ALASKA DATA ENTERPRISE REPORTING (ALDER) 2.0

ALDER 101
FOR INTERACTIVE USERS

Revision: January 2018

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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 45-minute timeout with automatic logout. This means that you will automatically be logged out of the system after 45 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 using versions so that you can go back if something does not come out the way you anticipated.

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 Archive 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 through 11.0
- Mozilla Firefox 25 through 36

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

Goals and Objectives

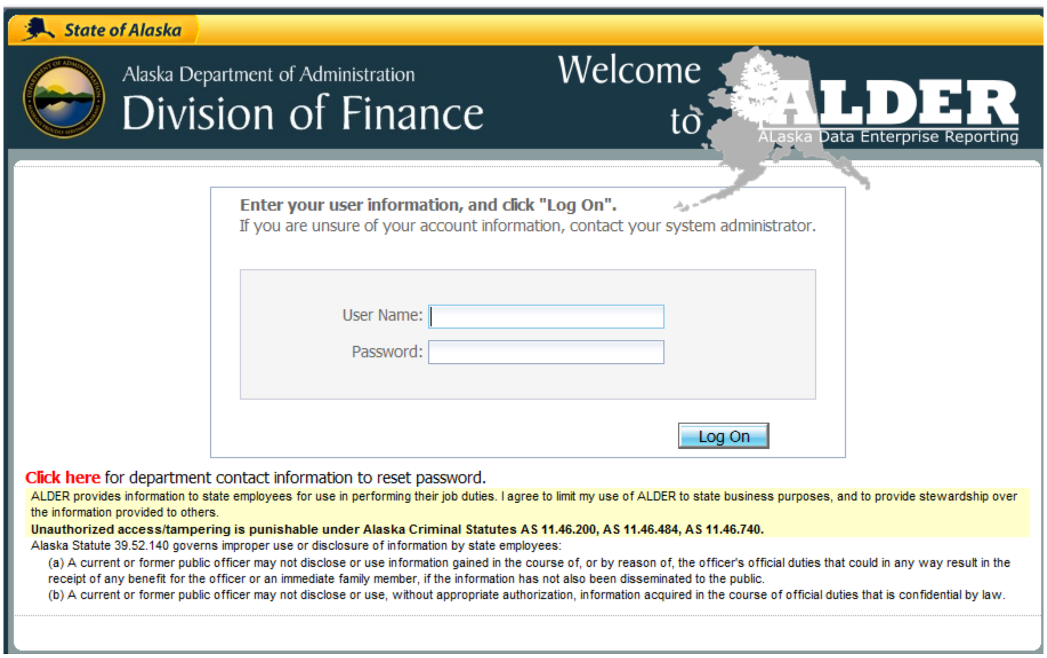
After you complete this chapter, you will be able to:

- 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**



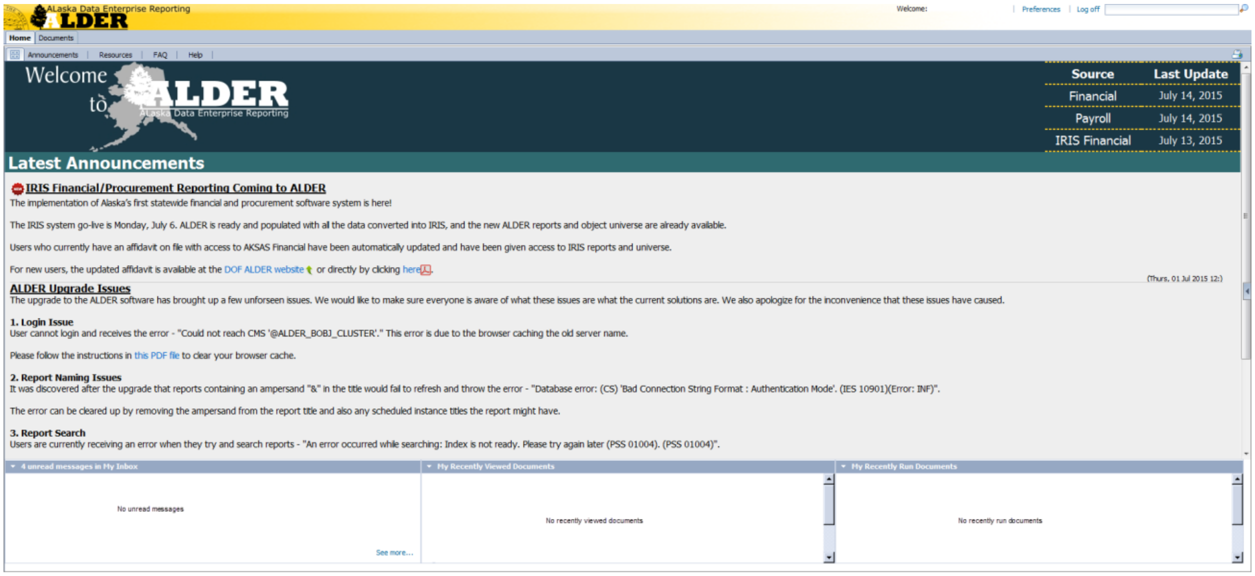
Note: By signing into ALDER, you are agreeing to the principles of data stewardship and Alaska Statute 39.52.140.

Sign 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.

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

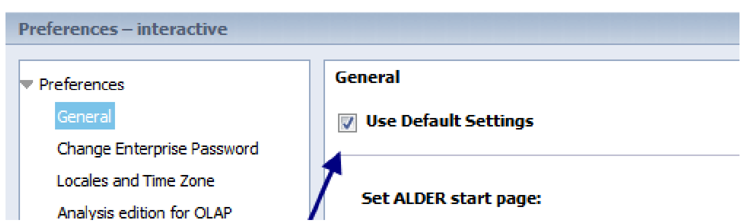


Setting Preferences

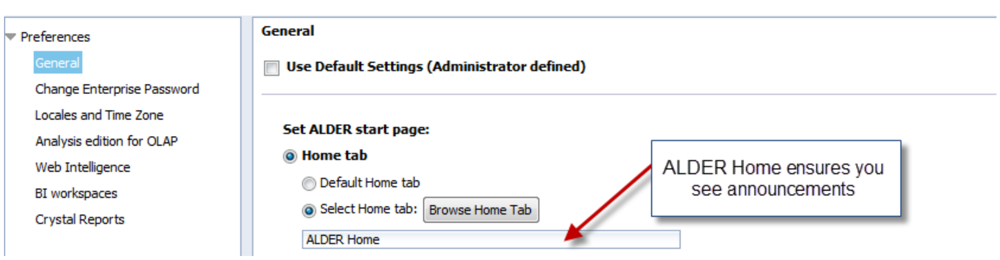
As an interactive user, you will want to verify that your preferences have been properly set.

1. Click on the Preferences button located in the ALDER header toolbar on the right-hand side of the page

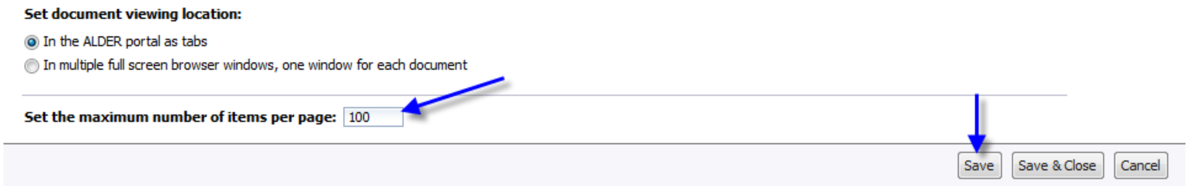
2. Select General uncheck the Use Default Settings



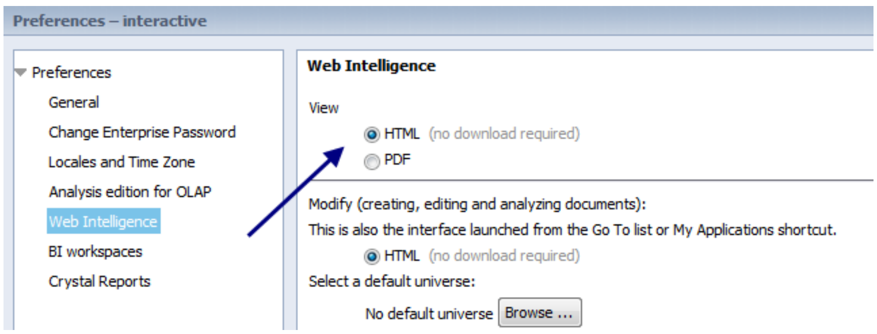
3. Make sure that the ALDER Home is the selected home tab (Note: if this is not set to ALDER Home, click Browse Home Tab. Under Folders, Enterprise, select the ALDER Home icon.)



4. At the bottom of General, you can increase the number of reports returned. Click Save



5. Click on Web Intelligence, under View make sure HTML is selected



6. Click Save & Close

7. Click OK to acknowledge some changes may need a refresh of the browser

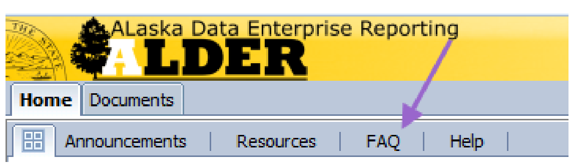
8. Refresh the browser (F5)

Internet Browser Settings

When using ALDER, you may need to save a report from ALDER as an Excel or PDF document. This will require you to enable downloads in your internet browser settings. Follow the below steps to access a PDF document with step-by-step instructions for enabling downloads.

From the ALDER home page:

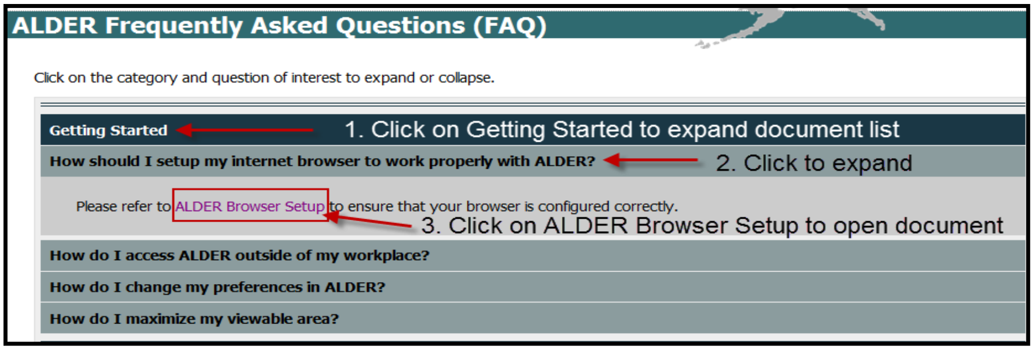
1. Click on the FAQ tab.



2. Click on **Getting Started**.

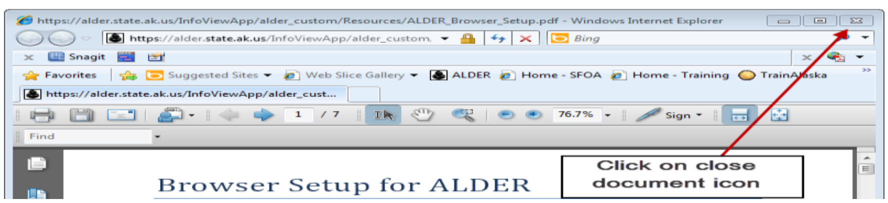
3. Click on **How should I setup my internet browser to work properly with ALDER?**

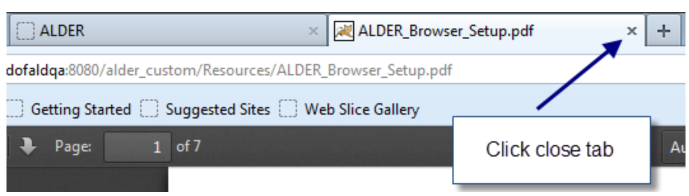
4. Click on **ALDER Browser Setup**.



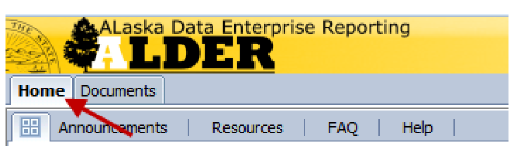
5. Follow the instructions to set your browser. This will allow you to complete the exercises included later in this student guide without browser errors.

6. Close browser setup for ALDER document by clicking on the close document icon or close tab icon depending on the Internet browser being used





7. Return to ALDER home page by clicking on **Home**



Summary

After completing this chapter, you should now be able to:

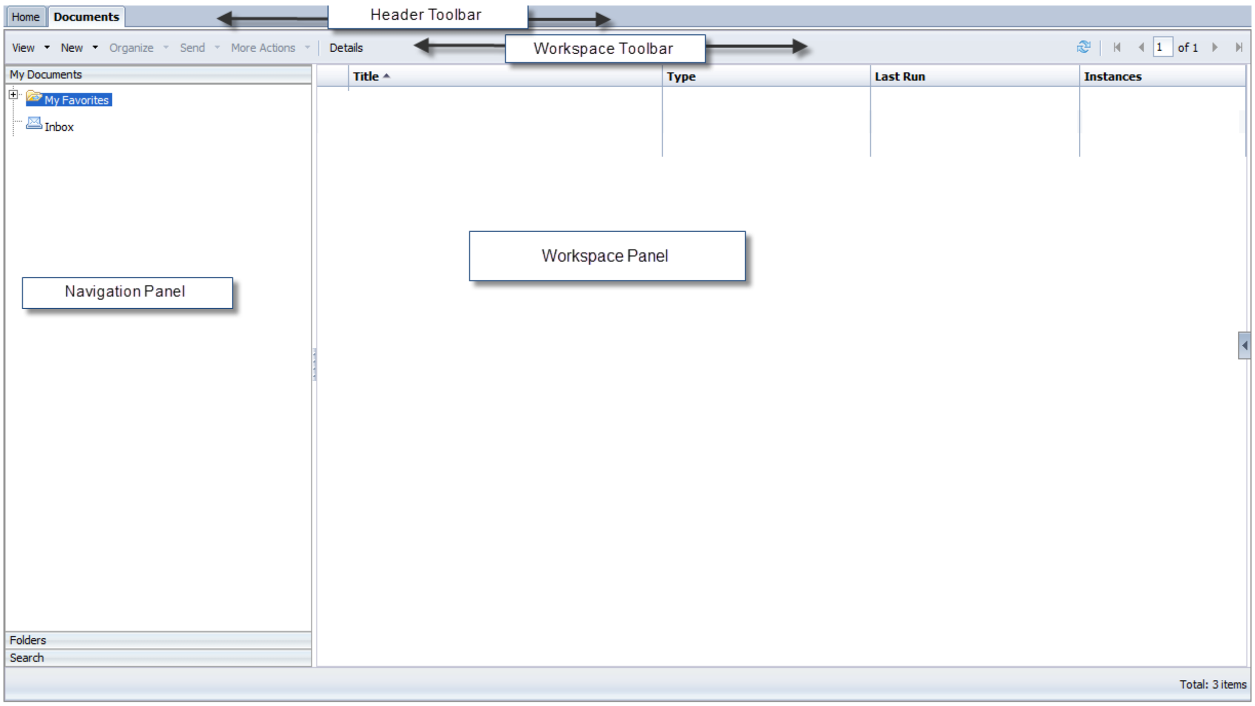
- Access the ALDER web page
- Sign into ALDER
- Change your preferences
- Set your internet browser settings to allow downloads

CHAPTER 3: Creating New Folders and Copying Reports

Goals and Objectives

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

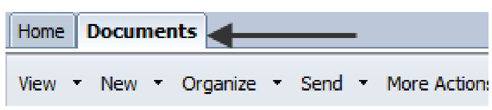
- Create a new folder
- Copy and paste a report to a folder



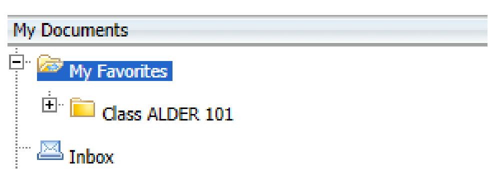
Creating a New Folder

To open the navigation panel:

1. Click on Documents located on the Header Toolbar

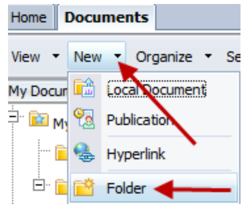


2. In the navigation panel, Click on the My Favorites folder

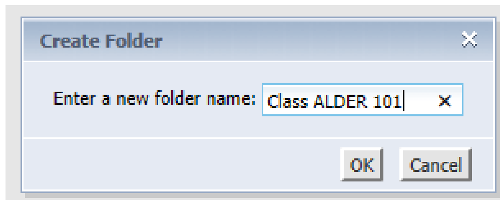


3. In the workspace toolbar, Click on the dropdown arrow next to the New button

4. Select Folder



5. In the create folder pop-up box, enter **Class ALDER 101**



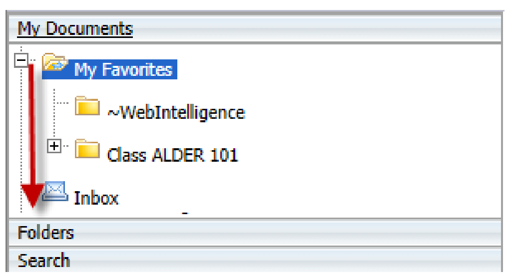
6. Click OK

7. Verify that your Class ALDER 101 folder was created within the My Favorites folder

Copying and Pasting a Report to Folder

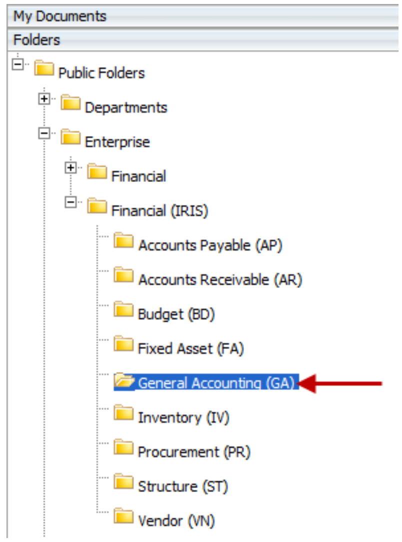
In the navigation panel:

1. Click on Folders at the bottom of the navigation panel



2. Expand Public Folders. Note: To expand folders, click on the ; to collapse folders, click on the

   a. Expand Enterprise
   b. Expand Financial (IRIS)
   c. Click on General Accounting (GA) so that it is highlighted

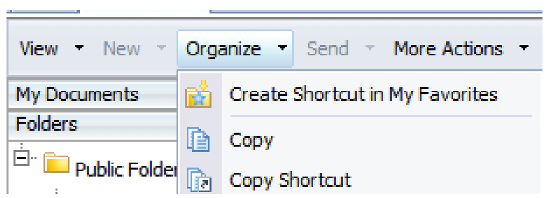


In the workspace panel:

3. Click on the report name: **IRIS GA Detail Transaction**

4. Click on the dropdown arrow next to the Organize button

5. Select Copy



In the navigation panel:

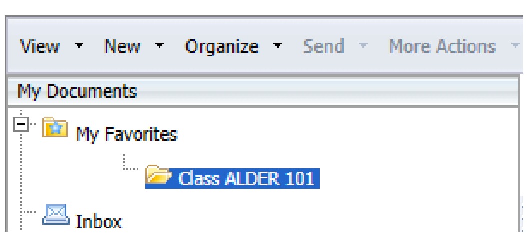
6. Click on My Documents

7. Expand My Favorites

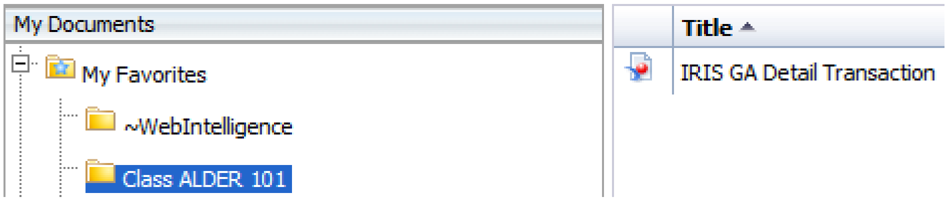
8. Click on the **Class ALDER 101** folder to highlight it

9. Click on the dropdown arrow next to the Organize button

10. Select Paste



Your folder structure should now look like this:



For more information on moving, copying and deleting folders and reports, see the ALDER 100 Student Guide.

Summary

After completing this chapter, you should now be able to:

- Create a new folder
- Copy and paste a report to a folder

Exercise

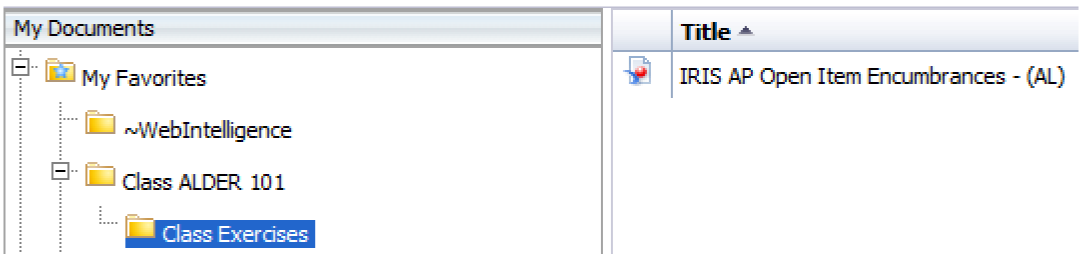
1. Add a new folder titled **Class Exercises** under your Class ALDER 101 folder.

2. Verify that your new folder has been added.

3. From the Enterprise-Financial (IRIS) folder, Accounts Payable (AP) Reports locate the report titled **IRIS AP Open Item Encumbrances – (AL)**.

4. Copy this report to your Class Exercises folder.

5. Verify that the report was copied to your new folder.



CHAPTER 4: Workspace Panel Toolbar within a Report

Goals and Objectives

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

- Define and utilize buttons
- Open a report
- Navigate the Workspace Toolbar
- Change to Design View
- Switch between Structure Only and With Data
- Refresh data
- Insert/delete rows and columns
- Create an Outline on a report

Button Definitions

The definitions of the buttons available in the workspace toolbar are included in the table below. Some options will only be available when a report or folder has been selected.

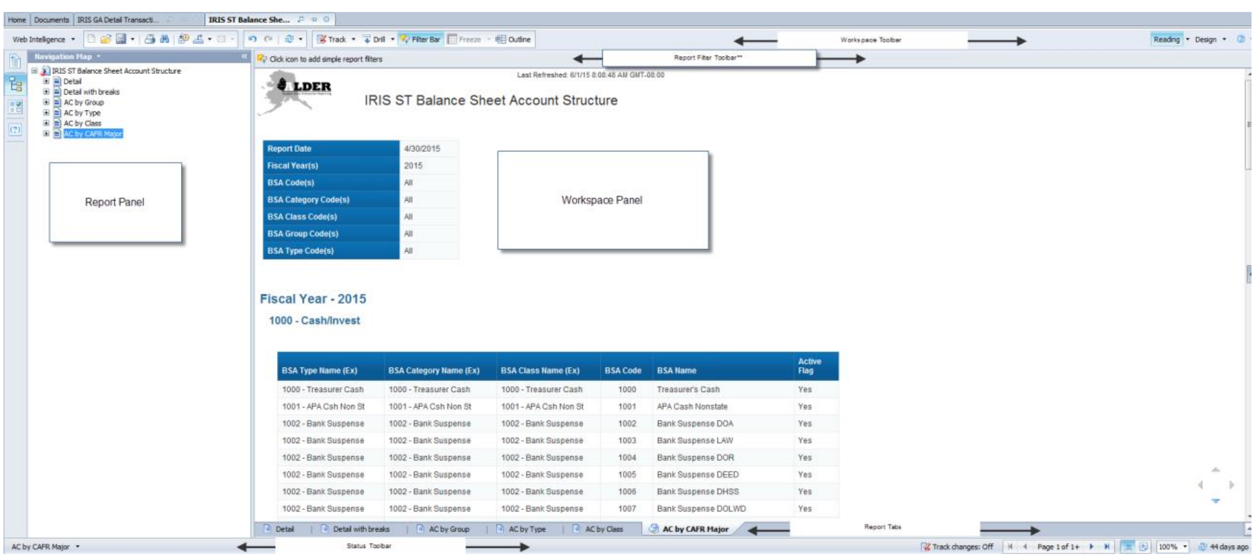
Button / Dropdown List	Options	Function in ALDER
View	View	Allows user to open a selected report in Reading Mode
	Properties	Shows and allows editing of properties of a selected report
New	Local Document Publication Hyperlink **Folder**	 ALDER supports only creating a new folder
Organize	Create Shortcut in My Favorites	Creates a Shortcut to a report in the My favorites folder
	Cut	Cuts a report and/or folder
	Copy	Copies a report and/or folder
	Copy Shortcut	Copies a report and creates a shortcut
	Paste	Pastes the cut or copied report and/or folder
	Delete	Deletes a report and/or folder
Send	BI Inbox	Sends a report to another ALDER user's inbox
More Actions	Modify	Opens a selected report for modification
	Schedule	Allows the scheduling of a selected report
	Mobile Properties	Not supported
	History	Shows the history of a selected report
	Categories	Not supported

Button / Dropdown List	Options	Function in ALDER
	Document Link	Not supported
Details		Opens a pane on the right hand side showing a summary of document details such as owner, description, type, instances, and last run
		Refreshes current view when in a document folder
1 of 1	Pagination	Allows users to go to another page of the report listing. Located at the bottom of the page once a report is opened.

Opening a Report

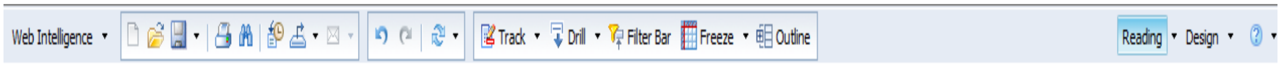
In the navigation panel:

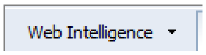
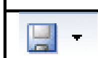
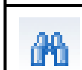
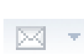
1. Click on Folders
2. Expand Public Folders
3. Expand Enterprise
4. Expand Financial (IRIS)
5. Click on Structure (ST)
6. Find and copy the **IRIS ST Balance Sheet Account Structure** report to the My Favorites, Class ALDER 101 folder
7. From your Class ALDER 101 folder open the report **IRIS ST Balance Sheet Account Structure** by double clicking on the document name

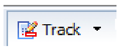
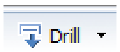
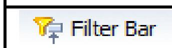
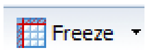
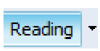


**NOTE: The report filter toolbar is only visible after selecting Filter Bar from the workspace toolbar.

Navigating the Workspace Toolbar



Button	Options	Function in ALDER
 Web Intelligence	 Filter bar	Opens Report Filter Toolbar
	 Outline	Allows users to summarize data in sections, breaks, and tables
	Side Panel	Allows users to show or hide report panel
	Report Tabs	Allows users to show or hide report tabs
	Status Bar	Allows users to show or hide status bar
	New	Not supported
	Open a Document	Closes the current report and opens a new report. This will not save the current report.
	Save	Saves the open report, must save to My Favorites folder
	Save As	Allows you to change the name and location as you save the report
	Print	Exports to PDF for printing, allows printing outside of ALDER
	Find	Allows users to search for data elements within a report
	History	Opens a window showing information about the scheduled instances of the report
	Export Document As	Saves all tabs of the Web Intelligence document as either PDF, Excel 2007, Excel, CSV Archive, or Text
	Export Current Report As	Saves the active tab as either PDF, Excel 2007, Excel, CSV Archive, or Text
	Export Data to CSV Archive	Saves the data as Comma Separated Value, allowing users to define the separation point
	Send To	This allows the user to send an Unopened document to another ALDER user
	Undo and/or Redo	Allows users to undo or redo previous actions

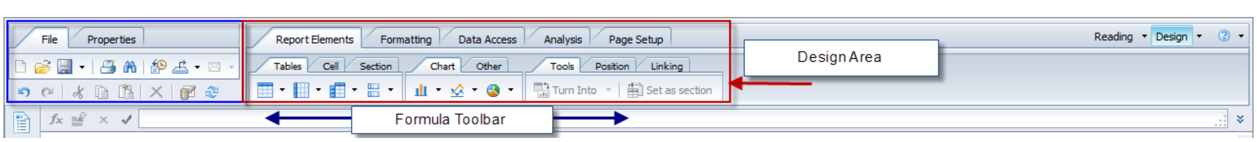
Button	Options	Function in ALDER
	Refresh	Prompt box for entering parameters and refreshing data. Users can refresh one or all queries in a report.
	Track	Activate and deactivate data tracking mode. Data tracking mode highlights differences in report data from one refresh to another refresh.
	Drill	Navigate the report by hierarchy. This feature only works for some dimensions.
	Show/Hide Report Filter	Shows and hides the report filter toolbar
	Freeze	Allows users to freeze the header row and up to a few additional rows. As you scroll down the screen, you are able to view your headers
	Outline	Allows users to summarize data in sections, breaks, and tables
	HTML PDF	Allows users to modify the view of a report Shows the report in PDF format
	With Data	Shows report data when report is refreshed
	Structure Only	Shows the Available Objects within the tables and cells
	Help Contents	Opens a help menu for finding information on Web Intelligence
	Tutorials	Opens tutorials by the developers of Web Intelligence
	About	Explains information about the developers of Web Intelligence and the version

Design View

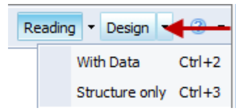
To see the design area, select Design/With Data on the Workspace Toolbar.

Design View Workspace and Formula Toolbars

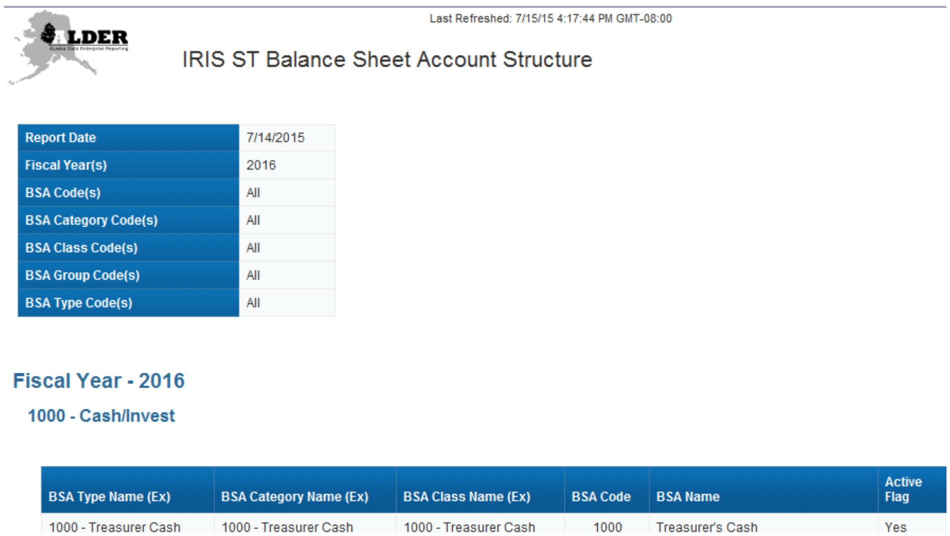
This is the view you should see after clicking on Design. The toolbar changes regardless of whether you choose Design With Data or Structure Only.



Click on the down arrow next to Design and select With Data.



