ALASKA DATA ENTERPRISE REPORTING (ALDER)

ALDER 201
FOR REPORT DEVELOPERS

Presented by: Department of Administration

Division of Finance

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CHAPTER 1: Key Points of Emphasis

Error message prompts

You may see error message prompts if you do not have security access for a feature or data, or if there is a problem with the report or application. If you need to send a message to your agency advocate, include the error message number and text, or a screenshot of the error message, and an explanation of what happened.

System Timeouts

The system has a 60-minute timeout with automatic logout. This means that you will automatically be logged out of the system after 60 minutes of inactivity. This is measured from the last time you downloaded data from the server (e.g., refreshed). Save often if working on a new report.

System Security

User IDs and Passwords

These are the same user IDs and passwords that you use for the State of Alaska e-mail system. When you log into ALDER, your user ID and password are authenticated using the state security credentials. Do NOT share your user ID or password with anyone.

Role-Based Security

Your security access has been established based on the level necessary to perform your job duties; ALDER will not display data that exceeds your security level on a report. Keep in mind that this security feature only applies on ALDER (Web Intelligence) reports; if a report is saved as an Excel or CSV file, all data will be displayed, regardless of security level. Users are responsible for the security and privacy of the data they access in ALDER. (AS 39.52.140)

Recommended Browsers

To ensure full functionality, the following browsers are recommended for accessing ALDER:

- Microsoft Internet Explorer 7.0
- Microsoft Internet Explorer 8.0
- Microsoft Internet Explorer 9.0
- Mozilla Firefox 25 through 27

Secure Website

ALDER is located on a secure website and is protected by the state's firewall. Consequently, the ALDER system cannot be accessed from outside the state enterprise system.

Windows-Like Environment

ALDER is formatted into a Windows-like environment, particularly the folder structure where reports are housed. Folders may contain subfolders, and each folder can be expanded or collapsed by clicking on the ⊞ or ⊟ buttons next to each folder.

No Trash or Recycle Bin

There is no "trash" or "recycle bin" in ALDER, so **once the delete function for folders or reports has been chosen and confirmed, that action cannot be undone**. Use caution when deleting items in ALDER.

Multiple Ways to Perform Functions

There are multiple ways to perform the same function in ALDER. Some of these include double clicking, using the arrows, and/or right clicking. In most cases, this student guide only shows one of these ways.

Key Terminology

A list of key terminology can be found in the Appendix.

CHAPTER 2: Logging Into ALDER and Setting Preferences

Goals and Objectives

After you complete this chapter, you will be able to:

- Access the ALDER web page
- Sign into ALDER
- Change your preferences

Accessing the ALDER Web Page

1.   To use ALDER, you must first open your web browser (see Chapter 1 for a list of recommended browsers).

2.   Type in the web address (URL) for ALDER: https://alder.state.ak.us

Note: By signing into ALDER, you are agreeing to the principles of data stewardship and Alaska Statute 39.52.140.

Signing into ALDER

1.   Enter your ALDER username and password, which is the user ID and password that you use for the State of Alaska e-mail system.

2.   Click the Log On button.

3.   If you have successfully logged in, your screen should look similar to the following screenshot of the ALDER home page:

Setting your Preferences to Report Developer

As a Report Developer, you will want to verify that your *preferences* have been properly set.

1.   Click on the preference button located in the ALDER Banner on the right-hand side of the page

2.   Click on Web Intelligence under View and make sure HTML is selected
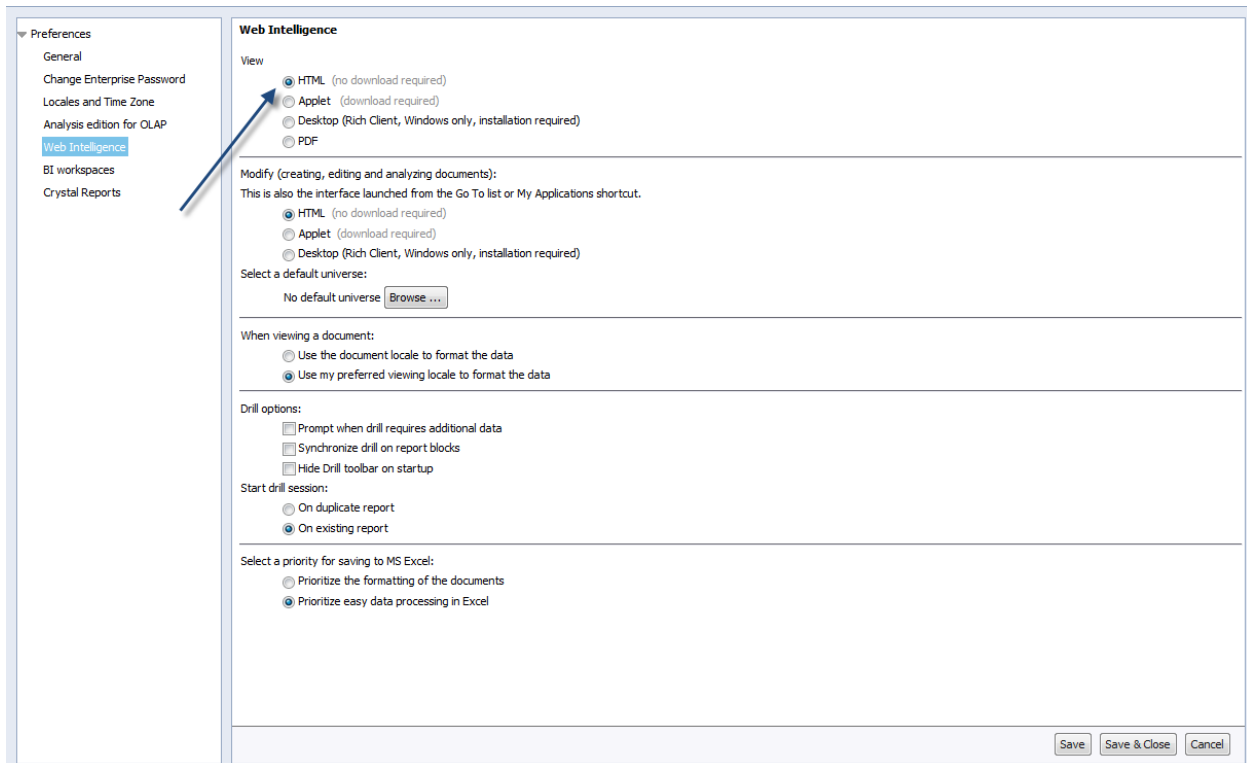
3.   Click Save & Close

CAUTION: Do not change any other preferences other than the ones discussed here or in the ALDER 101 Student Guide. All other preferences are system specific and any changes that you make can affect your ability to use ALDER!

Summary

You should now be able to:

- Access the ALDER web page
- Change your preferences

CHAPTER 3: Edit Panel

Goals and Objectives

After you complete this chapter, you will be able to:

- Access the Edit panel
- Identify the three different panels within Edit
- Identify Information Classes within the Universe
- Identify Universe Objects
- Arrange Objects within the Result Objects panel
- Identify the different types of filters

Accessing the Edit Panel

From the homepage:

1. Click on Documents

2. In the Navigation panel:

   a. Click on Folders on the bottom of the panel
   b. Click on the "+" next to Public Folders
   c. Click on the "+" next to Enterprise
   d. Click on the "+" next to Financial
   e. Click on the :+" next to Detail Reports
   f. Click on Audit Trail so that it is highlighted
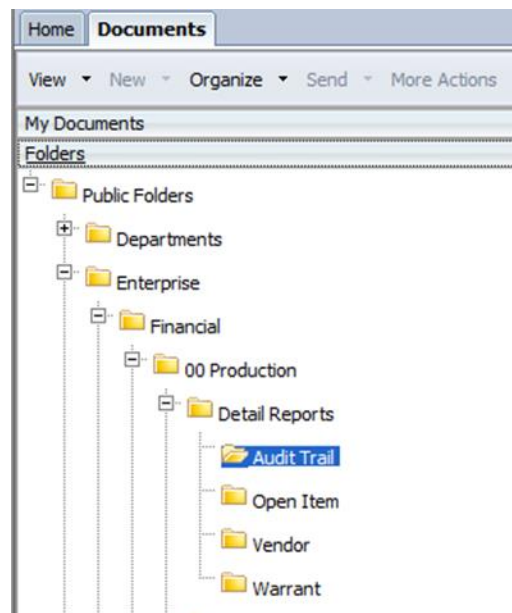
3. In the Workspace panel:

   a. Highlight (click) report "Detail Transaction for Appropriation"
   b. Right click on the highlighted report
   c. Select Organize

d.   Select Copy
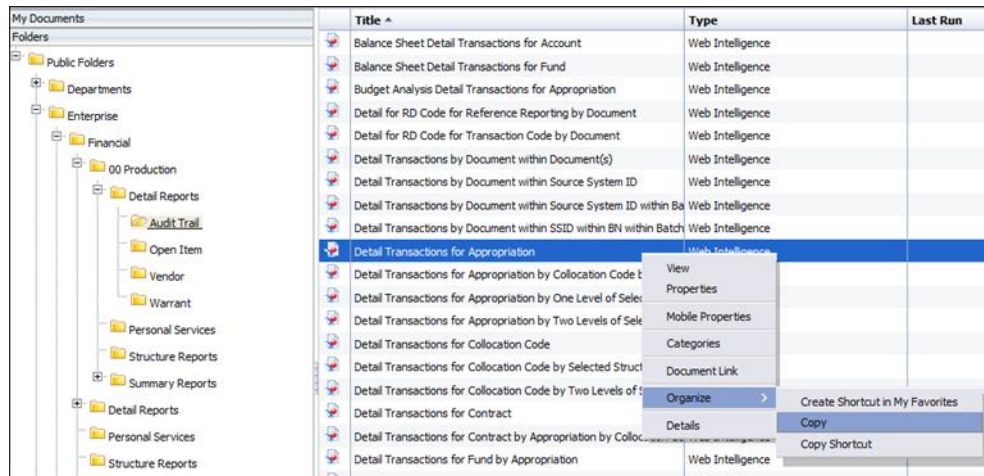
4.   Create ALDER 201 folder:

    a.   Click My Documents
    b.   Highlight My Favorites Folder
    c.   Right click – Select New; Folder
    d.   Name your folder ALDER 201
    e.   Click OK
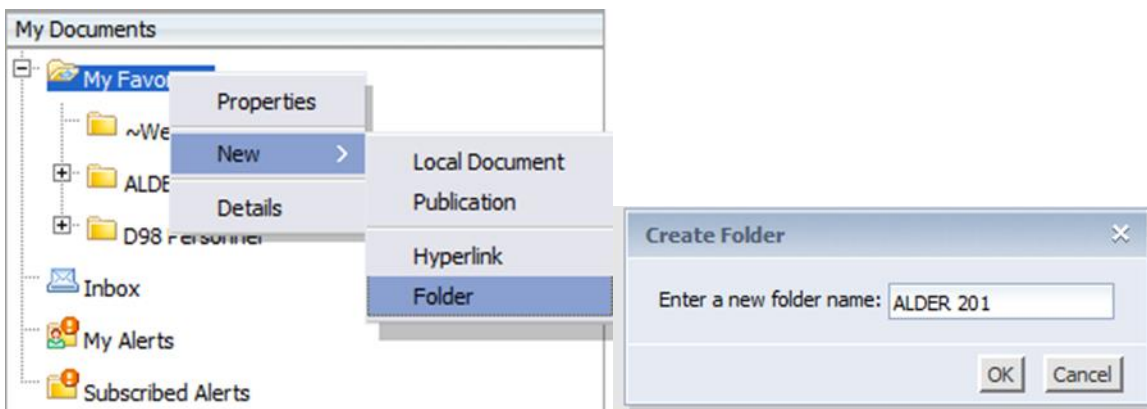
5.   In the Navigation panel:

    a.   Highlight ALDER 201 folder
    b.   Right click – Select Organize
    c.   Select Paste
    d.   Verify that the report copied to this folder

e.   Your folder structure should now look like this:
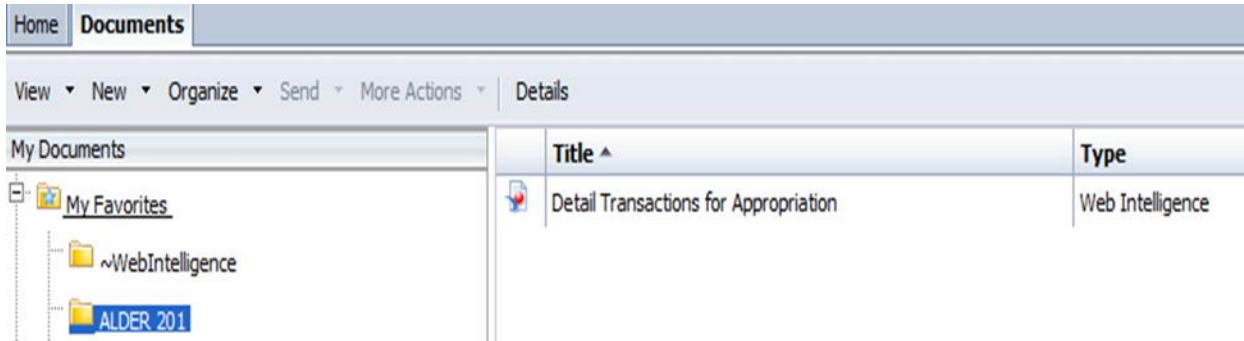
6.   Double click to open the report. Be sure that you are in Design mode

7.   Under Data Access, notice the Edit function is now available

8.   Click on Edit
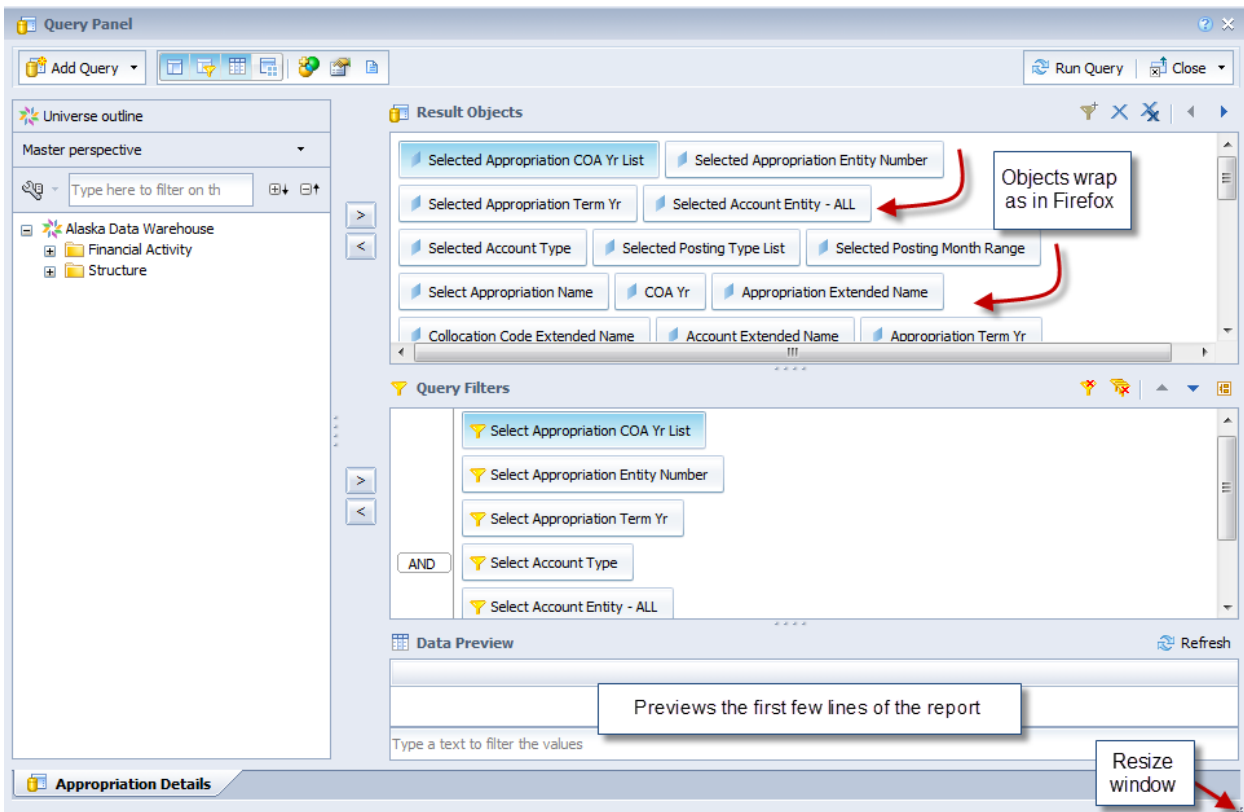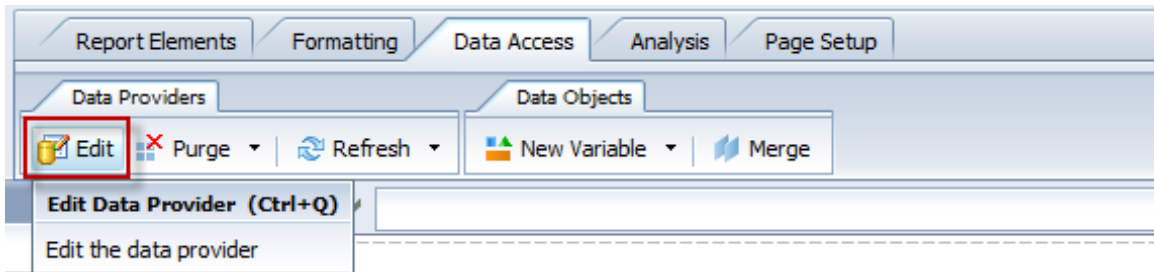
Notice that there are four different panels within the Query Panel

1. **The Universe Panel**

   - This is the location of all the data objects that you might want to report on or display within your report

2. **The Result Objects Panel**

   - Objects from the Universe panel are placed here to be displayed on a report
   - These become the Available Objects within a report

3. **Query Filters Panel**

   - This is where you place objects to limit or filter the information being retrieved from the data warehouse

4. **Data Preview**

   - This is where you can test your query results. If the test is small enough, you will see all the results of your Result Objects for your data. If the test is large, it will give you the first 100 lines.

Edit Toolbar Discussion

At the top of the Query panel, there are eight buttons:
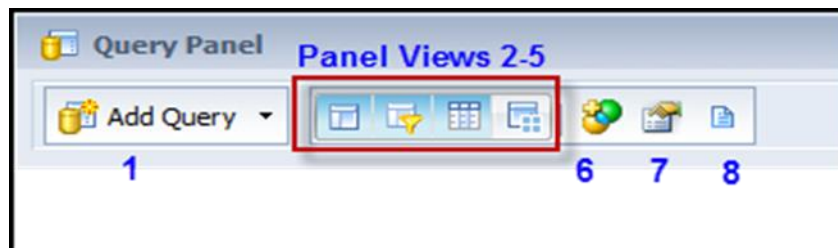
1. **Add a Query**

   - Allows you to add additional queries to filter for different sets of data that you might want to display

2. **Data Outline Panel**

   - Allows you to show/hide the Universe panel

3. **Filters Panel**

   - Allows you to show/hide the Query Filters panel

4. **Data Preview Panel**

   - Allows you to show/hide the Data Preview panel

5.   **Scope of Analysis Panel – Not supported**

- Allows you to show/hide the panel that defines structured hierarchy

6.   **Add a Combined Query – Not supported**

- Allows you to get valid information when adding a new query to an existing query

7.   **Query Properties**

a.   **Name** – When building queries, you should always assign your query a name (This will be discussed in more detail when we build multiple queries).

b.   **Universe** – Name of the universe that data is being pulled from.

c.   **Max Rows Retrieved** – Limits the number of rows retrieved from the data warehouse. It is recommended that you do not select this option. You may not get all of your data if you do.

d.   **Max Retrieval Time** – Limits the amount of time that the query will search through the data warehouse. It is recommended that you do not select this option. You may not get all of your data if you do.

e.   **Sample Result Set** – To run a small sample of a report to check to see if you are retrieving what you wanted before running a large report that will take time and rows.

f.   **Retrieve Duplicate Rows** – When unchecked, ALDER will summarize rows that have the same data. If left checked, each row of data will be displayed independently on your report.

g.   **Allow Other Users to Edit all Queries** – If unchecked, other users will not be able to modify the query. It is recommended that you leave this checked.

h.   **Prompt Order** – Allows you to change the order of prompts when you are filtering on dimensions, measures, or details. You cannot change the prompt order on predefined filters.

i.   **Reset Context on Refresh** – Not used by ALDER, leave this box checked.

