

Using Smart View UGA Budget Management System



website: onesource.uga.edu email: onesource@uga.edu service desk: 706-542-0202

Agenda

- Introducing SmartView
- Installing and Setting Up SmartView
- Understanding the Database
- Terminology and Concepts
- UGA Dimensional Models
- Logging Into Smart View
- Creating an Ad Hoc Report
- Symmetric vs Assymetric Reporting
- Hiding and Docking the POV
- Customizing the Quick Access Toolbar
- Using What You Have Learned
- Wrap-Up

Objectives

When you complete this course, you will know how to:

- Setting up Smart View
- Understand basic terminology and functionality
- Log in to Smart View
- Create an Ad-Hoc analysis
- Use Smart View tools
- Work with Smart View grids

*Instructions for installing Smart View are found in the Online Training Library

Introducing Smart View

Using Smart View for the UGA Budget Management System



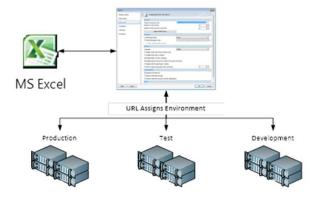
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Overview

- Smart View is based on Microsoft Excel to provide an interface for Oracle Hyperion products
- Users use Smart View to
 - View Data from the UGA Budget Management System
 - Import Data to the UGA Budget Management System
 - · Model budget data
 - · Report on budget data
- Smart View works with Excel, Word, and PowerPoint

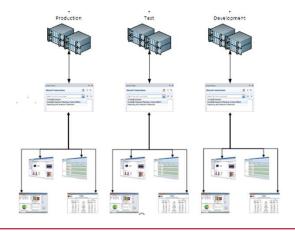
How Smart View Works

 Connects via a URL that points Excel to different environments



How Smart View Works

- Uses a Provider Service to talk to an application
- The user selects the application based on security

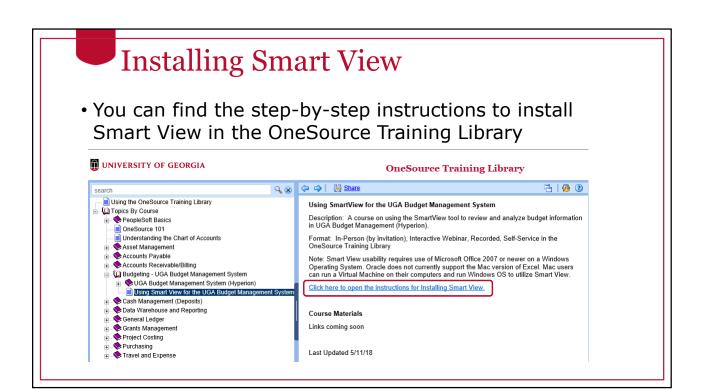


Installing and Setting Up Smart View

Using Smart View for the UGA Budget Management System

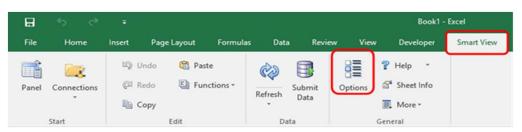


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Setting Up Smart View

 This will add a new Smart View Ribbon when you open Excel



Click on the Options tab to set up Smart View

Smart View Shared Connections

- Shared Connections are used to point Smart View to the correct environment URL.
- This will point to the production environment. Enter the production URL on the Options > Advanced page.

Shared Connections

- Choose the Advanced option in the Options dialog box to set up Shared Connections
- Shared connections points Smart View to the production environment for retrieving data
- The production environment URL is: https://budgets.onesource.uga.edu/workspace/SmartViewProviders



Understanding the Database

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The Database Layer

- Smart View is used primarily to retrieve data
- It is helpful to understand the database structure to understand how data is retrieved
- The UGA Budget Management System is based on a multidimensional database

Relational Database

- A relational database is a collection with data stored in rows and columns
- When new data is added a new row is added at the bottom
- Each time you search for data, the system scans the table starting at the top