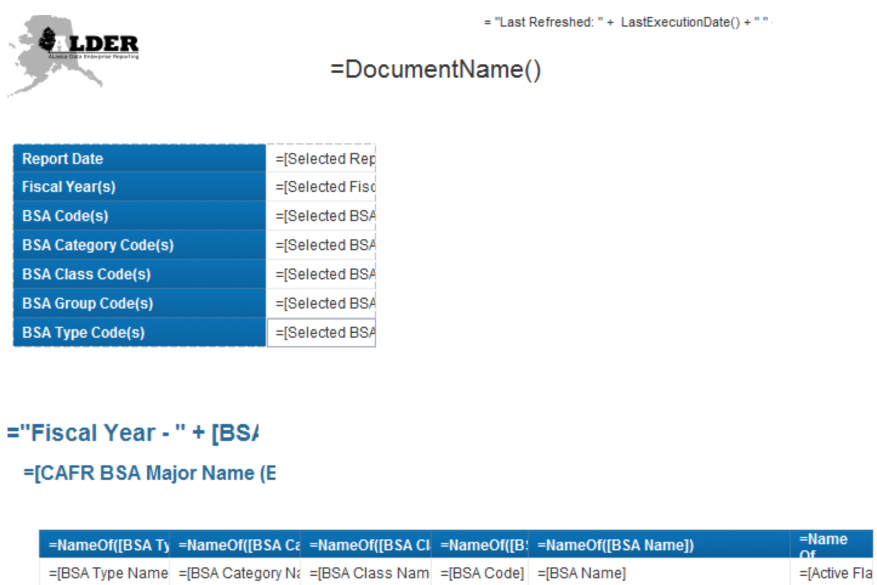
With Data View



Structure Only View

1. Click on the down arrow next to Design and select Structure only option.

This view gives the available objects, formulas, and variables that are within the fields. This view option may be useful to determine the information that is in a particular area of the report and assist with troubleshooting reports that are not running correctly.



2. Click on the down arrow next to Design and select With Data.

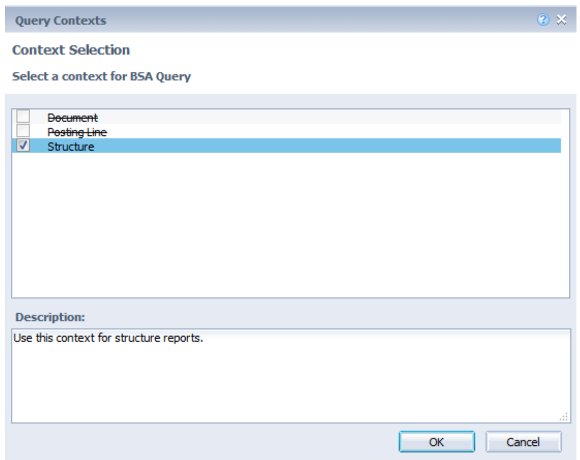
Refreshing Data

Using the refresh data button allows you to add prompts to retrieve the desired data from the universe.

1. Click the Refresh button

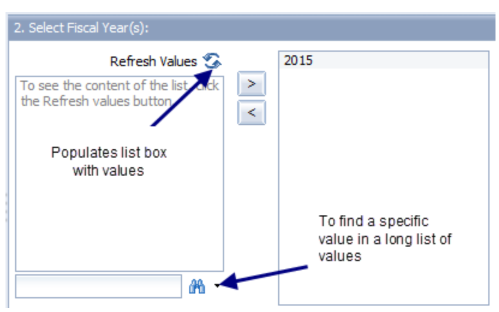
2. A context pop up box with three options will appear. Only structure reports should prompt you for the context

3. Select Structure in the popup window (Note: choosing document or posting line in a structure report will include only structure elements that have postings to them based upon prompted data)



4. Click OK

5. If the values do not appear in the list of values box, click on Refresh Values



6. Change the prompts to read as follows:

a.	Select Report Date:	Current
b.	Select Fiscal Year(s):	Current
c.	Select BSA Category Code(s):	ALL
d.	Select BSA Class Code(s):	ALL
e.	Select BSA Code(s):	ALL
f.	Select BSA Group Code(s):	ALL
g.	Select BSA Type Code(s):	ALL
h.	Select CAFR BSA Major Code(s):	ALL

i. Select CAFR BSA Minor Code(s): ALL

7. Click OK

Inserting New Row

To add necessary information to a table, you might need to add a new row. This will allow the user to add information that cannot be captured with an existing object.

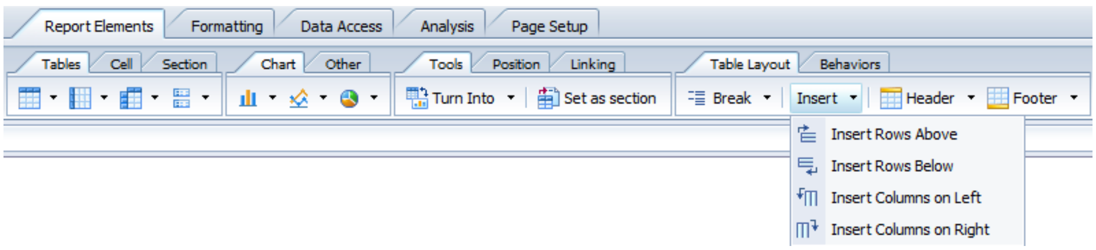
1. Right click on the last row of the header box
2. Select Insert
3. Select Rows Below
4. Click on the blank blue cell in the new row
5. In the formula toolbar type: Below Cell
6. Press Enter
7. Right click on the new last row
8. Select Insert
9. Select Rows Above
10. Click on the blank blue cell in the new row
11. In the formula toolbar type: Above Cell

Report Name	IRIS ST Balance Sheet Account Structure
Report User	250468
Selected Report Date	10/16/2017
Selected Fiscal Years	2018
Selected BSA Category Codes	All
Selected BSA Codes	All
Selected BSA Group Codes	All
Selected BSA Type Codes	All
Selected CAFR BSA Minor Codes	All
Selected CAFR BSA Major Codes	All
Above Cell	
Below Cell	

Inserting New Column

To add necessary information to a table, you might need to add a new column. This will allow the user to add information that cannot be captured with an existing object.

1. On the Detail tab
2. In the second column of the data table, click on the blue box titled BSA Group Name (Ex)
3. Under Report Elements, Table Layout, click on the down arrow next to the Insert icon in the workspace toolbar



4. Select Insert Columns on Left
5. To add text in the blue cell, click on the cell, go to the formula toolbar, type in Blank Column and press Enter

BSA Code	Blank Column	CAFR BSA Major Name (Ex)	BSA Group Name (Ex)	BSA Type Name (Ex)	BSA Class Name (Ex)	BSA Name	BSA Active Flag
1000		1000 - Cash/Invest	1000 - Cash	1000 - Treasurer Cash	1000 - Treasurer Cash	Treasurer's Cash	Yes
1002		1000 - Cash/Invest	1000 - Cash	1002 - Bank Suspense	1002 - Bank Suspense	Bank Suspense DOA	Yes
1003		1000 - Cash/Invest	1000 - Cash	1002 - Bank Suspense	1002 - Bank Suspense	Bank Suspense LAW	Yes
1004		1000 - Cash/Invest	1000 - Cash	1002 - Bank Suspense	1002 - Bank Suspense	Bank Suspense DOR	Yes

6. Save the report as **IRIS ST Balance Sheet Accounts Structure Insert Columns and Rows** in your Class ALDER 101 folder.

Note: Some reports in ALDER for AKSAS do not have the blue header row connected to the gray data area. When inserting new columns in structure reports and summary reports, you need to make sure that the column formatting lines up between the blue header row and the gray data area. Scroll to the end of the data table (all the way to the right). Notice that the blue header row is now one column longer than the gray data area.

Appropriation Indented Name		AR Logical Level	Rpts to AR Num	Rpts to AR Term Yr	AR Bgt Character	AR Bgt Fund	AR Actv Ind	AR Function Code	AR Total Ctrl Ind	AR Bgt Ind	AR Spending Ind	AR Rev Recog Ind	AR Account Ctrl Ind	AR Orig Yr	AR Term Yr
00009-13 HEALTH & SOCIAL SERV	10	00002	2013	O		Y			N	N	N	N	2013	2013	
00530-13 BUDGET ACT	18	00009	2013	O		Y			N	N	N	N	2013	2013	
22296-13 CHAPTER 15 SLA 20	20	00530	2013	O		Y			N	N	N	N	2013	2013	

Deleting Rows

1. On the AC by CAFR Major tab
2. Click on the gray cell in the last row of the header box
3. Click Delete icon 

Deleting Columns

1. On the Detail tab
2. Click on the second column of the data table (the non-blue box)
3. Right click
4. Select Delete

Deleting Columns or Rows in a Non-Connected Table (AKSAS Structure Reports)

1. Click on the second column of the data table (the blue box)
2. Right click
3. Select Delete
4. Click on the second column of the gray area
5. Select Delete
6. Close report; do not save

Create an Outline

You can hide or display report data by folding or unfolding the display of different report elements (this is similar to the subtotal feature in Excel). ALDER conceals and displays data in different ways depending on the report. You can fold and unfold sections, breaks and tables. When a section is folded, section details are hidden and only free cells are displayed. When a table or break is folded, the rows are concealed and only headers and footers are displayed. Tables must have headers and footers to be folded and unfolded. Only vertical tables and crosstabs can be folded and unfolded.

1. Copy **IRIS AP PCard Outstanding Transaction Detail** to your Class ALDER 101 folder
2. Open the report from the Class ALDER 101 folder
3. Click Design
4. Click the Refresh Data button

5. Change the prompts:

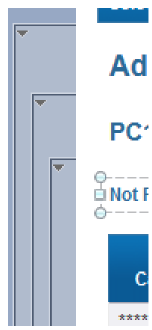
   a. Select Report Date: Current
   b. Select Pcard Administrator Departments: 11 - Department of Fish and Game
   c. Select Select Pcard Administrator IDs: ALL

6. Click OK

To fold or unfold

1. Select the Unreconciled Tab. Under Analysis, Interact, click on the Outline icon. 

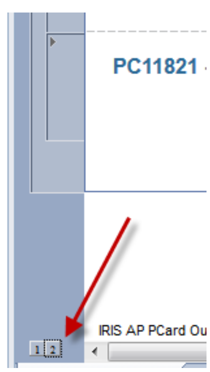
Notice that a new panel opens between the report panel and the workspace panel.



Also notice the numbers at the bottom of the panel. Clicking on the number will summarize the table to display only the header and footer rows. To remove the summarization, click on the same number again.

2. Click on the 2 at the bottom of the panel (see above arrow). The data is now summarized based on the break and shows only the header, as shown below. Note: this summarized data will include footers if they are incorporated in the section.

3. To expand the sections, first click on the largest number visible



4. Save the report in your Class ALDER 101 folder as **IRIS AP PCard Outstanding Transaction Detail Outline**

5. Close the report

Summary

After completing this chapter, you should now be able to:

- Define and utilize buttons
- Open a report
- Navigate the Workspace Toolbar
- Change to Design View
- Switch between Structure Only and With Data
- Refresh data
- Insert/delete rows and columns
- Create an outline on a report

Review

1. **How do you open a report to view it?**
   a. Click on report title, select View, select View from the drop down menu
   b. Double click on report title
   c. Click on report title, right click, and select View
   d. All of the above

2. **What is the difference between viewing a report in Design With Data vs. Structure Only?**
   a. With Data provides the results of the query when run. Structure Only shows the Web Intelligence Objects placed on the face of the report.
   b. With Data has the ALDER logo in the upper corner. Structure Only has the ALDER logo on the bottom of the report.
   c. Structure only has multiple pages after the query is refreshed
   d. There are no differences between the two methods

3. **How can you print a report from within ALDER?**
   a. You cannot print a report from ALDER
   b. Select Reading, select PDF mode, and right click and select Print
   c. Select Print to open the document outside of ALDER in PDF
   d. Both B and C

4. **Identify the different ways that you can export a report, and explain why you would use each.**
   a. Excel, Excel 2007, PDF, CSV Archive, Text. Excel (and Excel 2007) exports with header box and row titles. PDF data is static (cannot be changed) and shows header box and row titles. CSV Archive exports all objects in the available object list with no headers or footers. Text opens a notepad document with header and row titles.
   b. Excel, CSV Archive, CSV Archive with options. Excel exports with header box. CSV Archive, exports all objects in the available object list with no headers or footers. CSV Archive with options exports only the objects in the data table.
   c. Excel, PDF, CSV Archive with options. Excel exports with header box and row titles. PDF data is static and shows header box and row titles. CSV Archive with options exports all objects in the available objects list and separates the columns with commas.
   d. None of the above.

5. **Where is the only location(s) you can save reports to?**
   a. When you are within the My Favorites folder
   b. When you are in the Enterprise and Department report folders
   c. When you are within your Inbox and Department report folders
   d. None of the above

6. **When would you use the Outline button?**
   a. When you want to view only the totals for a specific logical level
   b. When you want to view the totals for a specific account code
   c. When you want to summarize the data on the report
   d. When you want to view only the totals for a specific column on your report

CHAPTER 5: Report Panel

Goals and Objectives

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

- Identify the report panel
- Move between the report panel icons
- Use the navigation map to find information within the report
- Identify and define available objects
- Add or remove available objects
- Identify the report outline using document structure and filters

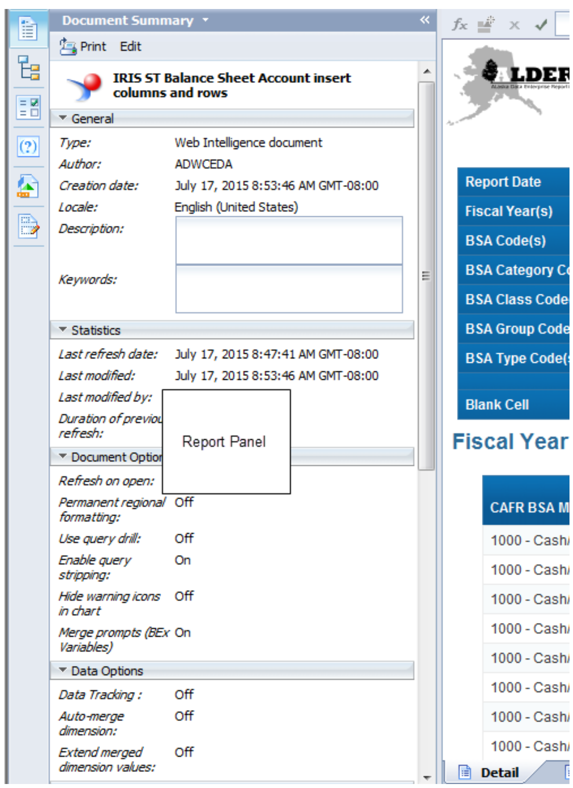
Report Panel Icons

We are first going to review the various icons listed on the left of the report panel.

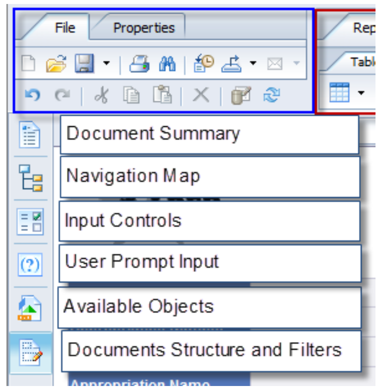
1. Go to the Class ALDER 101 folder and open **IRIS ST Balance Sheet Account Structure Insert Columns and Rows**

2. Click on Design

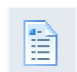
Notice the report panel located on the left side of your report. Note: If you do not see a report panel, right click in the workspace toolbar, select side panel, select normal



Notice the icons at the left side of the report panel, as shown below. We will be describe each of these icons. **Note these items are separate of the report panel and will remain if the report panel is minimized.



Document Summary

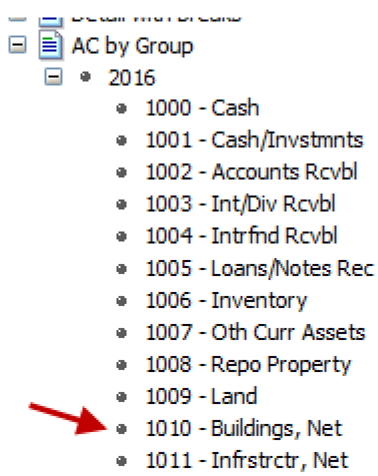


- Displays the property-type information of the report, such as the title, last modified date and a description of the report
- Displays the prompts that were selected

Note: The print button in this panel only prints the information located in the document summary.

Navigation Map

- In the report panel, select Navigation Map. This is a way to quickly find data within your report
- Expand the IRIS ST Balance Sheet Account Structure
- Expand AC by Group
- Expand 2016. Your report panel should look similar to this:



- Now click on 1010 – Buildings, Net. You have now navigated to that area of the data

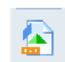
Input Controls

The input control icon in the report panel:

- Allows users to create dynamic filters in the report panel based on the available objects within the report.
- Allows users to attach a filter to multiple tables, sections and charts or to the entire report.

Available Objects

There are two distinct areas under the available objects menu.



1. **Available objects**
2. **Variables**

Available objects represent information that is available to be displayed on the report. The information is categorized in three different types of objects:

1. Dimensions  (blue flag). These objects contain data that we can aggregate our information by (e.g., appropriation, collocation code, ledger code, document number, date processed, etc.). If a dimension has a  next to it, there are related details (see below) associated with this dimension.

2. Measures (orange ruler). These objects contain data that we can calculate on (e.g., actual, encumbrance, authorized, restrictions, etc.)

3. Details  (blue flag with green asterisk). These objects contain data that we would not aggregate or calculate on (e.g., phone number, address, etc.)

Note: Not all available objects are displayed on a report, and objects are listed in alphabetic order by object type.

Variables

- Are formulas that you have assigned a name
- Become objects that can be placed on the report
- Become objects that can be filtered on
- Can be dimensions, measures, or details

Formulas

- Calculation that you can create to display data that is not retrieved by existing objects
- The actual formula is displayed in the formula toolbar when selected on the report

- Does not appear in the Available Objects

Dragging and Dropping Available Objects onto the Report

Anytime you drag an object to be displayed on the data table, you want to make sure you do not drag it into the blue header row. For some of the reports in ALDER, the blue header row and the data table are not connected (e.g., structure reports and authorized balance reports). When the header row and data table are not connected, you place the object in the data table and insert a column in the header row.

1. From the Available Objects list, find the object BSA Type Name (Ex)

2. Click on the object and hold the mouse button down while dragging the object onto the report

3. Drag it into the second column of the blue header row.

NOTE: The image below shows what happens when you add objects into the header row, when the header row is not connected to the data table. Several ALDER for AKSAS structure reports are designed this way.

Appropriation Indented Name	00002	Rpts to AR Num	Rpts to AR Term Yr	AR Bgt Character	AR Bgt Fund	AR Actv Ind	AR Function Code	AR Total Ctrl Ind
Appropriation Indented Name	00009	Rpts to AR Num	Rpts to AR Term Yr	AR Bgt Character	AR Bgt Fund	AR Actv Ind	AR Function Code	AR Total Ctrl Ind
Appropriation Indented Name	00530	Rpts to AR Num	Rpts to AR Term Yr	AR Bgt Character	AR Bgt Fund	AR Actv Ind	AR Function Code	AR Total Ctrl Ind

Here are three helpful guidelines to follow when dragging and dropping objects:

- A skinny blue line to the side of the column will create a new column
- A thick blue line replaces the existing data in the column or row
- A skinny blue line at the bottom or top of the row will create a new row

Using these guidelines, let's try dragging and dropping an object again.

4. On the Detail tab

5. From the Available Objects list, find the object BSA Type Name (Ex)

6. Click on the object and hold the mouse button down while dragging the object onto the report

7. Drag it into the second column of the gray area of the data table that says "Blank Column"

8. Correct the blue header cell to show BSA Type Name (Ex)

If you were successful, your columns should look similar to this:

BSA Code	Blank Column	CAFR BSA Major Name (Ex)	BSA Group Name (Ex)
1000	1000 - Treasurer Cash	1000 - Cash/Invest	1000 - Cash
1002	1002 - Bank Suspense	1000 - Cash/Invest	1000 - Cash
1003	1002 - Bank Suspense	1000 - Cash/Invest	1000 - Cash
1004	1002 - Bank Suspense	1000 - Cash/Invest	1000 - Cash
1005	1002 - Bank Suspense	1000 - Cash/Invest	1000 - Cash

9. Save the report in your Class ALDER 101 folder as: **IRIS ST Balance Sheet Account Structure Available Objects**.

Removing Objects from the Data Table

After reviewing your tables, you now realize that you have BSA Type name (Ex) set as a section so you do not need that information displayed in the data table. To remove objects or columns from your data table which are not needed for your report:

1. On the AC by Group report tab

2. Right click on the second column of the data table (make sure that the area behind the data is gray)

3. Select Delete

If you were successful, your columns should look similar to this:

BSA Group: 1000 - Cash

BSA Code	BSA Type Name (Ex)	BSA Active Flag
1000	1000 - Treasurer Cash	Yes
1002	1002 - Bank Suspense	Yes
1003	1002 - Bank Suspense	Yes

4. Close without saving.

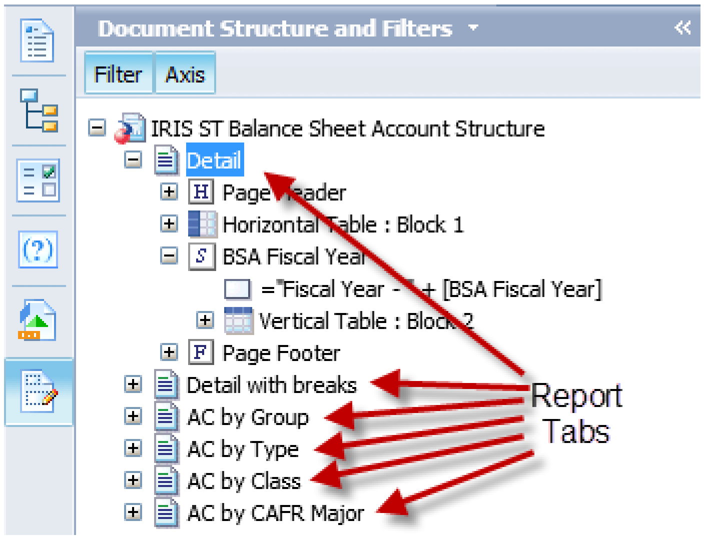
Document Structure and Filters

1. Open the report **IRIS ST Balance Sheet Account Structure** from your Class ALDER 101 folder

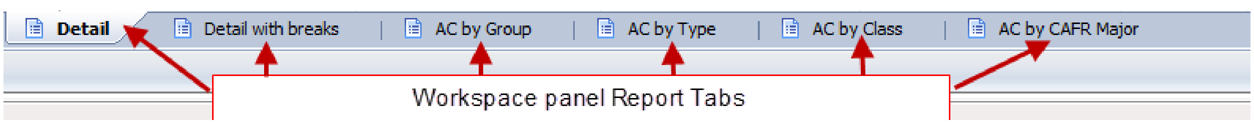
2. Click on Design

3. In the report panel, select Document Structure and Filters. This menu item is an outline for your entire report.

Your report panel should look similar to this:



Notice in the workspace panel, there are three tabs that correspond with the report tab names.

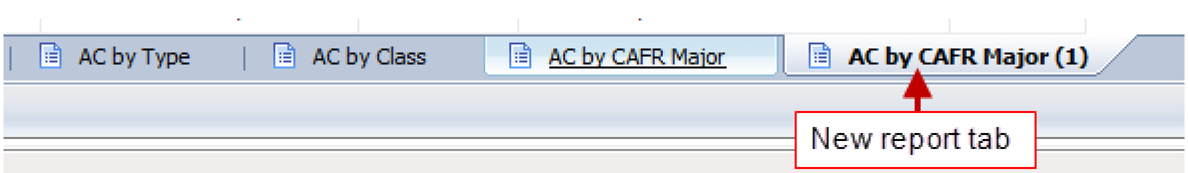


When you click on a report tab name in the report panel, ALDER automatically expands the outline of the report tab.

4. Click on AC by Group. Notice that it opens the report tab in the workspace panel

5. In the workspace panel, right click on the report tab AC by CAFR Major

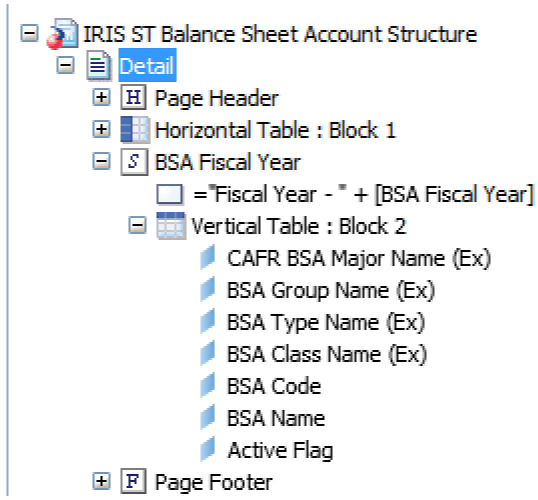
6. Select Duplicate Report. In the report panel, notice that it automatically expanded the outline of the new report tab that was just created



7. In the report panel, click on the next to the report name Detail

8. Click on the next to Vertical Table: Block 2

Your report panel should look similar to this:



As we click on each item within the outline, ALDER takes us to that item within the workspace panel. This is how you can locate each item within your report. Notice that the available objects that are displayed in the workspace panel are listed below the table.

9. Click on the Horizontal Table: Block 1, notice there is a blue outline around the header box in the workspace panel

10. Click on the Vertical Table : Block 2, notice there is now a blue outline around the section total in the workspace panel

11. Close without saving

Summary

After completing this chapter, you should now be able to:

- Identify the report panel
- Move between the report panel icons
- Use the navigation map to find information within the report
- Identify and define available objects
- Add or remove available objects
- Identify the report outline using document structure and filters

Review

1. **What are available objects?**

   a. Dimension, measure, detail, variable
   b. Represents information that is available to be displayed on the report
   c. Information that cannot be displayed in the report's data table
   d. Both A and B

2. **Are all available objects displayed on the report?**

   a. Yes
   b. No

3. **What are the different types of available objects?**

   a. Dimension, measure, formula
   b. Measure, detail, dimension, variables
   c. Formula, variable, dimension, measures
   d. Dimension, measures, detail, formulas, variables

4. **What is a formula?**

   a. Variable that can be displayed on the report
   b. Information that is not an available object
   c. Calculation that you can create to display data
   d. Both B and C

5. **When you drag an object onto a report, you should always drop it in the blue area of the table.**

   a. False
   b. True

Exercise

1. From the Enterprise/Financial(IRIS)/Structure (ST) folder, copy the report **IRIS ST Appropriation Structure** to your Class Exercises folder

2. Go to your Class Exercises folder and open the report **IRIS ST Appropriation Structure**

3. Click on Design

4. Refresh data

5. Click on "Structure" under the Query Contexts box

6. Using the following prompts:

a.	Select Report Date:	Current
b.	Select Fiscal Year(s):	Current
c.	Select Department(s):	02 – Department of Administration
d.	Select Appropriation Class Code(s):	ALL
e.	Select Appropriation Code(s):	ALL
f.	Select Appropriation Department Codes:	02 - Department of Administration
g.	Select Appropriation Group Code(s):	ALL
h.	Select Appropriation Type Code(s):	ALL

7. Click OK

8. On the **AR by Year with breaks** report tab, remove the column AR Type Code

9. Insert Appropriation Group Fiscal Year in the data table between the columns for AR Group Code and AR Code

10. Double click on the header cell and rename the column AR Group Fiscal Year

11. Press Enter

Your report should look similar to this:

Appropriation Class Code	AR Group Code	AR Group Fiscal Year	AR Code	Appropriation Name	Appropriation Classification
CPTL	A160	2018	022501601	General Svcs Public Bldg Fund Bldgs Def Maint ORIG2016 PBF	Continuing
	A160				

Appropriation Class Code	AR Group Code	AR Group Fiscal Year	AR Code	Appropriation Name	Appropriation Classification
CPTL	A162	2018	022301602	Alaska Land Mobile Radio System SUP ORIG2016 GF	Continuing
	A162				

12. Save the report in your Class Exercises folder as **Chapter 5 Exercise**

CHAPTER 6: Table Types and Charts

Goals and Objectives

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

- Add charts, tables and cells
    - To the report
    - To sections
- Change or edit charts

Charts and Table Types

13. From the Enterprise/Financial(IRIS)/IRIS Workshops/Summary folder, copy the report **IRIS GA Expenditure Budget and Actual Summary** to your Class ALDER 101 folder

14. Click on Design

15. Click the Refresh Data button

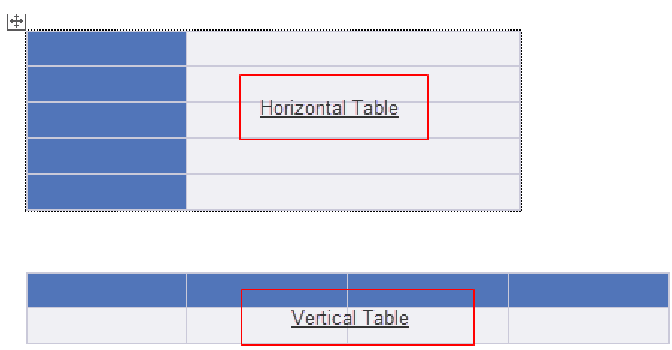
16. Enter the following prompts:

a.	Select Report Date:	CURRENT
b.	Select Fiscal Year(s):	CURRENT;PRIOR
c.	Select Department(s):	02-Department of Administration
d.	Select Appropriation Code(s)(by FY):	ALL
e.	Select Appropriation Code(s):	ALL
f.	Select Appropriation Group Codes(by FY):	ADMV;ADMV
g.	Select Appropriation Group Code(s):	ADMV
h.	Select Appropriation Type Codes(by FY):	ALL
i.	Select Appropriation Type Code(s):	ALL
j.	Select Budget Fiscal Year(s)	CURRENT;PRIOR

17. Click OK

All financial enterprise reports in ALDER have at least two existing tables on them:

- Horizontal table displays the user prompts (header box)
- Vertical table displays the data results (data table)



ALDER displays data in three different formats:

- Tables display summary or detail information such as account number, document numbers, amounts, date processed, etc.
- Charts graphically display the business information based on the user prompts.
- Cells display information that adds meaning to your report such as:
  - Text comments
  - Formulas or calculations
  - Page numbers
  - Document name

We will be working on the Summary by AR report tab.

There are two areas on the report where charts, tables or cells can be placed.

- Next to the header box will display your chart, table, or cell at the top of the report and will compile data based on the entire report.

Report Name	IRIS GA Expenditure Budget and Actual Summary
Report User	250468
Report Date	12/14/2017

02 - DOA

Budget Fiscal Year - 2016

Appropriation Code	Appropriation Name	Budget	Encumbrances
021199102	Motor Vehicles PR	17,965,073.78	-37,519.09
021199105	Motor Vehicles IA	10,000.00	0.00
021199114	Motor Vehicles FED	0.00	0.00

- Placing a chart, table or cell next to an existing data table will compile your data based on the sectioning of a report. In the example below, if you place a chart next to the table (inside the section, outside the data table), the data will be compiled based on each appropriation.

Budget Fiscal Year - 2016

Appropriation Code	Appropriation Name	Budget	Encumbrances	Budgetary Expenditures	Unexpended Balance	Uncommitted Balance
021199102	Motor Vehicles PR	17,965,073.78	-37,519.09	[illegible]	[illegible]	[illegible]
021199105	Motor Vehicles IA	10,000.00	0.0	[illegible]	[illegible]	.00
021199114	Motor Vehicles FED	0.00	0.00	0.00	0.00	0.00

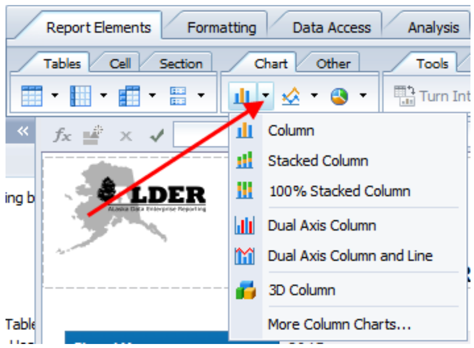
Placement of chart, table, or cell for table data

Note: When you drag a chart, table or cell onto the report, make sure that the area you are placing the object in is where you want to reflect the data.