8. **View Script – Not supported**

- As you build or change your query, Web-Intelligence automatically generates the programming language for the data objects you are using to retrieve information from the data warehouse

When closing, you can select either Apply Changes and Close or Revert Changes and Close. You cannot save and remain in the edit panel. The Apply Changes and Close option does not run the report.
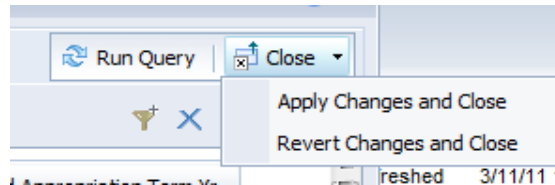
Universe Panel Discussion

The universe in ALDER contains all the data objects that can be reported on. If a data field exists in AKSAS (Alaska State Accounting System), then a data object has been created in ALDER.

Currently, there are two main Information Classes within the universe, Financial Activity and Structure.
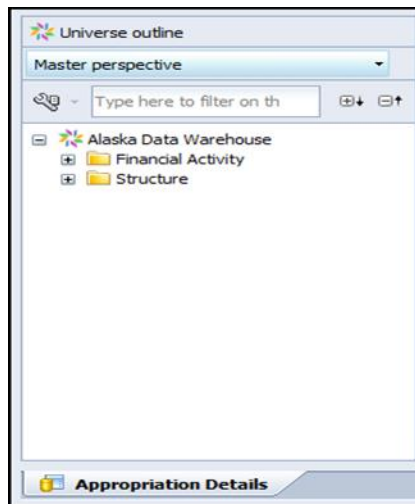
Objects from the Financial Activity information class should not be mixed with objects from the Structure information class.
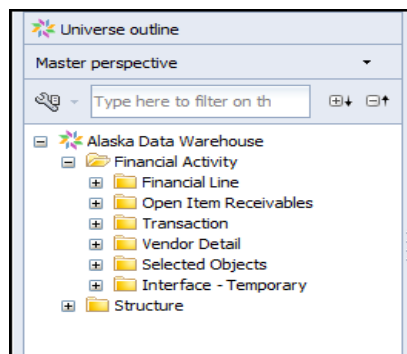
Objects from the Financial Line folder should not be mixed with objects from the Transaction folder.

Within the Universe panel, there are five types of objects:

1. ▮ **Dimension –** objects that data is aggregated by (e.g., appropriation, fund, grant, collocation code, ledger code, vendor zip code, open item type, date processed, chart of account year).

2. ᴍᴍ **Measure –** objects that data is calculated on (e.g., actual, encumbrance, original budget, restrictions).

3. ✴ **Detail –** objects associated with dimensions that are unique (e.g., address, phone number, transaction amount, schedule pay amount).

4. ▼ **Predefined Filters (information selectors) –** objects defined within the universe to filter data retrieved by the query from the data warehouse. These filters are have predefined parameters (e.g., Posting Type List, Posting Month Range, Collocation Code List, Open Item Number, Fiscal Period Code, Transaction Code). These objects can only be used in the Query Filters panel.

5. **Selected dimension –** objects associated with predefined filters. If a predefined filter is used, the associated selected dimension should also be used (e.g., Selected Ledger Code List, Selected Ledger Code List). These objects allow you to display in the Header Box what data is being retrieved from the data warehouse.

Objects within the Universe are grouped together in sub-folders by data type. When developing a report, use caution when pulling objects from subfolders.
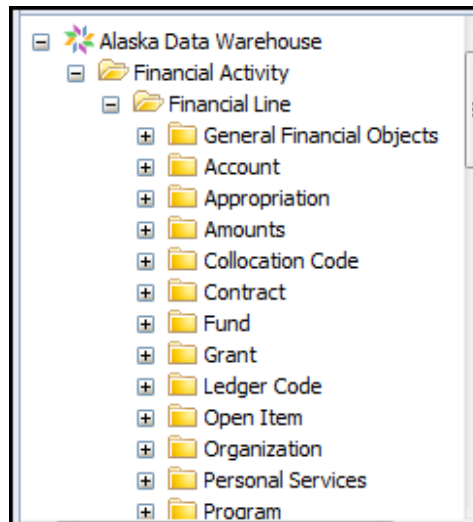
If an object is not specific to a data type, it is listed in one of the General Objects folder (e.g., Posting Type, Posting Month, COA Yr, Date Processed, Document Number, Source System ID).

Note: It is important that you understand how the Universe is arranged, how the objects are ordered, and what the object types mean!

If you do not know what an object is or how it is defined, you can hover over the object within the Universe panel and a brief description will be displayed.
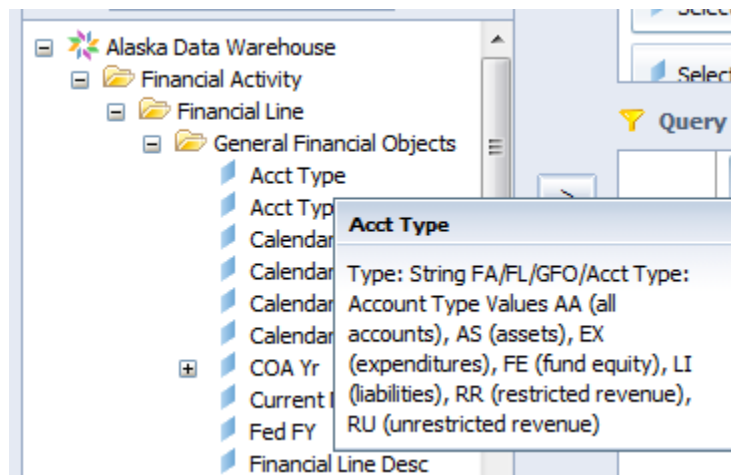
It can be difficult to **locate objects**; however, with continued use and review of folders you will be able to find objects quicker.   Following are some useful hints when you are looking for objects:

- Looking for dollar amounts?
    - Financial Activity/Financial Line/**Amounts**

- Looking for Selected dimensions?
    - Financial Activity/**Selected Objects**

- Looking for relative reporting items? Predefined filters are located at:
    - Financial Activity/Financial Line/General Financial Objects/**Relative Reporting**

- Can't find an object in a specified folder or it doesn't fit in any category? Try
    - Financial Activity/Financial Line/**General Financial Objects**, or
    - Financial Activity/Financial Line/**Transaction (FIN)/General Transaction (FIN) Objects** and it's subfolders

Another way to find objects in the universe is to use the **find option** located below the Universe panel. Type in the name of the object you are searching for and it will take you to the first instance, folder or object. Continue pressing the find icon and it will continue searching much like windows applications.
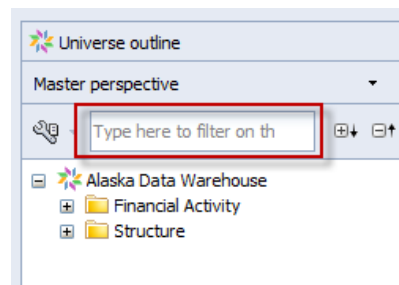
Result Objects Panel Discussion

Any data object that you might want to display on the face of your report must be placed in the Result Objects panel. The objects in this panel become the Available Objects within your report.

Enterprise Reports have a lot of available objects on them. The reports were designed to accommodate most Interactive Users and Report Viewers. These types of users can not add data objects to reports, but can access the information if the data object is already available to the report.

You can arrange objects within the Result Objects panel:

- Arrangement does not affect how objects get displayed in the report
- Makes it easier to see that you have all the objects you need within groups
- Hover over an object and the full object name is displayed
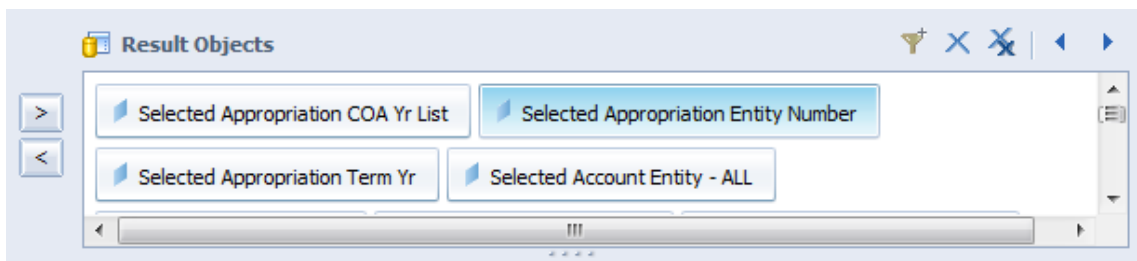
To move an object within the Result Objects panel:

- Drag and drop object to new position, or
- Click on an object and use the right or left arrow buttons

To remove an object within the Result Objects panel:

- Click on the X and remove one object or a double XX for Remove all
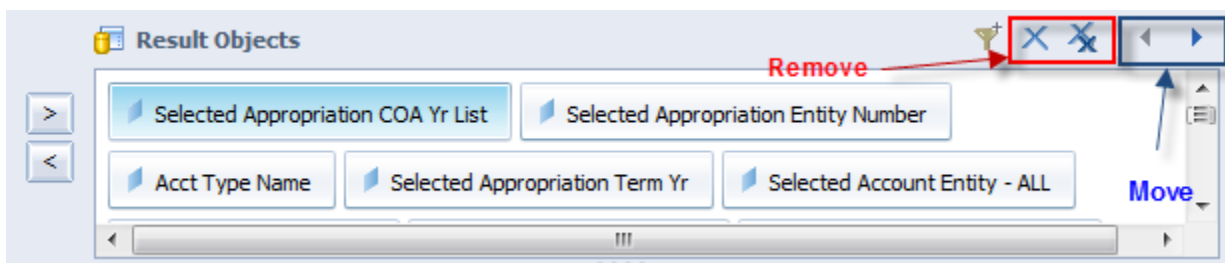
To create a filter from an object within the Result Objects panel.

- Not all objects can be converted to a filter
- Click on an object in the Results Object panel
- When the Quick Filter turns from grey to yellow, it can be converted
- The filter button takes a dimension, measure or detail and adds it to the Query Filters panel
- It does not remove the object from the Result Objects panel; it creates a new object in the Query Filters panel

- Click on the Filter and it opens the Add Quick Filter window so that the object pops into the Query Filters panel below and it is ready to define the filter
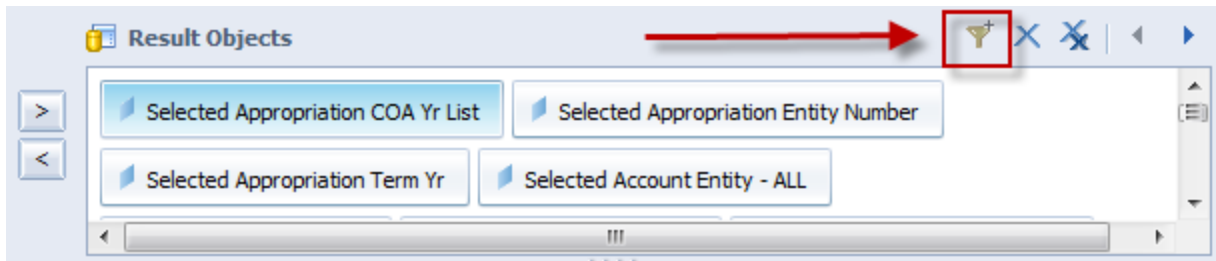
Query Filters Panel Discussion

The Query Filters panel is used to limit the information being retrieved from the data warehouse.

There are three different types of filters that can be used within the Query Filters panel:

1. **Predefined Filters (information selectors) –** objects defined within the universe to filter data retrieved by the query from the data warehouse. These filters have predefined parameters.

2. **User Defined Prompted Filters –** These can be dimensions, measures, or details and creates a prompt when Run Query or Refresh Data buttons are selected.

3. **User Defined Unprompted Filters –** These can be dimension, measures, or details. Only a report developer can change how this filter is defined.
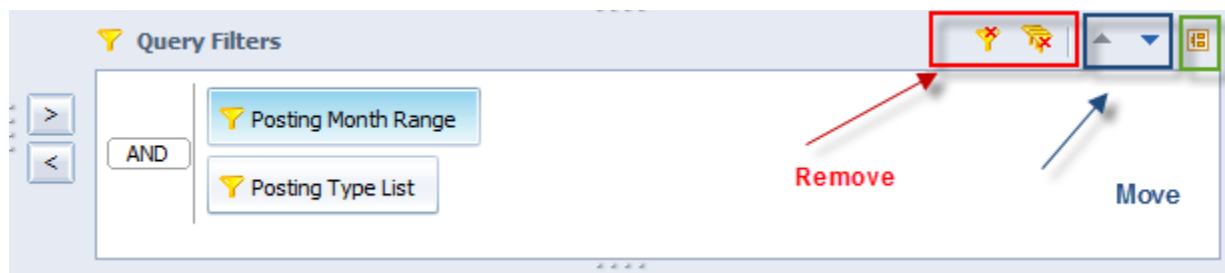
To Remove object(s) within the Query Filters panel:

- To remove one object, right-click on the single filter with a red X.
- To remove all filters, right-click on the filters with a red X.

To move an object within the Query Filters panel:

- Drag and drop object to new position, or
- Click on an object and use the up and down buttons

Summary

After completing this chapter, you are now able to:

- Access the Edit panel
- Identify the four different panels used within Edit
- Identify Information Classes within the Universe
- Identify Universe Objects
- Arrange Objects within the Result Objects panel
- Identify the different types of filters

Exercise

Instructions:

1. Add a New Folder under your ALDER 201 folder titled CLASS EXERCISES

2. Verify that your new folder has been added

3. From the Enterprise Audit Trail folder locate and open (double click) the report titled **Balance Sheet Detail Transactions for Account**

4. Save this report to the CLASS EXERCISE folder as **Chapter 3 Exercise**

5. Verify that the report was saved to your new folder
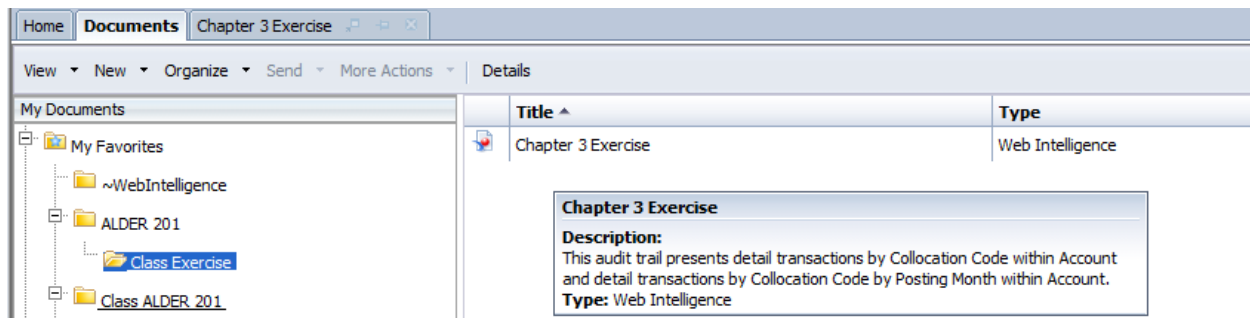
1.   Where in the Query panel can you find the data objects that can be added to a report?

2.   Where would you put data objects that you want to be available on your report?

3.   Where do you limit the information being retrieved from the data warehouse?

4.   What are the different types of filters?

5.   What are the different types of objects?

6.   Using the report you just copied, identify the Predefined Filters in the Query Filters panel.

7.   Is the User Defined Filter prompted or unprompted?

8.   Find the following objects in the Universe panel and identify what folder you found each one in:

   Note: Object names listed below are as they appear in the Universe. Objects can sometimes be found in multiple folders

   a.   Acct Type

   b.   CC Code/SY

   c.   Open Item Num

   d.   Input RD Code

   e.   Date Processed

   f.   Total Authorized

g.   Select Grant Entity Number

h.   Selected Grant Entity Number

CHAPTER 4: Adding and Removing Objects

Goals and Objectives

After you complete this chapter, you will be able to:

- Develop a Report Plan
- Find an Enterprise Report that will work with the plan
- Modify the Result Objects to fit the plan

Report Plan

It is strongly recommended before you ever open, create, or change a report that you have a report plan in place. A report plan consists of:

- What reporting structures do I want to report on?
- What account type do I want to report on?
- What posting type do I want to report on? (Budgets, Actuals, Encumbrances, etc.)
- What is the timing period that I want to report on? (Posting Months, Chart of Account Years, etc.)

Scenario

You have been asked to develop a report that shows actual expenditures by contract with detail. This report should cover the entire fiscal year for 2011. You know that an Enterprise Report probably exists that you can use. Once you open the report, you realize that there are a lot of objects listed on the report that your department does not use. This report will be used in the future, so remove any unnecessary objects and add any that will be needed.

1. Develop a report plan based on the scenario above.

   a. Reporting Structure
   b. Account Type
   c. Posting Type
   d. Timing Period

2. Find and copy **Detail Transactions for Contract** to your ALDER 201 folder. Open the report.

3. Refresh the data using the following prompts:

   a. COA Yr   2011
   b. Contract Number   51000
   c. Account Type   EX
   d. Account Entity   70201
   e. Posting Type   1
   f. Posting Months   1 – 18

4.   Ensure that you are in Design Mode

5.   In the Report panel, select Available Objects.

6.   Scroll through the list. This is an Enterprise report and there are a lot of available objects listed

7.   Before adding or removing objects, scroll through the report and notice that some of the objects we want to remove are being displayed on the face of the report.
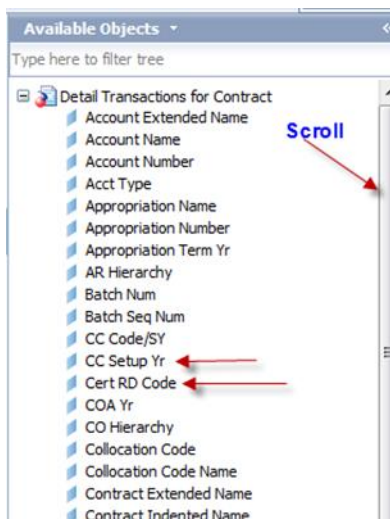
8.   In the Data Access tab, click Edit.

Removing Objects

There are four ways to remove objects from the Result Objects panel:

1.   Arrow out
2.   Delete key
3.   Drag and Drop
4.   Remove
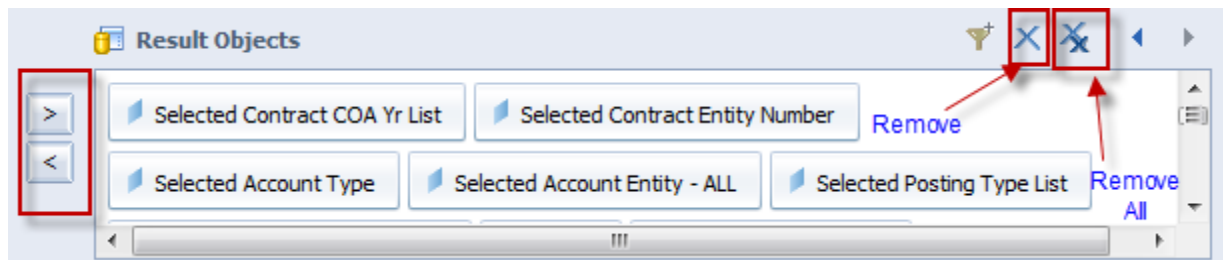
After our review, we have determined that we do not need the following objects in our report:

CC Setup Yr	Cert RD Code	FQA Financial Source	Financial line Desc
Fund Name	Fund Number	Open Item Line Num	Open Item Num
Open Item Type	Program Indicator	Program Number	Source System ID
Transaction Desc L1			

Note: There is not an **undo** button, so make sure you know which object you are removing!

Find the objects listed above and remove them from the Result Objects panel.

Adding Objects

There are three ways to add an object to Result Objects panel:

1. Arrow In
2. Drag and Drop
3. Double Click

When adding objects, they will be placed at the end or where you last had an Object selected in Result Objects panel

We have also determined that we need to add the following objects to our report:

Fed FY   Contract FQA   Contract FQO

1. Find the objects listed above in the Universe panel and add them to the Result Objects panel.

2. Click Close, Apply Changes and Close

3. Scroll through the list of Available Objects and verify that you have removed all the objects listed above. Also, verify that the objects you added are in the list.