Expense Account	Department	Month	Amount
Travel Expenses	IT	Jan	69155.85
Salaries	Marketing	Jan	10914.1
Travel Expenses	Marketing	Jan	37299.84
Salaries	IT	Jan	96178.34
Office Supplies	Marketing	Jan	24512.74
Salaries	Finance	Jan	2787.84
Office Supplies	Finance	Jan	48203.75
Salaries	Operations	Jan	200000.71
Office Supplies	IT	Jan	27965.21
Travel Expenses	IT	Feb	73810.82
Salaries	Marketing	Feb	58345.88
Salaries	Finance	Feb	61193.23
Office Supplies	Finance	Feb	64093.03
Office Supplies	IT	Feb	97501.17
Salaries	IT	Feb	40906.58
Travel Expenses	Marketing	Feb	87459.36
Salaries	Operations	Feb	200000.71
Computer Hardware	l IT	Jan	77161.24

Multidimensional Database Data is pulled from the What are my travel expenses in a relational database in the specific department in a specific month **UGA Financial** Month Dimension Management System Data is stored in the UGA Expense Account **Budget Management** Dimension System in a Office Supplies multidimensional database Intersections of data Dimension Data dimensions define data Members storage locations Department Dimension

Terminology and Concepts

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Dimensions

- Dimensions are analogous to PeopleSoft chart fields
- Data is located where the dimensions intersect, the database can easily find and retrieve data
- Examples of Dimensions are:
 - Department
 - Account
 - Year
 - Program
 - Fund
- Dimensions can be thought of as the axis of a report or a question you must answer in Smart View

Dimension Members

- Dimension Members are analogous to PeopleSoft Chart Field Members
- They are the discrete items that make up a dimension.
- Examples of Dimension Members:
 - 20000000 Terry College of Business
 - 1952000- CSCI Computer Science
 - FY18
 - 10000 RI-State Appropriations
- A Dimension member can only belong to a single dimension
- Dimension members can exist at various levels of a hierarchy

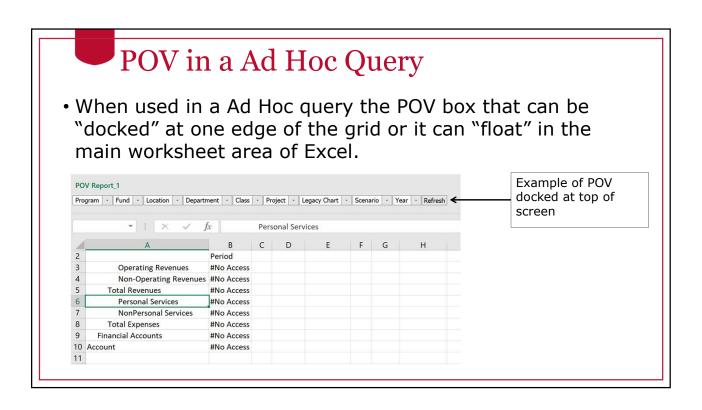
How Smart View Uses Dimensions and Dimension Members

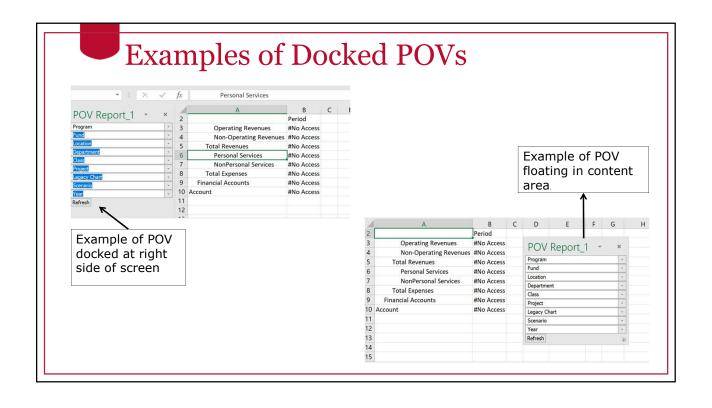
- Smart View is an Excel interface that allows you to arrange dimensions on various axes of reports
- The axes of the report can be moved around to create the layout the user needs
- Dimension members can be selected to determine exactly what data elements are reported
- Dimension members can be easily changed to create an ad-hoc analysis that unfolds as the user learns more about the data