To add a chart, table or cell to the entire report

1. In the Workspace Toolbar, select Report Elements, Chart

2. Click on the down arrow next to the column chart icon



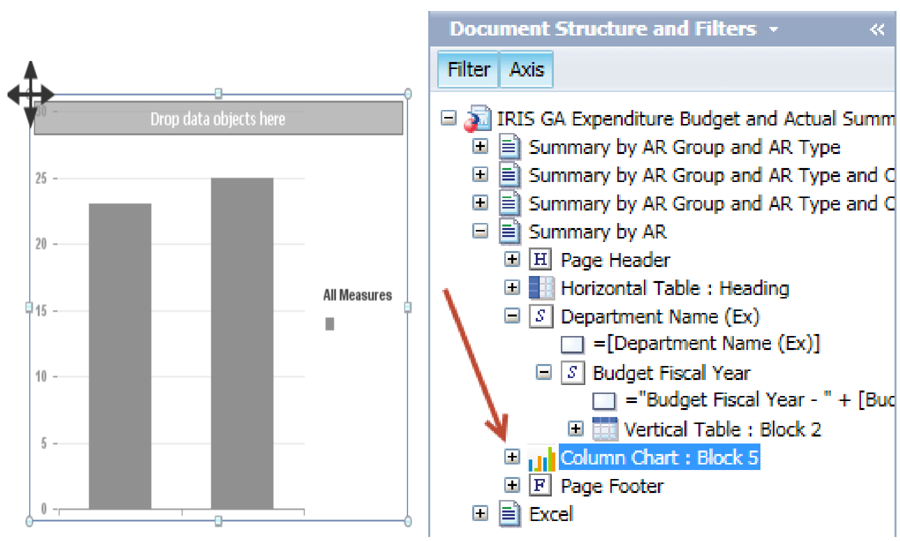
3. Click on a Column chart to select the chart

4. Move your cursor to the workspace panel next to the header box

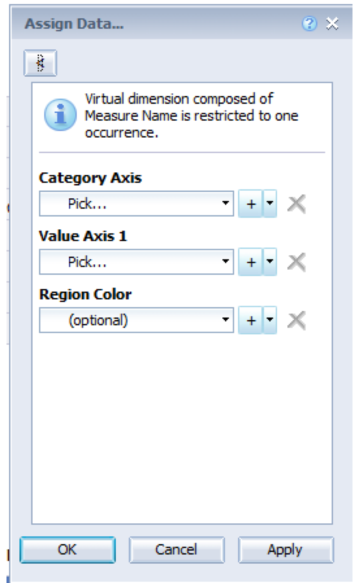
5. Click in the area next to the header box

6. A blank chart will appear

7. Select the entire chart, you must have a 4-way arrow to select the chart in the workspace panel or you can select the chart from Document structure and filters



8. Right click and select Assign Data



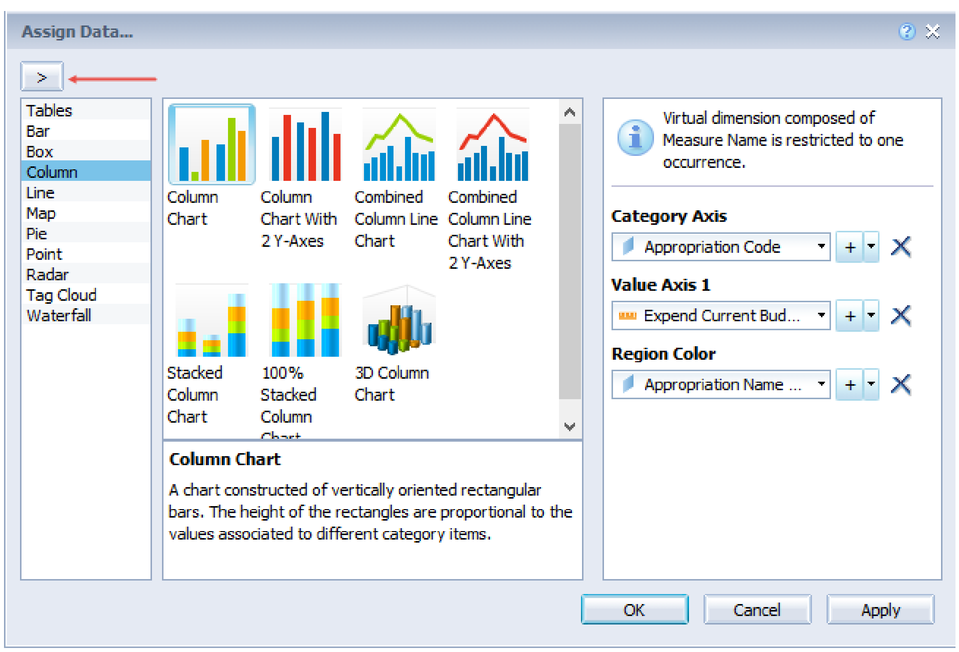
9. Under Category Axis (X-Axis) click the down arrow and select Object Type Code

10. For the Value Axis 1 (Y-Axis), click the down arrow and select Budgetary Expenditures

11. Region Color allows you to assign colors to the Category Axis values, click the drop-down arrow and select the object *(optional) do not select anything at this time*

12. Click Apply

13. From the Assign Data, you can change the chart type by clicking the arrow at the top of the window



14. Click OK to close this window

15. Select the entire chart, you must have a 4-way arrow to select the chart in the workspace panel or you can select the chart from Document structure and filters

16. Right click and select Format Chart

17. Click on General

18. Change the Name of the chart to EX by Object Type

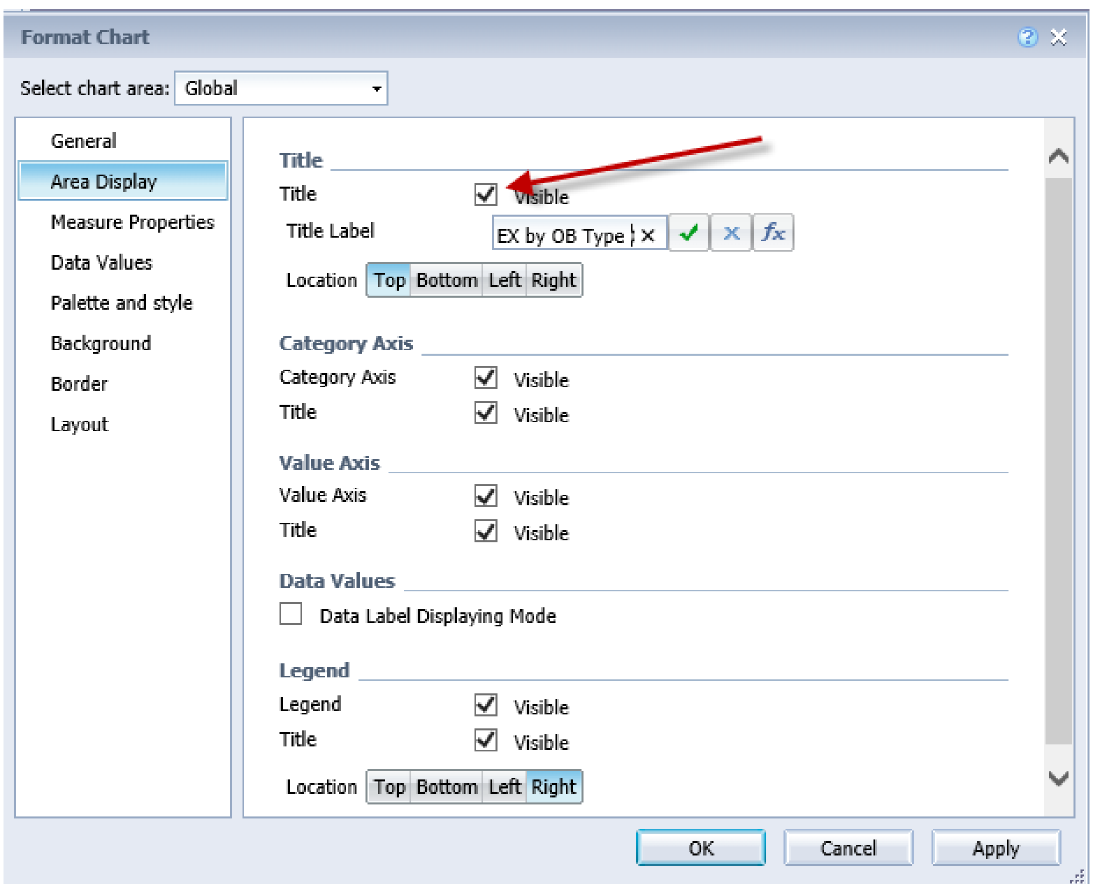
19. Click Apply

20. Click on Area Display

21. Check the box Title Visible. Note: Having this box checked allows you to put a title on the chart

22. In Title Label, enter the title Posting by Account, this is a formula so you will need to make sure the information is formatted as **=”EX by OB Type Chart"**

23. Verify that the boxes under Legend are checked, as shown below

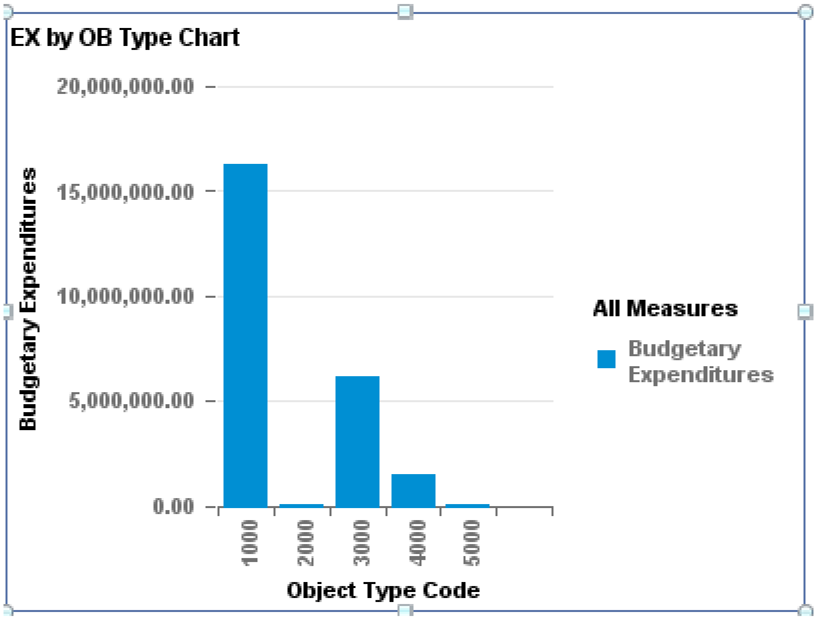


24. Click Apply

25. Click OK

26. You may need to refresh the data (to bring current data into the chart)

Your report with a vertical table should look similar to this:

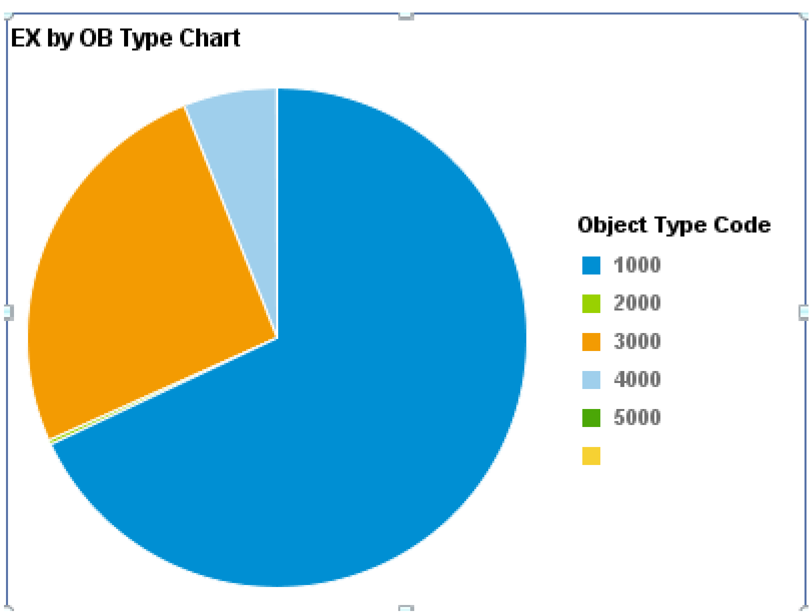


Note: Do not try to drag the chart closer to the data table. We will change the location later by formatting the chart within the report.

You can change the chart type by Right Clicking on the Chart, Select Turn Into, then select Chart Type

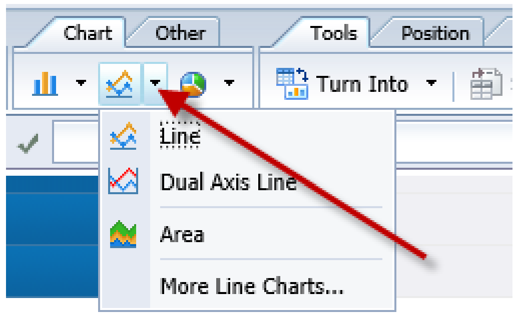
Select Pie Chart

Your report with a pie chart should look similar to this:



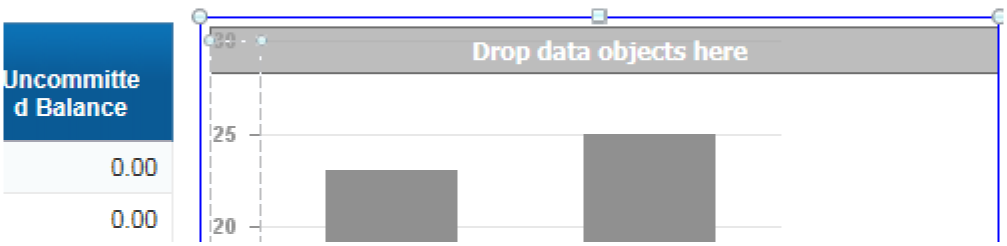
To add a chart, table or cell beside the data table (sections)

1. Click on the down arrow next to the Line chart icon



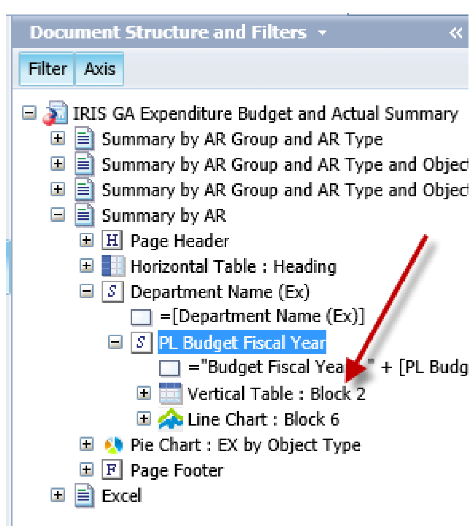
2. Click on Line to select the chart

3. Click in the workspace panel to place it to the right of the data table inside the section



4. A blank chart will appear

5. Select the chart from Document structure and filters



6. Right click and select Assign Data

7. Under Category Axis (X-Axis) click the down arrow and select the dimension Object Type Code

8. For the Value Axis 1 (Y-Axis), click the down arrow and select the measure Budgetary Expenditure

9. Region Color select the dimension Appropriation Code

10. Click Apply

11. Click OK

12. Select the line chart from Document Structure and Filters

13. Right click and select Format Chart

14. Click on Layout (this will position the chart on the report) and key in the following under Position:

    a. 0.25 inches to Right Side of Block 2(data table)
    b. 0 inches to Top Side of Block 2 (data table)

15. Click Apply

16. Click OK

17. Refresh data to populate the new chart (if needed)

18. Select the pie chart from Document structure and filters

19. Right click and select Format Chart

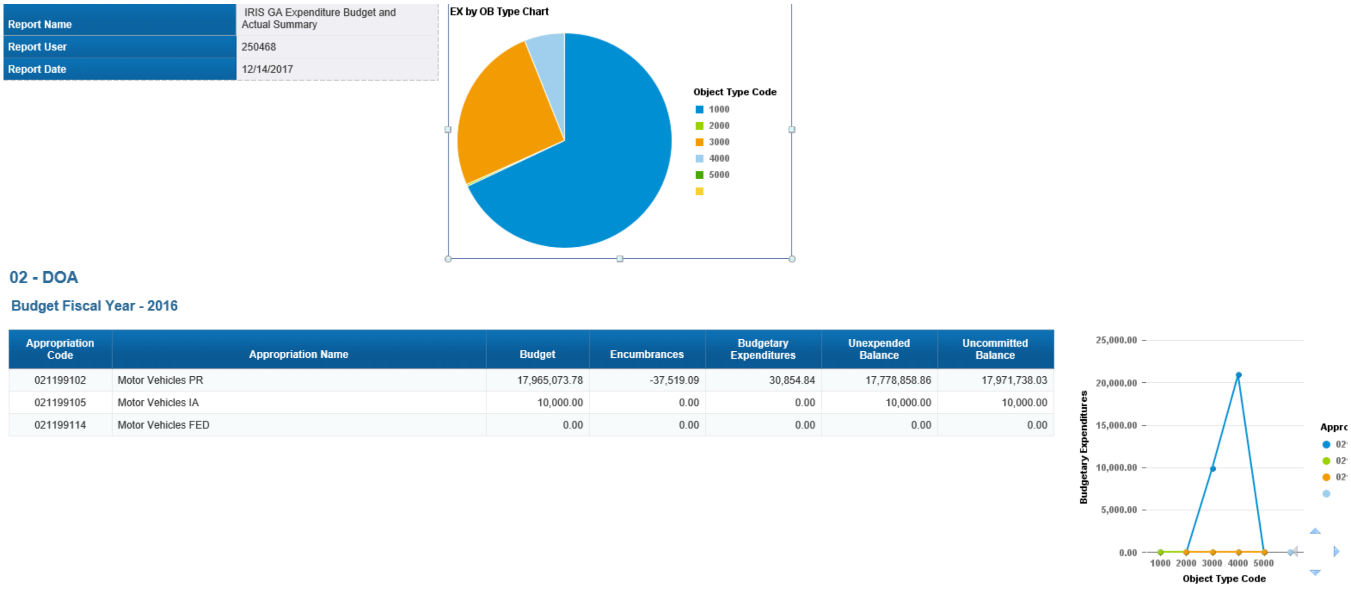
20. Click on Layout (this will position the chart on the report) and key in the following under Position:

    a. 0.25 inches to Right Side of Heading
    b. 0 inches to Top Side of Heading

21. Click Apply

22. Click OK

You should now have two charts on your report, which should look similar to this:



Appropriation Code	Appropriation Name	Budget	Encumbrances	Budgetary Expenditures	Unexpended Balance	Uncommitted Balance
021199102	Motor Vehicles PR	17,965,073.78	-37,519.09	30,854.84	17,778,858.86	17,971,738.03
021199105	Motor Vehicles IA	10,000.00	0.00	0.00	10,000.00	10,000.00
021199114	Motor Vehicles FED	0.00	0.00	0.00	0.00	0.00

23. Save the report in your Class ALDER 101 folder as **IRIS GA Expenditure Budget and Actual Charts**

24. Close document

Summary

After you complete this chapter, you should now be able to:

- Add charts, tables and cells
  - To the report
  - To sections
- Change or edit charts

Review

1. **What types of tables exist on all financial enterprise reports?**

   a. Horizontal table, document name cell
   b. Vertical table, ALDER logo cell
   c. Horizontal table and vertical table, cells
   d. Last refreshed date cells, vertical table

2. **What formats are available to display data?**

   a. Tables, charts and page body
   b. Charts, tables, cells
   c. Data table charts, report charts, page body charts
   d. Report table, report chart, report cells

3. **What are the differences between cells and charts?**

   a. Charts are based on user prompts, and cells display the ALDER standard elements
   b. Charts display information based on the user prompts, and cells display page numbers and document name
   c. Charts graphically display the business information based on user prompts, and cells display text comments, formulas or calculations, page numbers and document name
   d. Charts display summary or detail information, and cells display amounts and date processed

4. **What are the areas that you can display charts, tables, or cells?**

   a. In the page body and on the data table
   b. In the gray area next to the header box and at the end of the report
   c. In each section and in the area next to the header box
   d. In the page body and next to an existing data table

5. **How do you display a chart title in the workspace panel?**

   a. Right click on the chart, Select Format Chart, select General, check Show chart title, type in title
   b. Right click on the chart, Select Format Chart, select Data Value, select Chart title, type in title
   c. Right click on the chart the chart, Select Format Chart, select Area Display, check Title, click Visible, type in chart title within quotes
   d. Right click on the chart the chart, Select Format Chart, select Layout, type in title

Exercise

1. From the Enterprise/Departments/D02 Administration/Internal/ALDER Class folder, copy the report **IRIS Projection July-Nov 2017** to your Class Exercises folder

2. Go to your folders and open the report

3. Click on Design

4. Select the EX Summary by AR Type by Obj Type report tab (if not already selected)

5. Place a stacked bar chart onto your report next to the header box

6. Right click go to Assign Data

   a. For the Category Axis select Object Type
   b. For the Value Axis 1 select Budgetary Expenditures
   c. For Region Color select Appropriation Type

7. Click OK

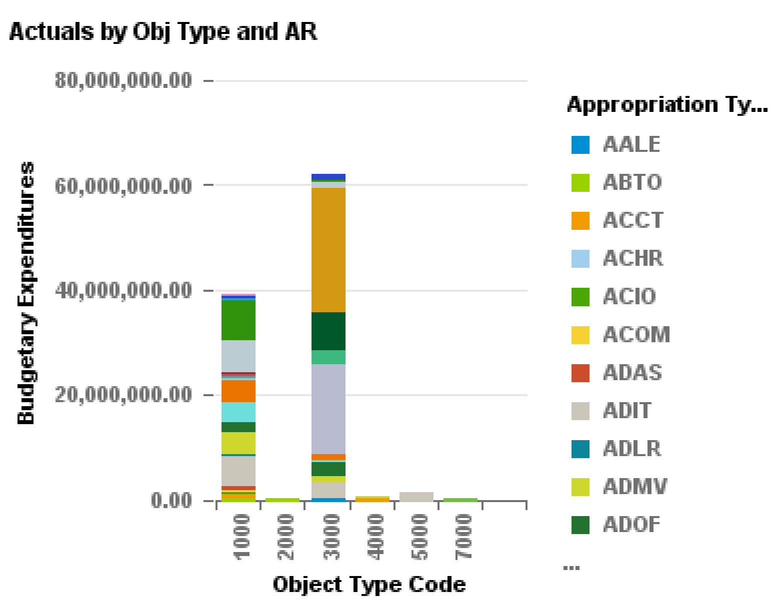
8. In Document Structure and Filters right click on the Stacked Column Chart and select Format Chart

9. Change the chart name to: **Actuals by Object Code Type**

10. Add the chart title: **=" Actuals by Obj Type and AR"**

11. May need to refresh data to populate the new chart

12. Your chart should look similar to:



13. Click OK

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

CHAPTER 7: Table Sorts, Breaks, and Sections

Goals and Objectives

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

- Apply and remove table sorts to/from a table
- Apply and remove breaks to/from data in a table
  - Insert calculations to breaks (sum, count, etc.)
- Apply and remove sections to your report
  - Add section headers
  - Add section footers/totals

Types of Sorts

ALDER inherently sorts data from the left to the right in a table. You can change how the data is sorted and displayed. There are three different types of sorts:

- Table sorts
- Breaks
- Sections

Sorts are applied first by section, then by breaks, and finally by table sorts.

Table sorts apply ascending, descending or custom sorts to specific columns within a data table. The data is then sorted based on the first column in which you applied a sort. In the example below, the first table is default sorted (ordered by first column). The second table is sorted based on Expend Current Budget. Notice how that affects the Appropriation Name (Ex) in the first column)?

Fiscal Year	Fund Name (Ex)	AR Group	Appropriation Group Name	AR Type	Appropriation Type Name	AR Code	Expenditure Budget	Expenditures
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110002	3,285,500.00	1,684,444.87
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110003	206,500.00	40.73
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110004	8,034,400.00	5,029,738.96
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110005	74,500.00	47,858.05
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110007	160,000.00	39,667.80
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110008	703,300.00	338,186.81
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110009	651,800.00	445,787.14
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110012	314,000.00	83,522.99
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110061	449,100.00	0.00

Fiscal Year	Fund Name (Ex)	AR Group	Appropriation Group Name	AR Type	Appropriation Type Name	AR Code	Expenditure Budget	Expenditures
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management		0.00	0.00
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF2	Central Region Fisheries Management		0.00	0.00
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF3	AYK Region Fisheries Management		0.00	0.00
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF4	Westward Region Fisheries Management		0.00	0.00
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCFE	Commercial Fisheries Entry Commission		0.00	0.00
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCFS	Statewide Fisheries Management	11FCFSALL	0.00	74,104.13
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCFS	Statewide Fisheries Management		0.00	0.00
2016	3233 - Civil Fines & Penalties	FCF0	Commercial Fisheries	FCFS	Statewide Fisheries Management		0.00	0.00
2016	3386 - Exxon Valdez Settlement Trust	FCF0	Commercial Fisheries	FCFS	Statewide Fisheries Management		0.00	0.00
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF3	AYK Region Fisheries Management	110130009	3,100.00	1,685.39

Ascending Sort Applied

Breaks separate all of the data based on the unique value that you selected, and group data within a table. Breaks allow the end user to easily read the data in a table. Along with breaking up the data, ALDER inserts a blank row at the bottom of each break in data so that you can insert a calculation (e.g., sum, count, etc.). In the example below, the first table does not have a break, and the second table has a break on the Object Name column.

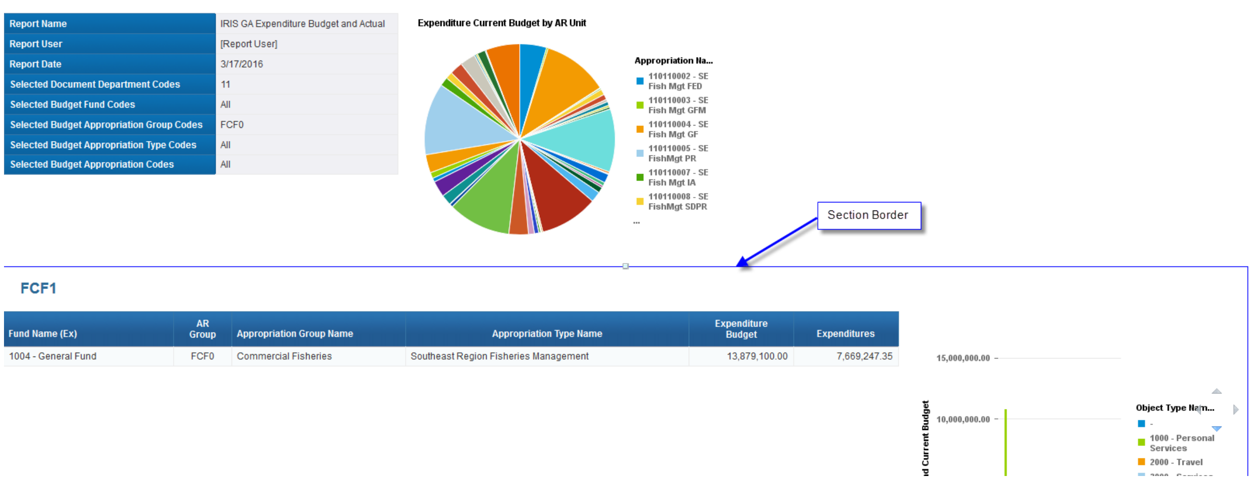
Fiscal Year	Fund Name (Ex)	AR Group	Appropriation Group Name	AR Type	Appropriation Type Name	AR Code	Expenditure Budget	Expenditures
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110002	3,285,500.00	1,684,444.87
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110003	206,500.00	40.73
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110004	8,034,400.00	5,029,738.96
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110005	74,500.00	47,858.05
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110007	160,000.00	39,667.80
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110008	703,300.00	338,186.81
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110009	651,800.00	445,787.14
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110012	314,000.00	83,522.99
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110061	449,100.00	0.00

Fiscal Year	Fund Name (Ex)	AR Group	Appropriation Group Name	AR Type	Appropriation Type Name	AR Code	Expenditure Budget	Expenditures
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110002	3,285,500.00	1,684,444.87
						110110002		

Fiscal Year	Fund Name (Ex)	AR Group	Appropriation Group Name	AR Type	Appropriation Type Name	AR Code	Expenditure Budget	Expenditures
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110003	206,500.00	40.73
						110110003		

Fiscal Year	Fund Name (Ex)	AR Group	Appropriation Group Name	AR Type	Appropriation Type Name	AR Code	Expenditure Budget	Expenditures
2016	1004 - General Fund	FCF0	Commercial Fisheries	FCF1	Southeast Region Fisheries Management	110110004	8,034,400.00	5,029,738.96
						110110004		

Sections allow you to group data for the entire report. A report includes any tables or charts that are sitting next to each other within a report tab. When the data is set as a section, the unique value is removed from the data table and placed in a cell at the top of the section. In the example below, the report is sectioned by appropriation name extended. The section is applied to both the data table and the chart to the right of it.



Removing Table Sorts

To remove one column sort at a time:

1. Right click on a column for which you want to remove the sort
2. Select Sort, None
3. Update the header box

To remove all sorts applied to the table:

4. Right click on any column within the table
5. Select Sort, Remove all sorts
6. Update the header box

Note: If you remove the table sorts, don't forget to update your header box.

Applying Table Sorts

Note: Many enterprise reports have sections and breaks applied to them, but they do not have any pre-applied table sorts. In ALDER, table sorts are applied after sections and breaks. Table sorts will not override sections and breaks.

There are three different types of table sorts:

- Ascending: Sorts data in alpha/numeric order
- Descending: Sorts data in reverse alpha/numeric order
- Custom: Sorts data on a custom sort order defined by the user

To apply a table sort:

1. Find and open **Exp by AR Type for Class** within the Departmental Folder
2. Click on Design
3. Save the report to your Class ALDER 101 folder as **Exp by AR Type for Class**

Notice that everything is currently sorted from left to right in ascending order. You want to sort by Object Type Name (Ex) data is at the top of our data table.

PL Budget Fiscal Year	Appropriation Code	Object Type Name (Ex)	Object Name (Ex)	Encumbrances	Budgetary Expenditures	Total Obligated
2018	021043301	1000 - Personal Services	1011 - Regular Compensation	$0.00	$28,097.43	$28,097.43
2018	021043301	1000 - Personal Services	1014 - Overtime	$0.00	$73.78	$73.78
2018	021043301	1000 - Personal Services	1016 - Other Premium Pay	$0.00	$171.84	$171.84
2018	021043301	1000 - Personal Services	1028 - Alaska Supplemental Benefit	$0.00	$1,757.96	$1,757.96
2018	021043301	1000 - Personal Services	1029 - Public Employee's Retirement System Defined Benefits	$0.00	$1,648.85	$1,648.85
2018	021043301	1000 - Personal Services	1030 - Public Employee's Retirement System Defined Contribu	$0.00	$1,091.49	$1,091.49
2018	021043301	1000 - Personal Services	1034 - Public Employee's Retirement System Defined Cont He	$0.00	$917.02	$917.02
2018	021043301	1000 - Personal Services	1035 - Public Employee's Retiremnt Sys Defined Cont Retiree	$0.00	$218.09	$218.09
2018	021043301	1000 - Personal Services	1037 - Public Employee's Retiremnt Sys Defined Benefit Unfnc	$0.00	$2,436.68	$2,436.68

4. Right click on the data in the Object Type Name (Ex) (not on the blue header row)

5. Select Sort. Notice that the sort option Remove All Sorts is not available. This means there are no sorts applied to this table.