4. Insert 3 blank columns on your report after the Document Num column.

5. Drag the object Fed FY into the first blank column you created.

6. Drag the object Contract FQO into the second blank column you created.

7. Drag the object Contract FQA into the third blank column you created.

8.   Save the report to your ALDER 201 folder as **Detail Transactions for Contract Add Remove Objects**.

Summary

After completing this chapter, you are now able to:

- Develop a Report Plan
- Find an Enterprise Report that will work with the plan
- Modify the Result Objects to fit the plan

Exercise

Instructions:

1.   Find and save a copy of Detail Transactions for Appropriation to your CLASS EXERCISE folder

2.   Open the report from your CLASS EXERCISE folder

3.   Refresh data:

a.	Select COA Yr:	2011
b.	Select AR Number:	15320
c.	Select AR Term Year:	2011
d.	Select Account Type:	EX
e.	Enter Account Entity:	70200
f.	Select Posting Type(s):	1;4;5;6;7
g.	Starting Posting Month:	1
h.	Ending Posting Month:	18

4.   Run Query

5.   Click the Design button

6.   Review report and find Input RD Code column

7.   In the Available Objects find Cert RD Code not displayed on the report

8.   Click on Edit

9.   In the Result Objects panel, remove the Input RD code and Cert RD code dimension objects

10.   Run Query, using the same prompts

11.   Review report, verifying that the objects removed are no longer in the list of available objects, and that Input RD is not on the report

12.   Click on Edit

13.   Add the objects Account Logical Level and Appropriation FQA to the Results Objects panel

14.   Run Query, using the same prompts

15.   Review the Available Objects list to verify the new objects available for use on the report

16.   Drag and Drop Objects in the report. Place the object Account Logical Level in column 2; place Appropriation FQA in the column before CC Code/SY

17.   Review the table to make sure your new objects are in the correct columns

18.   Save this report as **Chapter 4 Exercise** to your CLASS EXERCISES folder

CHAPTER 5: Modify Query Filters from Range to List

Goals and Objectives

After you complete this chapter, you will be able to:

- Identify types of filters
- Modify the Query Filters from range to list

Introduction

ALDER has the ability to pull data in many different formats.

- Information requests from ALDER should be designed to increase efficiency which will enable your reports to run faster
- Request only information that is needed in a report; it is easy to add objects at a later date to a report

Identify Filter Types

In ALDER there are three different types of filters:

1. ***Query Filters*** - Allow the user to limit the amount of data retrieved from the data warehouse. There are two types of Query Filters:

   a.   Pre-defined Query Filters based on objects in the Universe panel
   b.   Filters built by report developers

2. ***Report Filters*** – Allow the user to restrict the data displayed on the entire report. These types of filters are applied to all tables and charts within a report.

3. ***Table/Chart Filters*** – Allow the user to limit the data displayed on individual tables or charts.

All but pre-defined filters are defined on dimensions, measures, details, and variables that are listed within the Available Objects menu in the Report panel.

Scenario

Your department has found a report that allows them to select a range of ledger codes but the program managers in the department would like the report modified to select specific ledger codes. They want to know if the report can be modified to accommodate their request.

Changing a report from Range to List:

1.   Find and copy **Detail Transactions for Ledger Code** to your ALDER 201 folder

2.   Open report from ALDER 201 folder

3.   Refresh Data with the following prompts:

	a.	Select COA Year:	2011
	b.	Select Beginning Ledger Code:	02000100
	c.	Select Ending Ledger Code:	02000200
	d.	Select Account Type:	EX
	e.	Enter Account Entity or Enter ALL:	70200
	f.	Select Posting Type(s):	1;4;5;6;7
	g.	Starting Posting Month:	1
	h.	Ending Posting Month:	3

4.   Click OK

5.   Save the report in your ALDER 201 folder as **Detail Transactions for Ledger Code in List**

Modify Query Filters

Review the report results and notice that we now have a range of ledger codes listed in the header box (prompt selection). Because this report is sectioned by ledger code you can also use the navigation map (Report panel) and see the ledger codes that appear on the report.

1.   Ensure you are in Design Mode. In the Report panel select Available Objects.

2.   Scroll through the list until you find the objects "Selected Ledger Code Range" and "Selected Ledger Code COA Year List".
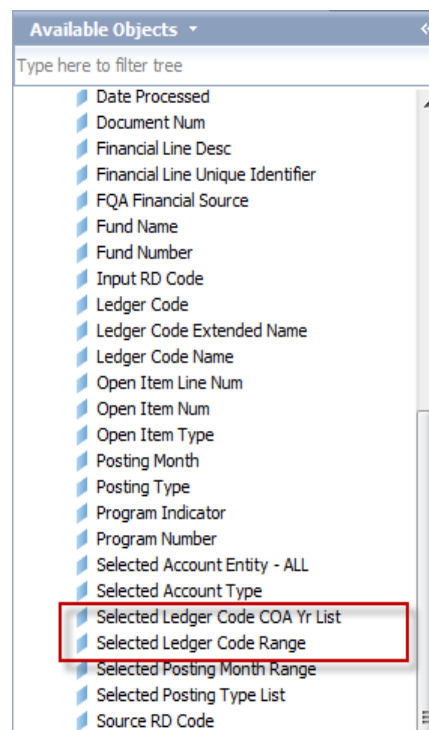
3.   Edit

4.   From the Query Filters panel remove:

      a.   Select Ledger Code COA Yr List

      b.   Select Ledger Code Range

5.   From the Result Objects panel remove:

      a.   Selected Ledger Code COA Yr List

      b.   Selected Ledger Code Range

Note: If you do not remove the selected objects from the Result Objects panel, you will still be prompted for these objects when you run the query. Even though you are being prompted for these items, you are not filtering on the objects.

6.   From the Universe panel

7.   Add the following objects to the Query Filters panel:

      a.   Select COA Yr List

      b.   Select Ledger Code List

8.   Add the following objects to the Results Objects panel:

      a.   Selected COA Yr List

      b.   Selected Ledger Code List

9.   Run Query with the following prompts:

      a.   Ledger Codes   02000100 and 02000115

Notice the difference in the prompt box?

BEFORE Changes
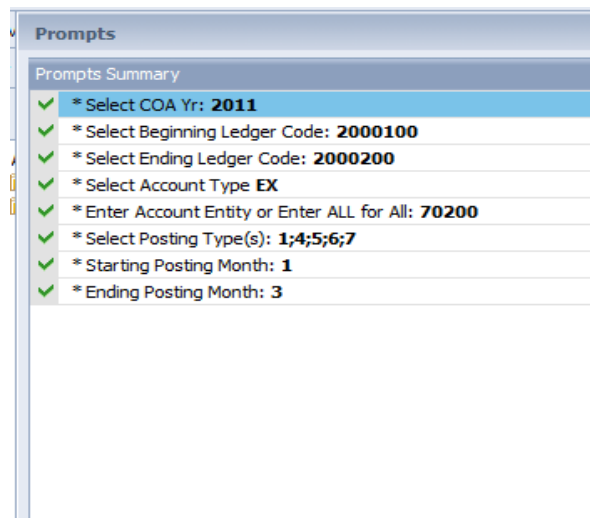
AFTER Changes
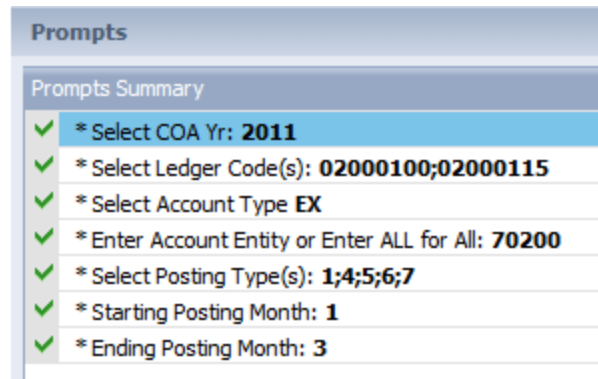
10.   Click OK

Notice that our report header box now has blank rows. This is because the header box displayed the "Selected Ledger Code Range" and the "Selected Ledger Code COA Yr". Those objects were removed from our report.

11.   Update the header box by dragging and dropping the following objects into the gray area:

    a.   Selected COA Yr List
    b.   Selected Ledger Code List

12.   Save the report to your ALDER 201 folder with the **same title**

Summary

You should now be able to:

- Identify filter types
- Change reports from ranges to lists

Exercise

Instructions:

1.   Find and save a copy of the Enterprise report **Detail Transactions for Collocation Code** to your CLASS EXERCISE folder

2.   Open the report from your CLASS EXERCISE folder

3.   Refresh the report:

    a.   Select COA Yr: 2011
    b.   Select Beginning Collocation Code: 45000000
    c.   Select Ending Collocation Code: 45999999
    d.   Select Collocation Code Set-up Year: 2011
    e.   Select Account Type: AA

f.	Enter Account Entity:	ALL
g.	Select Posting Type(s):	1;4;5;6;7
h.	Starting Posting Month:	1
i.	Ending Posting Month:	18

4.   Click OK

5.   Notice that the report is asking for a range of Collocation Codes. You would like to change this report to ask for a specific list of Collocation Codes rather than a range

6.   Edit

7.   In the Query Filters panel, remove:

      a.   Select Collocation Code Range
      b.   Select Collocation Code COA Yr List

8.   From the Universe panel, find and place in the Query Filters panel:

      a.   Select COA Yr List
      b.   Select Collocation Code List

9.   In the Result Objects panel, find and remove:

      a.   Selected Collocation Code COA Yr List
      b.   Selected Collocation Code Range

10.   In the Universe panel, find and add in the Result Objects panel:

      a.   Selected COA Yr List
      b.   Selected Collocation Code List

11.   Run Query with the following prompts:

      a.   Select Collocation Code List   45141630 and 45141640
      b.   Select COA Yr List   2011

12.   Populate the Header Box by dragging and dropping the new objects in the grey areas or by removing the blank rows and inserting the new objects:

      a.   Selected Collocation Code List
      b.   Selected COA Yr List

13.   Save the report to your CLASS EXERCISES folder as **Chapter 5 Exercise**

CHAPTER 6: Change Report Type

Goals and Objectives

After you complete this chapter, you will be able to:

- Change Query Filters
- Rename Query Tabs

Introduction

The purpose of changing a report type will vary between users. Changing Query Filters allows the user to define the type of data they need for a specific purpose. This chapter will show the user how to change Query Filters and define the report parameters by different structures/entities.

Scenario

Your program managers have found an enterprise report that they would like to have changed to accommodate their reporting needs. They would like to see the report sectioned by appropriations that report to an organization structure. We believe we can change this report type entity from Appropriation to Organization.

- Open **Detail Transactions for Appropriation** from your ALDER 201 folder
- DO NOT REFRESH REPORT
- Edit

Change Query Filters and Result Objects for Reporting Entity

1. From the Query Filters panel remove:

   a. Select Appropriation COA Yr List
   b. Select Appropriation Entity Number
   c. Select Appropriation Term Yr

2. From the Result Objects panel remove:

   a. Selected Appropriation COA Yr List
   b. Selected Appropriation Entity Number
   c. Selected Appropriation Term Yr
   d. Select Appropriation Name (Dimension)

3. From the Universe panel add the following objects to the Query Filters panel:

   a. Select COA Yr list
   b. Select Organization Entity Number

4. From the Universe panel add the following objects to the Result Objects panel:

   a. Selected COA Yr List
   b. Selected Organization Entity Number

5.	From the Universe panel add the following objects to the Result Objects panel:

   a.	OR Hierarchy
   b.	Organization Extended Name
   c.	Organization Number
   d.	Organization Name
   e.	Organization Logical Level
   f.	Select Organization Name (Dimension)

Rename Query Tab

1.	Rename Query to **OR by AR**. Be careful not to name the query the same name as a universe object.
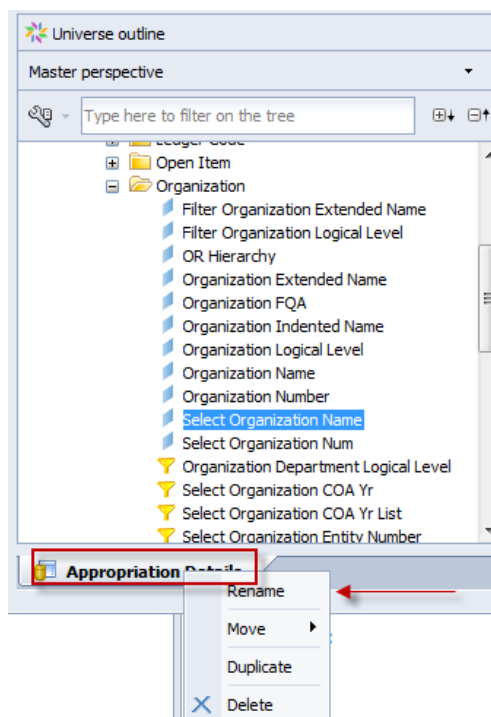
2.	Run Query only updating the following prompts:

   a.	Select COA Yr			2011
   b.	Select OR number			09100
   c.	Select Account Entity		70200

3.	Update header box with:

   a.	Selected COA Yr List
   b.	Selected Organization Entity Number
   c.	Select Organization Name

4.	Delete unused rows and update the text in the blue boxes where necessary

5. Save the report to your ALDER 201 folder as **Detail Transactions for Organization by Appropriation**.

Document Structures and Filters

Notice on the Document Structures and Filters that the information is still sectioned on Appropriation.

This is not complete. You will need to update Sections (ALDER 101 Chapter 7) and populate the report.

Summary

After completing this chapter, you are now able to:

- Change report type entity
- Rename query tabs

Exercise

Instructions

1. Find and copy the **Detail Transactions for Grant** to your CLASS EXERCISE folder. **Do NOT Refresh Report.** We will be converting this report from Grants to Projects.

2. Open the report from your CLASS EXERCISE folder

3. Edit

4.   Add Query Filters objects:

      a.   Select COA Yr List
      b.   Select Project Entity Number

5.   Add Header Box Result Objects:

      a.   Selected COA Yr List
      b.   Selected Project Entity Number
      c.   Select Project Name

6.   Add additional Result Objects:

      a.   PJ Hierarchy
      b.   Project Extended Name
      c.   Project Number
      d.   Project Name
      e.   Project Logical Level

7.   Remove Query Filters objects:

      a.   Select Grant COA Yr List
      b.   Select Grant Entity Number

8.   Remove Result Objects:

      a.   Selected Grant COA Yr List
      b.   Selected Grant Entity Number

9.   Rename Query to PJ Detail

10.   Run Query only updating the following prompts:

      a.   Select COA Yr List   2011
      b.   Select PJ Number   41000
      c.   Enter Account Entity or enter ALL   70200
      d.   Ending Posting Month   1

11.   Update the Header Box with the following objects and rename them accordingly:

      a.   Selected COA Yr List
      b.   Selected Project Entity Number
      c.   Select Project Name

12.   Update the Description, and Keywords from Grant to Project by Grant, remember that this is a Detail Transactions for Project by Grant

13.   Save the report in your Class Exercises folder as **Chapter 6 Exercise**

CHAPTER 7: Modify Query to Filter on Dimensions, Measures and Nested Filters

Goals and Objectives

After you complete this chapter, you will be able to:

- Identify Prompted vs. Unprompted Filters
- Filter on Dimensions and Measures
- Create a Nested Filter

Query Filters Types

There are three different types of filters that can be used within the Query Filters panel:

1.   **Predefined Filters (information selectors)** – objects defined within the universe to filter data retrieved by the query from the data warehouse. These filters have predefined parameters and efficiently retrieve data from the warehouse. You should always look for a predefined filter first.

2.   **User Defined Prompted Filters** – These can be dimensions, measures or details and create a prompt when Run Query or Refresh Data buttons are selected

3.   **User Defined Unprompted Filters** – These can be dimensions, measures, or details. Only a report developer can change how this filter is defined.

Find and copy **Detail Transactions for Grant** to your ALDER 201 folder. Open the report from your ALDER 201 folder.

Refresh Data and update the following prompts:

- COA Yr   2011
- Account Entity   70200
- Posting Type   1

In the Report panel, view User Prompt Input.   See how the Query Filters are defined. This will show predefined filters and user prompted filters:

User Prompt Input ▾	«
📒 Advanced 🔁 Run	

Select COA Yr:
2011

Select GR Number:
35037

Select Account Type
EX
(--Show List Of Values--)

Enter Account Entity or Enter ALL for All:
70200

Select Posting Type(s):
1

Starting Posting Month:
1

Ending Posting Month:
18

As a reminder, each filter should be listed in the header box.

Unprompted Filters

Filter Data on a Dimension

1.   In the report, view the Date Processed column.

See that there are several days 10/12/2010 in account 73970. Also note how many pages the report currently has.

		AA23286810006	145-90	09/15/2010	03	18128
73802 - I/A DISASTER RELIEF						
73970 - CONTRACTUAL COST TRF		AA23455760004	430-10	09/30/2010	03	09356
		AA23487650008	430-10	10/12/2010	04	09330
		AA23487650009	430-10	10/12/2010	04	09330
		AA23487650012	430-10	10/12/2010	04	09330
		AA23487650013	430-10	10/12/2010	04	09330
		AA23487650014	430-10	10/12/2010	04	09330
		AA23487650015	430-10	10/12/2010	04	09330
		AA23487650015	430-10	10/12/2010	04	09330
		AA23487650016	430-10	10/12/2010	04	09330
		AA23488020010	430-10	10/12/2010	04	09330
		AA23488020013	430-10	10/12/2010	04	09330
		AA23488020014	430-10	10/12/2010	04	09330

2.   Click Edit.

3. Find the dimension Date Processed (Financial Activity/Financial Line/Transaction (FIN)/General Transaction (FIN) Objects) and drag the object to the bottom of the Query Filters panel.
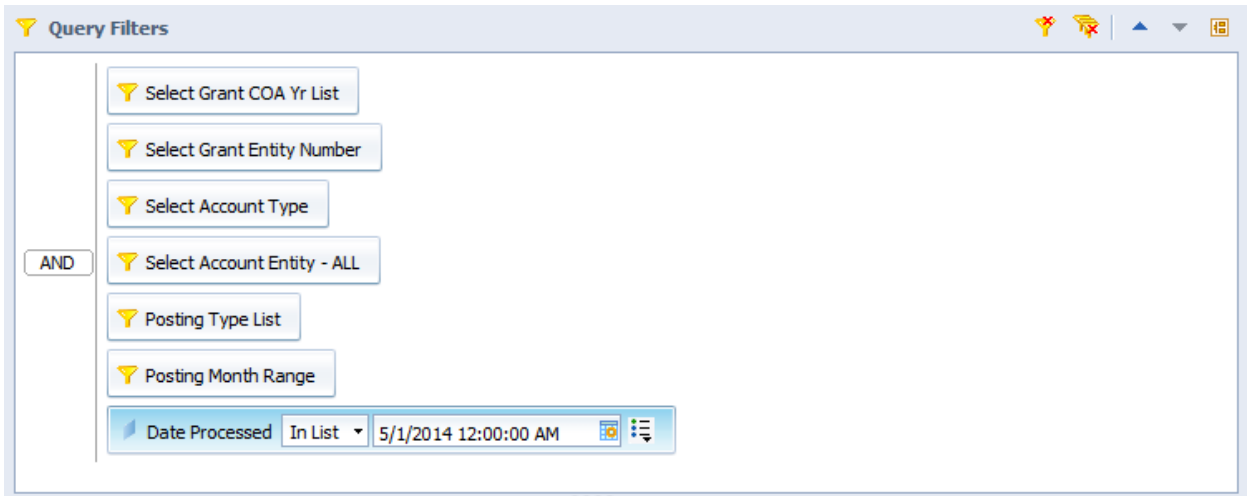
Notice that the object defaults to In List (depending upon your ALDER preferences).
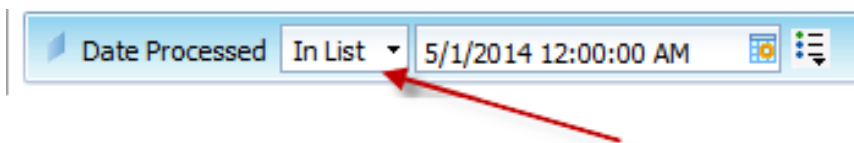
We want to filter the data for dates on or after December 15, 2010.

