.

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.
CHAPTER 10 FORMULAS AND VARIABLES

Web Intelligence User Guide

113
Office of Financial Management - Enterprise Reporting Services
Follow similar steps as above to create the **Expenditure** variable using the Variable Editor. The Formula for this variable is:

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

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 $=[\text{Allotments}]-[\text{Expenditures}]$. You may also double click on the actual Variable Name listed on the Data tab. Then click **OK**.
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.

![Report Panel with Variables](image)

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—]