6. Select Descending.

Notice that now everything is sorted from left to right based on the Object Type Name (Ex) within each column

PL Budget Fiscal Year	Appropriati on Code	Object Type Name (Ex)	Object Name (Ex)	Encumbrances	Budgetary Expenditures
2018	021043113	5000 - Capital Outlay	5006 - Materials and Supplies	$0.00	$5,000.00
2018	021043301	4000 - Commodities	4012 - Non-Food Supplies	$0.00	$250.38
2018	021043301	4000 - Commodities	4024 - Building Materials	$0.00	$697.27
2018	021043301	4000 - Commodities	4030 - Electrical	$0.00	$764.70
2018	021043301	4000 - Commodities	4031 - Plumbing	$62.10	$1,113.26
2018	021043301	4000 - Commodities	4034 - Parts and Supplies	$0.00	$128.26

Now you want to apply an advanced sort to see all transaction within Appropriation Code first.

7. Right click on the data in the Appropriation Code column

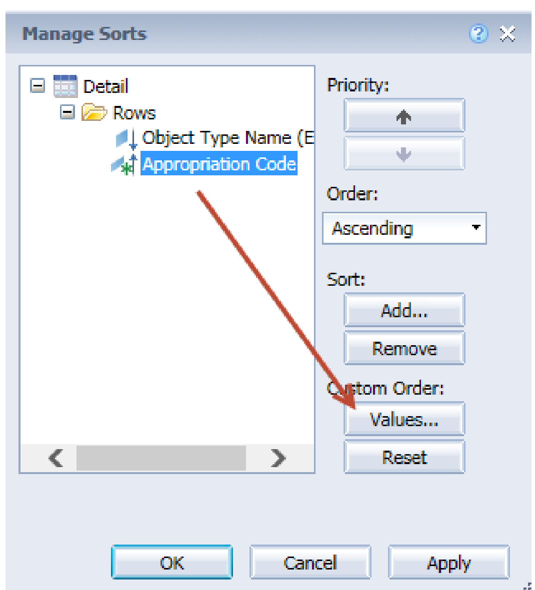
8. Select Sort, Advanced

9. In the pop-up window, click on Add

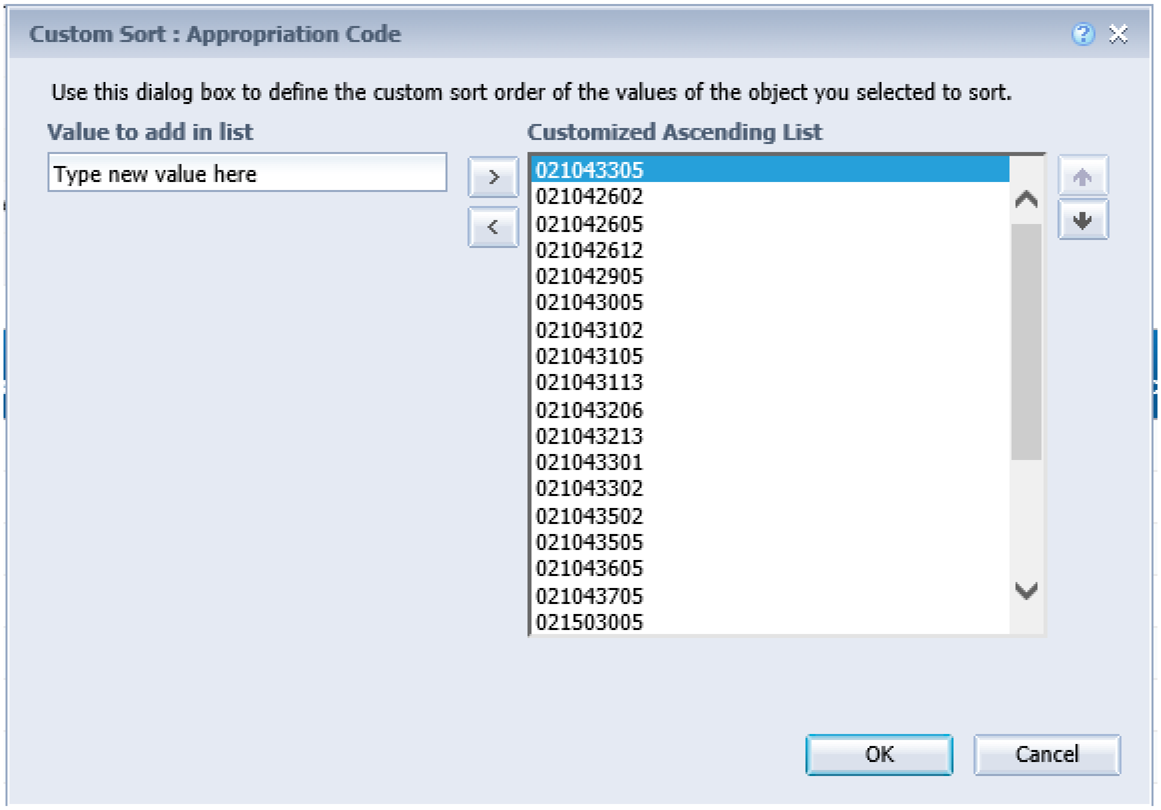
10. Select Appropriation Code

11. Click APPLY

12. With Unit Code highlighted, under Custom Order, click on Values

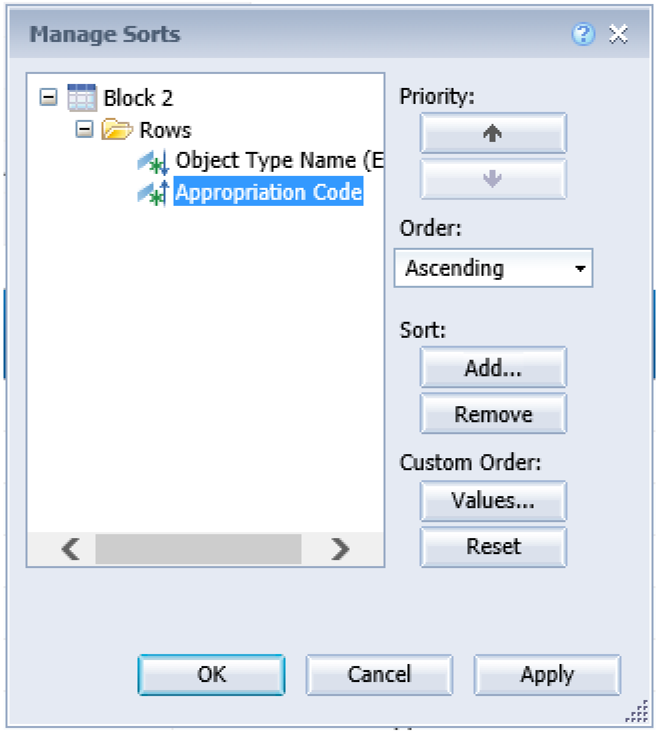


13. Move 021043305 to the top of the list. You must use the down arrow at the top right of the pop-up box. Your pop-up box should look similar to:



14. Click OK

15. With the Appropriation Code sort selected, verify the order Ascending is listed



16. Click OK

17. As you scroll through the report, note that as the Object Type Name (Ex) changes, Appropriation Code 021043305 is at the top of each change.

PL Budget Fiscal Year	Appropriation Code	Object Type Name (Ex)	Object Name (Ex)	Encumbrances	Budgetary Expenditures	Total Obligated
2018	021043113	5000 - Capital Outlay	5006 - Materials and Supplies	$0.00	$5,000.00	$5,000.00
2018	021043305	4000 - Commodities	4022 - Other Safety	$0.00	$47.00	$47.00
2018	021043305	4000 - Commodities	4024 - Building Materials	$0.00	$59.88	$59.88
2018	021043305	4000 - Commodities	4025 - Signs and Markers	$0.00	$22.68	$22.68
2018	021043305	4000 - Commodities	4030 - Electrical	$0.00	$1,622.23	$1,622.23
2018	021043305	4000 - Commodities	4031 - Plumbing	$0.00	$472.80	$472.80
2018	021043305	4000 - Commodities	4034 - Parts and Supplies	$0.00	$321.26	$321.26
2018	021043305	4000 - Commodities	4038 - Small Tools/Minor Equipment	$0.00	$49.98	$49.98
2018	021043305	4000 - Commodities	4042 - Other Equipment Fuel	$0.00	$56.00	$56.00
2018	021042602	4000 - Commodities	4002 - Business Supplies	$0.00	$74.75	$74.75

Once you have applied your sorts, you will want to update the header box. This will help the end user know in what order sorts have been applied.

18. Insert two rows to the bottom of the header box.

19. Update the header box to look like this:

Report Name	Exp by AR Type for class
Report User	250468
Selected Report Date	12/26/2017
Selected Department Codes	02
Selected AR Type Codes by FY	ABTO, ACCT, AFAC, AFAD, ALAD, ALEA, ANPB, APRI, APUR
Selected AR Codes by FY	All
Sorted by	Object Type Name (Ex) Descending
	Appropriation Custom 021043305 First/Ascending

20. Save the report

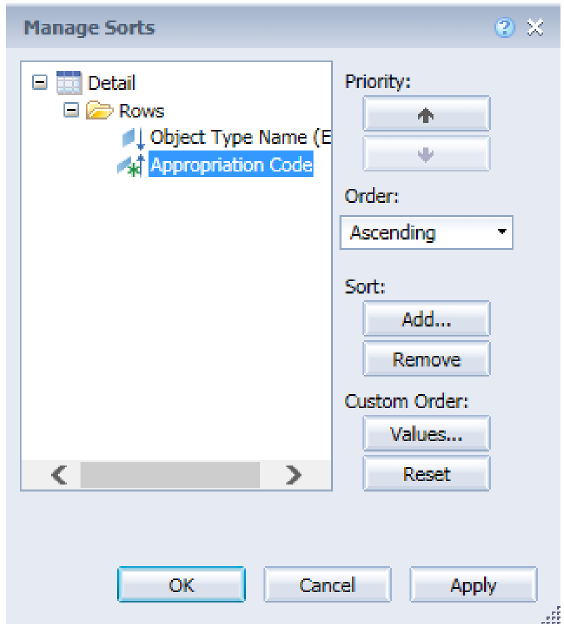
Manage Sort

Once you've finished applying sorts to your report, you decide that you want to change the order of the sorts. In the example above, the sorts are applied in the order that you set them. You can change the sort order through sort properties.

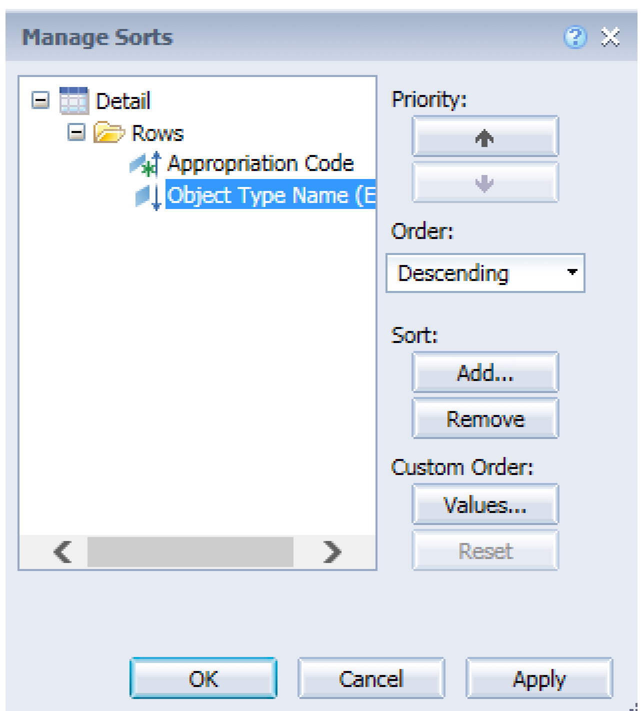
21. Right click on any column in the data table

22. Select Sort, Advanced

The pop-up window looks similar to this:



If you want the first sort to be Appropriation Code, click on the title and use the up arrow to move it above Document Record Date. This would make Appropriation Code the primary sort. Your pop-up window should look similar to:



Click OK and notice the data table shows items with the Appropriation Code of 25CHA1061 listed first, with the Object Type Name (Ex) listed in descending order.

PL Budget Fiscal Year	Appropriation Code	Object Type Name (Ex)	Object Name (Ex)	Encumbrances	Budgetary Expenditures	Total Obligated
2018	021043305	4000 - Commodities	4022 - Other Safety	$0.00	$47.00	$47.00
2018	021043305	4000 - Commodities	4024 - Building Materials	$0.00	$59.88	$59.88
2018	021043305	4000 - Commodities	4025 - Signs and Markers	$0.00	$22.68	$22.68
2018	021043305	4000 - Commodities	4030 - Electrical	$0.00	$1,622.23	$1,622.23
2018	021043305	4000 - Commodities	4031 - Plumbing	$0.00	$472.80	$472.80
2018	021043305	4000 - Commodities	4034 - Parts and Supplies	$0.00	$321.26	$321.26
2018	021043305	4000 - Commodities	4038 - Small Tools/Minor Equipment	$0.00	$49.98	$49.98
2018	021043305	4000 - Commodities	4042 - Other Equipment Fuel	$0.00	$56.00	$56.00

23. Save the report to your Class ALDER 101 folder as **EX by AR Type Sort**

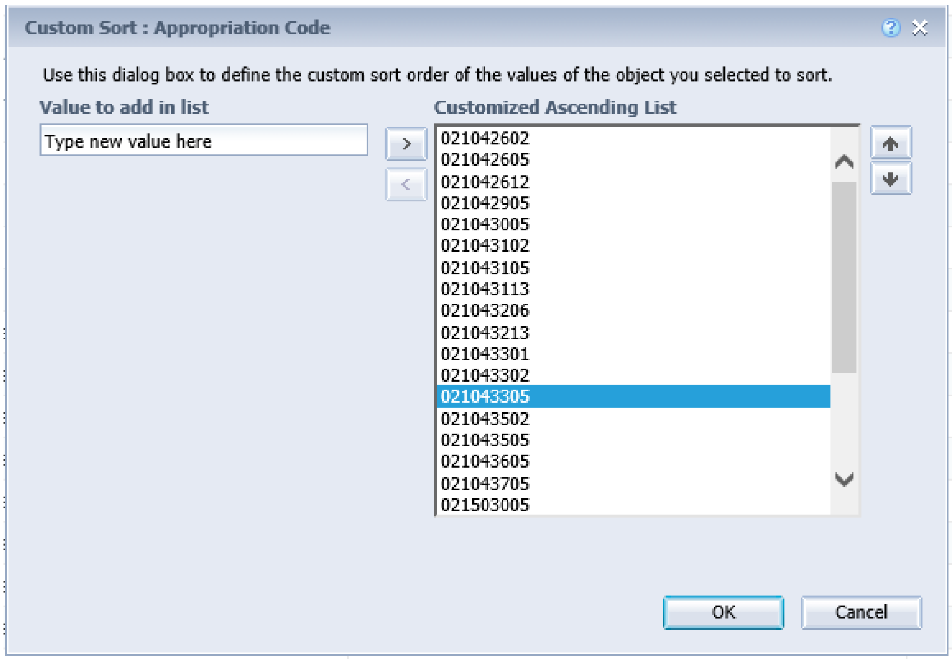
Remove Sorts

24. Right click on any column in the data table

25. Select Sort, Advanced

26. Select Custom Order: Values

27. Move AR 021043305 back to it's numerical position



28. Click OK

29. Remove both sorts

30. Click OK

Note: If you don't revert the custom sort back to the original sort order, the custom sort will not be removed when you delete the sorts.

31. Delete the last 2 Rows in the Header Box

32. Do **NOT** save

Breaks

Detail enterprise reports may come with pre-defined breaks. Breaks separate all of the data based on the unique value that you selected. The unique value is only displayed once in the table. It is a visual aid to make reading the data table easier.

Scroll through the report we have been working on; notice there are several Appropriation Codes listed repetitively. To create a break on this report so that each Appropriation Code is listed once and subtotaled:

1. Right click on the column Appropriation Code
2. Select Break, Add Break
3. Scroll through the report; notice that each time the Appropriation Code changes there is now a total line included in the data table.
4. From Available Objects, select the measure Budgetary Expenditures and drag it into the total row/column (you may need to adjust the column widths to have Value appear)
5. From Available Objects, select the measure Encumbrances and drag it into the total row/column
6. From Available Objects, select the variable Total Obligated and drag it into the total row/column

Your data table should now have totals under each of the columns (Note: ALDER is a live environment, so your totals may be different than those displayed below):

2018		3000 - Services	3066 - Print/Copy/Graphics	$0.00	$100.86	$100.86
2018		3000 - Services	3069 - Commission Sales	$0.00	$4.00	$4.00
2018		3000 - Services	3103 - State Equipment Fleet Summary A87 Allowed	$0.00	$934.45	$934.45
2018		4000 - Commodities	4002 - Business Supplies	$0.00	$74.75	$74.75
2018		4000 - Commodities	4003 - Information Technology Equipment	$0.00	$273.96	$273.96
2018		4000 - Commodities	4022 - Other Safety	$0.00	$220.75	$220.75
	021042602			378.96	434,664.59	435,043.55
PL Budget Fiscal Year	**Appropriation Code**	**Object Type Name (Ex)**	**Object Name (Ex)**	**Encumbrances**	**Budgetary Expenditures**	**Total Obligated**

To apply breaks to more than one column within the data table

7. From Available Objects, select the object Activity Code
8. Drag Activity Code into the column to the Right of Appropriation Code
9. Right click on the column Activity Code
10. Select Break, Add Break. Notice that the first break we applied to the table is still in place.

Your data table should look similar to this:

2018			3000 - Services	3103 - State Equipment Fleet Summary A87 Allowed	$0
2018			4000 - Commodities	4002 - Business Supplies	$0
2018			4000 - Commodities	4003 - Information Technology Equipment	$0
2018			4000 - Commodities	4022 - Other Safety	$0
		5323			
PL Budget Fiscal Year	**Appropriation Code**	**Activity Code**	**Object Type Name (Ex)**	**Object Name (Ex)**	**Encumbrances**
2018		5350	1000 - Personal Services	1011 - Regular Compensation	$0
2018			1000 - Personal Services	1014 - Overtime	$0

11. From Available Objects, select the measure Budgetary Expenditures
12. Drag this into the blank row at the bottom of the break, for the Budgetary Expenditure column

13. Save the report in your Class ALDER 101 folder as **EX by AR Type Breaks**

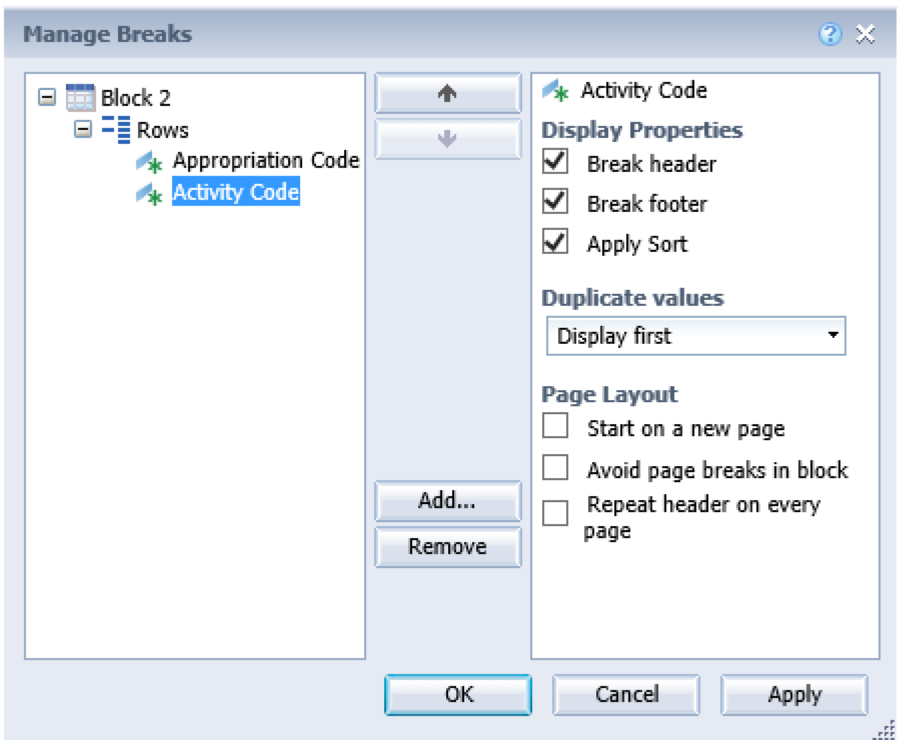
Manage Break

Once you've finished applying breaks to your report, you decide that you want to change the order of the break sort. In the example above, the breaks are applied in the order that you set them. You can change the break order through break properties.

14. Right click on the Activity Code

15. Select Break, Manage Breaks

The pop-up window looks similar to this:



From this window, you can add headers, footers, remove duplicates (headers or footers), apply sort, etc. This is a way to format your breaks.

You can also re-order the sequencing of your breaks. If you wanted the first break to be account extended name, you can click on the title and use the up arrow to move it. This would make account extended name the primary break.

16. Click Cancel

Removing Breaks

There are several ways to remove breaks. This report has multiple breaks, so we will use break properties to remove all breaks. **Do not** remove all breaks from the Manage Breaks, this will also delete your header rows.

17. Right click on the column Activity Code

18. Select Break, Remove all Breaks

19. Close document without saving

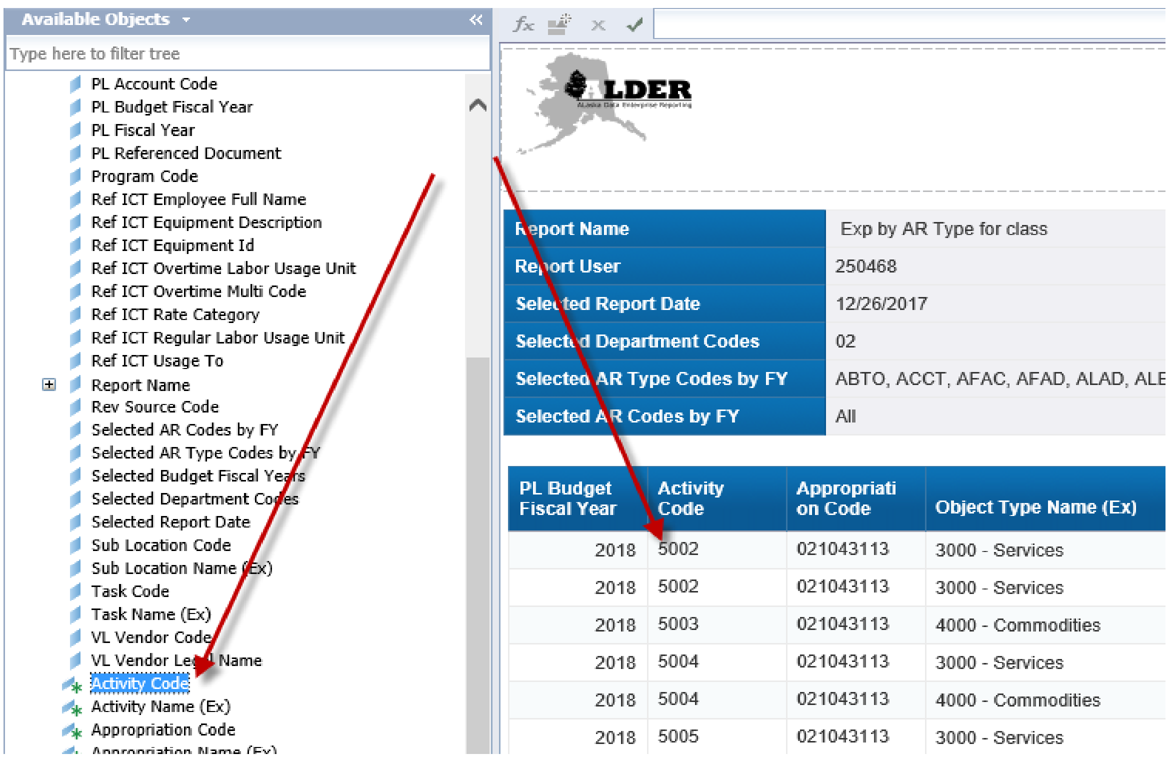
Sections

Sections allow you to group data for the entire report. When the data is set as a section, the unique value is removed from the data table and placed in a cell at the top of the section. You can place summary totals anywhere within a section.

1. From the Class ALDER 101 folder, find and open **Exp by AR Type for class**

2. Click on Design

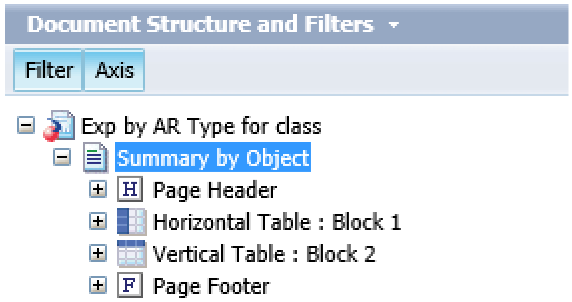
3. From Available Objects, click on Location Code and drag it into the column on the right side of Budget Fiscal Year



We are going to set a section for the column Activity Code.

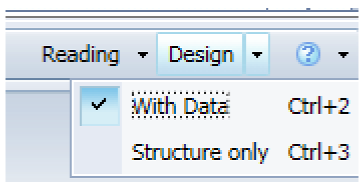
4. In the report panel, select Document Structure and Filters.

Notice that there currently are no Sections within this report



Before we set anything as a section, we will want to "hide" our data and then walk through the document structure and filters outline to name our tables. Sometimes when we set a section, tables will "jump" to the wrong section and naming our tables will be very helpful when we set a section and need to correct the format of the report.

5. Click the down arrow button next to Design on the toolbar



6. Select Structure only

In document structure and filters, we now need to identify and name our tables to make them easier to find in the report, especially when working with sections.

Renaming Tables

Notice that there are two table types under the first report

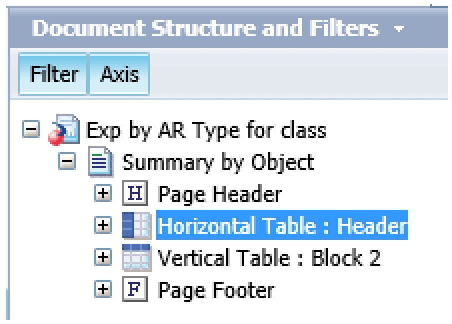
7. Click on the Horizontal Table in this report

8. Verify that this selected Horizontal Table: Block 1 in document structure and filters

9. Right click on this Horizontal Table in the workspace panel (be sure you get the four way arrows), select Format Table

10. In General of the Format Table pop-up box, change the name to **Header**

11. Click OK, notice the name changed



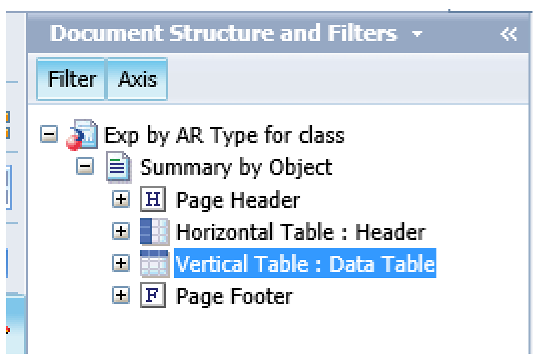
Note that there are several other ways to access the "Format Table" box.

12. Click on the Vertical Table in this report that is within the Document Structure and Filters

13. Right click on Vertical Table in the workspace panel (be sure you get the four way arrows), select Format Table

14. In General of the Format Table pop-up box, change the name to **Data Table**

15. Click OK, notice the name changed



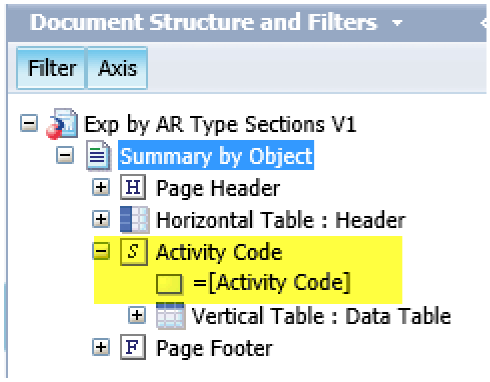
16. Save the report in your Class ALDER 101 folder as **Exp by AR Type Sections V1**

We are now ready to set Ledger Code as a section. When we set Location Code as a section, some of our data tables will try to jump to the new section. Since we renamed all of our tables, we will know which sections they need to go back to.

17. In the workspace panel, right click in the grey cells of the column Activity Code in the data table

18. Select Set as section

19. In Document Structure and Filters, notice that we now have a section for Activity Code and a Section Cell Activity Code



20. In the workspace panel, verify that the column Activity Code is no longer in the data table

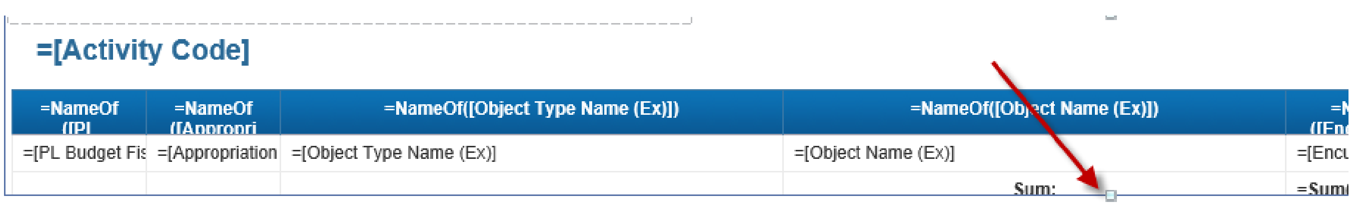
21. Save the report to your Class ALDER 101 folder as **Exp by AR Type Sections V2**

Notice that our data table is now in the section Location Code. This is the correct location for our data table. We want a total by Location Code and a section header for each Location, so we will need to create tables under the Location Code section. We also want total and section header tables under the section Appropriation Code

22. In Document Structure and Filters, click on section Activity Code Section

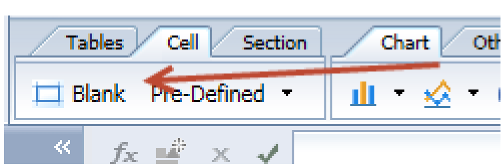
23. In the workspace panel, find the outlined section Activity Code Section.