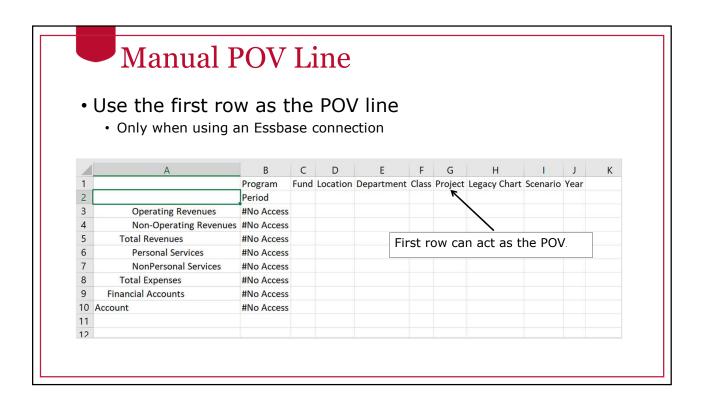
	Rov	ws and Colu	1111118		Year and Per	
4	Α	В	С	D	/E	F/
2			FY18	FY18	FY18	FY18
3			BegBalance	YearTotal	YTD P	Period
4	All Departments	Operating Revenues	1,143,681,248	570,154,685	1,713,835,933	1,143,681,248
5	All Departments	Non-Operating Revenue	s 479,786,748	124,311,828	604,098,576	479,786,748
6	All Departments	Total Revenues	1,623,467,996	694,466,513	2,317,934,509	1,623,467,990
7	All Departments	Personal Services	1,047,237,400	128,492,598	1,175,729,998	1,047,237,400
8	All Departments	NonPersonal Services	570,911,945	565,699,675	1,136,611,620	570,911,94
9	All Departments	Total Expenses	1,618,149,345	694,192,273	2,312,341,618	1,618,149,34
10	All Departments	Financial Accounts	5,318,651	274,240	5,592,891	5,318,653
11	All Departments	Account	5,318,651	274,240	5,592,891	5,318,65
	Entity and Acstacked on th		 Each grid must have at least one dimension on the rows and one dimension on the column You can also stack multiple dimensions 			

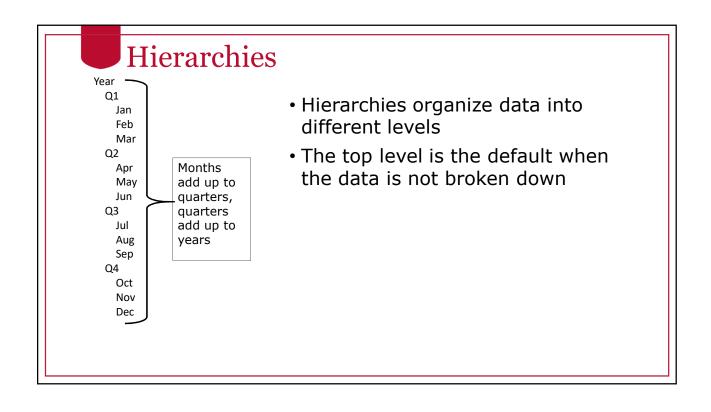
Point of View (POV)

- When you have a grid, the rows and columns represent the X and Y axis
- The Point of View (POV) provides the Z axis that provide the pages of the report
- The POV contains dimensions that don't exist in columns and rows









Drilling

Expanding the Hierarchy Options

- Double-click
- Ribbon options
- Right Click

An example of drilling into the "YearTotal" value to see the quarterly detail underneath.

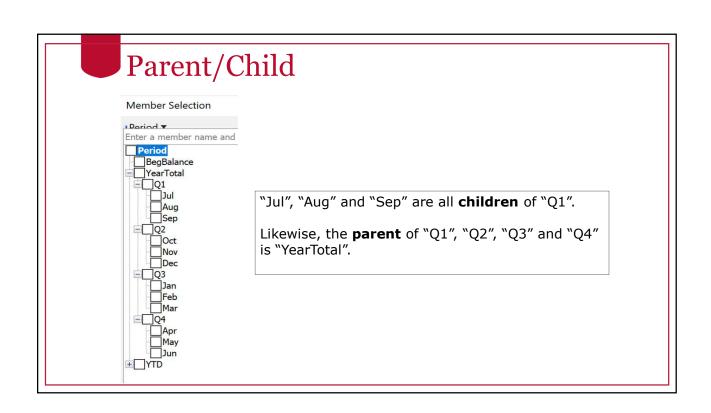
All Programs All Fund Type **Total Revenues** 3 YearTotal 1,391,202,958 All Fund Types All All Programs **Total Revenues** 586903525.5 485047937.4 Q3 319251494.9 6 Q4 YearTotal 1,391,202,958 7 8 9

A Warning About Drilling

- Drilling is a powerful tool for investigating data and find the details that make up data. However as you drill in it is possible to retrieve thousands or even millions of rows of data
- Retrieving too much data into Excel can cause performance slowdowns
- If you accidentally retrieve too much data restarting Excel or your laptop will usually fix the performance issue.