4. Change the Operator to Greater than or Equal to

5. In the Value 1 box, type 12/15/2010 (you must have the exact format for this object) or select the date from the drop down menu

6. Define filter type: Constant
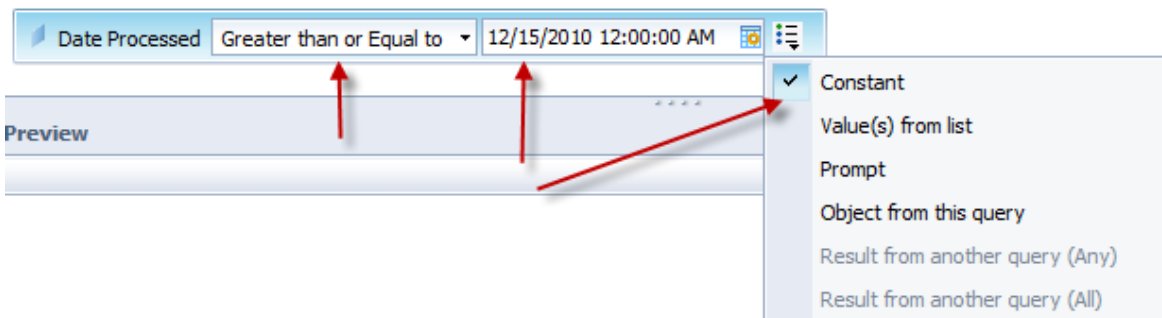
7.   Run Query

8.   Click OK without changing prompts

9.   In the report, view the Date Processed column.

See that the dates in account 73970 start with 02/02/2011. Also note how many pages the report now has.

Account	Document Num	Trans Code	Date Processed	Posting Month
72970 - TRAVEL COST AJE XFER	AA23651920001	430-10	12/21/2010	06
72970 - TRAVEL COST AJE XFER				
73970 - CONTRACTUAL COST TRF	AA23748770001	430-10	02/02/2011	08
	AA23748770002	430-10	02/02/2011	08
	AA23748770003	430-10	02/02/2011	08
	AA23754930001	430-10	02/04/2011	08
	AA23754930001	430-10	02/04/2011	08
	AA23754930003	430-10	02/04/2011	08
	AA24016200001	430-10	05/20/2011	11
	AA24016200001	430-10	05/20/2011	11

In the Report panel, view User Prompt Input.

Notice that this Unprompted Filter will not show.

Since you are filtering this information at the Query level, you will want to update your Header Box to let the report users know that this filter exists.

COA Year	2011
Grant	35037
Account Type(s)	EX
Account Number	70200
Posting Type(s)	1
Posting Month(s)	1 - 18
Filtered by:	Date Processed>=12/15/2010

10.   Save the report to your ALDER 201 folder as **Detail Transactions for Grant V1**.

11.   View the Actual column. We are going to place a filter in the query limiting our data to amounts greater than $1,000.

12.   Edit.

Filter Data on a Measure

1.   Find the measure Actual and drag the object to the bottom of the Query Filters panel.

2.   Change the Operator to Greater than or Equal to

3.   In the Value 1 box, type 1000 (do not use $ sign)

4.   Define filter type: Constant

When you are done, your Query Filters panel objects should look like this:
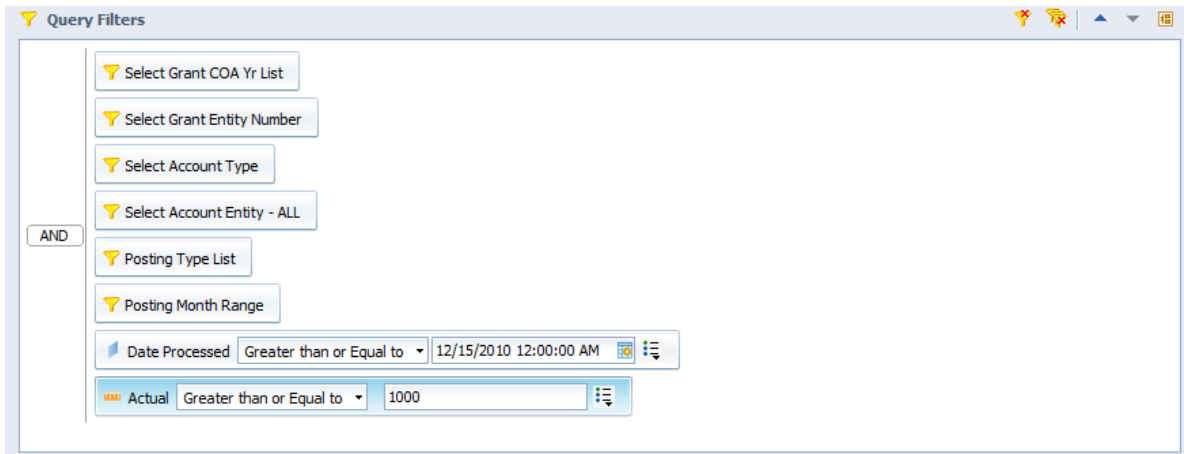
5.   Run Query

6.   Click OK without changing prompts

In the report, view the Actual column. See that the amounts are no longer under $1,000. Also note how many pages the report now has.

7.   Update the Header Box.

8.   Save the report to your ALDER 201 folder as **Detail Transactions for Grant V2**.

Nested Filters

The purpose of a Nested Filter is to limit or define the data being displayed on a report based on multiple sets of criteria. In this example, we want to filter on Date Processed OR Actual.

1.   Edit

2.   In the Query Filters panel, select the last filter in the list of filters. Select the Nested Filter button next to the Query Filters panel. Once it has been selected, notice that ALDER has added an OR into the Query Filters panel.
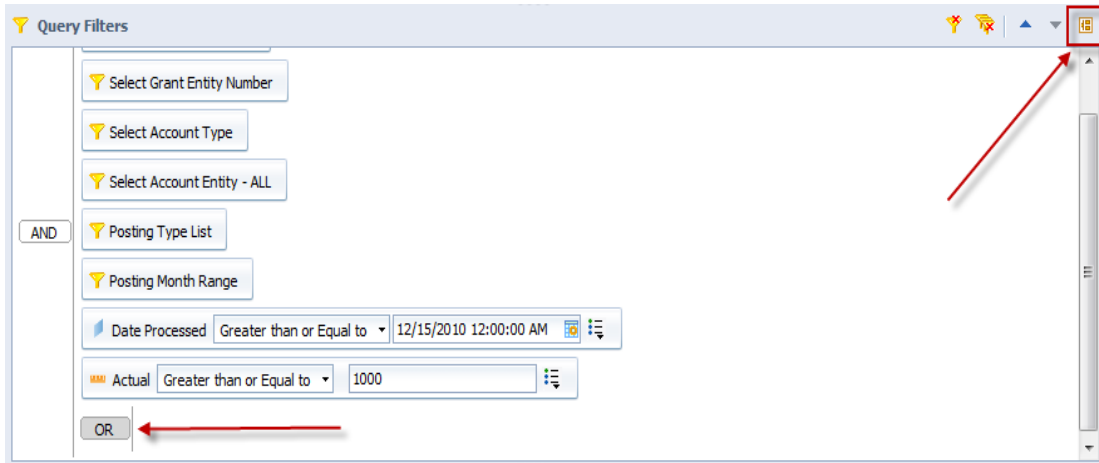
3.   In the Query Filters panel, select the object Date Processed Greater than or Equal to.

4.   Using the Up/Down Arrows, move the object next to the OR statement.
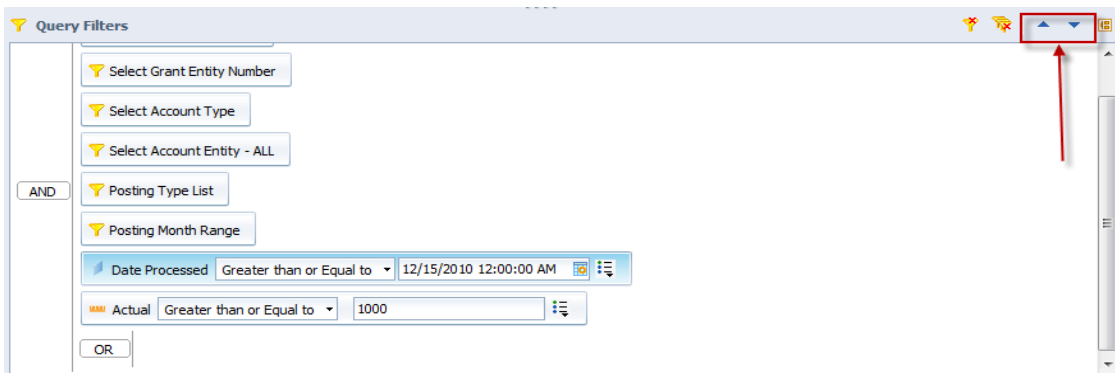
This is what the Date Processed should look like when it has been moved next to the OR statement.

5.   In the Query Filters panel, select the object Actual Greater than or Equal to 1000.

6.   Using the Up/Down Arrows, move the object next to the OR statement.

7.   Run Query

8.   Click OK without changing prompts

9.   Update the Header Box

The Report is now bringing back more data with this Nested Filter. It will display rows that have the date processed >= 12/15/2010 or the amounts >= $1,000. For example on the first row, it has the date of 12/21/2010 and the amount of $ 61.76.

See the APPENDIX for definitions of OPERATORS and an additional example of a Nested Filters!

Note: When using filters, you should always verify your information with AKSAS.

10. Save the report in your ALDER 201 folder as **Detail Transactions for Grant Nested Filters**.

Summary

After completing this chapter, you are now able to:

- Identify Prompted vs. Unprompted Filters
- Filter on Dimensions and Measures
- Create a Nested Filter

Exercise

Scenario

Employees who work on contracts in your section have come to you requesting two reports. One report that provides contracts with only reimbursable service agreement (RSA) information and data for only collocation codes (CC) with a setup year of 2009 or greater. The second report they would like to see either of the two criteria (RSA or CC setup years).

1. Find and copy **Detail Transactions for Contract** to your CLASS EXERCISE folder

2. Open the report from your CLASS EXERCISE folder

3. Change the following prompts:

    a. Select COA Yr: 2010
    b. Select Account Type: RR
    c. Select Account Entity: 50000

4. Click OK

After reviewing the report, you decide you only want to see certain types of transactions on this report

5. Edit

6. Go to the Universe panel and find the dimension "Trans Code" (Hint: look in Financial Activity/Financial Line/Transaction(FIN))

7. Drag the dimension onto your Query Filters panel

8.   You don't want to be prompted for this information each time that you refresh the data; therefore, set it as a filter (Define filter type: Constant)

9.   You want to get all RSA transactions, so you will select trans codes 140-00 thru 145-99 (Hint: Between)
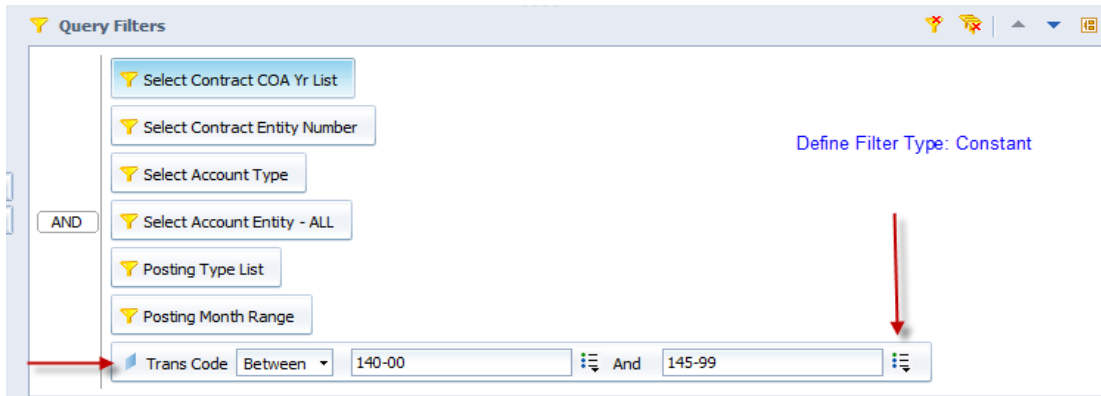
10.   Run Query

11.   Review report to verify that the data was filtered correctly

12.   Update the Header Box

COA Year	2010
Contract	51000
Account Type(s)	RR
Account Number	50000
Posting Type(s)	1, 4, 5, 6, 7
Posting Month(s)	1 - 18
Filtered by:	Transaction Code 140-00 thru 145-99

13.   Save to your Class Exercise folder as **Chapter 7 Exercise V1**

Now you need to add the second criteria that was requested, collocation codes with the setup year of 2009 or greater

14.   Edit

15.   Add the dimension CC Setup Yr to the Query Filters panel

16.   Update the CC Setup Yr to be Greater than or Equal to 2009. This should be an unprompted filter
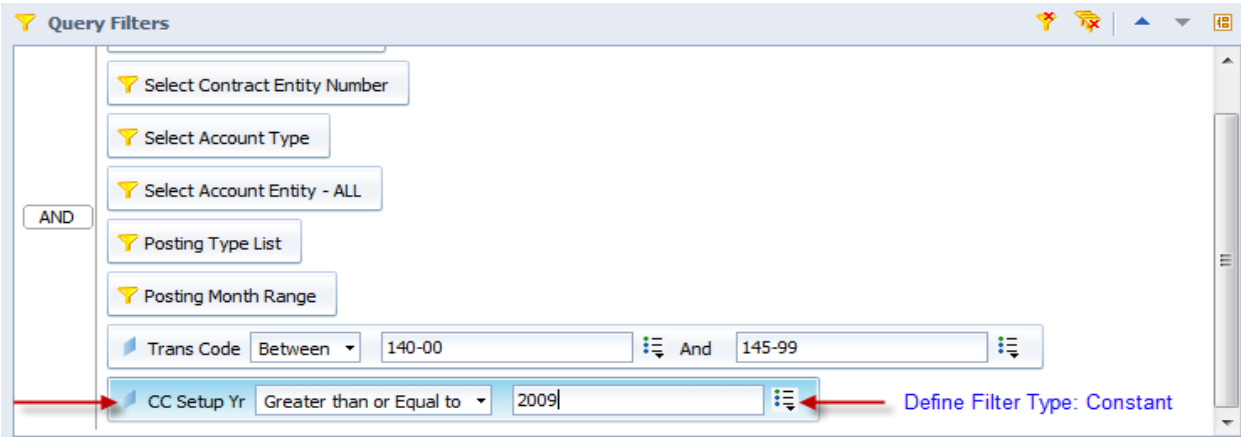
17.   Run Query and view the data

18.   Update Header Box

19.   Save the report to your Class Exercises folder as **Chapter 7 Exercise V2**

20.   Now you need to create the second report that was requested, you only want to retrieve data from one of the new filters OR the other

21.   Edit

22.   Add a Nested Filter for the 2 dimension objects that you added to the Query Filters panel
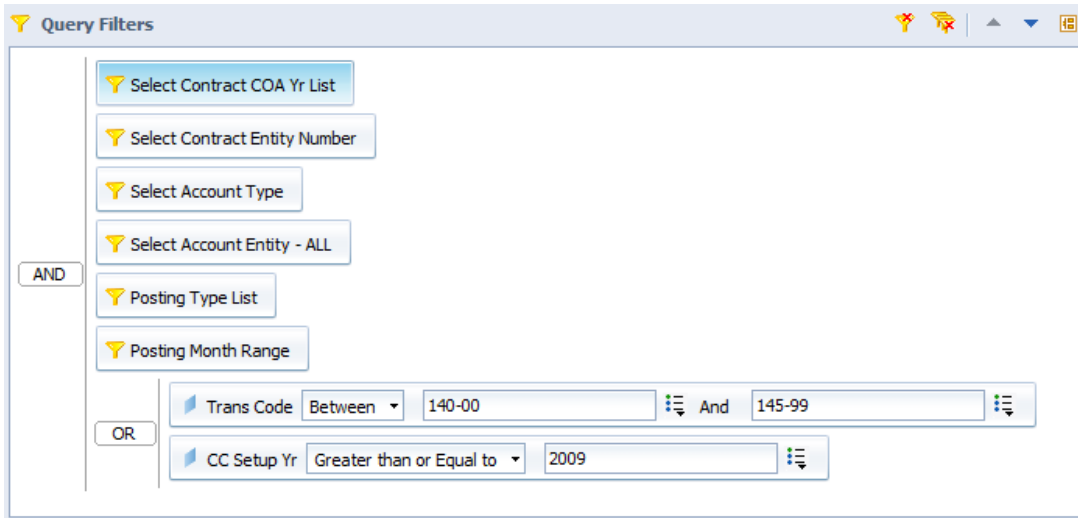
23.   Run Query

24.   Review report to see what changed with the Nested Filter

25.   Update Header Box

COA Year	2010
Contract	51000
Account Type(s)	EX,RR
Account Number	50000
Posting Type(s)	1, 4, 5, 6, 7
Posting Month(s)	1 - 18
Filtered by:	Transaction Code 140-00 thru 145-99
OR	CC Setup Yr>= 2009

26.   Save the report to your Class Exercises folder as **Chapter 7 Exercise Final**

CHAPTER 8: Building a Report from Scratch Using a Template

Goals and Objectives

After you complete this chapter, you will be able to:

- Create a report utilizing a template
- Create a report plan
- Paint a report
- Add tables for section headers and section and report totals
- Format Section and Blocks

Introduction

Before creating a report it is always a good idea to have a report plan in place. Know the entities you want to report on so that you can select your objects in a timely manner. You cannot save a report from the Edit function so you must have enough query filter objects in your report to run a query. Included in Chapter 4 was a "report plan" guideline that will help us with the upcoming process.

Scenario

Your director has asked you to build a report based on collocation codes, he/she would like to see the expenses for the first quarter and he/she would also like to see these expenditures displayed by account for Chart of Account Year (COA) 2011.

Creating and Using a Report Plan

A plan includes:

1.   Entity Type (structure)?

   a.   Collocation Code

2.   Timing Period?

   a.   COA Year 2011
   b.   Posting Month Range (3 months)

3.   Accounts?

   a.   Expenditures (EX)

4.   Posting types

   a.   Posting Type 1 (actual)

These will become your basic Prompts (Query Filters).

For quicker retrieval of data, we STRONGLY ENCOURAGE you to use the filter objects COA YR and Posting Month on all reports.

Based on the plan that we have just created, lets determine what Query Filters and Result Objects we need on the report.

Best practice for Query development:

- Start by creating a small, well-structured query; add more objects later
- Add objects to query that help to partition the database and optimize query performance such as COA YR; Posting Month; and Posting Type
- Objects placed in the Query Filters panel should have matching "Selected" objects in the Result Objects panel. Selected objects are used to populate the header box of the report.