24. Click on and hold your mouse button down on the bottom of the outline where the box is at the bottom of the section and drag the line down creating space below the Data Table

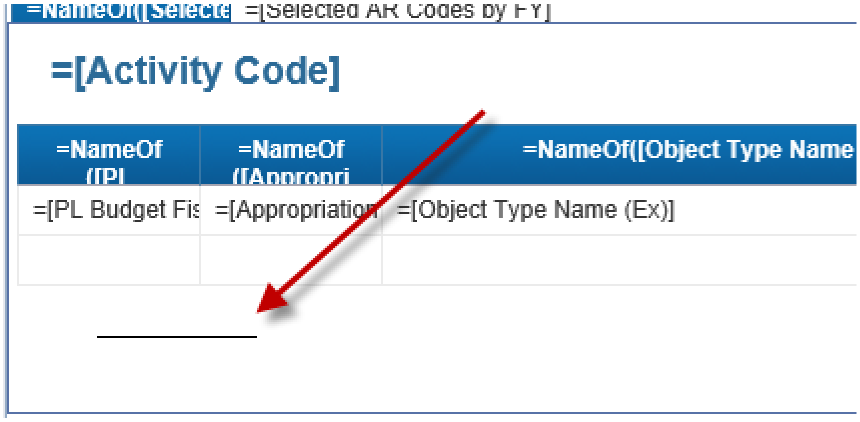


25. In the Workspace Toolbar, select Cell

26. Click on Blank



27. Place the Blank Cell below the Data Table within the Activity Code Section



28. Right click on the Cell

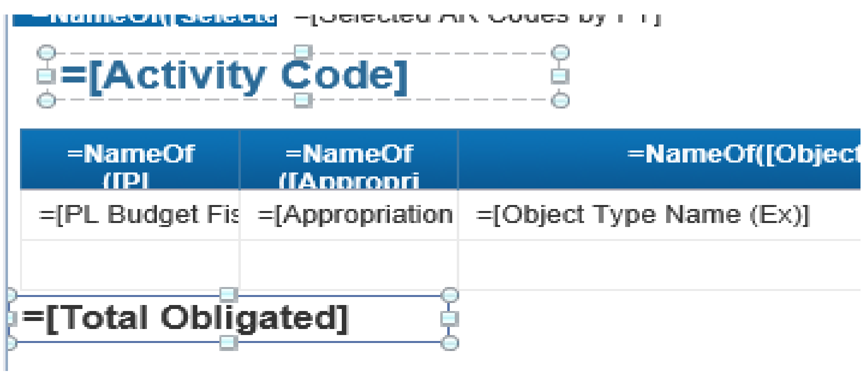
29. Select Format Cell

30. Rename Cell to Total Activity

31. Select Layout and in the Position/Within the Section

    a. 0.00 inches to the left edge of the section
    b. 0.12 inches to the Bottom side of….Data Table
    c. Click OK

32. From Available Objects select the Variable Total Obligated and drag into the Total Activity Cell



33. Save the report to your Class ALDER 101 folder as **Exp by AR Type Sections V3**

34. In the workspace panel, find the outlined section Activity Code Section.

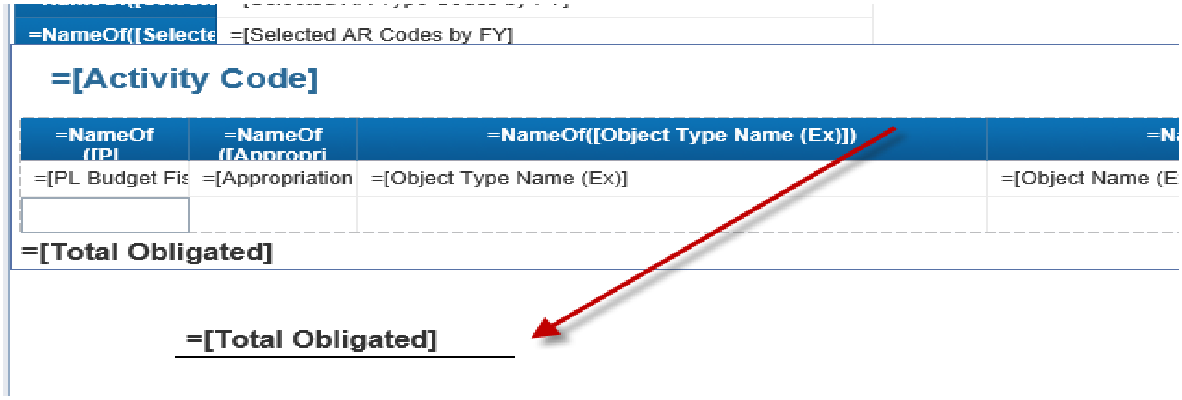
35. Click on and hold your mouse button down on the bottom of the outline where the box is at the bottom of the section and drag the line up eliminating space below the Total Activity Cell

36. Right Click on the Total Activity Cell

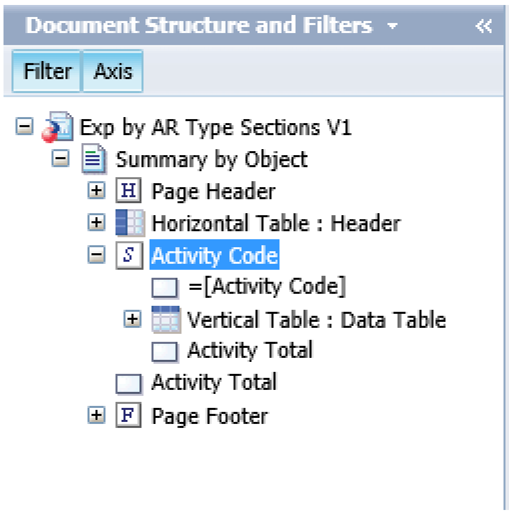
37. Select Copy

38. Right Click below the Total Activity Cell

39. Select Paste



40. Document Structures and Filters should look like this



Right Click on the Activity Total cell **NOT** in the Activity Code section

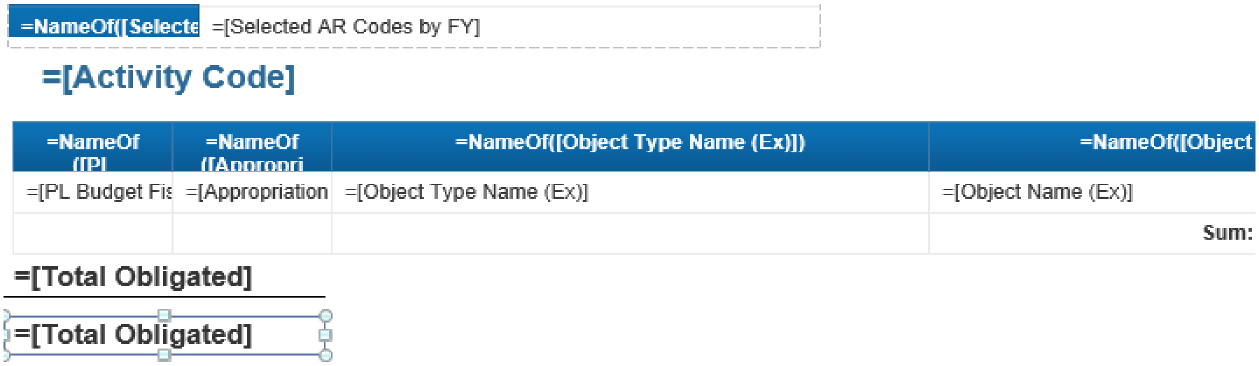
41. Select Format Cell

42. Rename the Cell to Report Total

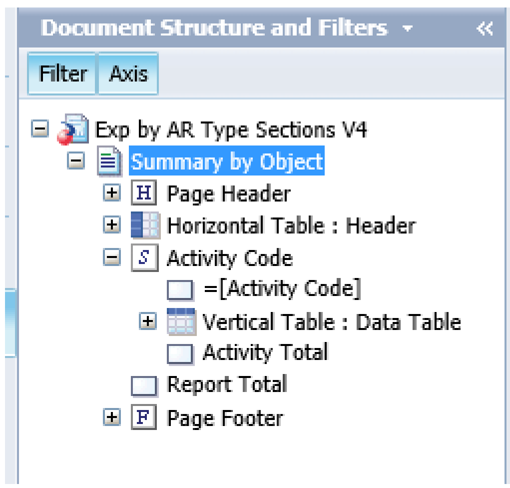
43. Select Layout and in the Position/Within the Section

   a. 0.00 inches to the left edge of the section
   b. 0.12 inches to the Top Edge of section
   c. Click OK

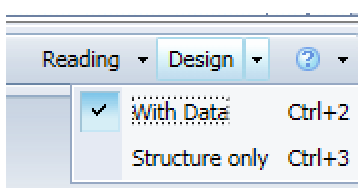
44. The Workspace Panel should look like this



45. Document Structures and Filters should look like this



46. Click the down arrow button next to Design on the toolbar



47. Select With Data

48. Save the report in your Class ALDER 101 folder as **Exp by AR Type Sections V4**

49. In the report panel, select Navigation Map

50. Expand:

a. Summary by Object
b. Select 5212

Now that we have added a section for Activity Code, we can walk directly to the specific Activity Code data within the report. Notice we are no longer on Page 1

Removing Section

The only place you should remove a section is through document structure and filters. This allows you to verify that you are on the correct section.

1. Click on the section Activity Code
2. Select Delete from the workspace toolbar above the report panel (or right click on the section header)
3. A pop-up box will appear with the question (are you sure you want to delate this section) click Yes
4. Notice that it only removed the section; it did not remove the cells that we added
5. In Document Structure and Filters, right click on the Cell Location Total
6. Select Delete
7. Close report; do not save!

For more information on formatting and page layout for page orientation, please refer to Chapter 10, Formatting Reports.

Summary

After completing this chapter, you should now be able to:

- Apply and remove table sorts to a table
- Apply and remove breaks to data in a table
  - Insert calculations to breaks (sum, count, etc.)
- Apply and remove sections to your report
  - Add section headers and
  - Add section footers/totals

Review

1. **What are the three different types of sorts?**

   a. Tables, breaks, and sections
   b. Ascending, descending, custom sorts
   c. Breaks, insert, and remove
   d. Tables, ascending, and descending.

2. **In what order are sorts applied?**

   a. Sections, table, and then breaks
   b. Sections, breaks, and then table sorts

c. Tables, ascending or descending, and then custom
d. Breaks, tables, and then sections

3. **What are two ways that you can apply a break?**

   a. Right click, select Break, select Add Break or click on the Break icon on the workspace toolbar
   b. Click on the Insert icon, select Break, select Add Break or click on the Break icon on the workspace toolbar
   c. Select Data column, right click, select Break, select Add Break, or select Data column, click on the Break icon on the workspace toolbar under the Analysis tab
   d. Select Data column, click on the Break icon on the report toolbar, select Add or select Data column, right click, select Break, select Add Break

4. **What are two ways that you can apply a table sort?**

   a. Right click on the Data column, select Sort, select the order in which you want it sorted, or select Sort on the workspace toolbar under Analysis and select the order in which want it sorted
   b. Right click on the Data column, select Sort, select Sort properties, select order or select Sort from the workspace toolbar, select Sort properties and select order
   c. Select Sort on the workspace toolbar and select Ascending, or right click, select Sort, select Ascending
   d. Select Sort on the workspace toolbar, select Ascending or Descending, or right click, select Sort, select Ascending or Descending

5. **How can you easily identify that a break has been applied to the data table?**

   a. A break is a visual aid
   b. The data is not repeated in the data column, and it has subtotals at the end
   c. It applies a footer row at the end of each break
   d. All of the above

6. **What is the benefit of setting a section?**

   a. Makes the report easier to read
   b. It is helpful to visually see the report and organizes the data
   c. Allows you to easily use the navigation map to navigate through the report within the report panel
   d. Organizes the data according to the report panel navigation map

Exercise

1. Find and copy **Exp by AR Type for class** into your Class Exercises folder (get a new copy from the Department folder)

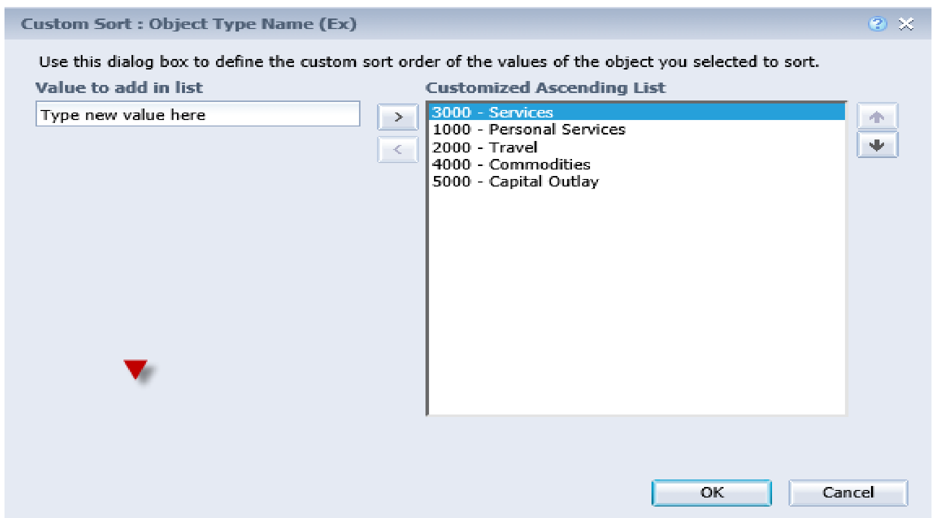
2. From the Class Exercises folder open the copied report

3. Click on Design

4. Make sure there aren't any existing breaks and sorts

5. Apply an Descending Sort to Appropriation Code

6. Apply an Ascending Advanced Sort to Object Type Name EX making 3000 the top choice



7. Apply a Break to Object Type EX

8. Verify that the document data table looks like this:

PL Budget Fiscal Year	Appropriation Code	Object Type Name (Ex)	Object Name (Ex)
2018	02APURCRD	3000 - Services	3019 - Uncleared 1Card Transactions
2018	02AFADCRD		3019 - Uncleared 1Card Transactions
2018	02AFACCRD		3019 - Uncleared 1Card Transactions
2018	02ACCTCRD		3019 - Uncleared 1Card Transactions
2018	029041740		3005 - Management/Consulting
2018	021043705		3032 - Software Licensing
2018	021043705		3033 - Software Maintenance
2018	021043705		3035 - Long Distance
2018	021043705		3045 - Postage
2018	021043705		3058 - Equipment and Machinery - Repairs/

9. Save as **Chapter 7 Exercise V1** in your Class Exercise folder

10. Reset the values on the Object Type Name (EX) sort (Manage sorts)

11. Click OK

12. Verify 1000-Personal Services is on the first page and looks like this:

PL Budget Fiscal Year	Appropriation Code	Object Type Name (Ex)	Object Name (Ex)
2018	021503213	1000 - Personal Services	1011 - Regular Compensation
2018	021503213		1023 - Leave Taken
2018	021503005		1011 - Regular Compensation
2018	021503005		1023 - Leave Taken

13. Remove all Breaks

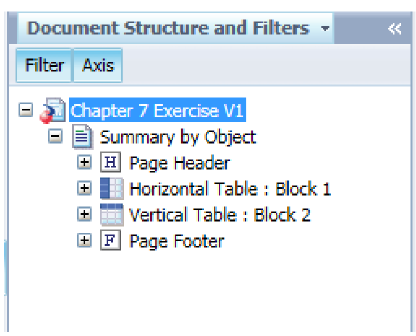
14. Remove all Sorts

15. Verify your report looks like this:

PL Budget Fiscal Year	Appropriation Code	Object Type Name (Ex)	Object Name (Ex)
2018	021042602	1000 - Personal Services	1011 - Regular Compensation
2018	021042602	1000 - Personal Services	1014 - Overtime
2018	021042602	1000 - Personal Services	1021 - Allowances to Employees
2018	021042602	1000 - Personal Services	1023 - Leave Taken

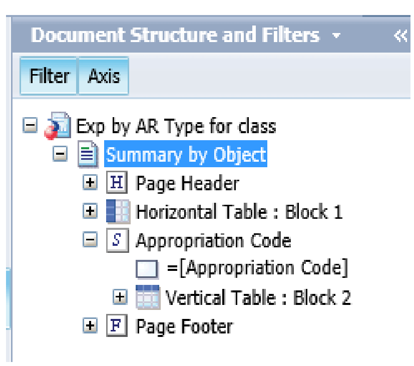
16. Click on Document Structure and Filters in the report panel

17. Verify that your Document Structure and Filters looks like this:



18. Set the column Appropriation Code as a section

19. Verify that your Document Structure and Filters looks like this:



20. Hide the Data from the report (Design Structure only)

21. Add a Horizontal table to the right of your Appropriation Code section cell in the Appropriation Code section, this will be the AR Header (Hint: Don't forget to rename)

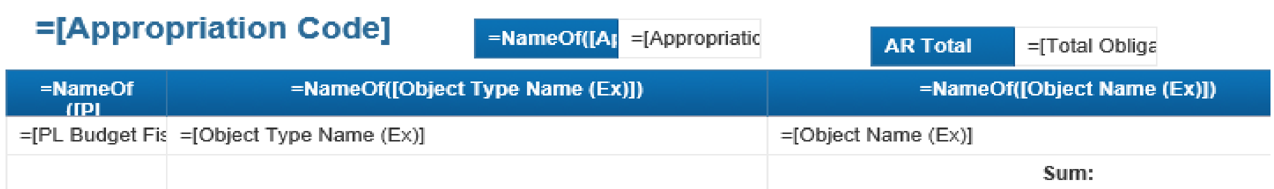
22. From Available Objects bring Appropriation Code into the first column gray cell

23. Delete the extra Rows

24. Add a Horizontal table next to the Horizontal Table you just added in your workspace panel, this will be the AR Total

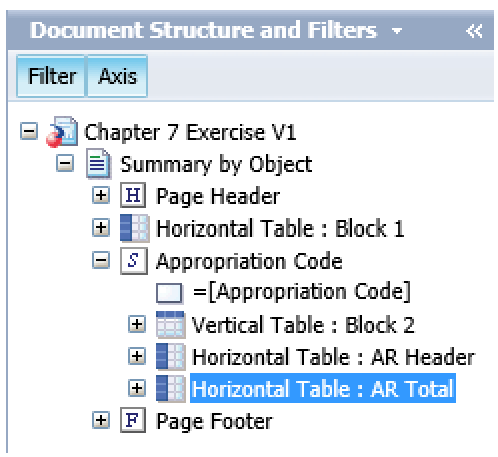
25. Click on the Blue Cell and type AR Total in the formula bar

26. Verify your report looks like this:



27. From Document Structure and Filters, identify and rename each table in the report. Be sure that you visually identify each table within the report.

28. When you are done, verify that your Document Structure and Filter looks like this:



29. Save as **Chapter 7 Exercise V2**

30. Click on the section cell: Appropriation Code

31. Right click and select Delete/Cell Only (read the warning carefully!)

32. In Document Structure and Filters, under section Appropriation code, double click on Horizontal Table AR Header

33. Select Layout and set the following:

    a. .0 to the Left edge of Section
    b. .12 to the Top edge of Section

34. Click OK

35. In Document Structure and Filters, under section Appropriation code, double click on Vertical Table Block 2 and rename to Data Table

36. Select Layout and set the following:

    a. .0 to the Left side of … AR Header
    b. .12 to the Bottom side of … AR Header

37. Click OK

38. In Document Structure and Filters, under section Appropriation code, double click on Horizontal Table AR Total

39. Select Layout and set the following:

    a. .0 to the Left side of … Data Table
    b. .12 to the Bottom side of … Data Table

40. Click OK

41. Unhide your data

42. Click OK

43. Verify that, with data, the report looks similar to this (Remember: ALDER is a live environment so totals may change.)

Report Name	Exp by AR Type for class
Report User	250468
Selected Report Date	12/26/2017
Selected Department Codes	02
Selected AR Type Codes by FY	ABTO, ACCT, AFAC, AFAD, ALAD, ALEA, ANPB, APRI, APUR
Selected AR Codes by FY	All

Appropriatio	021042602

PL Budget Fiscal Year	Object Type Name (Ex)	Object Name (Ex)	Encumbranc
2018	1000 - Personal Services	1011 - Regular Compensation	$
2018	1000 - Personal Services	1014 - Overtime	$
2018	1000 - Personal Services	1021 - Allowances to Employees	$

2018	4000 - Commodities	4002 - Business Supplies	$0.00	
2018	4000 - Commodities	4003 - Information Technology Equipment	$0.00	
2018	4000 - Commodities	4022 - Other Safety	$0.00	
		Sum:	**$378.96**	**$43**

AR Total	435,043.55

Appropriatio	021042605

PL Budget Fiscal Year	Object Type Name (Ex)	Object Name (Ex)	Encumbrances	Budgeta Expend
2018	1000 - Personal Services	1011 - Regular Compensation	$0.00	$5
2018	1000 - Personal Services	1014 - Overtime	$0.00	

44. Save the report in your Class Exercises folder as **Chapter 7 Exercise Final**.

CHAPTER 8: Formulas and Variables

Goals and Objectives

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

- Identify and use the formula toolbar
- Identify and use the formula editor
- Identify the variable button and create a variable
- Know the difference between a formula and variable

Introduction

ALDER has the ability to:

- Calculate simple formulas ([Object A] + [Object B])
- Concatenate words with numbers or objects ("Your available balance is" + [Object A])
- Calculate conditional functions (If [Object A] = XX; then display this; otherwise display that)

In this chapter, we are going to explore these features. In preparation, complete the following steps:

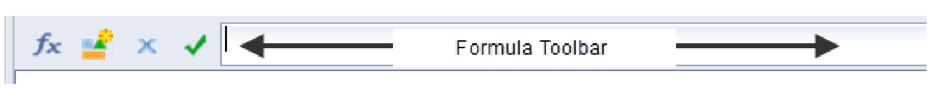
1. Go to the Class ALDER 101 folder and open **IRIS GA Expenditure Budget and Actual Charts**
2. Click on Design

Formulas

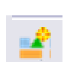
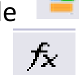
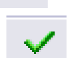
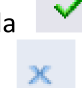
Formulas are a way for you to calculate data that is not being retrieved with existing objects within the universe. There are two ways to create a formula in ALDER:

- Use the formula box if you are familiar with the ALDER structure necessary for creation of the formula. However, if you are not familiar with the formula or function that you want to use, you should use the formula editor.
- Use the formula editor. This allows you to view the different components (operators, objects, functions) of your formula as you add them. It also provides a brief description and the syntax of the function or object that you are trying to calculate on.

The formula toolbar looks like this:

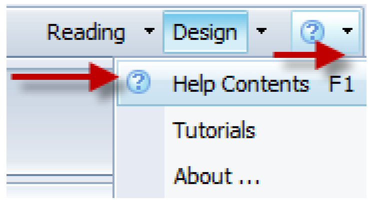


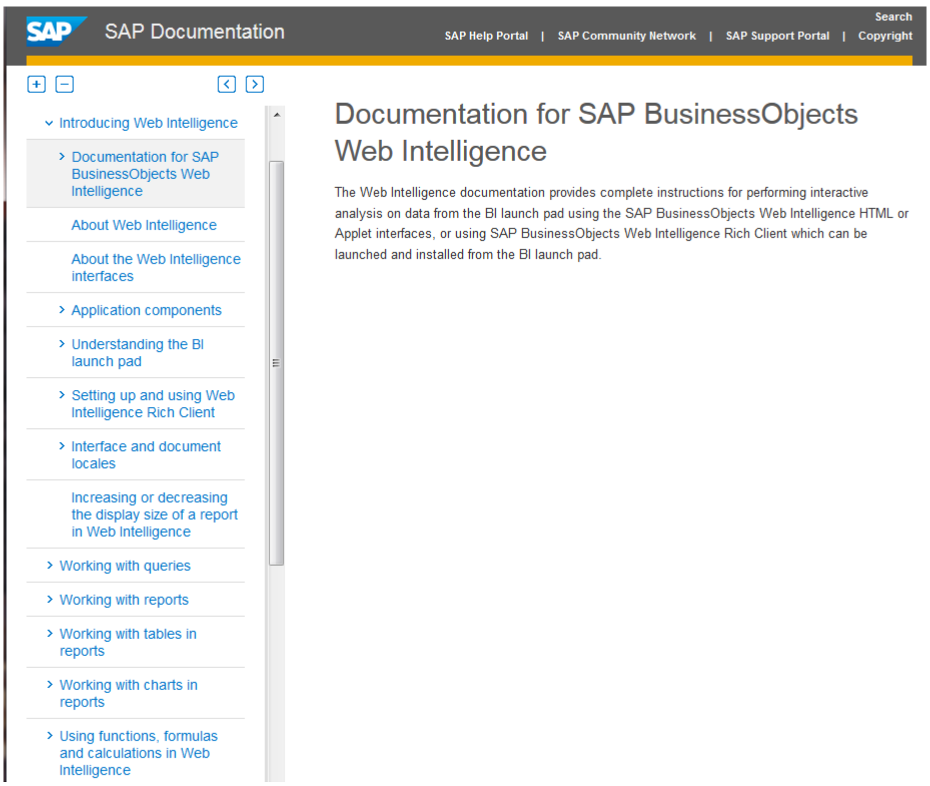
Options on the formula toolbar include:

- Create a variable 
- Formula editor 
- Validate formula 
- Cancel formula 

- Formula box 

For additional assistance in using specific functions, you can go to the Business Objects help page. Business Objects has examples of how to create formulas and functions, as well as the syntax for each function. Note: To access the Business Objects help page for formulas, formatting and functionalities you **must** be in an ALDER report. On the far right of the workspace toolbar, click on the down arrow next to the question mark and choose Help Contents.





Creating a Simple Formula

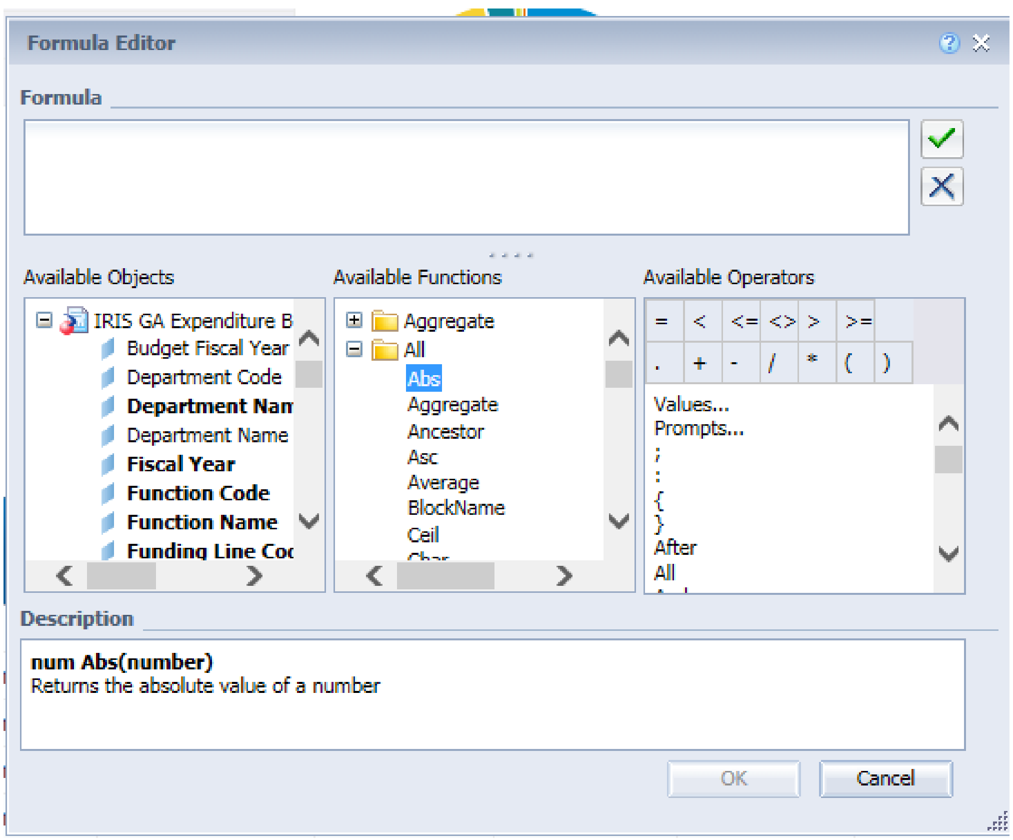
We are going to create a simple formula that calculates an amount based on two objects within the universe.

1. From the workspace toolbar, select Report Elements, select Cell
2. Click Blank and click to the right of the chart on the workspace panel
3. Click on the Blank Cell. Notice how the format toolbar has been activated when you clicked on the blank cell.

4. Click on the Formula Editor button. 

Notice that in the pop-up box, we have four areas available to us:

- A formula box
- List of available objects
- List of available functions
- List of available operators
- By selecting the functions you will see that each one has a description.



In the Formula box, we want to calculate the Total Obligations.

5. From the Available Operators list, click on the = sign (or type it into the Formula box)

6. From the Available Objects list, scroll through the list and click on Budgetary Expenditures. Notice a brief description of the object is displayed at the bottom of the pop-up box

7. Drag Expend Current Budget into the Formula box after the = sign (or double click on the object)

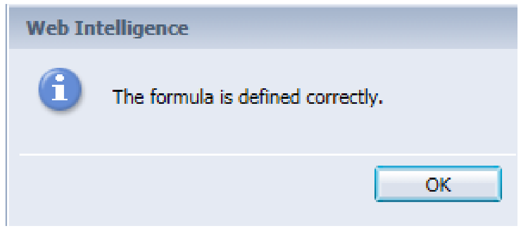
8. In the Available Operators list, click on the + (plus) sign

9. From the Available Objects list, double click on Encumbrances

Before you can apply a formula, you will need to make sure that it has been defined correctly. To do this:

10. Click on the Validate button 

11. If it is defined correctly, click OK twice



12. If it is not defined correctly, you will need to fix the error

13. Resize the cell, if needed, so you can see the Total Obligation within the cell

Creating an Advanced Formula

We would like to only see Expend Current Budget in the thousands. There is not an object on this document that will provide that information, therefore we are going to need a formula. The easiest way to find this is through an advanced formula.

How can we round the Expend Current Budget Object to the thousands?

1. Find the column Budget.

2. Insert a Column to the right

3. Click on the gray cell of that column

4. Select the formula editor. What available function could I use?

5. In Available Functions, expand All, click on Round

   a. From Available Functions find and select Round (double click) Note the description: Description – Rounds a number to a specified number of digits
      - For example: num Round(number;round_level)

   b. From Available Objects select Expend Current Budget (double click) (be sure this shows up between the parentheses for the Round function above)
   c. From Available Operators select the semi-colon (;)
   d. Type -3

6. Validate Formula

7. Click OK

8. Click OK

The formula should look like this:

=Round([Expend Current Budget];-3)

The workspace panel should look similar to this:

Appropriation Name	Budget	
Motor Vehicles PR	17,965,073.78	17,965,000.00
Motor Vehicles IA	10,000.00	10,000.00
Motor Vehicles FED	0.00	0.00

More information on the various formulas can be found by going to use the help button on the Header toolbar 

1. Select Help Contents

2. Select Search

3. Type in functions

There are many options and one of the hardest parts is finding the correct function.

Note: *Remember in order to use the help key you **must** be in the report.*

Variables

Converting a Formula to a Variable

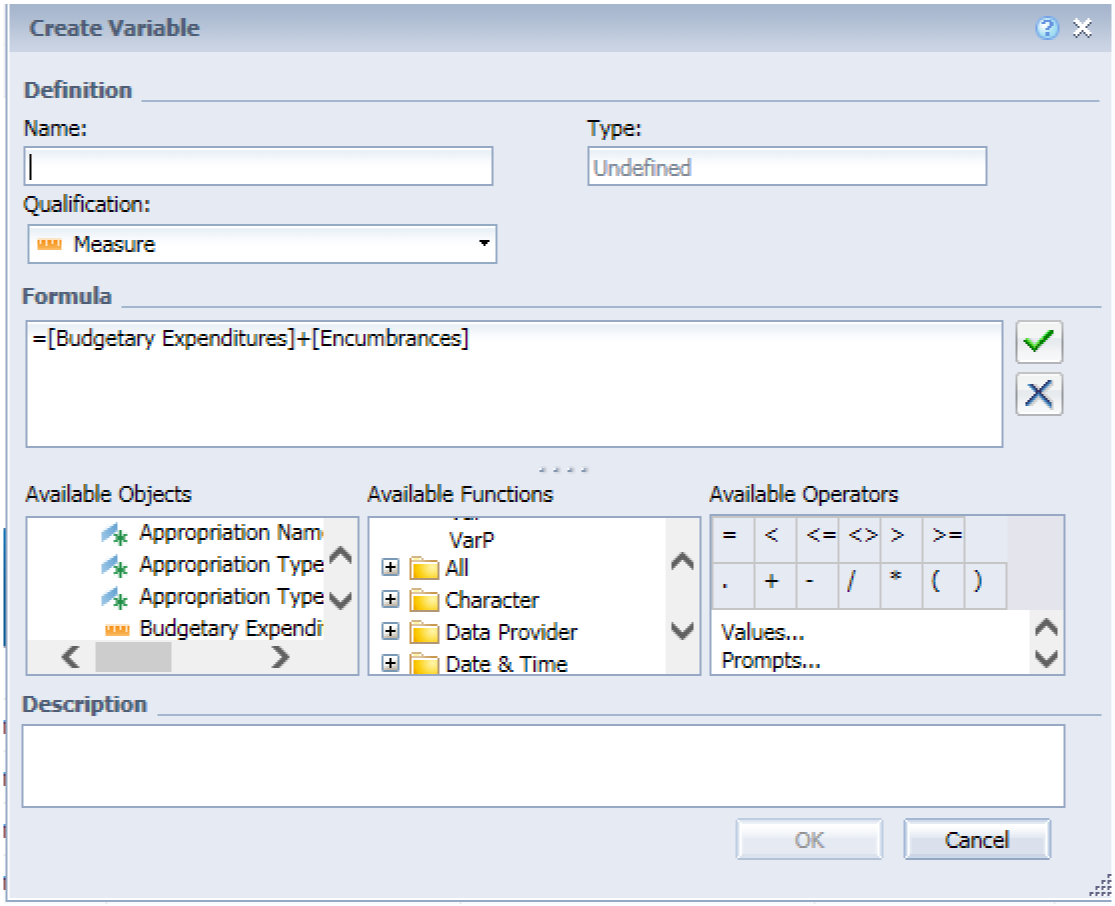
Now that you have simple and advanced formulas, you decide that you want to be able to easily identify what the formula is for and that you will want to use it as a part of other formulas or as a filter within this report. To make things easier on yourself, you want to convert the formula into a variable. A variable is a way to name a formula. To create a variable:

1. Click on the cell containing the simple formula

2. See the formula on the toolbar

=[Budgetary Expenditures]+[Encumbrances]

3. Click on the Create Variable  button on the toolbar



4. Notice that in the pop-up box, we have eight areas available to us:

   a. A name box
   b. A type box
   c. A qualification dropdown list
   d. A formula box
   e. List of available objects
   f. List of available functions
   g. List of available operators
   h. A description box

Since we are converting a formula to a variable, we only need to assign a name to the formula and verify that the qualification is correct.

5. In the Name box, type: EXP plus Enc

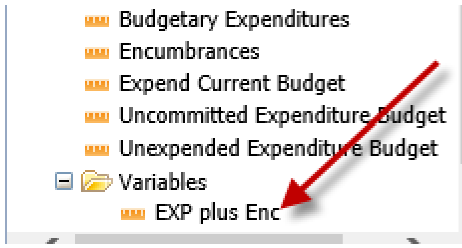
Since we are not changing the formula, we do not need to validate the formula.

6. Click OK

7. Notice the formula has changed in the cell

8. In the report panel, go to Available Objects

9. Scroll to the bottom of the list, open the Variables folder, and see that you now have a measure object called EXP BUD - REV BUD



Adding Text in a Formula using a Variable

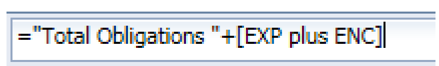
When you use words or characters in your formula, you must have double quotes at the beginning and end of the character string. When adding to an object, use additional spaces either at the beginning or end of the double quotes to allow for spaces to be displayed in the cell.

1. Click on the cell containing the variable

2. In the Formula box on the toolbar, click between the = and the object [EXP plus ENC]

3. Type: “Total Obligations “+

Your formula should look similar to this:



4. Validate the formula by clicking on the green Validate button  or press Enter. Expand the cell to see the entire information.

If the formula is defined correctly, it will automatically update your cell. If it is not defined correctly, you will need to fix the formula. Your cell should look similar to this (you may need to resize your cell to see all of the text):

Creating a New Variable using a Conditional Function

There are several functions available in ALDER. The Business Objects help button provides assistance with using or defining each of the available functions.

1. Select the advanced formula from the data table

2. Turn the advanced formula into a variable named **Rounded Budget**

3. Click OK

4. In the blue header box, type **Rounded Budget**

5. Insert a new column to the right of column Rounded Budget

6. Select the first gray cell in the new column

7. In the formula editor create the following formula

   =If([Rounded Budget]<1000000;"Negative Budget";"Positive Budget")

Review the data in the report; you should notice that “Negative Budget” is now showing where Rounded Budget is less than $1,000,000.

5. In the blue header box, type **Available Budget Type**

6. If necessary, widen the column so you can see the column title

Budget	Rounded Budget	Available Budget Type
17,965,073.78	17,965,000.00	Positive Budget
10,000.00	10,000.00	Negative Budget
0.00	0.00	Negative Budget

7. Save the report as **IRIS GA Expenditure Budget and Actuals - Formula and Variable**

Summary

After completing this chapter, you should now be able to:

- Identify and use the formula toolbar
- Identify and use the formula editor
- Identify the variable button and create a variable
- Know the difference between a formula and variable

Review

1. **Where can you find help with defining and using functions?**

   a. The formula editor, Excel, ALDER help from the home page
   b. The Internet, Excel, ALDER FAQs
   c. The formula editor, ALDER FAQs, Excel
   d. The formula editor, internet, Excel

2. **What is the difference between a formula and a variable?**

   a. Formula is a calculation that cannot be retrieved with an available object. Variable is a formula with a name, and it shows as an available object that can be dragged onto the report
   b. Formula is a calculation. Variable is the same calculation used in a column
   c. Variable is a formula and is defined as a dimension, measure, or detail. Formula is a calculation and is defined as a dimension, measure or detail, and can be dragged onto the report
   d. None of the above

3. **What are the four areas in the formula editor?**

   a. Formula, qualification, available objects, available operators
   b. Formula, available objects, name, qualification
   c. Formula, available objects, available functions, available operators
   d. Name, qualification, formula, available operators

4. **Why would you create a variable?**

   a. To use the formula as an available object to drag onto the report
   b. To use a formula within another formula
   c. To use as a filter on the report
   d. All of the above

5. **What is the first thing that you should do after you type in a formula?**

   a. Click Apply, click OK
   b. Validate to ensure it is defined correctly, then click Apply, click OK
   c. Click OK
   d. Click on the green check box to validate, then click OK

Exercise

1. Find and copy **Detail Report by Appropriation for class** to your Class Exercise folder

2. Open **Detail Report by Appropriation for class** from your Class Exercise folder

3. Click on Design

4. Click on Account AR Fund Source Summary report tab

You will create a formula to identify if revenues are unrestricted or restricted and if restricted whether the revenues have been over or under collected.

5. Go to Document Structure and Filters to find the Vertical Table: Revenues

6. In the workspace panel, drop a Blank Cell next to the Vertical Table: Revenues

7. Click on the blank Cell

8. Using the Formula Editor create the formula

   =If([CAFR Revenue Major Code]="5000";If([Budgetary Expenditures]+[Budgetary Revenue]>0;"under collected";"overcollected");"N/A")Validate the formula

9. Validate the formula

10. Click OK twice

11. Verify that the formula performed as expected

12. Convert your formula to a variable named **RR Collections**

13. Save your report in your Class Exercises folder as **Chapter 8 Exercise** and close

CHAPTER 9: Report and Table Filters

Goals and Objectives

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

- Place a filter on a report
- Place a filter on a table
- Place a filter on a chart
- Know the effects of filters on calculations within the report
- Know how to find filters within the document structure and filters menu
- Know how to remove filters
- Know how to nest a filter
- Know how to use a variable in a filter

Introduction to Filters

In ALDER, there are three different types of filters:

- Query Filters: Allow the user to limit the amount of data retrieved from the data warehouse. These types of filters are built by report developers
- 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
- Table/Chart Filters: Allow the user to limit the data displayed on individual tables or charts

Filters are defined on dimensions, measures, details and variables that are listed within the available objects menu in the report panel.

Scenario 1

You have been asked to pull a report for Budget Fiscal Year 2017 for appropriations between 021000000 and 021999999. Your supervisor also does not want to see information in the data table related to payroll charges (Object Type Code 1000) or data that is not associated with an Activity Code. Your supervisor would like this report to display two charts: one chart that shows posting amount by account that is equal to or greater than $150,00, and the other chart to display posting amount by Object Type. You know of an existing enterprise report that will work, but it will need to have filters applied to it. We will walk through the necessary steps in this chapter.

Creating Report Filters

1. From the ALDER Class folder find and copy **Exp by AR Type for class Chapter 9** to your Class ALDER 101 folder.

2. Open Exp **by AR Type for class Chapter 9** from the Class ALDER 101 folder

3. Click on Design

4. Add Activity Code between Object Code and Budgetary Expenditures

Before passing this report on, you will want to verify that the requested data is correct. The report should look similar to this:

PL Budget Fiscal Year	Object Type Code	Appropriation Code	Object Code	Activity Code	Budgetary Expenditures	Encumbrances	Total Obligated
2017	1000	021138801	1970		$1,733.50	-1,733.50	$0.00
2017	2000	021010305	2001		($88.67)	0.00	($88.67)
2017	2000	021010305	2002		($308.00)	0.00	($308.00)
2017	2000	021010305	2008		$0.00	-559.79	($559.79)
2017	2000	021010305	2010		$0.00	-728.14	($728.14)

Recall that your supervisor only wants to so see transactions for PL Budget Fiscal Year 2017. You will want to apply a filter to the entire report to limit the data.

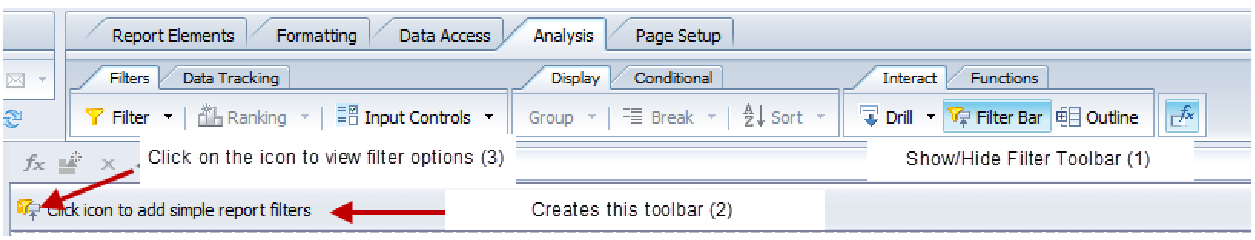
5. Go to the end of the report and notice how many pages there are

6. Go to the first page of the report

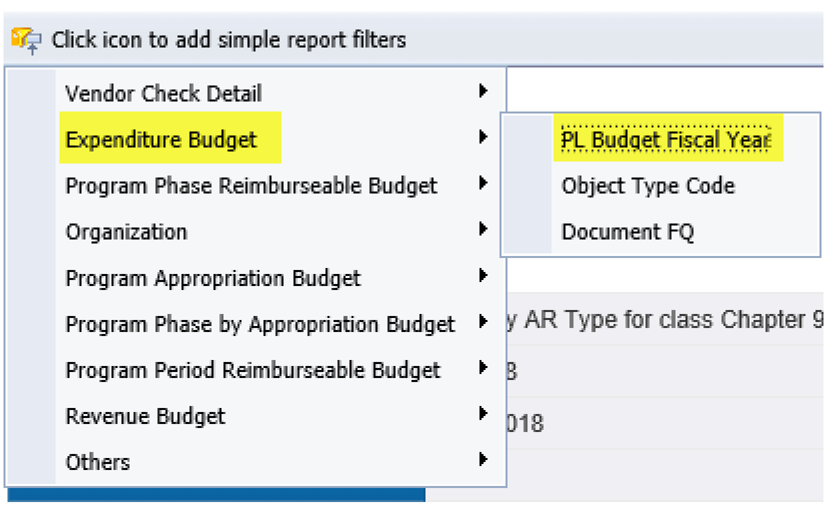
7. In the workspace toolbar, under Analysis, Interact, click on Filter Bar (1) icon

8. The filter toolbar will appear (2)

9. In the workspace panel click on the icon labeled: Click icon to add simple report filters (3)



10. Select the arrow next to Expenditure Budget

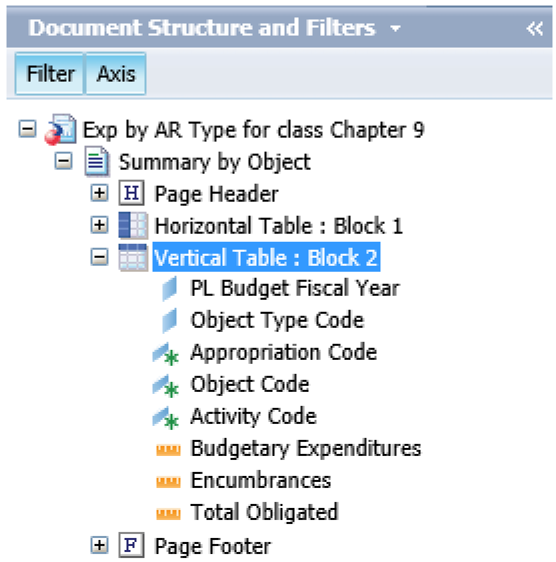


11. Select PL Budget Fiscal Year

12. From the dropdown menu PL Budget Fiscal Year (All values), select 2017

13. Review your report to ensure that only activity from Budget Fiscal Year 2017 appears on the face of the report

14. In the Document Structure and Filters, notice that there is no report filter showing



15. In the header box, insert a new row at the bottom

16. In the blue cell type: Report Filtered by:

17. Press enter to accept typed information

18. In the gray cell type: Budget Fiscal Year = 2017

19. Press enter to accept typed information

20. Save your report in your Class ALDER 101 folder as **Exp by AR Type for class Chapter 9 V1**

21. In the Document Structure and Filters menu, right click on the report name Summary by Object

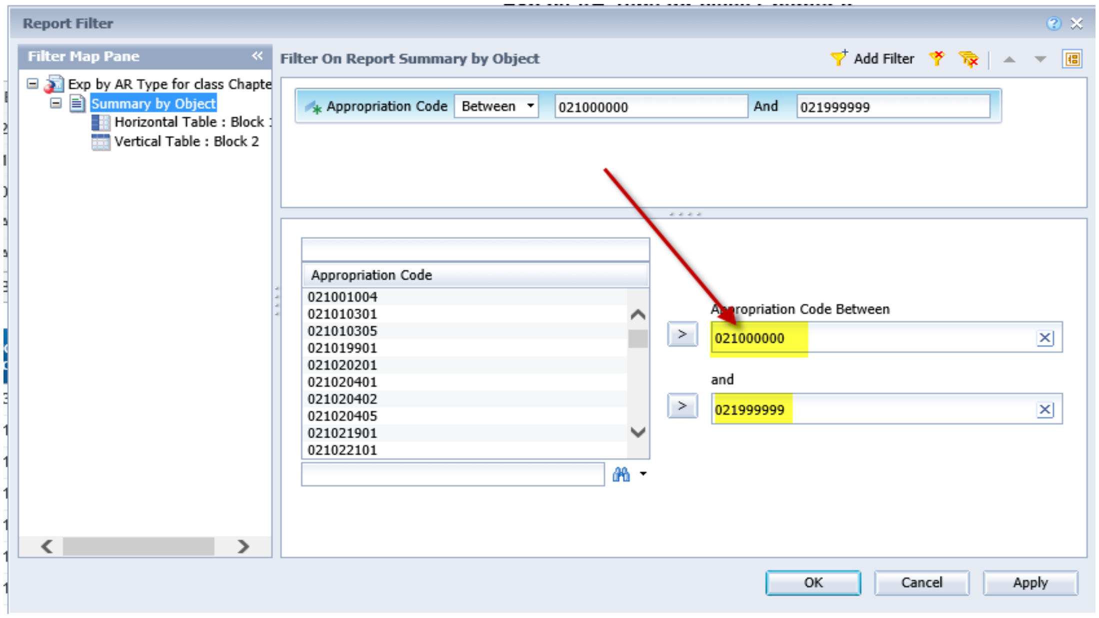
22. Select Filter, Add Filter

23. In the Report Filter Editor box, click Add Filter to see Available Objects you can enter by

24. From the available objects list double click on Appropriation Code

25. Select Operator: Between

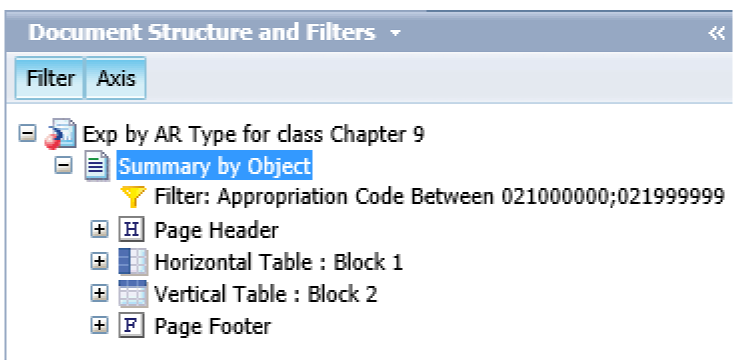
26. Type in Appropriation the appropriation information in the value boxes



When you enter the values, the filter at the top of the box will be automatically updated

27. Click OK

28. In Document Structure and Filter, verify that you now have a report filter.



29. Review your report to ensure that only Appropriations between 021000000 and 021999999

30. Update the header box to let the end user know that a filter has been placed on this report. Insert a new row at the bottom of the header box

31. In the new row in gray cell type: Appropriations between 021000000 - 021999999

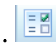
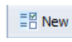
32. Press enter to accept typed information

33. Go to the end of your report and view the number of pages

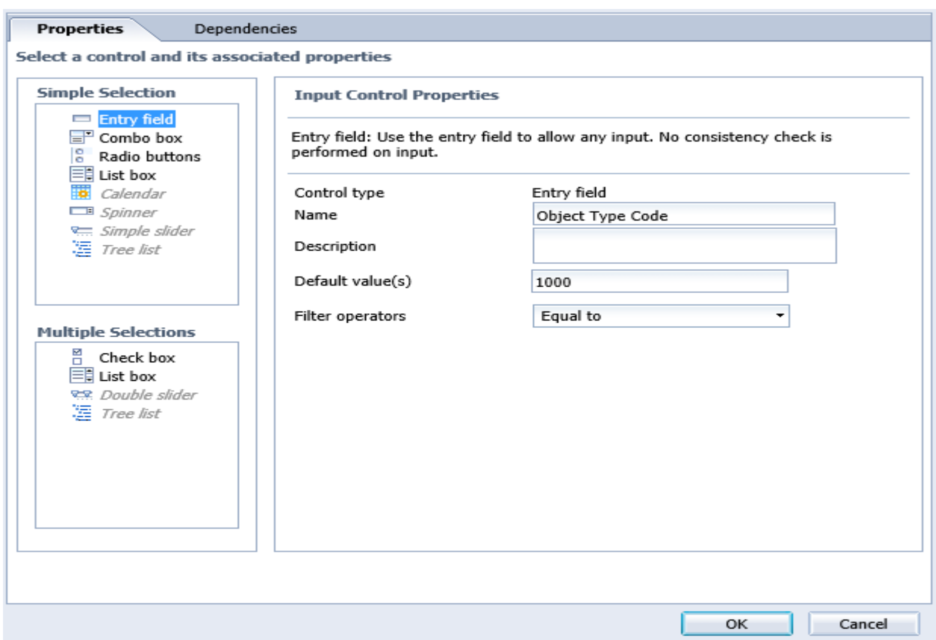
34. Save the report to your Class ALDER 101 folder as **Exp by AR Type for class Chapter 9 V2**

Creating Input Control Filters

While verifying your data, you noticed that the data table is displaying information for all transactions rather than just disbursement request transactions. As your supervisor requested only general expenditure document information in the data table, you will want to apply a filter to this table.

1. Go to Document structure and filters in the report panel
2. Click on the Vertical Table: Block 2 and rename it to Data Table
3. In the report panel, select the icon Input Controls. 
4. Click on the New input control icon. 

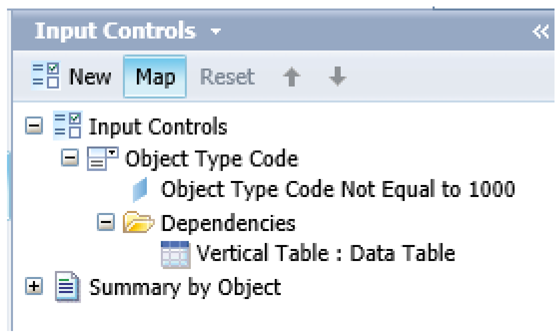
5. Select Report Object panel, find and click on Object Type Code
6. Click Next
7. In Simple Selection, click on Entry Field
8. Input Control Properties Select Default values(s) type 1000
9. Filter Operators select Not Equal to



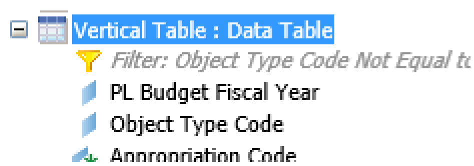
10. Click Next
11. Verify Only Data Table is checked. If you have totals on the report, you will want to make sure that the boxes next to those tables are also checked.

12. Click Finish

13. You should now have an Input Controls panel that displays your selections. Click on Map at the top of the navigation panel and expand the areas to show where the input control filter is active.



14. Go to Document Structure and Filter, expand Vertical Table: Data Table to see the filter that was added to the data table



15. Update the header box to let the end user know that a filter has been placed on this report at the table level. Insert a new row at the bottom of the header box

16. In the blue cell type: Data Table Filtered by:

17. Press enter to accept typed information

18. In the gray cell type: Object Type Code <> 1000

19. Press enter to accept typed information

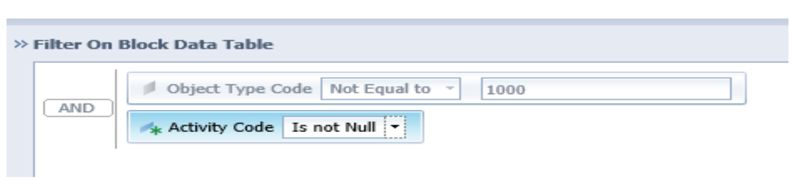
20. Save the report to your Class ALDER 101 folder as **IRIS GA Detail Transaction Filters V3**

Creating Table Filters

1. In the Workspace Panel, click on the data in the Activity Code Column (grey area)

2. Right Click on the data and select Filter Add Filter

3. Change the Operator to Is not Null



4. Select OK

5. Verify the report looks similar to this:

PL Budget Fiscal Year	Object Type Code	Appropriation Code	Object Code	Activity Code	Budgetary Expenditures	Encumbrances	Total Obligated
2017	2000	021147717	2000	1400	$191.00	0.00	$191.00
2017	2000	021147717	2001	1400	$177.83	0.00	$177.83
2017	2000	021168001	2001	1600	$713.18	-713.18	$0.00
2017	2000	021168001	2001	1650	$69.03	-69.03	$0.00
2017	2000	021168001	2003	1610	($390.00)	0.00	($390.00)
2017	2000	021168001	2005	1610	$170.00	-170.00	$0.00

6. Save the report to your Class ALDER 101 folder as **IRIS GA Detail Transaction Filters V4**

Creating Chart Filters

You still need to display two charts: one chart that shows posting amount by account that is equal to or greater than $500, and the other chart to display posting amount by date by account.

1. Go to Report Elements in the workspace toolbar

2. Add a Column Chart onto the report next to the header box

3. Right click on the chart in Document Structure and Filters, select Assign Data

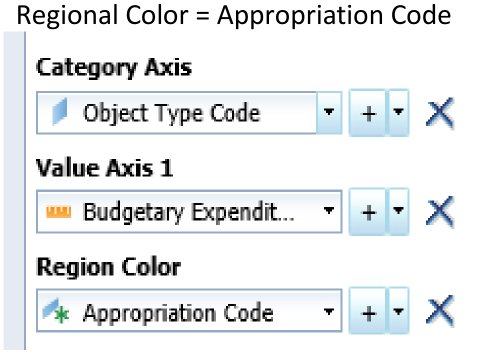
    a. Category Axis (X-Axis) = Object Code
    b. Values Axis (Y-Axis) = Budgetary Expenditures
    c. Regional Color = Object Name

4. Click OK

5. Add a Stacked Column Chart onto the report next to the header box

6. Right click on the chart in document structure and filters, select Assign Data

    a. Category Axis (X-Axis) = Object Type Code
    b. Values Axis (Y-Axis) = Budgetary Expenditures
    c. Regional Color = Appropriation Code



7. Click OK

8. In the workspace panel, right click on the first chart that has Posting Amount by Object Code (make sure you have a 4-way arrow)

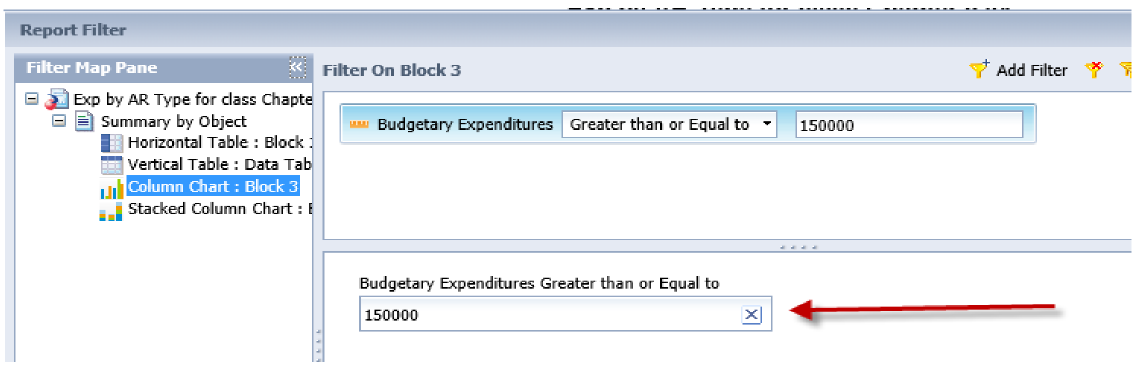
9. Select Filter, Add Filter

10. When the Report Filter Editor box pops up, click Add Filter

11. Double click on Budgetary Expenditures from the Result Objects list

12. Select the operator Greater than or Equal to

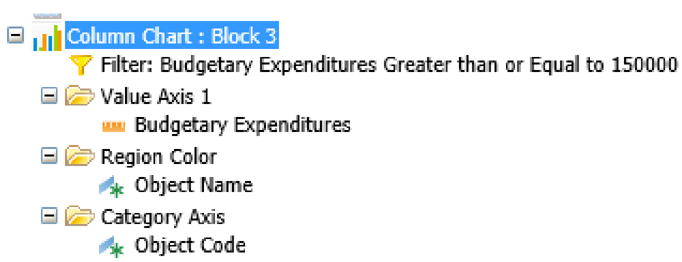
13. Type in the value of 150000 (do not use commas)



14. Click OK

15. Review your chart

16. Go to Document Structure and Filters in the report panel. It should look like this:



17. Review your account number chart. It should not have amounts under $150,000

18. Update your header box to look similar to this:

Report Name	Exp by AR Type for class Chapter 9
Report User	250468
Selected Report Date	1/14/2018
Selected Department Codes	02
Selected AR Type Codes by FY	All
Selected AR Codes by FY	All
Report Filtered by:	Budget Fiscal Year = 2017
	Appropriations between 021000000 - 021999999
Data Table Filtered by:	Object Type Code <> 1000
	Posting Amount >=$150,000 for Posting Amount by Account chart

(you may need to wrap the text in the grey cells)

19. Save your document in your Class ALDER 101 as **IRIS GA Detail Transaction Input Control and Chart Filters**. You have now completed a report with charts for the requested scenario.

20. Close report

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. Nested filters allow users to set contingencies within the filters, to return data in an if/then connection. The context of nested filters relies on and/or for development. If you want to create a filter where a combination of fund and appropriations data is returned, a nested filter is the way to do this. It also works well if you want all fund, regardless of appropriation, in addition to data for a specific appropriation (an "or" statement). The following scenario provides another example of a nested filter's use.

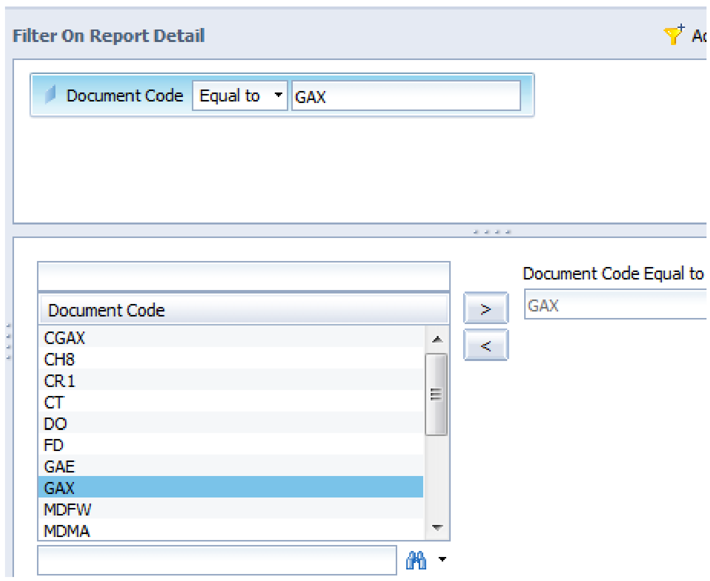
Scenario 2

You have been asked to filter this report to display potential coding errors. Your department uses object codes to track specific types of activities. Some object codes should be used with specific document type. Your director has indicated that document type GAX should only have object codes between 3059 and 3079 associated with it. You want to see any transaction that does not meet this criterion. The director has also indicated that if document type DO uses Appropriation Codes of 021020401, 021020402, and 021020405. You will need to pull the documents to ensure that the object code is correct. A report that you have saved in your Class ALDER 101 will give you the required information, but you will need to create a nested filter.

1. Copy and Save **EX by AR Type for class Nested Filters Chapter 9** from the Class ALDER 101 folder

2. Open the report from you folders

3. Click on Design
4. Right click in the workspace panel next to the header box
5. Select Filter, Add Filter
6. In the Report Filter Editor pop-up box, select Add Filter
7. Select Document Code and click OK
8. Select the operator Equal to from the pull-down menu
9. Double click or type GAX



10. Click Add Filter to add another filter
11. Select Object Code
12. Click OK
13. Select the operator Between from the pull-down menu.
14. Select or type 3059 into the first box
15. Select or type 3079 into the second box

You have now created a filter that meets the first set of criteria in our scenario based on two data objects. Now you need to add the objects to meet the second set of criteria. You have not created the nested filter yet.

16. Click Add Filter to add the next filter
17. Select Document Code

18. Select the operator Equal to from the pull-down menu

19. Select or type DO

20. Click Add Filter to add the next filter

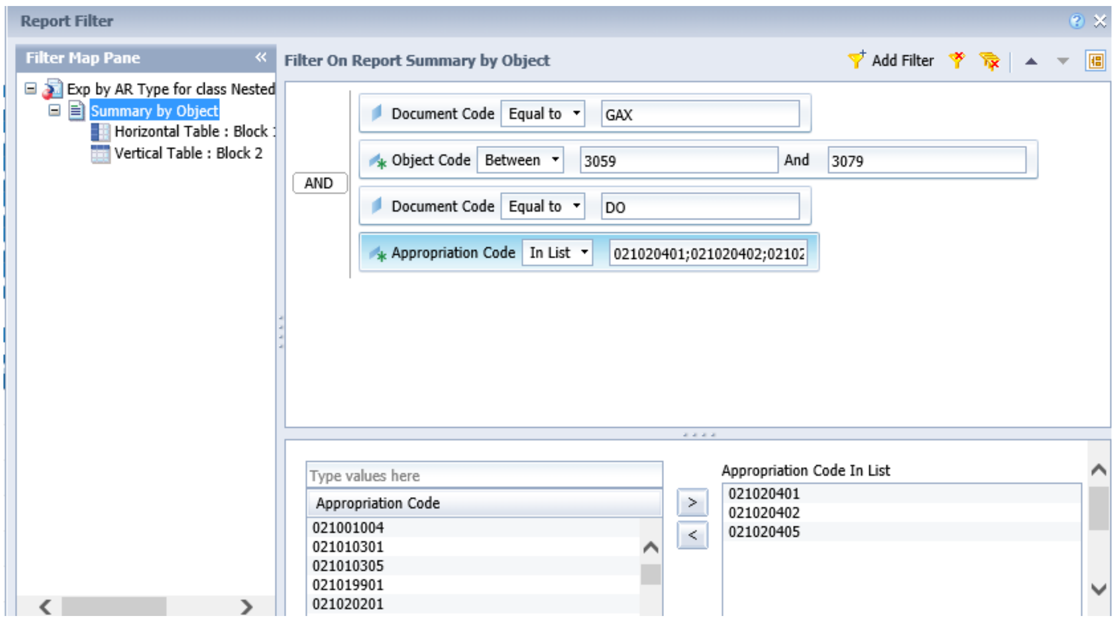
21. Select Appropriation Code

22. Select the operator In List in the pull-down menu

23. Select appropriations 021020401; 021020402; 021020405 in Look Up box

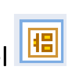
24. Arrow the values over to update the box under the Appropriation Code In List

25. Verify that your Filters editor box looks like this:



You now have four different data objects that you are filtering on. The next couple steps will walk you through how to make the filters you just added into nested filters.