1.   What am I filtering on (Query Filters)?

   a.   Select COA Yr List
   b.   Select Collocation Code Range
   c.   Select Account Entity – ALL
   d.   Select Account Type
   e.   Posting Month Range
   f.   Posting Type List

2.   What do I want in my Header Box (selected objects)?

   a.   Selected COA Yr List
   b.   Selected Collocation Code Range
   c.   Selected Account Entity – ALL
   d.   Selected Account Type
   e.   Selected Posting Month Range
   f.   Selected Posting Type List

3.   What Available Objects do I want available to display in my data tables (dimension/measure/detail)?

   a.   Account Number
   b.   Collocation Code Extended Name
   c.   Ledger Code
   d.   Posting Month
   e.   Posting Type
   f.   Actual

Creating a Report Utilizing a Template

1.   Find and copy the **Template Report** to your ALDER 201 folder (highlight folder for financial)
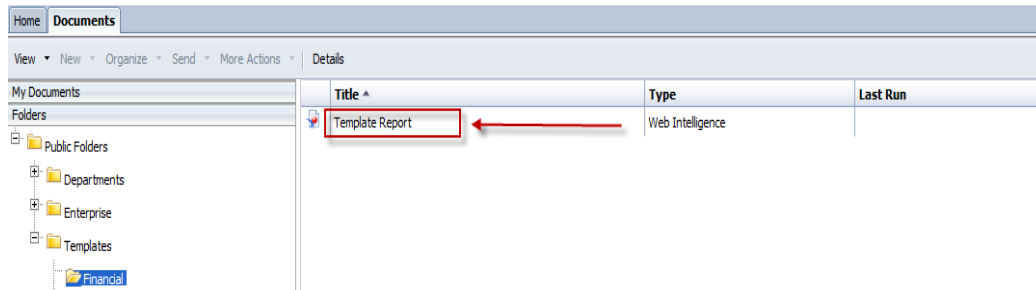
2.   Open the report from your ALDER 201 folder

Notice that the template report has the same standard elements as all other ALDER reports

3.   Edit

4.   Add objects to the Query Filters panel ⛳ from the previous page

    a.   Three ways to add objects to panels: Drag & Drop, Arrows, Double Clicking

5.   Add Selected objects to the Result Objects panel from the previous page
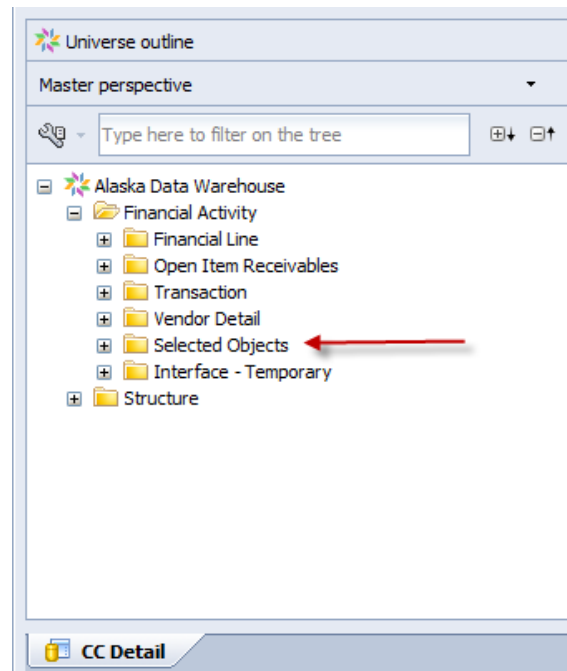
6.   Add dimension/measure/detail objects to the Result Objects panel from page 52

7.   Rename Query to **CC Detail**

Be careful not to name the query the same name as a universe object

8.   Run Query with the following prompts:

   a.   Select COA Year   2011
   b.   Select Beginning Collocation Code   02400210
   c.   Select Ending Collocation Code   02400290
   d.   Select Account Entity – ALL   70200
   e.   Select Account Type   EX
   f.   Select Posting Type   1
   g.   Starting Posting Month   1
   h.   Ending Posting Month   3

**Unless there is an error message that says no data retrieved the report will be blank until you paint the report with objects.

9.   Rename report tab as **CC Detail**

10.   Update Header Box:

11.   Update your header box with "selected" objects

12.   Rename blue boxes in Header Box

13.   You may need to add or delete rows in the Header Box to accommodate the selected items in your new report format

COA Yr	2011
CC Range	2400210 - 2400290
PM Range	1 - 3
PT	1
AC Type	EX
Account No	70200

Collocation Code E	Account Number	Posting Month	Posting Type	Actual
02400210-10 FINAI	72113	01	01	$2,086.00
02400210-10 FINAI	72721	02	01	$2,034.96
02400210-10 FINAI	72722	02	01	$213.50
02400210-10 FINAI	72723	02	01	$180.00
02400210-10 FINAI	72726	02	01	$1,161.00
02400210-10 FINAI	72727	02	01	$540.00
02400210-10 FINAI	73155	02	01	$0.00

Painting a Report

1.   Paint the report by adding available objects to data table (it should look like the table above):

   a.   Collocation Code Extended Name
   b.   Account Number
   c.   Posting Month
   d.   Posting type

       e.   Actual

2.   Save the report to your ALDER 201 folder as **CC Detail V1**

3.   Set Collocation Code Extended column as Section
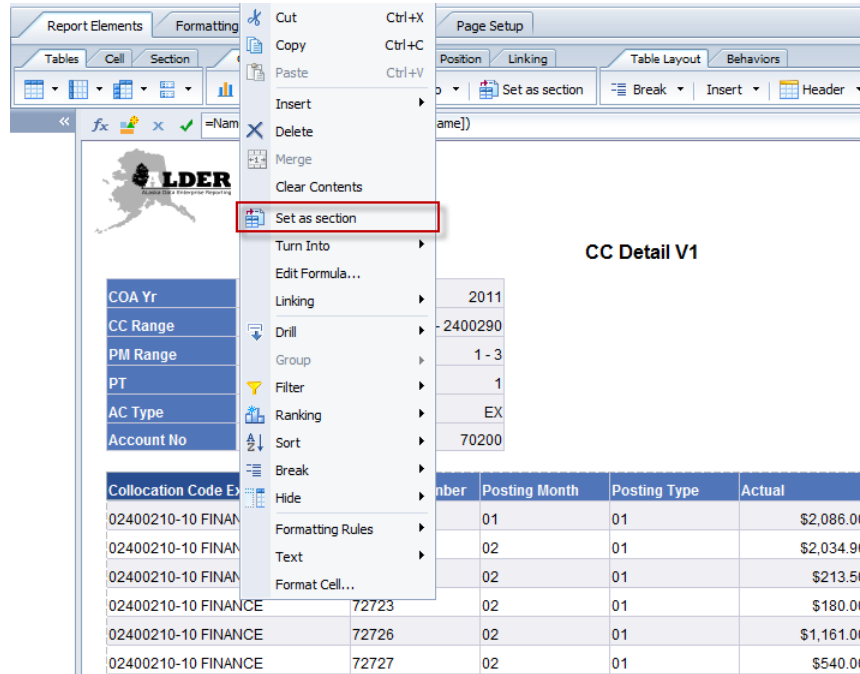
4.   Purge data from report using the Purge data icon

5.   When you select purge data, you will receive this warning. Be sure that the box is NOT checked or you will have to reenter your prompt data when you refresh the query. Select YES
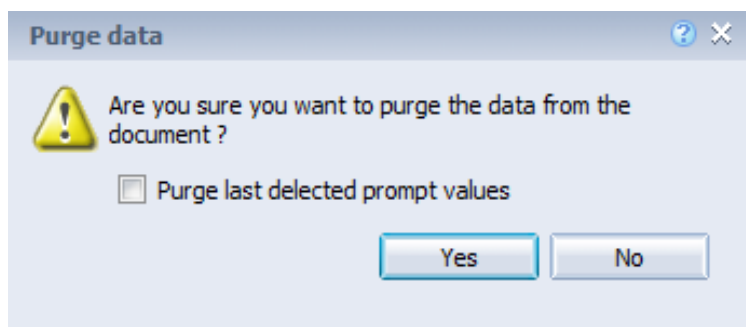
Adding Tables/Cells for Section Headers and Section/Report Totals

There are two ways to add tables.

- The first way is to add a table is to use the the Report Elements tab in the Workspace Toolbar. Select Tables, the type of table you want (in this case, horizontal) and simply place your cursor where you want the table located and click.
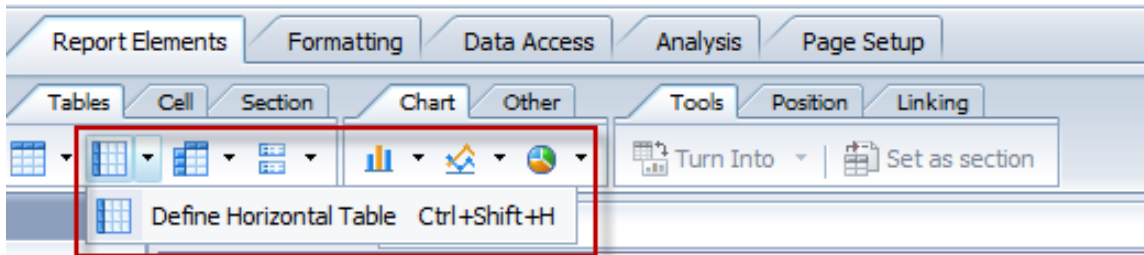
- The second way to add a table, which we recommend, is to click in the area next to the new section cell in the Workspace panel

1. Identify your section cell by clicking on the section cell in Document Structures and Filters
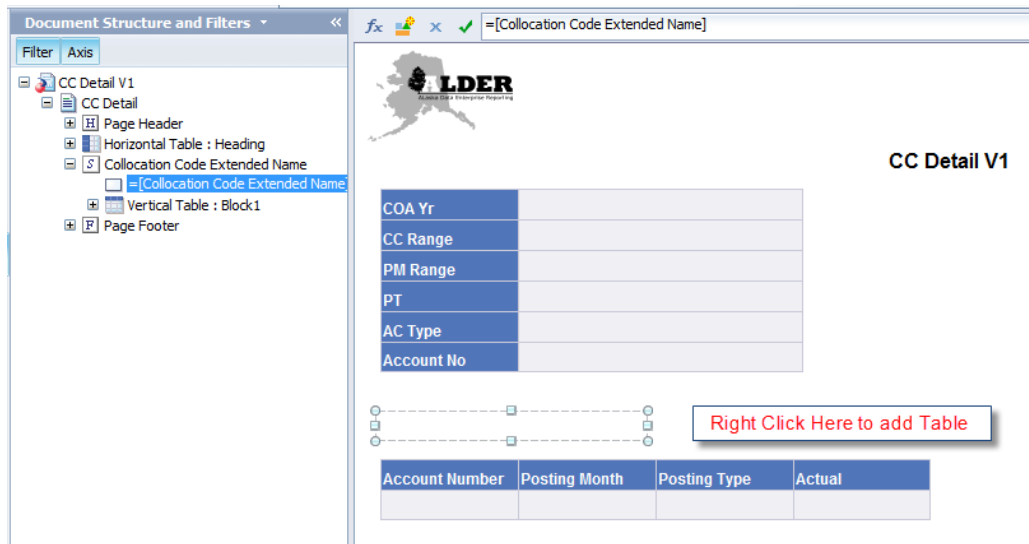
2.   Right Click in an area outside the section cell, Select Insert, and then choose Horizontal Table
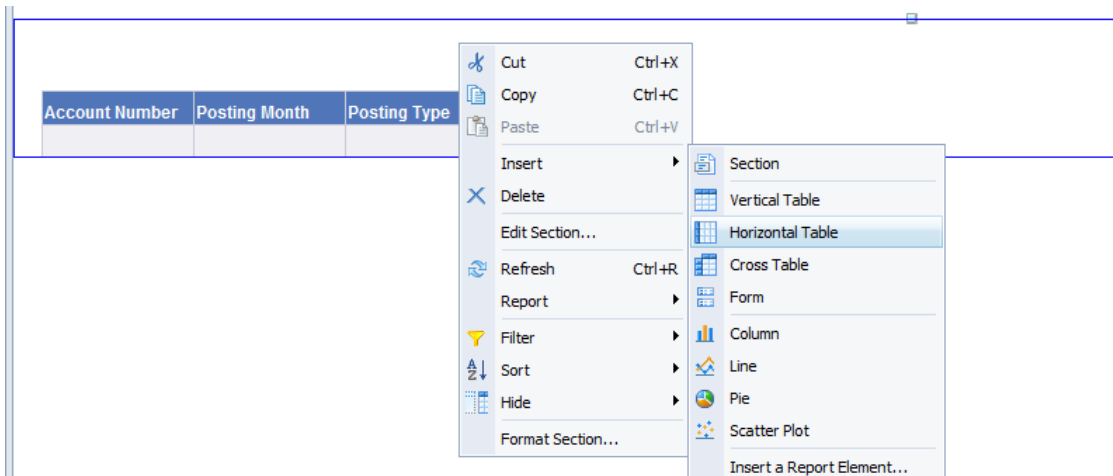
3.   Click to insert the table here
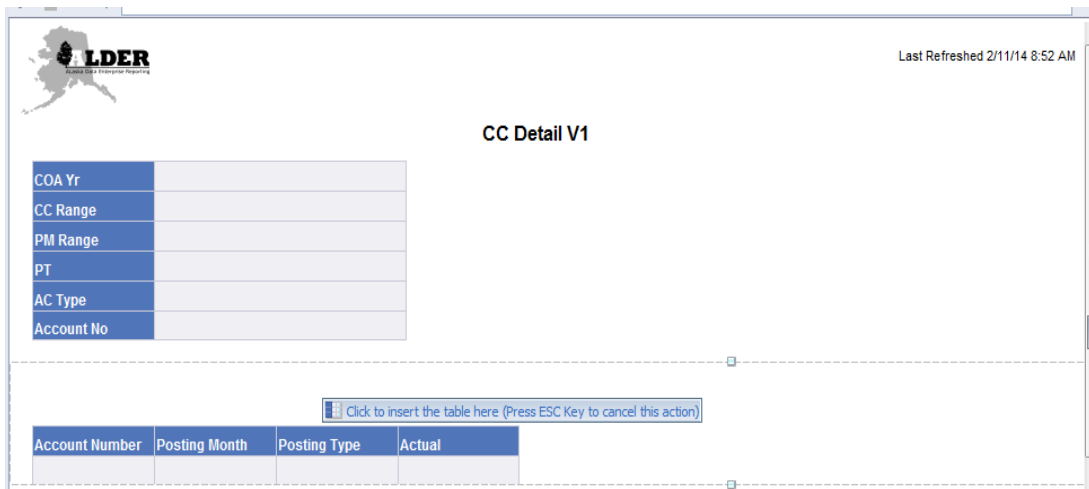
Your results should like this

You now should be able to Assign the Data to be in the table

4.   Right click on the data table in Document structure and Filters and select Assign Data
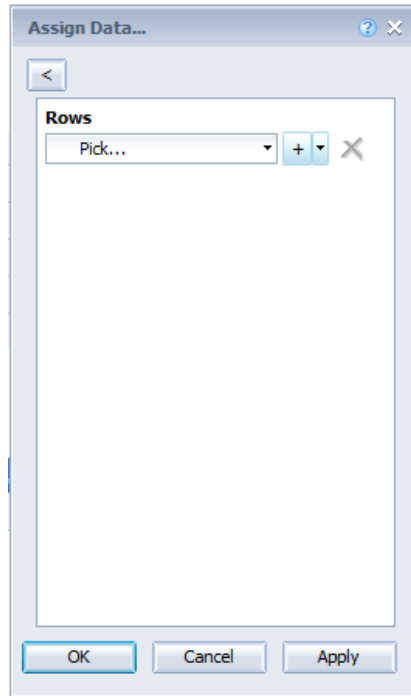
5.   Click on the down arrow next to Pick

6.   Pick Collocation Code Extended Name

7.   Click OK
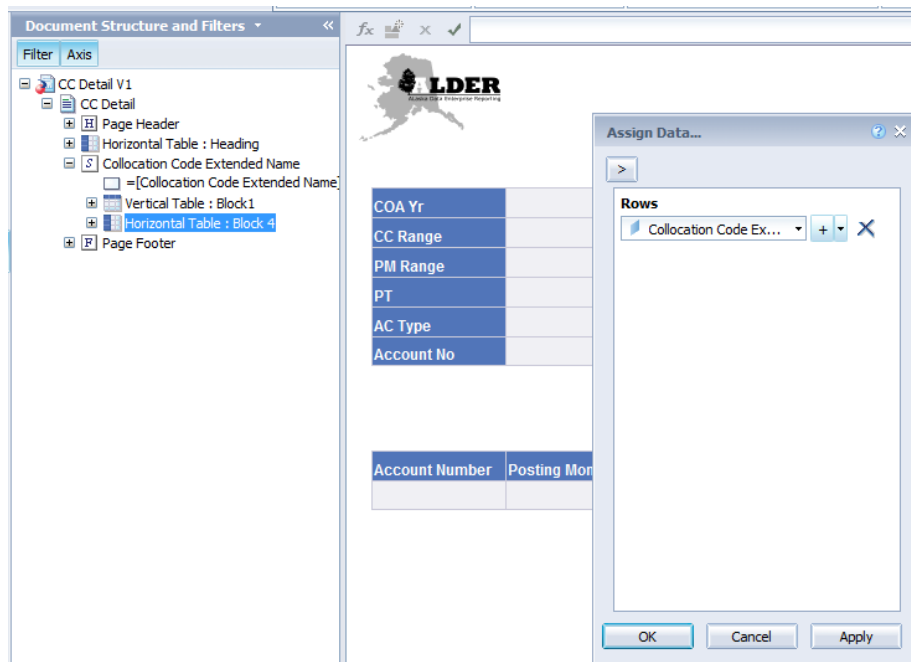
There are two ways to copy a table. You can right click on it and select Copy, then right click elsewhere (the general area where you want the cell) and select Paste.

*Note: Find the 4-way arrow that your cursor changes to when you're on the edge of the table in order to select the whole table, if you just click in the middle of the table, you will just copy the single cell
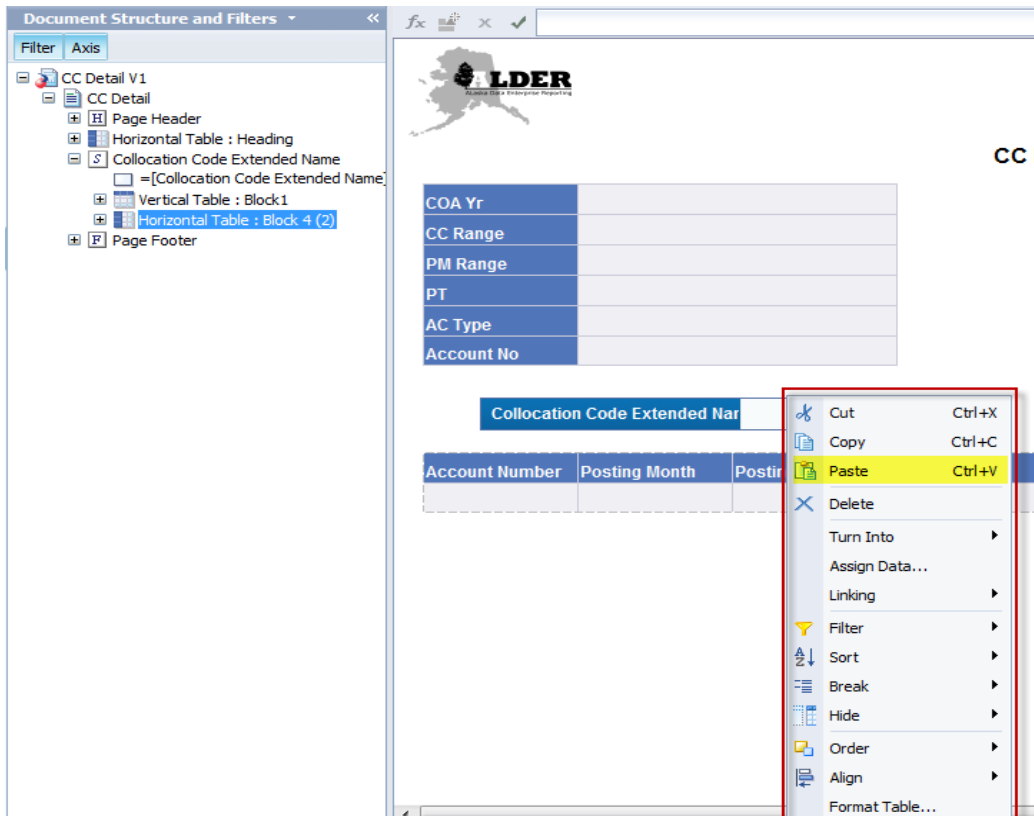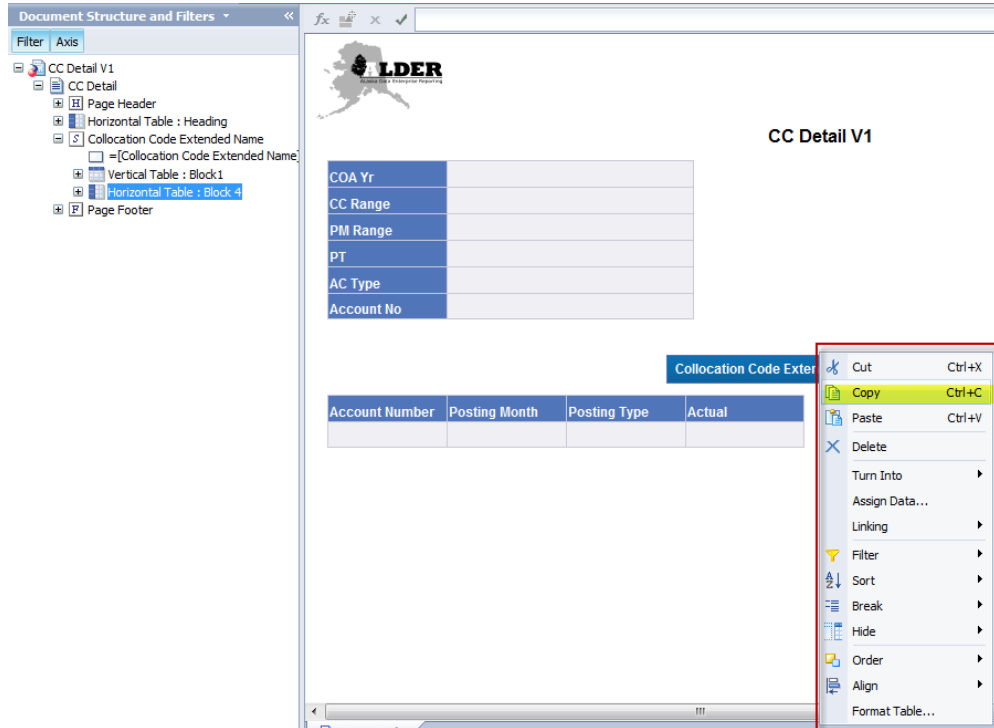
The result is shown below:

You can also select a table by just left clicking it (again, note the 4-way arrow). You will know it is selected because it will have a solid blue border. Then you can use your copy/paste shortcut keys ("Ctrl-C" and "Ctrl-V") to copy and then paste the table

Go to Document Structures and Filters in the Report Panel

1.   Find and select the Section Cell: Collocation Code Extended Name

2.   Remove the Section Cell, using Delete
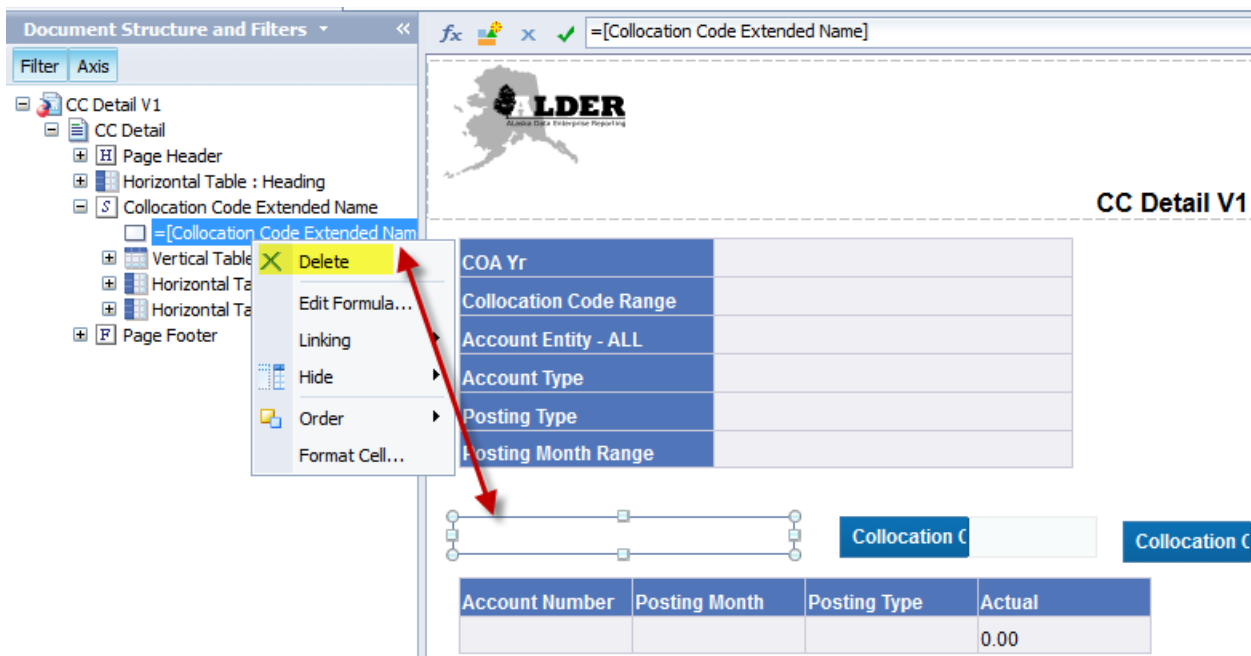
The result is shown below:
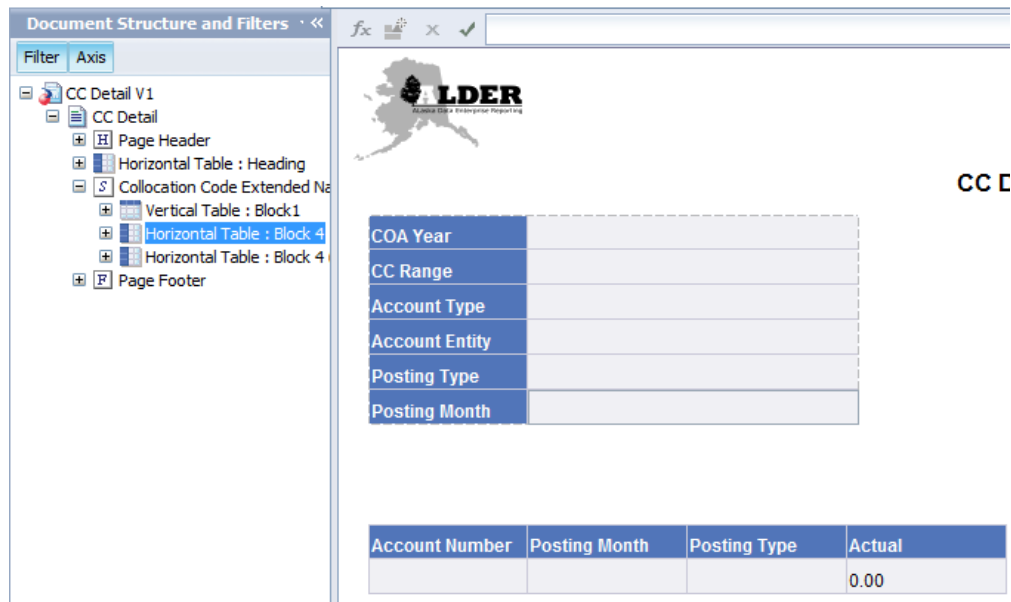
3.   Go to the Available Objects list in the Report panel

4.   In the first horizontal table change the blue box in this table to read "Collocation Code"

5.   Drag the measure "Actual" to the second horizontal table

6.   Change this blue box to read "Total Collocation Code"

7.   The result is shown below.
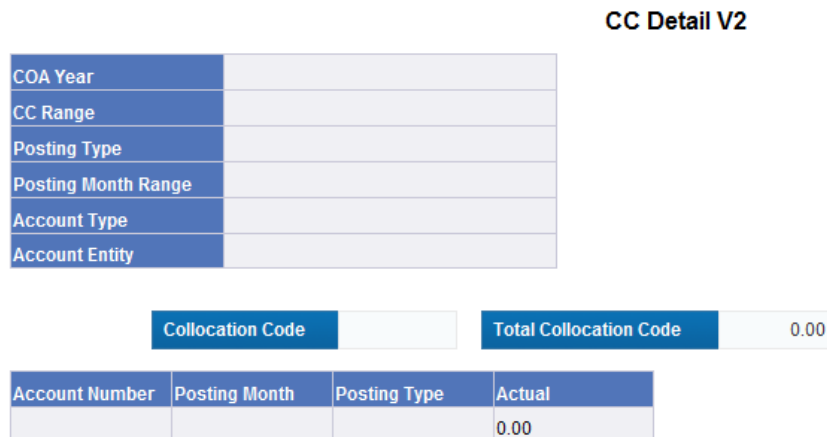
8.   Save the report to your ALDER 201 folder as **CC Detail V2**

Format Section and Blocks:

Note: Highlight the table in the document structures and filters area to identify the table on the report

1.   Locate Collocation Code Data Table (this should be the only vertical table)

2.   Right click and select Format Table

     a.   General Tab – Name the table "Data Table"
     b.   Layout Tab
        i.   The left of this table is 0.21 inches to Left edge of section
        ii.   The top of this table is 0.53 inches to Top edge of section

3.   Apply

4.   OK
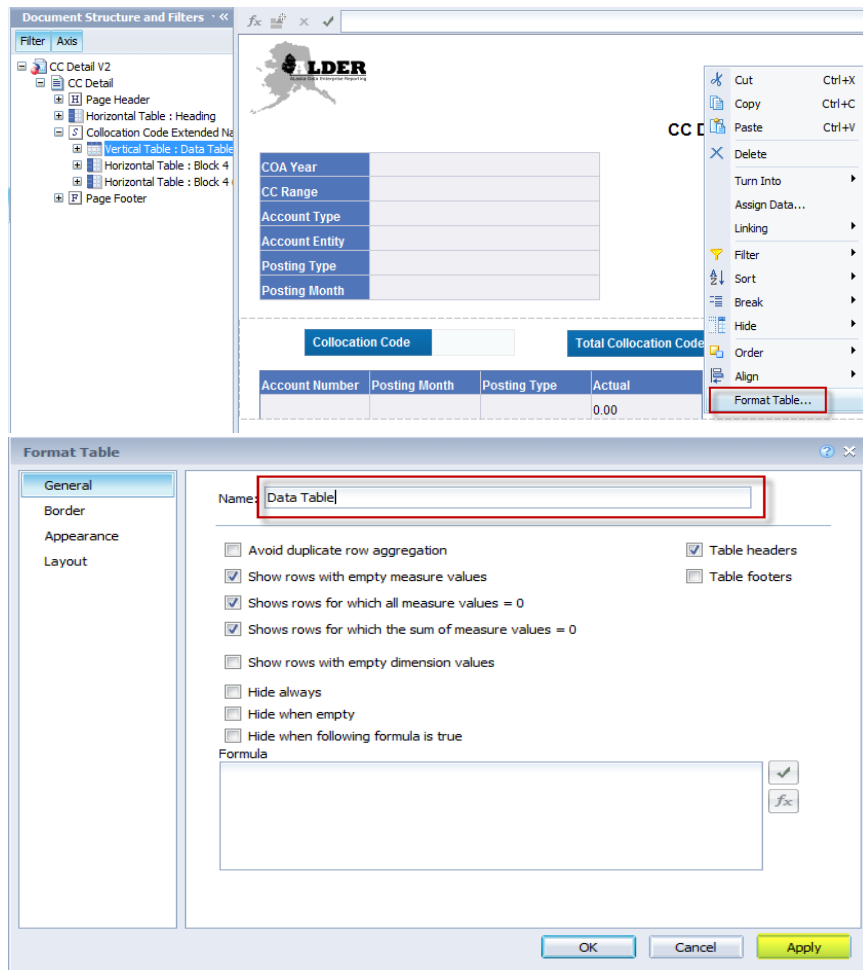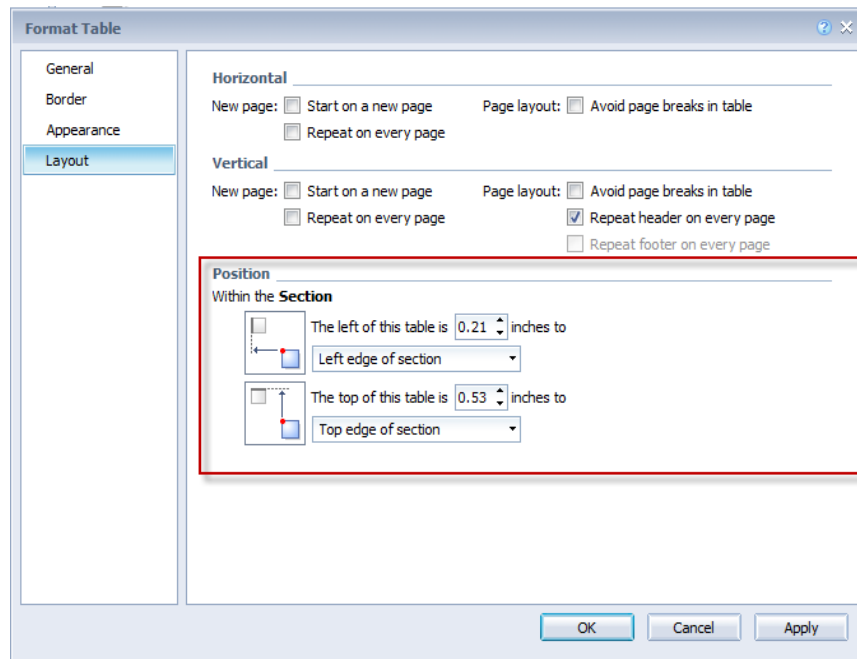
5.   Locate Collocation Code Header Table

6.   Right click and select Format Table

      a.   General Tab – Name the table "CC Header"
      b.   Layout Tab - Position
          i.   The left of this table is **.21** inches to Left edge of section
          ii.   The top of this table is **0.12** inches to Top edge of section

7.   Apply

8.   OK

9.   Locate Total Collocation Code Table

10.   Right click and select Format Table

      a.   General Tab – Name the table "CC Total"
      b.   Layout Tab - Position
          i.   The left of this table is **.21** inches to Left edge of section
          ii.   The top of this table **is 0.12** inches to Bottom side of…Data Table

11.   Apply

12.   OK

Note: The total table is now at the bottom of the section and all of the tables are aligned with the Header Box.

13.   Click and place a horizontal table at the bottom of the report

14.   Drag available object "Actual" to the new table

15.   Change the name in the blue cell to read "Report Total"

16.   Format Table:

      a.   General Tab – Name the table "Report Total"
      b.   Layout Tab
          i.   The left of this table is **0.21** inches to Left edge of report
          ii.   The top of this table is **0.39** inches to Top edge of report

17.   Apply

18.   OK

19.   Refresh data and below is what your report should look like:

Collocation Code	02400270-11

Account Number	Posting Month	Posting Type	Actual
73154	03	01	435.00
73155	01	01	19.16
73401	02	01	629.12
73403	02	01	169.99
73452	01	01	100.00
73677	02	01	507.96

Total Collocation Code	1,861.23

Report Total	356,369.91

20.   Save the report to your ALDER 201 folder as **CC Detail Final**

Summary

After completing this chapter, you are now able to:

- Create a report from scratch utilizing a template
- Create a report plan
- Paint a report
- Add tables for section headers
- Add tables for section and report totals
- Format Sections and Blocks

Exercise

Scenario

You have federal grants that are tracked using ledger codes. An auditor has requested to see a detailed transaction listing for all expenditures in the 73000 line of account codes for COA Year 2011.

1.   Find and copy the **Template Report** (remember this is the one without the AB next to it) to your CLASS EXERCISE folder

2.   Open the report from your CLASS EXERCISE folder

3.   Edit

4.   Rename the Query from Template to LC Detail

5.   Build Query Filters:

   a.   Select COA Yr List
   b.   Select Ledger Code Range
   c.   Select Account Type
   d.   Select Account Entity - ALL
   e.   Posting Type 1
   f.   Posting Month Range

6.   Drag objects into the Result Objects panel:

   a.   Selected COA Yr List
   b.   Selected Ledger Code Range
   c.   Selected Account Type
   d.   Selected Account Entity – ALL
   e.   Selected Posting Month Range
   f.   Posting Type
   g.   COA Yr
   h.   Ledger Code Extended Name
   i.   Ledger Code
   j.   Ledger Code Name
   k.   Account Extended Name
   l.   Account Number
   m.   Account Name
   n.   Posting Month
   o.   Document Num
   p.   Date Processed
   q.   Actual

7.   Run Query

   a.   Select COA Yr: 2011
   b.   Select Beginning Ledger Code: 05100701
   c.   Select Ending Ledger Code: 05101701
   d.   Select Account Type: EX
   e.   Enter Account Entity: 73000
   f.   Starting Posting Month: 1
   g.   Ending Posting Month: 18

8.   Save the report to your Class Exercises folder as **Chapter 8 Exercise V1**

9.   Paint Header Box table with Selected Objects and Posting Type, then Format Blue Cells

10.   Paint data table:

      a.   Ledger Code
      b.   Account Extended Name
      c.   Posting Month
      d.   Date Processed
      e.   Document Number
      f.   Actual

11.   Set Ledger Code as Section

12.   Purge data using the purge data icon

13.   Click and place a Horizontal Table into the Ledger Code Section (next to the section cell)

14.   Copy the table and paste to the right of the existing table

15.   Save the report to your Class Exercises folder as **Chapter 8 Exercise V2**

16.   Remove section cell

17.   Drag Ledger Code Extended Name into gray cell of 1st table

18.   Drag Actual into gray cell of the copied table from step 14

19.   Rename Ledger Code Extended Name table to LC Header (note: Format Table, replace the block name)

20.   Format LC Header table to be:

      a.   .20"   Left Edge of Section
      b.   .15"   Top Edge of Section

21.   Rename the data table block to Data Table

22.   Format Data Table to be:

      a.   .0"   Left Side of   LC Header
      b.   .15"   Bottom Side of   LC Header

23.   Rename the Actual horizontal table to LC Total

24.   Format LC Total table to be:

      a.   .0"   Left Side of   Data Table
      b.   .15"   Bottom Side of   Data Table

25.   Change the formula in the blue cell (using the formula editor) of the LC Total table to read LC ######## Total. You are concatenating words with the ledger code object (don't type the ledger code number, but use the object so that it will update the formula if the ledger code number changes or there are multiple ledger codes) Hint: ="LC "+[Ledger Code]+" Total"

26.   Rename the report tab to Ledger Code (through document structures and filters or right click on report tab)

27.   Refresh Data

28.   Save the report to your Class Exercises folder as **Chapter 8 Exercise Final**

Note: this report will be used in a later chapter, so ensure it is complete.

CHAPTER 9: Multiple Queries

Goals and Objectives

After you complete this chapter, you will be able to:

- Create a report with more than one query
- Duplicate an existing query

Introduction

In this chapter you will learn how to utilize multiple queries to retrieve different sets of data on similar Query Filters when the data cannot be retrieved with one query. Multiple query reports are based on individual needs.

When should I use multiple queries?

- When you are trying to display data side by side for comparative analysis
- If a formula is going to include an object or is built in a way that the formula will need to be updated each year (month, quarter, etc.)
- When working with two or more years and so that you do not want to duplicate posting month 19

Scenario

The purpose of this multiple query report is to illustrate three different Chart of Account years for the utility expenditure accounts for one appropriation in a single table.

1. Find and open Template Report from your ALDER 201 folder

2. Save report as **MQ AR by AC**

3. Edit

4. Name first query **AR TY 2008**

5. **Add objects to Query Filters**

Add objects to Query Filters	**Add objects to Result Objects**
Select COA Yr List	Selected COA Yr List
Select Appropriation Entity Number	Selected Appropriation Entity Number
Select Appropriation Term Yr	Selected Appropriation Term Yr
Select Account Entity – ALL	Selected Account Entity – ALL
Select Account Type	Selected Account Type
Posting Month Range	Selected Posting Month Range
Posting Type List	Selected Posting Type List
	Account Extended Name
	Actual

6.   Run Query with the following prompts for query #1:

   a.   Select COA Yr   2008;2009
   b.   Select AR Entity Number   50674
   c.   Select AR Term Yr   2008
   d.   Select Account Type   EX
   e.   Select Account Entity – ALL   73525
   f.   Select Posting Type(s)   1
   g.   Starting Posting Month   1
   h.   Ending Posting Month   18

7.   Go to Available Objects and add the Selected Objects to the header table

8.   Add Account Extended Name and Actual to the data table

9.   Update the blue boxes in the header table

10.   Update the Actual column header (blue box) to read **TY 2008**

MQ AR by AC V1

COA Yr List	2009, 2008
Appropriation Entity Number	50674
Appropriation Term Yr	2008
Account Entity - ALL	73525
Account Type	EX
Posting Type List	1
Posting Month Range	1 - 18

Account Extended Name	TY 2008
73526 - ELECTRICITY	301,457.23
73527 - WATER & SEWAGE	101,944.34
73528 - DISPOSAL	20,244.68
73529 - NATURAL GAS/PROPANE	2,332.28
73530 - HEATING OIL	1,013,316.72

11.   Save report as **MQ AR by AC V1**

If you want to see the results of your queries as you create them, run the queries, then paint the reports when you have completed each query. This will also identify if you have any problems with a query before you get too far into the report.

Duplicating a Query

Duplicating a query will "copy" the existing query (and all of the objects) as a new query. By adding a new query (blank) you would have to determine all of the objects in the other query(s) and add them all manually. It is very easy to forget or miss an object that would be critical to the report.