26. Click on the Filter Document Code Equal to GAX

27. Click on the Nested Filter button in the upper right of your Filters panel 

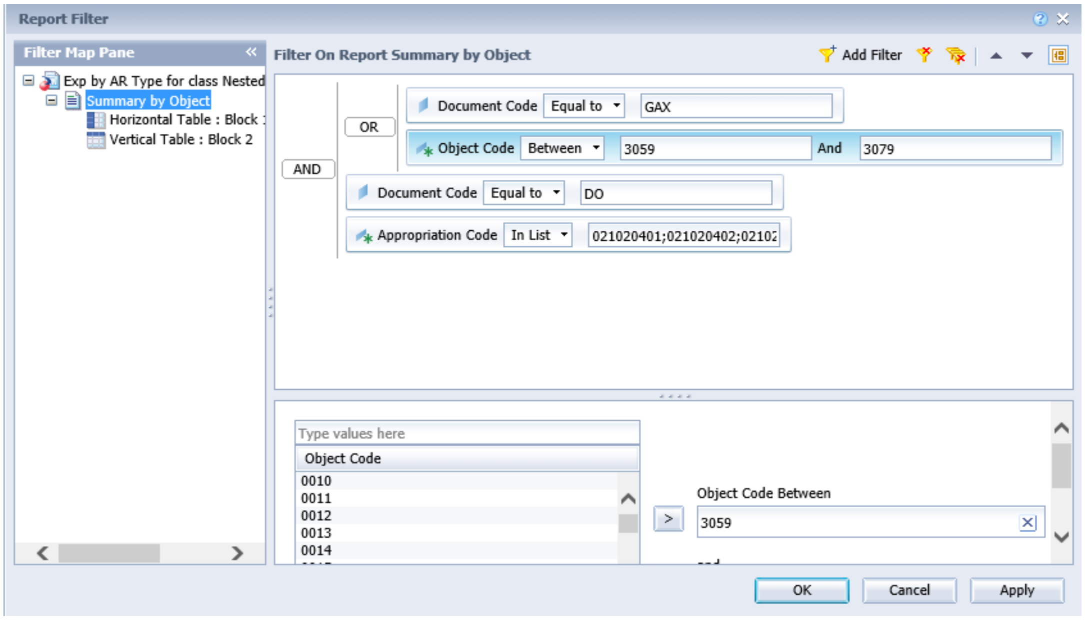
28. Click on the filter Object Code Between 3059 and 3079

29. Using the arrow buttons to the right of your Report Filters panel, move the filter for Object Code up or down until it is next to the nested OR

30. Click on the filter Document Code Equal to GAX (the first one)

31. Using the arrow buttons, move the filter up or down until it is next to the nested OR

32. Your filters box should look like this:



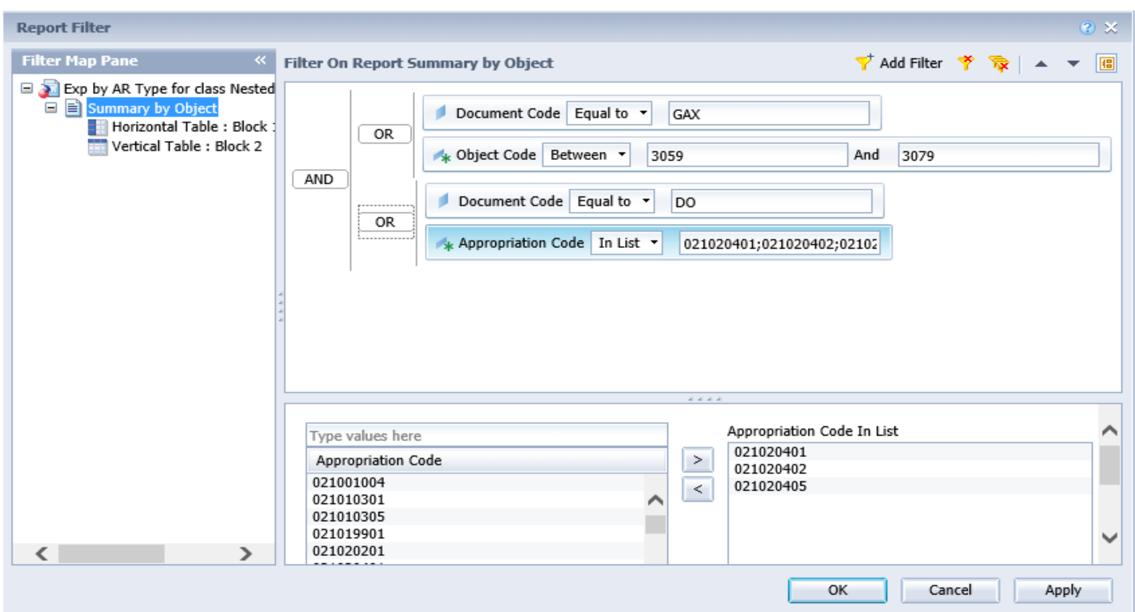
Now you need to "nest" the other set of criteria.

33. Click on the filter Appropriation Code In List

34. Click on the Nested Filter button

35. Using the arrows, move Appropriation Code In List and Document Code Equal to DO (the second one) into the new nested area

Your filters box should look like this:

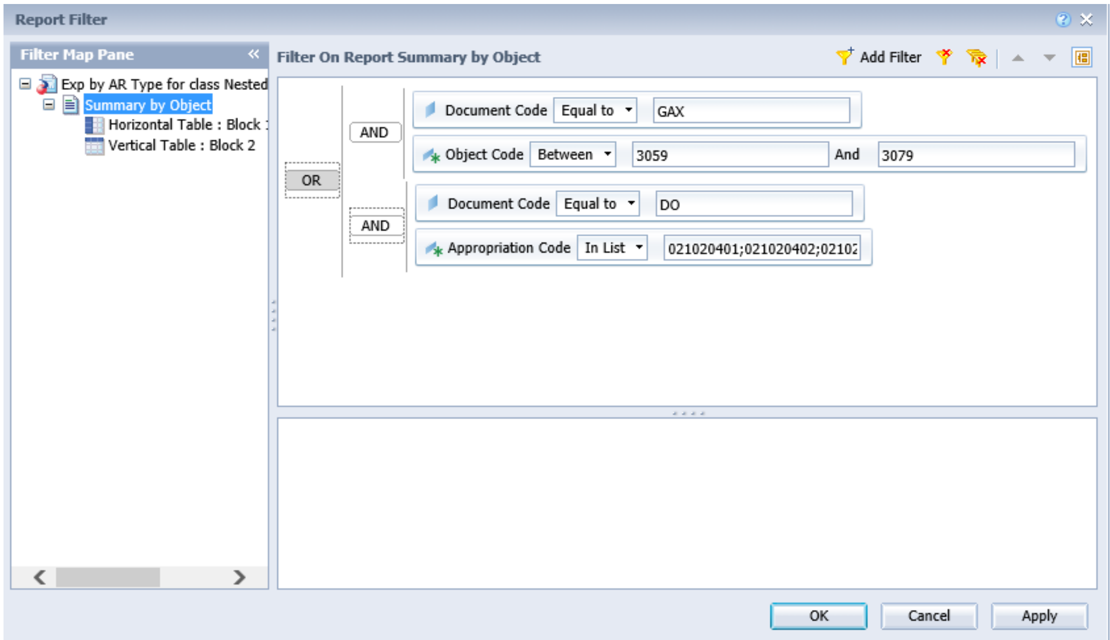


Remember you want to see any data where the Document Code is equal to GAX ***AND*** the Object Code is between 3059 and 3079 ***OR*** any data where the Document Code is equal to DO ***AND*** the Appropriation Code is in list, so you will need to change our operators on our nester filters.

36. To change the operator “AND” to “OR,” double click on the word “AND”

37. Now change the two nested filters to show “AND”

Your filters box should look like this:



38. Now that we are done defining our nested filter, click OK

39. Review the data in the report

40. Updated the header box to show the report filters that have been added to the report

41. Your header box should look similar to this

Report Name	Exp by AR Type for class Chapter 9
Report User	250468
Selected Report Date	1/14/2018
Selected Department Codes	02
Selected AR Type Codes by FY	All
Selected AR Codes by FY	All
Report Filtered by:	Document Code = GAX and Object Code between 3059 and 3070
OR	Document Code = DO and Appropriation Codes in list 021020401, 402, 409

(you may need to wrap the text in the grey cells)

42. Save the report in your Class ALDER 101 folder as **EX by AR Type for class Nested Filters Final**

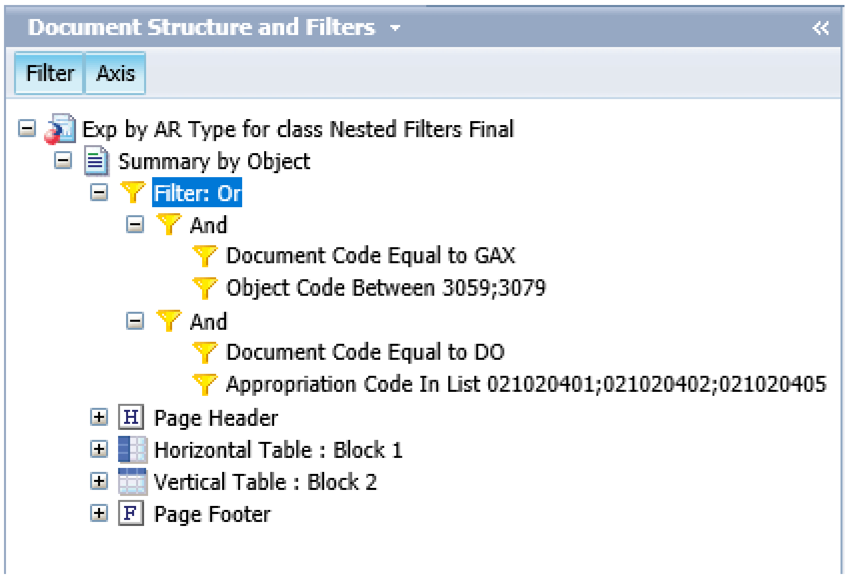
See the Appendix for definitions of operators and additional examples of nested filters.

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

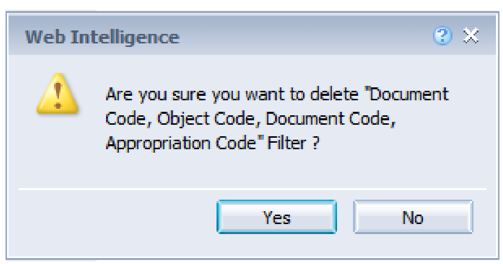
Deleting Filters

1. Go to Document Structure and Filters in the report panel

2. Click on the nested report filter



3. Right click on the Filter: Or and select Remove Filter



4. Click Yes

5. Review the effects on the data table within the report

6. Close the report without saving

Using a Variable as a Filter

1. From your Class ALDER 101 folder, open **IRIS GA Expenditure Budget and Actuals - Formula and Variable**

2. Click on Design

3. Click on the Summary by AR Group and AR Type and Object Group report tab,
4. In Document Structure and Filters, Click on Vertical Table: Block 2 and rename to Data Table
5. In the report panel, right click on the data table
6. Select Filter, Add Filter
7. In the Report Filter Editor pop-up box, click Add Filter
8. From the Available Objects panel, select the Variable, Rounded Budget
9. From the operator dropdown menu, select Greater than or Equal to
10. Enter Rounded amount of 12000000 (no period, commas, or dollar symbols)
11. Select OK
12. Scroll to the through your report and verify you only see Budgets greater than 12,000,000.
13. Update your header box to reflect the new filter.
14. Save the report in your Class ALDER 101 folder as **IRIS GA Expenditure Budget and Actuals - Formula and Variable Filters**
15. Close report

Summary

After completing this chapter, you should now be able to:

- Place a filter on a report
- Place a filter on a table
- Place a filter on a chart
- Know the effects of filters on calculations within the report
- Know how to find filters within the document structure and filters menu
- Know how to remove filters
- Know how to nest a filter
- Know how to use a variable in a filter

Review

1. **How are filters defined?**

   a. Variables, dimensions, measures, details
   b. Dimensions, measures, details
   c. Measures, variables, filters, details
   d. Formulas, dimensions, measures, details

2. **Can you apply a filter to a table or chart instead of the entire report?**

   a. No, the report totals would be incorrect and the user would have difficulties reading the report
   b. Yes, but you would need to update the header box to notify the user of the filters
   c. Yes, but you would need to update the header box and the report totals with the same filters
   d. Yes, but you would need to update the header box to notify the user of the filters and apply the filters to the section and report totals

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

   a. Report, data, table
   b. Query, report, data
   c. Report, table, query
   d. Table, report, data table

Exercise

CHAPTER 10: Formatting

Goals and Objectives

After you complete this chapter, you will understand:

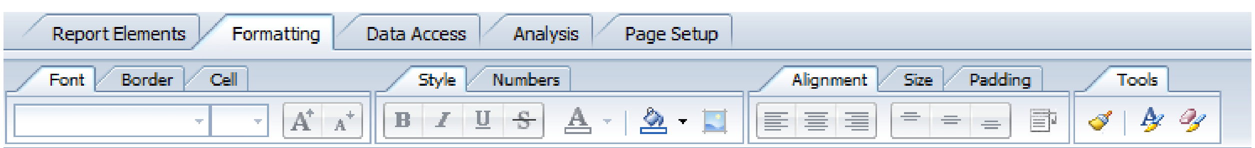
After you complete this chapter, you will be able to:

- Format individual cells or columns
- Apply consistent formatting to an entire table
- Format a table
- Format the report

Introduction

This chapter focuses on formatting cells, columns, tables and the entire report. See Chapter 6 for instructions on formatting a chart, and see the appendix for instructions on formatting a section.

1. From the Class ALDER 101 folder, open the report **IRIS GA Expenditure Budget and Actuals Charts**
2. Select the Summary by AR Group and AR Type and Object Group tab
3. Click on Design
4. In the report panel, click on the Formatting tab to verify that the below is displayed



Formatting a Cell

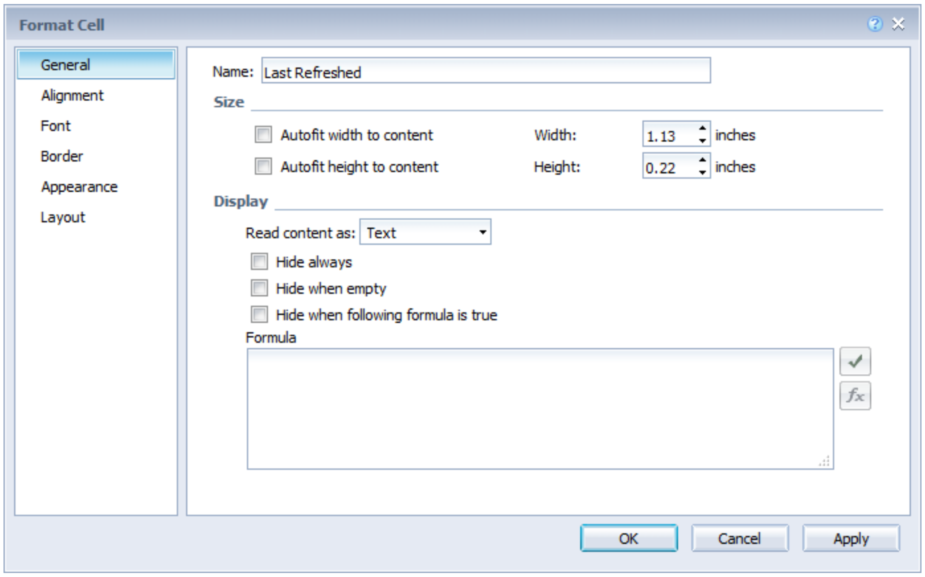
There are three ways to format a cell:

1. Click on the cell in the report and use the formatting tab
2. Right click on the cell and select Format Cell
3. Click on the cell in the report panel and use the formatting tab

Let's walk through the areas in the formatting window.

1. In the report header, locate the cell that displays Last Refreshed.

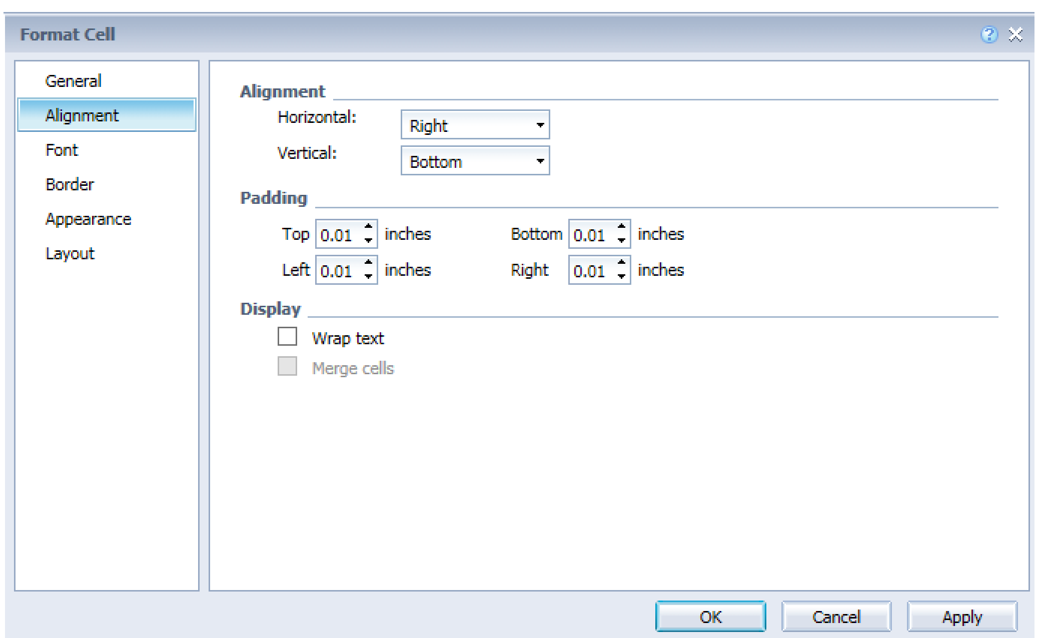
2. Right click on the cell and select Format Cell (with the 4-way arrow). A Format Cell box should pop up.



3. Select General. In general, you can:
   - Change the name of the cell (if applicable)
   - Change the width of the cell (if checked, ALDER will autofit the cell to the content)
   - Change the height of the cell (if checked, ALDER will autofit the cell to the content)
   - Other display options

Note: If you make a change to an area, click Apply before moving to another area (sometimes changes do not take if Apply is not checked). Once you are done making all of your changes, click OK.

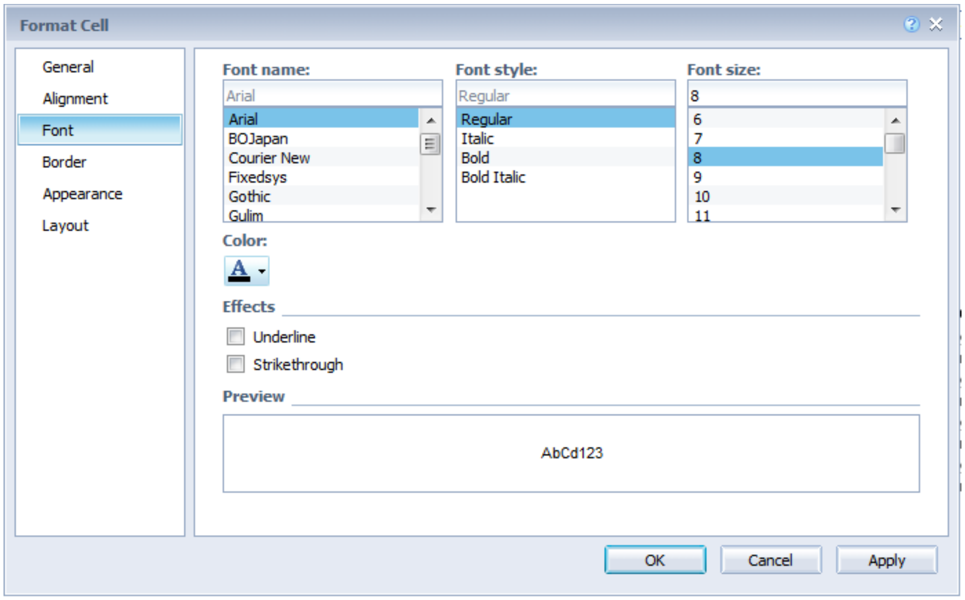
4. Select Alignment



In Alignment, you can position the text of the cell by changing the:

- Horizontal alignment
- Vertical alignment
- Wrap text within a cell

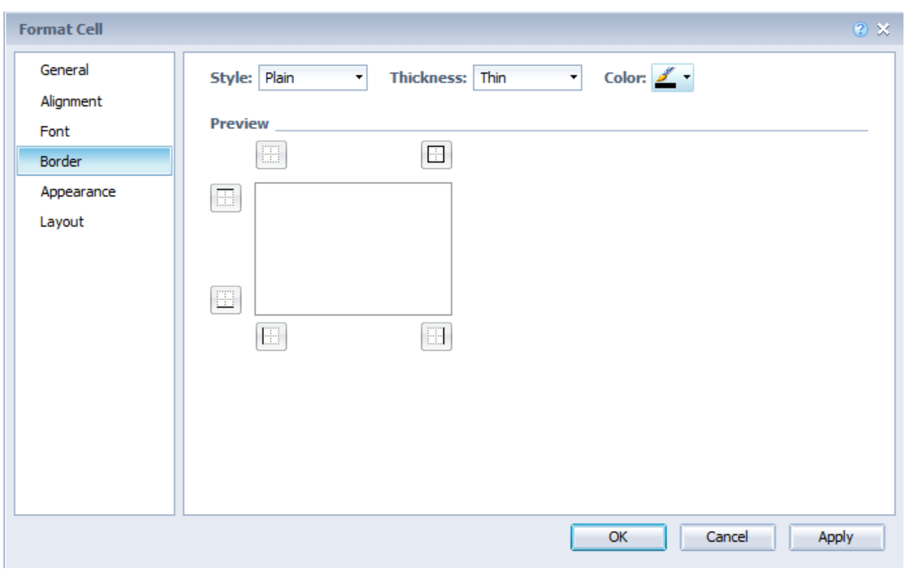
5. Select Font



In Font, you can:

- Change the font name: Arial, Times New Roman, Tahoma, etc.
- Change the font style: Regular, Italic, Bold, Bold Italic
- Change the font size
- Change the font color (click the down arrow next to the color)
- Underline your text
- Strikethrough your text
- Preview what the cell will look like

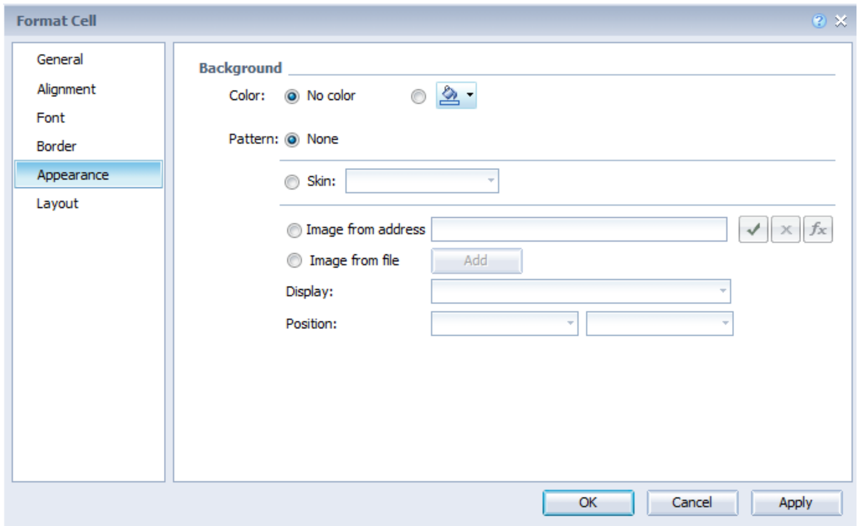
6. Select Border



In Border, you can:

- Change all of the borders at once (includes color)
- Change one border at a time (includes color)

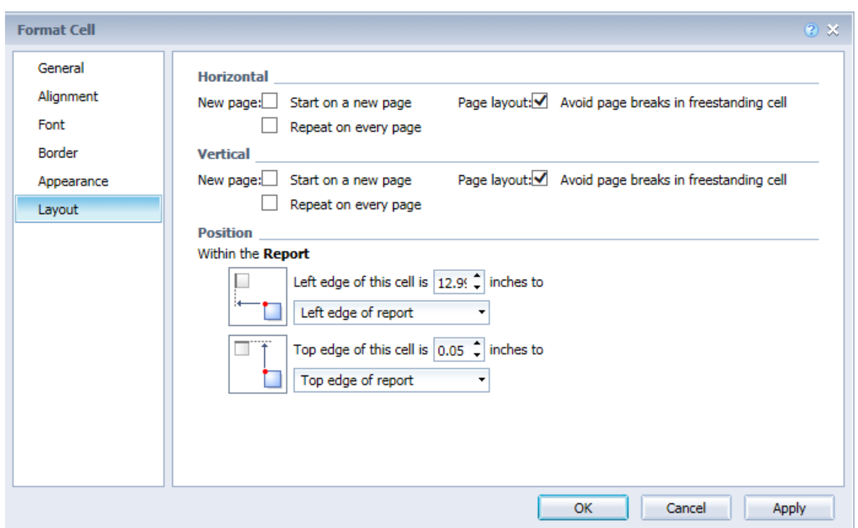
7. Select Appearance



In Appearance, you can:

- Change the background color
- Change the pattern including the:
  - Skin
  - Image from URL
  - Image from file

8. Select Layout



Note: We have discussed the layout area for cells, tables, and charts in Chapters 6 and 7. Recall that layout properties relate to how you position a cell, table, or chart within the report.

9. Select Cancel to exit cell formatting

Formatting a Column

There are two ways to format a column:

1. Click on a column in the data table and use the formatting tab
2. Right click on the column and select Format Cell
3. Select cancel to exit column formatting

The formatting options for a column are similar to formatting an individual cell. The differences are:

- There is no layout area
- If the column has a number or date, there is an area for formatting the number or date

Formatting a Table

There are four ways to format all table cells:

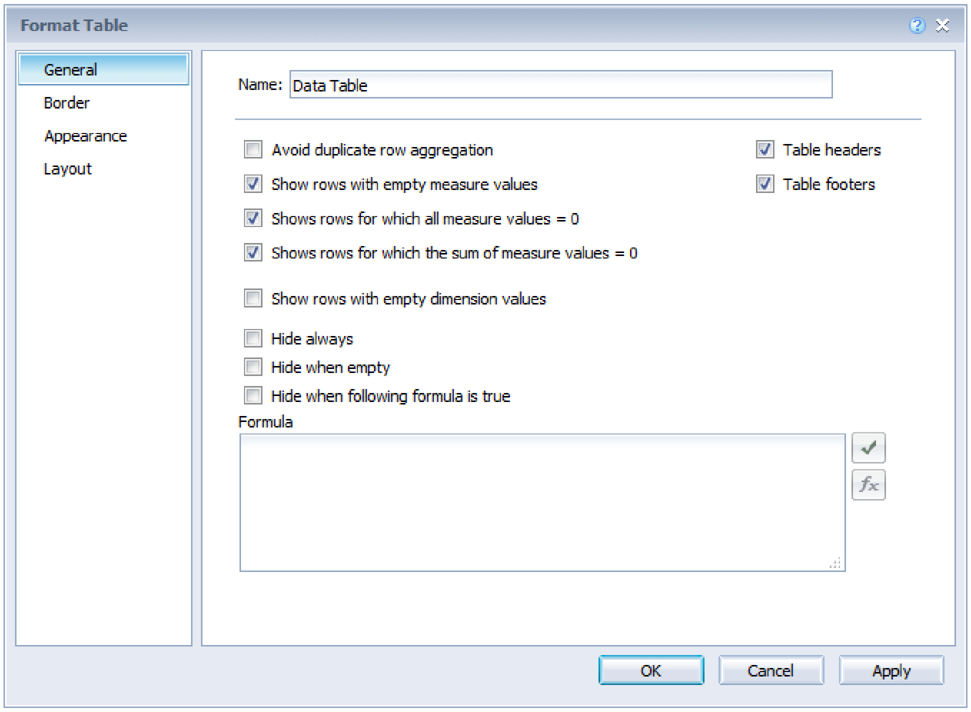
- Hover over the edge of the table until a 4-way arrow replaces your cursor. Right click and select Format Table
- Right click on the table in the report panel and select Format Table
- Click on the table in the report panel and use the Formatting tab. (Note: Some of the formatting options will be grayed out and unavailable through this method.)
- Hover over the edge of the table until a 4-way arrow replaces your cursor, click to select the table in the workspace panel and use the Formatting tab. (Note: Some of the formatting options will be grayed out and unavailable through this method.)

The formatting options for all table cells are similar to formatting an individual cell. The differences are:

- Formatting applies to the entire table and will undo or overwrite any formatting applied to individual columns where the formatting overlaps
- There is no font area for formatting tables
- There is no alignment for formatting tables

In this section, we will be illustrating the format table and naming a table to easily identify it within the report panel.