1.   Edit

2.   Duplicate AR TY 2008 query

      a.   Click on the query tab AR TY 2008
      b.   Right click and select Duplicate
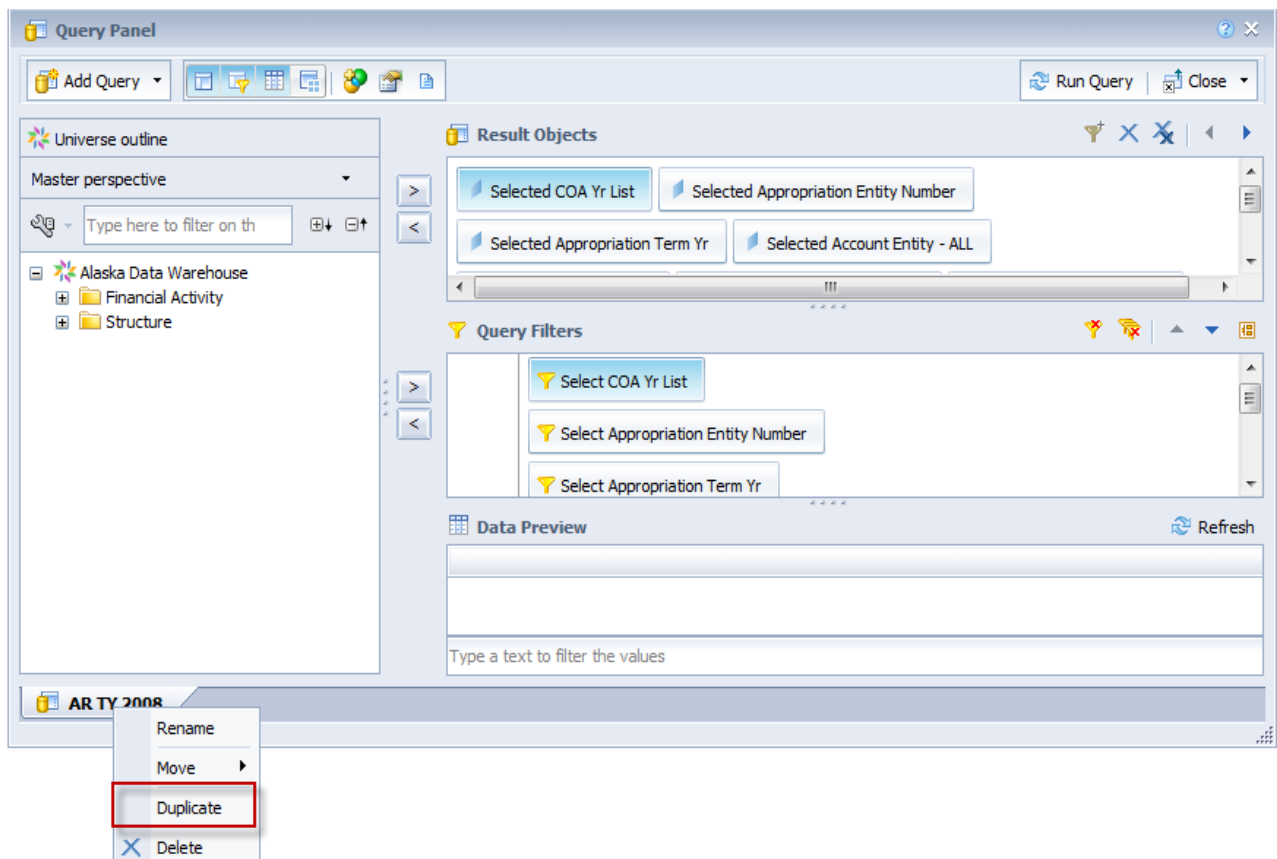
3.   Name second query **AR TY 2009**

Note: When duplicating a query, be sure that the Query Filters have Filters Icons rather than Edit Data Provider Icon . If you have the Edit Data Provider Icon, remove the Edit Data Provider objects and replace with Filters so that you will get the intended results.

4.   **Remove** objects from Query Filters

      a.   Select COA Yr List
      b.   Select Appropriation Term Yr

5.   **Remove** objects from Result Objects

   a.   Selected COA Yr List
   b.   Selected Appropriation Term YR

6.   **Add** objects to Query Filters

   a.   COA Yr (Dimension)
   b.   Select Operator: Between
   c.   Filter Type: Prompt
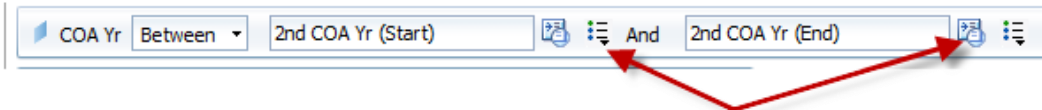
   d.   Prompt text 1:   2nd COA Yr (Start)
   e.   Prompt text 2:   2nd COA Yr (End)

7.   Appropriation Term Yr (Dimension)

   a.   Select Operator: Equal to
   b.   Filter Type: Prompt
   c.   Prompt text 1:   2nd AR TY
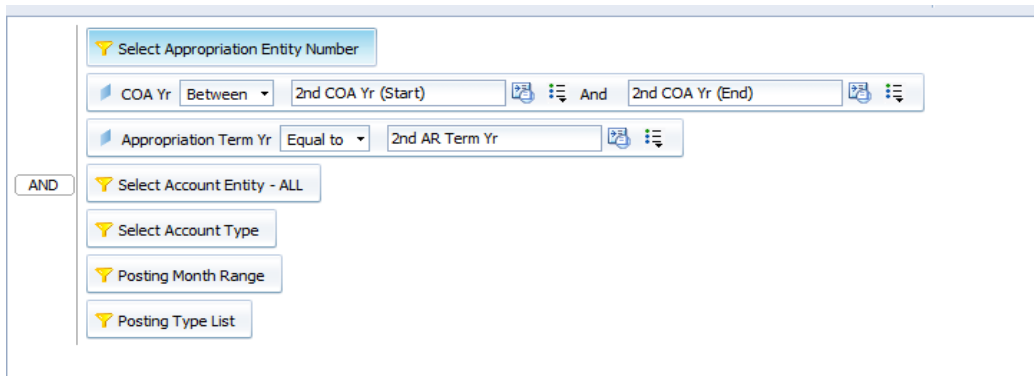
8.   Run Query with the following new prompts for query #2:

   a.   2nd COA Yr (Start):   2009
   b.   2nd COA Yr (End):   2010
   c.   2nd AR TY: 2009
   d.   Account Entity: 73525 (this is the same account as the first query)
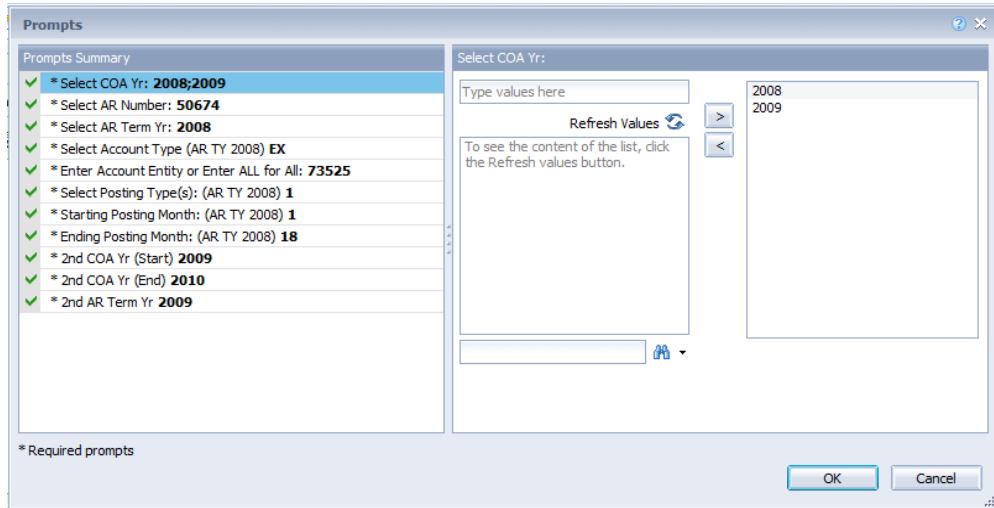
9.   Run Query

10.   When duplicating a query, a message will appear. You have three options (we recommend choosing Option 3):

Insert a table in a new report which gives you the result below:
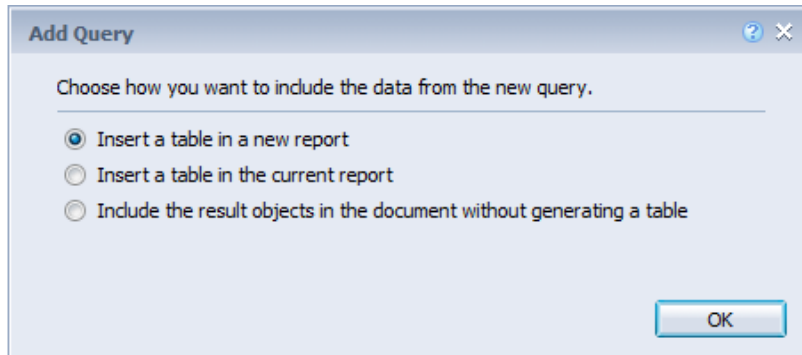
Selected App	Selected Acc	Selected Acc	Selected Pos	Selected Pos	Account Ext	Actual
50674	73525	EX	1 - 18	1	73525 - UTIL	1,114,885.58
50674	73525	EX	1 - 18	1	73526 - ELEC	348,032.74
50674	73525	EX	1 - 18	1	73527 - WATI	72,616.27
50674	73525	EX	1 - 18	1	73528 - DISF	20,198.90
50674	73525	EX	1 - 18	1	73529 - NATU	2,458.18
50674	73525	EX	1 - 18	1	73530 - HEAT	671,579.49

Insert a table in the current report which gives you the result below:

COA Yr List	2009, 2008
Appropriation Entity Number	50674
Appropriation Term Yr	2008
Account Entity - ALL	73525
Account Type	EX
Posting Type List	1
Posting Month Range	1 - 18

| Account Extended Name	TY 2008
73526 - ELECTRICITY	301,457.23
73527 - WATER & SEWAGE	101,944.34
73528 - DISPOSAL	20,244.68
73529 - NATURAL GAS/PROPANE	2,332.28
73530 - HEATING OIL	1,013,316.72

Selected App	Selected Acc	Selected Acc	Selected Pos	Selected Pos	Account Exte	Actual
50674	73525	EX	1 - 18	1	70251 - TRAI	283,259,529.38
50674	73525	EX	1 - 18	1	70252 - TRAI	461,728,824.50
50674	73525	EX	1 - 18	1	70821 - RG-F	32,059,172.97
50674	73525	EX	1 - 18	1	70822 - OH -	0.00
50674	73525	EX	1 - 18	1	70831 - OT-C	2,761,071.66
50674	73525	EX	1 - 18	1	70832 - DT-D	165,454.07

Include the result objects in the document without generating a table. This allows you to place the information where you want it.
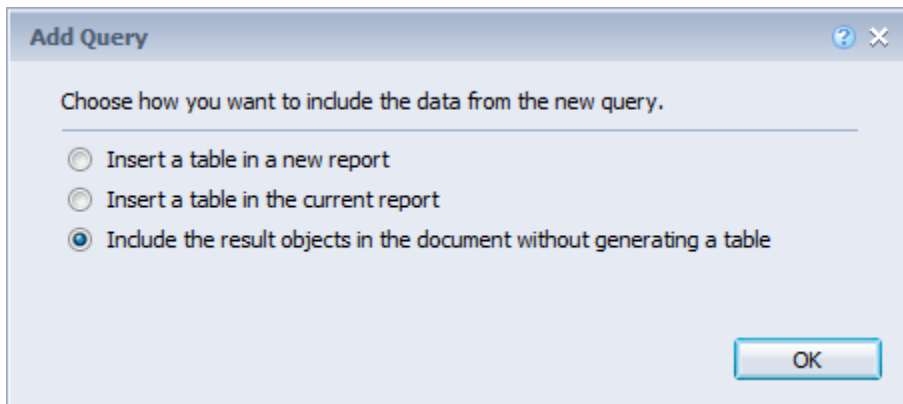
COA Yr List	2008, 2009
Appropriation Entity Number	50674
Appropriation Term Yr	2008
Account Entity - ALL	73525
Account Type	EX
Posting Type List	1
Posting Month Range	1 - 18

Account Extended Name	TY 2008	TY 2009	
73526 - ELECTRICITY	301,457.23	348,032.74	
73527 - WATER & SEWAGE	101,944.34	72,616.27	
73528 - DISPOSAL	20,244.68	20,198.90	
73529 - NATURAL GAS/PROPANE	2,332.28	2,458.18	
73530 - HEATING OIL	1,013,316.72	671,579.49	

Merged Objects
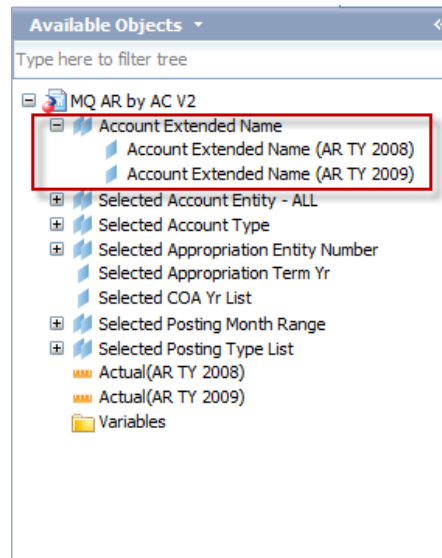
Notice that you now have objects with a + in front of them on the available objects list. These are called "merged" objects. Click on the + sign for one of the objects. You can now identify each object from each query. Measures are **NEVER** merged.

1.   Paint report for ACTUAL COLUMN ONLY

2.   When adding the object from the 2009 query add only the measure Actuals (AR TY 2009) in the column next to 2008 actual

3.   Update the Actual column header (blue box) to read **TY 2009**

4.   Save report as **MQ AR by AC V2**

We are now ready to create our last query.

5.   Edit

6.   Duplicate AR TY 2009 query

      a.   Click on the query tab AR TY 2009
   b.   Right click and select duplicate query
      c.   Name Third query AR TY 2010

7.   Change: Query Filters

   a.   COA Yr (Dimension)

            i.   Prompt text 1:   3rd COA Yr (Start)
            ii.   Prompt text 2:   3rd COA Yr (End)

      b.   Appropriation Term Yr (Dimension)

            i.   Prompt text 1:   3rd AR TY

8.   Run Query with the following new prompts for query #3:

      a.   3rd COA Yr (Start):   2010
      b.   3rd COA Yr (End):   2011
      c.   3rd AR TY   2010
      d.   Account Entity: 73525 (this is the same account as the first query)

9.   Run Queries (OK)

Updating the Data Table

10.   Paint report with 3rd query object - Actual (AR TY 2010) from the Available Objects

Notice that the account extended name column is only showing the data from the first query that we painted (click on the cell and view the formula on the formula bar).
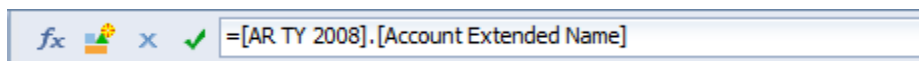
11.   Drag the merged object Account Extended Name onto the report creating a new column 2

Is there a difference between column 1 and column 2? In this instance there was no change but often there can be changes; for example an account code could be used in one year and not another year. It is very important to drag the merged object into the report once you have completed all of the queries **into a new column**.

12.   Delete first column with the unmerged data

Updating the Header Box

13.   Update header box to represent the multiple queries. In this example, we are changing the COA YR List and Appropriation Term Year

14.   Since there are not Merged Selected Objects, the years are typed in the gray area

COA Yr List	2008,2009,2010,2011
Appropriation Entity Number	50674
Appropriation Term Year	2008,2009,2010
Account Entity	73525
Account Type	EX
Posting Type List	1
Posting Month Range	1 - 18

15.   Save report as **MQ AR by AC V3**

NOTE:

- All dimensions that are merged have a "+" next them
- If you click on the "+" you will see an object from each query
- Measures are not merged
- All dimensions should be on all queries
- When you change query prompts, you need to change how the prompt will display in the user prompt box, by using a different naming technique – the naming cannot be the same as existing prompts
- Use Merged objects when you are changing or updating the report column layouts
- Since measures are not merged, you have to merge them through a formula in the columns that they appear

Now we can add a formula to a new column to illustrate how to aggregate the information.

16.   Insert a new column at the end of the table and highlight the column

17.   Select the formula editor (fx) create the formula using the measure available objects

    a.   =[AR TY 2008].[Actual]+[AR TY 2009].[Actual]+[AR TY 2010].[Actual]
    b.   Validate the your formula

18.   OK

19.   Convert the formula to a variable (select the variable box)

    a.   Name the variable: MCOA Actual
    b.   Qualification: Measure

20.   OK

21.   Update the blue cell

Add Table Footers

Table footers can be used to add totals to columns

1.   Select data table, from the upper right corner with a 4-way crossbar

2.   Right click, Format Table

3.   Select Table footers

4.   Drag the actual objects into the footer row

5.   Drag the new Variable into the final footer

6.   Rename the row's grey box to Total

7.   Save report as **MQ AR by AC Final**

NOTE: Remember to add formulas to break totals when necessary. If you have more than an actual column on your report you must create variables for Authorized and Encumbrances. Be sure that these are also added to all Breaks, Sections, and Report totals as applicable.

Review

1.   **When would you need multiple queries?**

2.   **Describe how you would duplicate a query?**

3.   **What are the advantages to duplicating a query vs. adding a query?**

4.   **Should you wait until you have created all of your queries before painting your report?**

Exercise

Scenario

You have federal grants that are tracked using ledger codes. A manager has asked to verify that the expenditures match the federal revenue collected by the setup year. You have already provided detail data by ledger code, but do not want to use that report. To accommodate this request, you will copy an existing report that you created and modify it.

1.   Find and open the report **Chapter 8 Exercise Final** from your Class Exercises folder

2.   Save report as **Chapter 9 Exercise V1**

3.   Rename the Report Tab to **LC Detail**

4.   Edit

5.   Rename Query to LC Expenditures

6.   Drag the following object into the Result Objects panel:

     a.   CC Code/SY

7.   Drag Select Collocation Code Setup Yr filter into Query Filters panel

8.   Drag Selected Collocation Code Setup Yr dimension into Result Objects panel

9.   From the Query Filters panel, remove:

     a.   Select Account Type

10. From the Result Objects panel, remove:

     a.   Selected Account Type

11.   Drag the following object into the Query Filters panel:

   a.   Acct Type

      i.   Change the operator to Equal to
      ii.   Filter is Constant
      iii.   Value Select: EX

12.   Duplicate Query

13.   Rename Query LC Revenues

 Remember: be sure that the Query Filters have Filters Icons rather than Edit Data Provider Icons. If you have the Edit Data Provider Icons, remove the Edit Data Provider objects and replace with Filters.

14.   Change Acct Type query

   a.   Value Select: RR

15.   Run Query

   a.   Select COA Yr   2007;2008
   b.   Beginning Ledger Code   05017100
   c.   Ending Ledger Code   05017400
   d.   Collocation Code Setup Yr   2007
   e.   Account Entity   ALL
   f.   Starting Posting Month   1
   g.   Ending Posting Month   18

16.   Click OK

17.   Select Include the result objects in the document without generating a table

18.   Save report as **Chapter 9 Exercise V2**

19.   Duplicate Report

20.   Change Report Tab to LC Summary

21.   At the beginning of the Data Table add a column

   a.   CC Code/SY (merged object)

22.   Rename the Actual column header to Expenditures

23.   At the end of the Data Table add the object Actual (LC Revenues) - Rename column header to Revenues

24.   Remove the following columns to get summary information by the CC Setup Yr

       a.   Account Extended Name
       b.   Posting Month
       c.   Date Processed
       d.   Document Number

25.   Update all of the tables using the merged dimensions. You must drag the merged object into a new row or column of the table and delete the row or column that is not merged. Verify in the formula bar that you are using the object [Ledger Code Extended Name]

26.   Insert a new column at the end of the data table

27.   Create a variable that adds expenditures + revenues in the new column

28.   Save the report to your Class Exercises Folder as **Chapter 9 Exercise Final**

CHAPTER 10: Reference Reporting

Goals and Objectives

After you complete this chapter, you will be able to:

- Create a reference report using multiple queries
- Add multiple data tables to display reference information and financial information

Introduction

ALDER does not accurately display reference and financial information in one data table. It is necessary to add multiple tables for ALDER to display information regarding warrants with reference information. By adding multiple tables it allows the user to display the financial information next to the reference information.

Scenario

The purpose of this exercise is to demonstrate how to retrieve reference information and display that information in a separate table next to the financial information table. This report will show warrant information for an appropriation.

Multiple Query Reference Report

1. Find and open the Template Report from your ALDER 201 folder

2. Click Design

3. Click on Edit

4. Add objects to **Query Filters**

   a. Select COA Yr List
   b. Select Appropriation Entity Number
   c. Select Appropriation Term Yr
   d. Select Account Entity – ALL
   e. Select Account Type
   f. Posting Type List
   g. Posting Month Range

5. Add objects to **Result Objects**

   a. Selected COA Yr List
   b. Selected Appropriation Entity Number
   c. Selected Appropriation Term Yr
   d. Selected Account Entity – ALL
   e. Selected Account Type
   f. Selected Posting Type List
   g. Selected Posting Month Range
   h. Warrant Num

i.   Vendor Num
j.   Vendor Name
k.   Date Processed
l.   Document Num
m.   Transaction Desc L1 (optional)
n.   Financial Line Unique Identifier
o.   Routing Code
p.   Actual

6.   Rename Query to **FinQuery**

7.   Run Query with the following prompts

a.   Select COA Yr: 2013
b.   Select AR Number: 11725
c.   Select AR Term Yr: 2013
d.   Select Account Type: EX
e.   Select Account Entity: 74229
f.   Select Posting Type(s):   1
g.   Starting Posting Month: 1
h.   Ending Posting Month: 3

8.   Paint the header table and update the blue boxes

COA Yr List	2013
Appropriation Entity Number	11725
Appropriation Term Yr	2013
Account Entity - ALL	74229
Account Type	EX
Posting Type List	1
Posting Month Range	1 - 3

9.   Paint the Data Table with the following:

a.   Warrant Num
b.   Document Num
c.   Date Processed
d.   Vendor Name
e.   Vendor Num
f.   Routing Code
g.   Actual

10.   From the Report panel select document structure and filters find and select the data table

11.   Right click and select Format Table

12.   Rename table to Data Table 1

13.   Click OK

14.   Save report as **Appropriation Reference Report V1**

Appropriation Reference Report V1

COA Yr List	2013
Appropriation Entity Number	11725
Appropriation Term Yr	2013
Account Entity - ALL	74229
Account Type	EX
Posting Month Range	1 - 3
Posting Type List	1

Warrant Num	Document Num	Date Processed	Vendor Name	Vendor Num	Routing Code	Actual
02841061	AQ01033650012	08/01/2012	OFFICEMAX NORTI	OFF96120		57.96
02842156	AQ01033650013	08/01/2012	TRAVE INC	OFP00116		15.71
02846183	AQ01050830002	08/24/2012	WALMART STORES	XXX07715		55.96
02847015	AQ01050830003	08/24/2012	TRAVE INC	OFP00116		94.48
02854654	AQ01050830011	08/24/2012	TRAVE INC	OFP00116		29.45

Special Reference Report Items

Now that we have completed our financial query we need to add the reference query. For reference reporting ALDER has created special objects for the user. These help identify references and are located in the Reference folder.

1.   Click Edit

2.   Duplicate the FinQuery

3.   Rename query to **RefQuery**

4.   Remove all Result Objects except Warrant Num and add the following:

      a.   Reference Type
      b.   Reference Number
      c.   Reference Amount
      d.   Reference Date
      e.   Reference Comment

5.   Remove Edit Data Providers and replace with Query Filters

6.   Run Queries with same prompts

7.   Select Insert a table in the current report

Add Query

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

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

OK
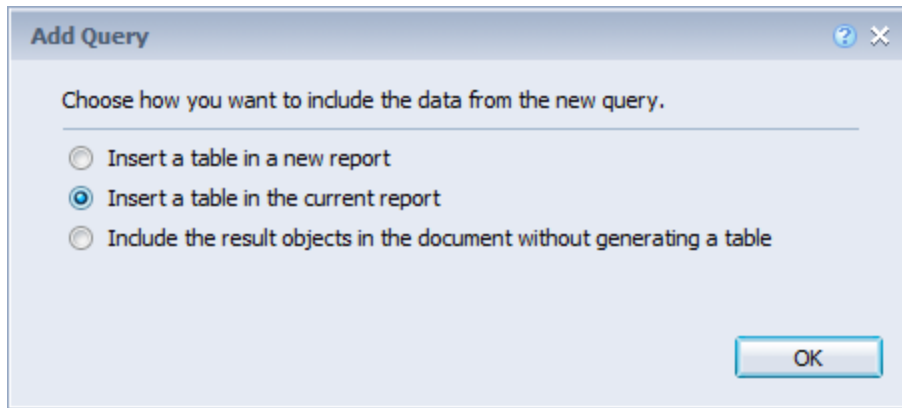
8.   Save Report as **Appropriation Reference Report V2**

Appropriation Reference Report V2

COA Yr List	2013
Appropriation Term Yr	2013
Appropriation Entity Number	11725
Posting Month Range	1 - 3
Posting Type List	1
Account Entity - ALL	74229

Warrant Num	Document Num	Date Processed	Vendor Name	Vendor Num	Routing Code	Actual
02841061	AQ01033650012	08/01/2012	OFFICEMAX NORTI	OFF96120		57.96
02842156	AQ01033650013	08/01/2012	TRAVE INC	OFP00116		15.71
02846183	AQ01050830002	08/24/2012	WALMART STORES	XXX07715		55.96
02847015	AQ01050830003	08/24/2012	TRAVE INC	OFP00116		94.48
02854654	AQ01050830011	08/24/2012	TRAVE INC	OFP00116		29.45

Warrant Num	Reference A	Reference C	Reference D	Reference N	Reference T
02841061	0.00	ADMIN/FINAN		FIN2013	UDR
02841061	0.00			OFF96120	PVN
02841061	57.96	02401	7/25/12	02401	BIL
02841061	57.96	DOA DOF PU	7/25/12	***********286	CBN

9.   From the 2nd table, set the column "Warrant Number" as a section.

Notice that the tables are sorted based on the warrant number

COA Yr List	2013
Appropriation Entity Number	11725
Appropriation Term Yr	2013
Account Entity - ALL	74229
Account Type	EX
Posting Type List	1
Posting Month Range	1 - 3

02841061

Warrant Num	Document Num	Date Processed	Vendor Name	Vendor Num	Routing Code	Actual
02841061	AQ01033650012	08/01/2012	OFFICEMAX NORTI	OFF96120		57.96

Reference Ty	Reference N	Reference A	Reference D	Reference C
BIL	02401	57.96	7/25/12	02401
CBN	***********28	57.96	7/25/12	DOA DOF PU
INV	091847	57.96	7/17/12	
MCC	5943	57.96	7/17/12	OFFICE MAX
OCD	***********75	57.96	7/25/12	REECE, BIAN
PVN	OFF96120	0.00		
UDR	FIN2013	0.00		ADMIN/FINAN

02842156

Warrant Num	Document Num	Date Processed	Vendor Name	Vendor Num	Routing Code	Actual
02842156	AQ01033650013	08/01/2012	TRAVE INC	OFP00116		15.71

Reference Ty	Reference N	Reference A	Reference D	Reference C
ACC	2100751	0.00		
BIL	02401	15.71	7/25/12	02401
CBN	***********28	15.71	7/25/12	DOA DOF PU
INV	1134158-0	15.71	7/18/12	
MCC	5044	15.71	7/18/12	OFFICE PLU:

10.   Save Report as **Appropriation Reference Report Final**

Exercise

Scenario

You received a telephone call from a vendor asking about details on a warrant they received. They need to know what invoices the warrant covers. You need to develop a warrant reference report that will bring both the financial and reference information together to be able to answer the question.

1.   Find and copy the **Template Report** (remember this is the one without the AB next to it) to your CLASS EXERCISE folder

2.   Open the report from your CLASS EXERCISE folder

3.   Edit

4.   Rename the Query from Template to FinQuery

5.   Build Query Filters:

  a.   Select COA Yr List
  b.   Select Warrant Number

6.   Drag objects into the Result Objects panel:

  a.   Selected COA Yr List   h.   Routing Code
  b.   Selected Warrant Number   i.   Warrant Class
  c.   COA Yr   j.   Warrant Num
  d.   CC Code/SY   k.   Document Num
  e.   Ledger Code   l.   Date Processed
  f.   Acct Type   m.   Actual
  g.   Account Number

7.   Run Query

  a.   Select COA Yr: 2014
  b.   Select Warrant Number(s):   25769208; 25769210

8.   Save the report to your Class Exercises folder as **Chapter 10 Exercise V1**

9.   Paint Header Box table with Selected Objects, then Format Blue Cells

10.   Paint data table:

  a.   COA Year
  b.   Document Number
  c.   Date Processed
  d.   CC Code/SY
  e.   Ledger Code
  f.   Account Type
  g.   Account Number

      h.   Routing Code

      i.   Warrant Class

      j.   Warrant Num

      k.   Actual

11.   Save the report to your Class Exercises folder as **Chapter 10 Exercise V2**

12.   Edit

13.   Duplicate Query

14.   Rename new query to RefQuery

15.   Remove all Result Objects except Warrant Num and add the following:

      a.   Reference Type

      b.   Reference Number

      c.   Reference Amount

      d.   Reference Date

      e.   Reference Comment

16.   Remove Edit Data Providers and replace with Query Filters

17.   Run Queries with same prompts

18.   Select Insert a table in the current report

19.   Save Report as **Chapter 10 Exercise V3**

20.   From the 1st table, set the column "Warrant Number" as a section

21.   Save Report as **Chapter 10 Exercise Final**

Appendix

Exercise Answers

Chapter 3 – Exercise Answers

1. **Where in the Query Panel can you find the data objects that can be added to a report?**

   Universe panel – Edit

2. **Where would you put data objects that you want to be available on your report?**

   Result Objects panel

3. **Where do you limit the information being retrieved from the data warehouse?**

   Query Filters panel

4. **What are the different types of filters?**

   Predefined filters, Prompted filters, Unprompted Filters

5. **What are the different types of objects?**

   Dimension, Measure, Detail, Predefined filters, Selected dimensions

6. **Using the report you just copied, identify the Predefined Filters in the Query Filters panel.**

   Select COA Yr, Select Collocation Code Setup Yr List, Select Collocation Code List Select Account Entity – ALL, Posting Type 1, Posting Month Range

7. **Is the User Defined Filter prompted or unprompted?**

   Unprompted – It is a filtered by Dimension

8. **Find the following objects in the Universe panel and identify what folder you found each one in: Note: Object names listed below are as they appear in the Universe. Objects can sometimes be found in multiple folders.**

   a.   Acct Type - Financial Activity; Financial Line; General Financial Objects
   b.   CC Code/SY - Financial Activity; Financial Line; Collocation Code
   c.   Open Item Num - Financial Activity; Financial Line; Open Item
   d.   Input RD Code - Financial Activity; Financial Line; Transaction Fin (FIN); RD Fields
   e.   Date Processed - Financial Activity; Financial Line; Transaction Fin (FIN); General Transaction (FIN) Objects
   f.   Total Authorized - Financial Activity; Financial Line; Amounts
   g.   Select Grant Entity Number - Financial Activity; Financial Line; Grant
   h.   Selected Grant Entity Number - Financial Activity; Selected Objects; Grant (SO)

Review Question Answers

Chapter 9 – Review Question Answers

1. **When would you need multiple queries?**

   When you're trying to display data in a column and there isn't an object available, then a formula can be created or multiple queries can be created

   If a formula is going to include an object or is built in a way that the formula will need to be updated each year (month, quarter, etc.), then you might want to consider multiple queries

   When working with two or more years and you don't want to duplicate posting month 19

2. **Describe how you would duplicate a query?**

   Select query tab, Right click, Duplicate

3. **What are the advantages to duplicating a query vs. adding a query?**

   Duplicating a query allows you to copy all of the existing objects

   Adding a query gives you a blank query and you would have to re-add any object that you would need

4. **Should you wait until you have created all of your queries before painting your report?**

   Not necessarily, if you paint as you go you can see differences as they occur and you will be able to tell if you have data in each query.

Available Functions

Often users need to build additional calculations or objects into a report beyond the report's base objects or calculations.

Web Intelligence has seven categories of Available Functions:

Category	Description
All	All the functions for all the categories listed below in this table.
Aggregate	Aggregates data (for example by summing or averaging a set of values)
Character	Manipulates character strings
Date and Time	Returns date or time data
Document	Returns data about a document
Data Provider	Returns data about a document's data provider
Logical	Returns TRUE or FALSE
Numeric	Returns numeric data
Misc	Functions that do not fit into the above Categories

Available Operators

The tool provides the use of operators for both query and report filters, calculations and formulas during the creation or modification of a report. The table below lists the operators available and provides an example of each operator in the context of a business question:

To obtain data...	for example...	Select...		to create the filter...
equal to a value a user specifies,	retrieve data for the US only,	=	**Equal to**	[Country] Equal to US.
not equal to a value a user specifies,	retrieve data for all countries other than the US	!=	**Not equal to**	[Country] Not Equal to US
greater than a value a user specifies,	retrieve data for customers aged over 60,	>	**Greater than**	[Customer Age] Greater than 60
greater than or equal to a value a user specifies,	retrieve data for revenue starting from $1.5M upward,	>=	**Greater than or equal to**	[Revenue] Greater than or equal to 1000500
lower than a value a user specifies,	retrieve data for exam grades below 40,	<	**Less than**	[Exam Grade] Less than 40
lower than or equal to a value a user specifies,	customers whose age is 30 or less,	<=	**Less than or equal to**	[Age] Less than or equal to 30
that falls between two values a user specifies and includes those two values,	weeks starting at week 25 and finishing at 36 (including week 25 and week 36),		**Between**	[Weeks] Between 25 and 36
that falls outside two given values a user specifies,	all the weeks of the year, except for weeks 25 through 36 (week 25 and week 36 are not included),		**Not Between**	[Weeks] Not Between 25 and 36
the same as several values a user specifies,	user only wants to retrieve data for the following countries: the US, Japan, and the UK,		**In List**	[Country] In list 'US; Japan; UK'
different from the multiple values a user specifies,	user does not want to retrieve data for the following countries: the US, Japan, and the UK,		**Not in list**	[Country] Not in list 'US; Japan; UK'
that includes a specific string,	customers whose date of birth is March 1972,		**Matches Pattern**	[DOB] Matches pattern, '72'
that doesn't include a specific string,	customers whose names do not begin with S,		**Different from Pattern**	[DOB] Different from pattern, 's'
that corresponds to two values a user specifies,	customers who have both a fixed telephone and a mobile phone,		**Both**	[Account Type] Both "fixed" and "mobile"
that corresponds to all values a user specifies	customers who have a fixed telephone, mobile phone, and fax phone		**** AND**	[Account Type] "fixed" AND "mobile" AND "fax"

To obtain data…	for example…	Select…	to create the filter…
that corresponds to a value a user specifies	customers who have a fixed telephone, mobile phone, or fax phone	**** OR**	[Account Type] "fixed" OR "mobile" OR "fax"
that corresponds to one value a user specifies and does not correspond to another value a user specifies	customers who have a fixed telephone, but don't have a mobile phone,	**Except**	[Account Type] "fixed" Except "mobile"

** AND – Returns data ONLY when ALL of the criteria is TRUE

** OR – Returns data when ANY of the criteria is TRUE

Additional Example of Nested Filters
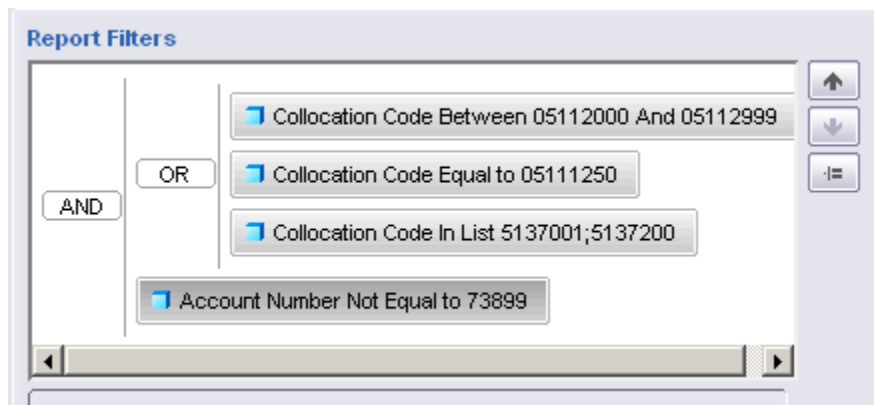
Available Operators to AVOID

Some operators can create confusion when used in a report and should not be used!

- Section
- Block
- Body
- Report
- Row
- Column
- User Response

Standard Calculations

Standard calculation functions can be used to make quick or standard business calculations on the data in Web Intelligence reports. These calculations are available from the Calculations list on the Report toolbar. Customized functions and formulas can be applied to more advanced calculations on the data as well. Users can utilize the following standard calculations:

Calculation Type	Icon	Use to…
Sum	Σ	Calculate the sum of the selected data.

Calculation Type	Icon	Use to…
Count	n	Count all rows for a measure object or count distinct rows for a dimension or detail object.
Average	$\bar{x}$	Calculate the average of the selected data.
Minimum	$\gg\!x$	Display the minimum value of the selected data.
Maximum	$\ll\!x$	Display the maximum value of the selected data.
Percentage	$\cdot\Sigma$	Display the selected data as a percentage of the total. The results of the percentage are displayed in an additional column or row of the table.

ALDER Key Terminology

Term	Definition
Available objects	Data elements that are available to use in a report but do not require re-executing the report.
Business Objects	Business Objects is the manufacturer of InfoView and Web Intelligence software that ALDER uses.
Enterprise reports	Reports developed for statewide use. They can be copied and customized to meet your agency's needs.
InfoView	The portal for ALDER that collects, consolidates and presents data and reports.
Instance	A version of the report that contains the data that was available at the time it was run.
Measure	Retrieves numeric data that is the result of calculations on data in the database.
Objects	An element in the universe that corresponds to a selection of data in the database. The name of an object is usually derived from the business terms.
Prompt	A dynamic filter that displays a question every time data is refreshed in a report. The prompts are answered by either typing or selecting the value(s) to be viewed. Web Intelligence retrieves only the values specified.
Query	A request for data from a database or other source. A user builds a query containing "objects" from a "universe." If the data is available, the requested data is returned usually in the form of a table or a chart.
Refresh	Refreshing reports ensures that you are viewing the most recent data available in the database.
Report	The graphical output from a query that has been executed. It includes data returned from the query, as well as formatting applied to the data to make the data more readable for end users.
Report filter	Report filters are applied to the data retrieved by a report that limit the values displayed in the report. Each report can be filtered to display a different subset of the same data depending on the user's requirements.

Term	Definition
Schedule	Scheduling a report allows the report to run automatically at specified times. When a scheduled report runs successfully, an "instance" is created.
Template reports	Blank reports that include the standard report elements (logo, page numbers, last refresh date, etc.).
Universe	A logical group of data tables used for reporting. Universes provide an easy-to-use and understand interface for non-technical Web Intelligence users to run queries against a database to create reports and perform data analysis.
Web Intelligence	A Business Objects tool that allows users to create queries and reports to analyze data.

Definitions of User Roles and Capabilities

Group	Course	Capabilities	Prerequisites
Report recipients	None	• Receive an Excel or PDF report (file)	None
Report viewers	ALDER 100 (3/4 day)	• Run, refresh and schedule reports in enterprise, department internal, public, favorites, and user's inbox folders • Receive sections of scheduled reports • Change prompt values for a report to limit the results displayed, but cannot change report layout	Increment 1: Some knowledge of structures and financial data Increment 2: Some knowledge of payroll data
Interactive users	ALDER 101 (1.5 days)	• Same capabilities as report viewers, plus the ability to: • Drag and drop fields onto a report from a list of objects • Change the sort, filter, and add new sections and breaks to a report • Create different views of data (e.g., charts)	ALDER 100 AND Intro to AKSAS OR Good working knowledge of structures and financial data Increment 2: Good working knowledge of payroll data
Report developers	ALDER 201 (2 days)	• Same capabilities as interactive users, plus the ability to: • Create new reports • Perform quality assurance and certify developed reporting	ALDER 101

Group	Course	Capabilities	Prerequisites
		prior to being deployed • Develop agency-specific ad-hoc reports	
Agency advocates	ALDER 201 (2 days)	• Same capabilities as report developers, plus the ability to: • Be responsible for the two-way communications between the department and the ALDER project team • Serve as the first line of help desk support for department ALDER users • Be responsible for maintaining department folder structure within ALDER	ALDER 101