1. Right click on the data table within Document structure and filters
2. Select Format Table



In General you are able to:

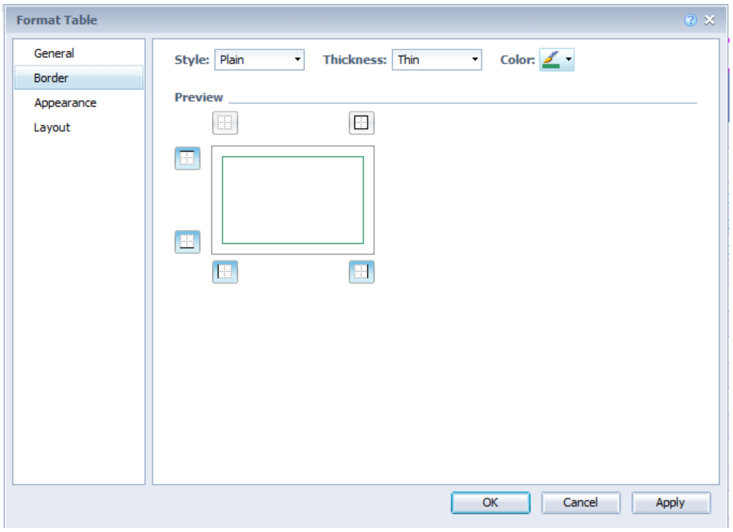
- Change the table name (this is *strongly* encouraged. By changing the table name, it becomes easier to know what you are clicking on in the document structure and filters)
- Show table headers (this is the blue header row at the top of your table)
- Avoid duplicate row aggregation (if more than one data row exists for the displayed detail, each data row will be displayed if this box is checked; if the box is unchecked, the data will be combined into one row)
- Show empty rows
- Show table footers (this puts a blank row at the bottom of the table within each section)
- Show the table when empty (if you section your report by COA year and select multiple years in the prompts, and if a COA year has no data, the section and table will display, but the table will be empty)
- Show rows when the values are zero
- Show rows when the total is zero
- Always hide
- Hide when empty
- Hide when a formula entered is true

3. Change the table name from Block 2 to Data Table

4. Click Apply

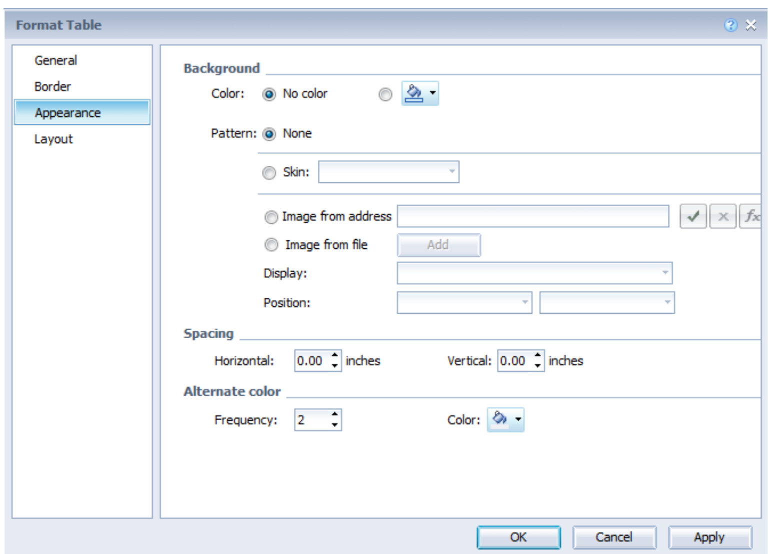
5. Select Border, from here you can:

    a. Change all of the borders at once (includes color)
    b. Change one border at a time (includes color)



6. Select Appearance, from here you should only change the alternate color or spacing:

   a. Frequency (currently set at 2 for every other line)
   b. Color (currently set at gray)



7. Change the alternate color to red

8. Change the frequency to 3

9. Click Apply

Your table should now look similar to this:

AR Group	AR Group Name	AR Type	AR Type Name	Object Group	Object Group Name	Budget
ADMV	Motor Vehicles	ADMV	Motor Vehicles			**17,975,073.78**
ADMV	Motor Vehicles	ADMV	Motor Vehicles	1000	Group Control - Personal Services	11,506,837.26
ADMV	Motor Vehicles	ADMV	Motor Vehicles	2000	Group Control - Other	6,468,236.52

Budget Fiscal Year - 2017

AR Group	AR Group Name	AR Type	AR Type Name	Object Group	Object Group Name	Budget
ADMV	Motor Vehicles	ADMV	Motor Vehicles			**17,952,239.79**
ADMV	Motor Vehicles	ADMV	Motor Vehicles	1000	Group Control - Personal Services	11,638,894.80
ADMV	Motor Vehicles	ADMV	Motor Vehicles	2000	Group Control - Other	6,313,344.99

Spacing creates a space or gap between your columns or rows. The current spacing is set to 0.00 inches for both vertical and horizontal.

10. Change the horizontal spacing to .05

11. Click Apply

Your table should now look similar to this:

AR Group	AR Group Name	AR Type	AR
ADMV	Motor Vehicles	ADMV	Mot
ADMV	Motor Vehicles	ADMV	
ADMV	Motor Vehicles	ADMV	

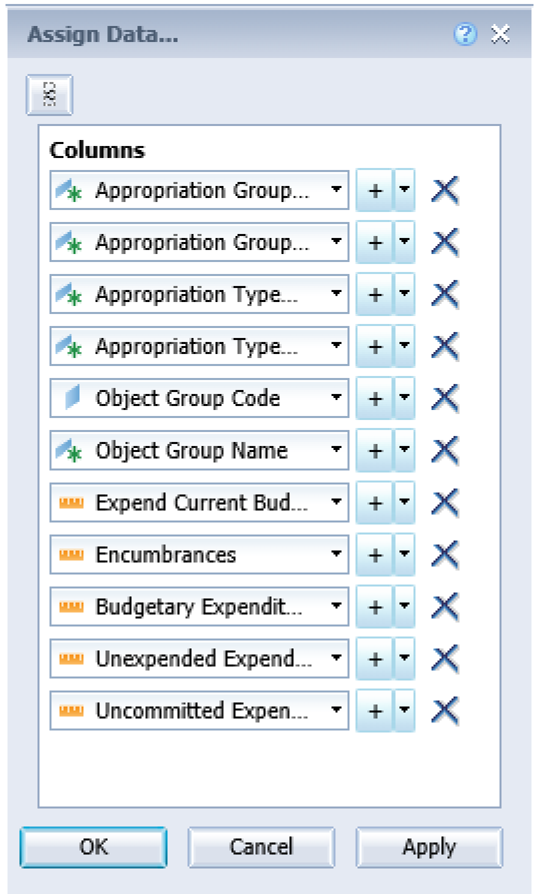
12. Select Layout

Note: We have discussed the layout tab for cells, tables and charts in Chapter 6. Recall that layout properties relate to how you position a cell, table or chart within the report.

13. Click OK to close the Format Table window

Assign Data for a Table

1. Right click on the data table in Document structure and filters and select Assign Data, here you can:

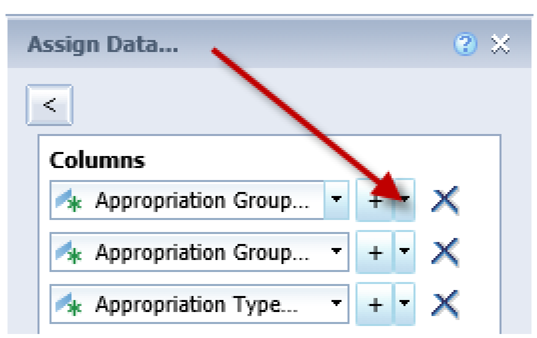


2. Change the table type or convert the table or chart

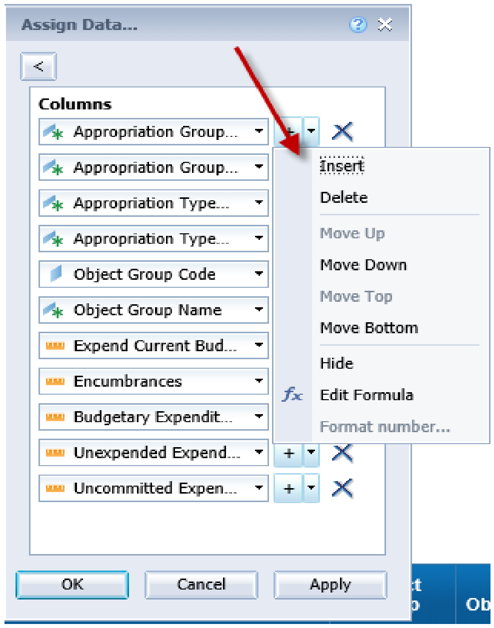
3. Click on the (<) at the top of the panel this will open more options to the left

4. Add available objects to your table by:

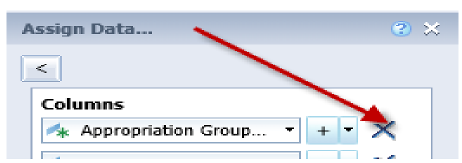
   a. Click on the plus sign or by clicking on the down arrow next to the plus sign
   b. Click the down arrow to choose the available object after the new box appears



For more actions click on the down arrow to the right of the plus sign, this allows you to:



a. Insert a new available object
b. Delete the currently selected available object
c. Change the order of the available objects
d. Hide the available object
e. Edit or create a formula of the selected object
f. Format the number (only available if a column with numerical values is selected)
g. Remove available objects from your table by selecting the delete button.



5. Move the object Appropriation Code and place it in the fourth column (after Document Accounting Line Number)

6. Remove the object Unexpended Expenditure

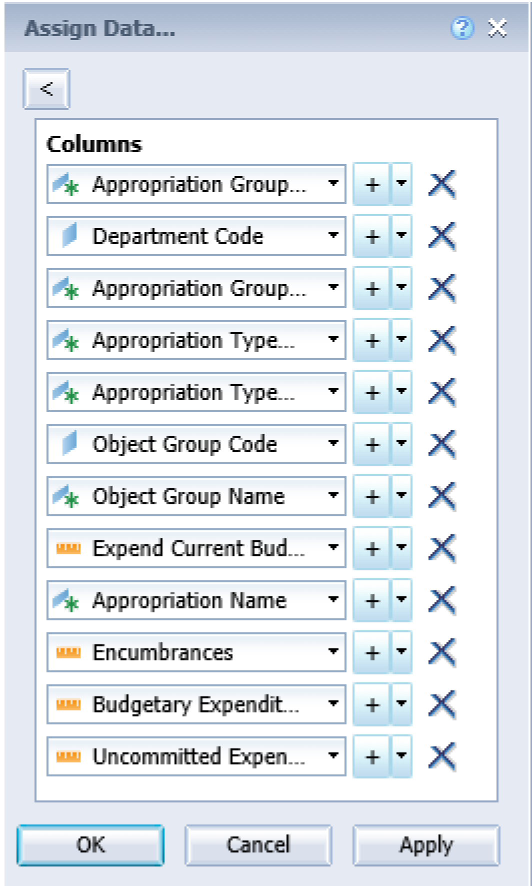
7. Add the object Department Cope in the second column

8. Insert a new column after Expend Current Budget

9. Select Object Appropriation Name

10. Click OK

Your Assign Data window should look similar to this:

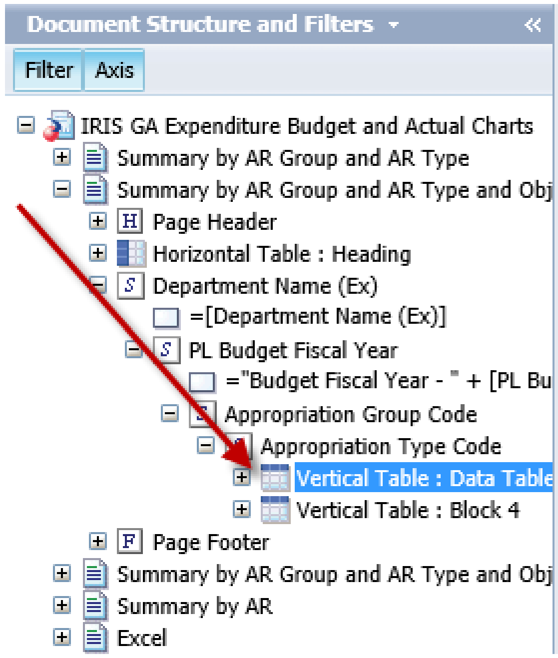


11. Click OK

Your table should look similar to this:

AR Group	AR Group Name	AR Type	AR Type Name	Object Group	Object Group Name	Budget	Encumbrance
ADMV	Motor Vehicles	ADMV	Motor Vehicles			17,975,073.78	-37,519
ADMV	02	Motor Vehicles	ADMV	Motor Vehicles	1000	Group Control - Personal Services	0.00
ADMV	02	Motor Vehicles	ADMV	Motor Vehicles	1000	Group Control - Personal Services	11,506,837.26
ADMV	02	Motor Vehicles	ADMV	Motor Vehicles	2000	Group Control - Other	0.00
ADMV	02	Motor Vehicles	ADMV	Motor Vehicles	2000	Group Control - Other	10,000.00
ADMV	02	Motor Vehicles	ADMV	Motor Vehicles	2000	Group Control - Other	6,458,236.52

12. Go to Document Structure and Filters.



Notice that we have a table titled Vertical Table: Document Data Table. This is the table that we just formatted.

Formatting a Report

There are six ways to format a report:

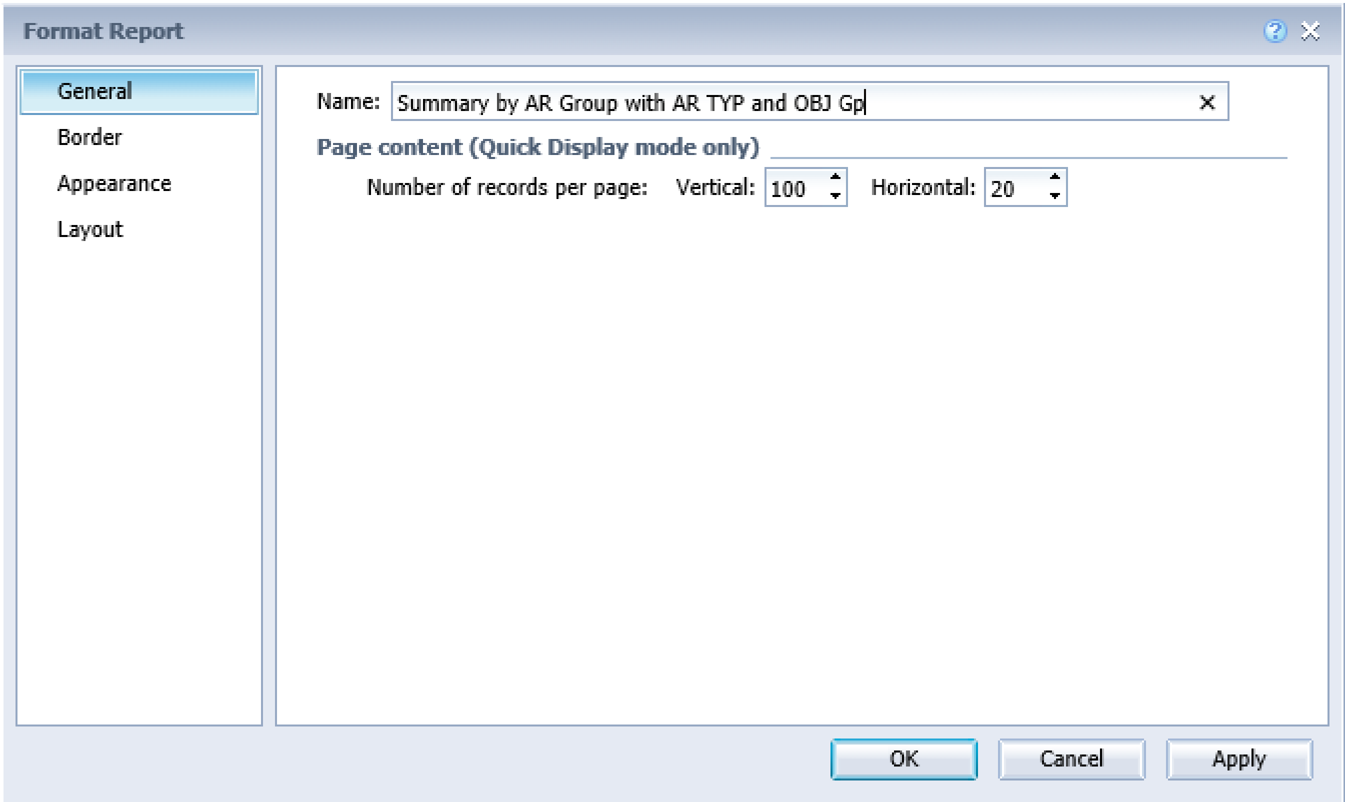
- Right click on the report tab name in the report panel and select Format Report
- Double click on the report tab name in the report panel
- Right click in a non-section, table, or cell of the report in the workspace panel and select Format Report
- Right click on the tab name at the bottom of the workspace panel and select Format Report
- Click on the report tab in the report panel and use the Formatting tab in the workspace toolbar
- Click on the tab name at the bottom of the workspace panel and use the Formatting tab in the workspace toolbar

All of the above options, not using the Formatting tab, format the report within the same pop-up box.

In this section, we will be illustrating how to format and name the report to easily identify it within the report panel and in the report tab located at the bottom of the workspace panel.

1. Right click next to the header box and select Format Report

In General, you can:



- Change the report tab name (how it displays in the document structure and filters)
- Change the number of vertical records displayed per page
- Change the number of horizontal records displayed per page

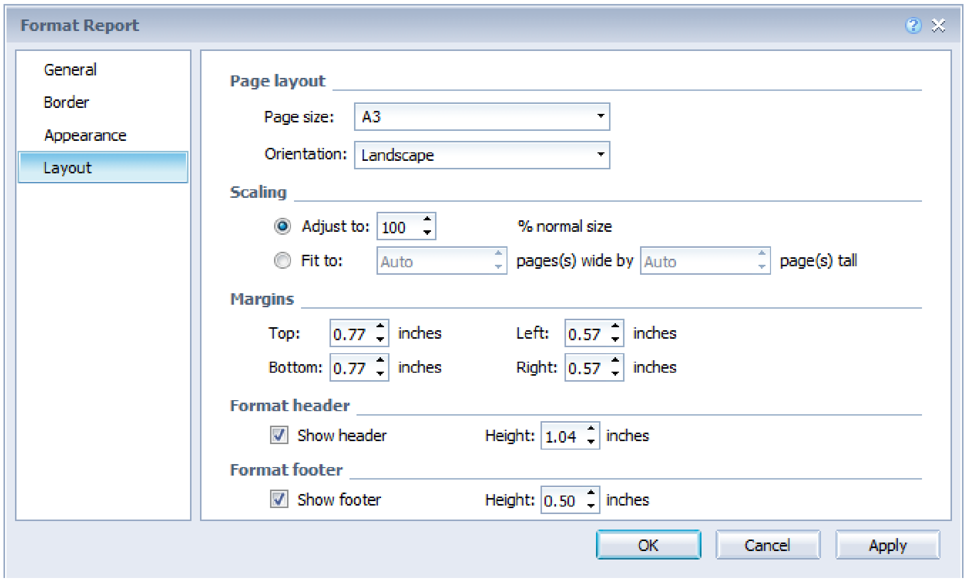
2. Change the name from Summary by AR. Note: You can also change just the report tab name by double clicking on the tab at the bottom of the workspace panel.

3. Click Apply

In the Border area you can place outlines around the entire report

In the Appearance area you can add background colors, patters, or images (not recommended)

In Layout, you can:

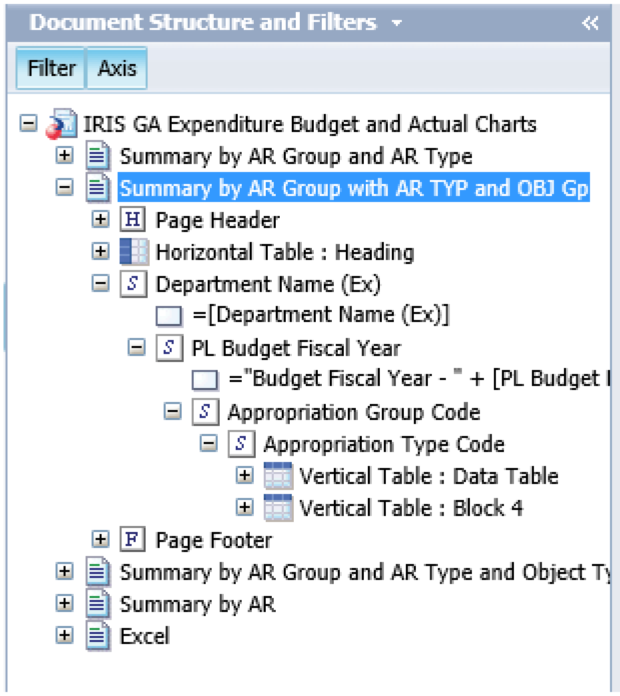


- Change the page size (legal vs. letter) A3 is the default for ALDER, this is a European equivalent to letter but is slightly different since it is in metric
- Change the page orientation (landscape vs. portrait)
- Change the scaling of the report to better fit printed pages
- Change the margins
- Change the header and footer

Note: All of the changes to the report MUST be made prior to printing or exporting the report to a PDF file. You cannot change the page/report layout in the PDF format. You will have to go back to ALDER and make these changes, and then convert the report to PDF again.

4. Click OK

5. Go to Document Structure and Filters to view the change to the report tab name



6. In the workspace panel, view how the tab name changed

7. Save the report to your Class ALDER 101 folder as **IRIS GA Expenditure Budget and Actuals Formatting**

Summary

After completing this chapter, you should now be able to:

- Format individual cells or columns
- Apply consistent formatting to an entire table
- Format a table
- Format the report

Appendix

Review Question Answers

Chapter 4 – Review Question Answers

1. **How do you open a report to view it?**

   D. All of the above.

2. **What is the difference between viewing a report in Design With Data vs. Structure Only?**

   A. With Data provides the results of the query when run. Structure Only shows the Web Intelligence Objects placed on the face of the report

3. **How can you print a report from within ALDER?**

   D. Both B and C

4. **Identify the different ways that you can save to my computer as, and explain why you would use each.**

   A. Excel, Excel 2007, PDF, CSV Archive, Text. Excel (and Excel 2007) exports with header box and row titles. PDF data is static (cannot be changed) and shows header box and row titles. CSV Archive exports all objects in the available object list with no headers or footers. Text opens a notepad document with header and row titles.

5. **Where is the only location(s) you can save a report to?**

   A. When you are within the My Favorites folder

6. **When would you use the Outline button?**

   C. When you want to summarize the data on the report

Chapter 5 – Review Question Answers

1. **What are available objects?**

   D. Both A and B

2. **Are all available objects displayed on the report?**

   B. No

3. **What are the different types of available objects?**

   B. Measure, detail, dimension, variables

4. **What is a formula?**

   D. Both B and C

5. **When you drag an object onto a report, you should always drop it in the blue area of the table.**

   A. False

Chapter 6 – Review Question Answers

1. **What types of tables exist on all financial enterprise reports?**

   C. Horizontal table and vertical table, cells

2. **What formats are available to display data?**

   B. Charts, tables, cells

3. **What are the differences between cells and charts?**

   C. Charts graphically display the business information based on user prompts, and cells display text comments, formulas or calculations, page numbers and document name.

4. **What are the two areas that you can display charts, tables or cells?**

   C. In each section and in the area next to the header box

5. **How do you display a chart title in the workspace panel?**

   C. Right click on the chart, Select Format Chart, select Area Display, check Title, click Visible, type in chart title within quotes

Chapter 7 – Review Question Answers

1. **What are the three different types of sorts?**

   A. Tables, breaks, and sections

2. **In what order are sorts applied?**

   B. Sections, breaks, and then table sorts

3. **What are two ways that you can apply a break?**

   C. Select Data column, right click, select Break, select Add Break, or select Data column, click on the Break icon on the workspace toolbar under the Analysis tab

4. **What are two ways that you can apply a table sort?**

   A. Right click on the Data column, select Sort, select the order in which you want it sorted, or select Sort on the workspace toolbar under Analysis and select the order in which want it sorted.

5. **How can you easily identify that a break has been applied to the data table?**

   D. All of the above

6. **What is the benefit of setting a section?**

   C. Allows you to easily use the navigation map to navigate through the report within the report panel

Chapter 8 – Review Question Answers

1. **Where can you find help with defining and using functions?**

   A. The formula editor, Excel, ALDER help from the home page

2. **What is the difference between a formula and a variable?**

   A. Formula is a calculation that cannot be retrieved with an available object. Variable is a formula with a name, and it has a qualification and can be dragged onto the report.

3. **What are the four areas in the formula editor?**

   C. Formula, available objects, available functions, available operators

4. **Why would you create a variable?**

   D. All of the above

5. **What is the first thing that you should do after you type in a formula?**

   B. Validate to ensure it is defined correctly, then click Apply, click OK

Chapter 9 – Review Question Answers

1. **How are filters defined?**

   A. Variables, dimensions, measures, details

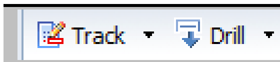
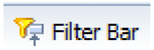
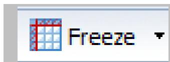
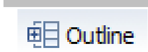
2. **Can you apply a filter to a table or chart instead of the entire report?**

   D. Yes, but you would need to update the header box to notify the user of the filters and apply the filters to the section and report totals

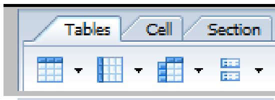
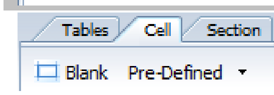
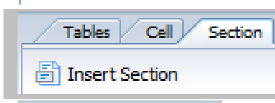
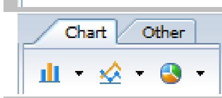
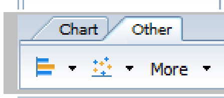
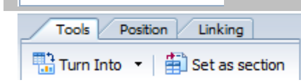
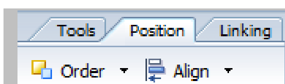
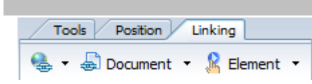
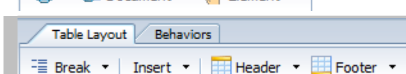
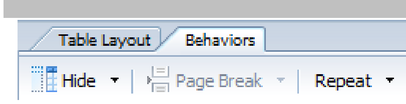
3. **What are the different types of filters?**

   C. Report, table, query

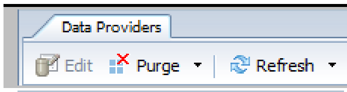
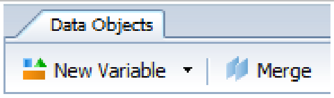
Reading Workspace Toolbar

Button	Title	Description
	**Track and Drill**	Activate and deactivate data tracking mode. Data tracking mode highlights differences in report data from one refresh to another refresh. Drill allows for navigation through the report by hierarchy. This feature only works for some dimensions.
	**Filter Bar**	Quick Filters to limit data showing on the report
	**Freeze**	Freezes the header rows of the report as you view the report (only active when a table has been selected)
	**Outline**	Outline allows user to summarize data

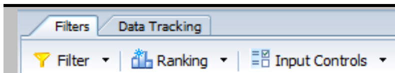
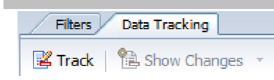
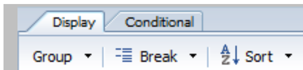
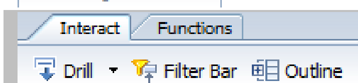
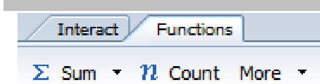
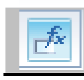
Report Elements Tab

Button	Title	Description
	**Tables**	To add a table
	**Cells**	To add a cell
	**Section**	To add a section
	**Chart**	To add a column, line, or pie chart
	**Other**	To add a bar, scatter, box, radar, tree, heat, or tag chart
	**Tools**	To transform a table into a different kind of table or chart; setting information in the data table as a section
	**Position**	Order allows you to move objects in front or behind other objects; Align allows you to change the relative position of information (see layout area discussion)
	**Linking**	Not supported
	**Table Layout**	Break allows you to add, remove, manage breaks; Insert row or column into the table; Header and Footer add or hide the header/footer of the table
	**Behaviors**	Hide or show a single dimension in the data table; Page Break (only active in page view) inserts or deletes page breaks; Repeat a table, header, or footer on every page

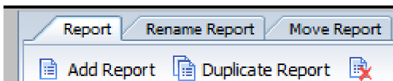
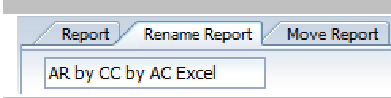
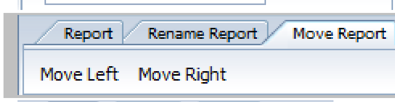
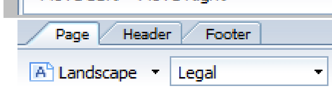
Data Analysis Tab

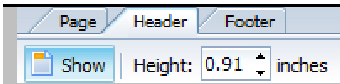
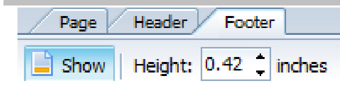
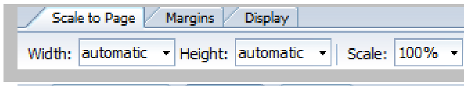
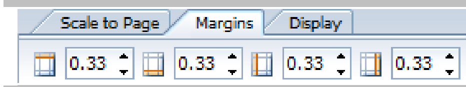
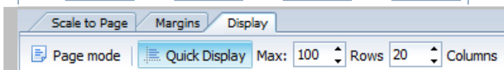
Button	Title	Description
	**Data Providers**	Purge data; refresh the query
	**Data Objects**	Create a new variable based upon dimension, detail, or measure; Merge is not supported

Analysis Tab

Button	Title	Description
	**Filters**	Add, edit, or remove filters on the report; Ranking reduces the amount of returned data; Input Controls create a custom query
	**Data Tracking**	Tracks changes in data from one refresh to the next
	**Display**	Group is not supported; Break allows you to add, remove, manage breaks; Sort allows you to add, remove, or design sorts
	**Conditional**	Not supported
	**Interact**	Drill allows for navigation through the report by hierarchy. This feature only works for some dimensions.; Filter Bar shows the quick filter toolbar; Outline allows user to summarize data
	**Functions**	Insert or remove a formula in a cell
	**Formula Toolbar**	Show or hide formula toolbar

Page Setup Tab

Button	Title	Description
	**Report**	Add a blank report; duplicate the current report; delete the current report
	**Rename Report**	Change the name of the current report
	**Move Report**	Change the position of the current report in relation to other reports
	**Page**	Change the layout of the report (landscape/portrait); change the paper size of the report

Button	Title	Description
	**Header**	Show/hide of the page header; change the height of the page header (ALDER logo, report title, and last refreshed)
	**Footer**	Show/hide of the page footer; change the height of the page footer (page number)
	**Scale to Page**	Controls the width, height, and scale of the page when going to print
	**Margins**	Set or change margins of the report
	**Display**	Changes the display view of the report (page/draft) and the number of rows or columns per page of the report

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
Set	Returns the parent, ancestor, children, or siblings of an object

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:

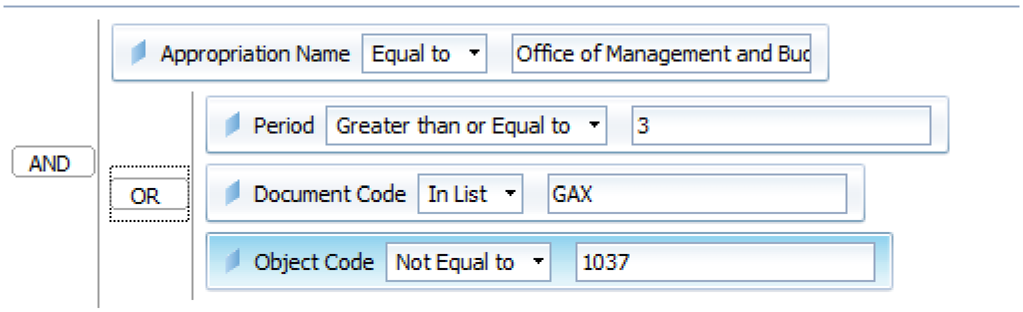
To obtain data...	for example...	Select...		to create the filter...
equal to a value a user specifies,	retrieve data for the US only,	=	**Equal to**	[Country] Equal to US.
not equal to a value a user specifies,	retrieve data for all countries other than the US	!=	**Not equal to**	[Country] Not Equal to US

To obtain data...	for example...	Select...		to create the filter...
greater than a value a user specifies,	retrieve data for vendor invoice number over 60,	**>**	**Greater than**	[VL Vendor Invoice Number] 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"
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.
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	$>x$	Display the minimum value of the selected data.
Maximum	$<x$	Display the maximum value of the selected data.
Percentage	$\%\Sigma$	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.
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 (self-paced)	• 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
Interactive users	ALDER 101 (self-paced)	• 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
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 prior to being deployed • Develop agency-specific ad-hoc reports	ALDER 101
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