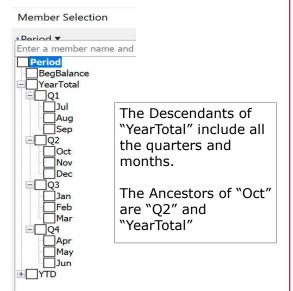
Hierarchy Terminology

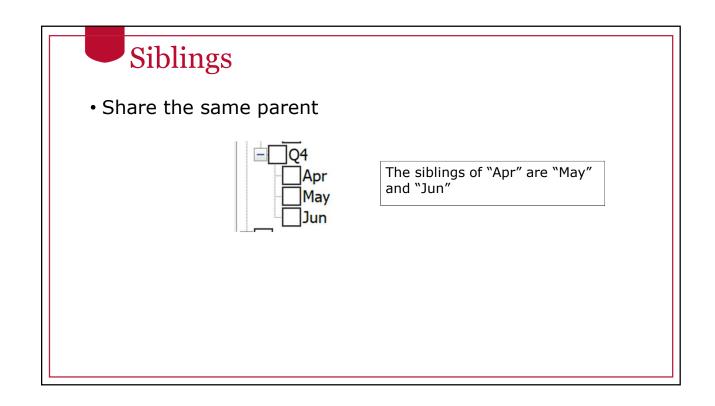
- "Genealogical" or "family tree" language used to describe the positions of dimension members
 - · Parent/Child
 - Ancestor/Descendants
 - Siblings
 - Generation
 - Levels
 - Alternate hierarchies
 - If a dimension contains more than one hierarchy, the first value is referred to as the main or base hierarchy
 - · Any others are called alternate hierarchies
 - If a member appears in a hierarchy more than once, subsequent appearances are called shared members



Ancestor/Descendents

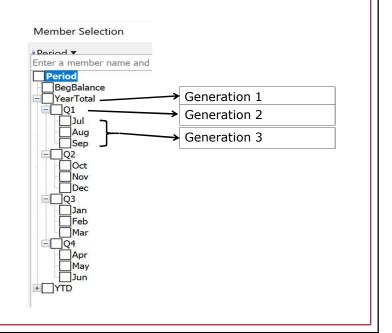
- Extending across more than one level in the hierarchy
- Ancestor: All members above a particular member (includes the parent)
- Descendent: all members beneath a particular member (includes the child or children)





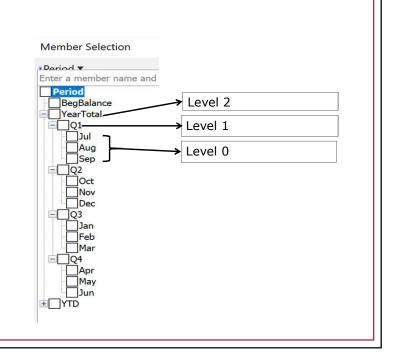
Generation

- A number that represents the distance to the top of the hierarchy.
- The generation number starts with "1"
- A particular member only has one generational number within a hierarchy



Level

- A number that represents the distance up from the bottom of the hierarchy.
- The generation number starts with "0"
- A particular member only has one generational number within a hierarchy



Levels in an Unbalanced Hierarchy

Institutional Departments

Institutional Departments

Institutional Department

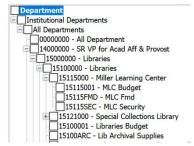
Institutional Departments

Institutional Department

Ins

In this example, "Libraries" is made up of multiple branches of the family tree, "Libraries", "Libraries Materials", "The Press", etc.

If we start at member "15115001" and walk up the hierarchy using the "Libraries" branch, we would count and say that "All Departments" is at level 5



Levels in an Unbalanced Hierarchy

Department

Institutional Departments

All Departments

00000000 - All Department

14000000 - SR VP for Acad Aff & Provost

42000000 - VP for Instruction

42000000 - VP for Instruction - IU

42013000 - Work Study

42006200 - Freshman College

42005004 - CTL Technology Fee

However, if we start at member "42013000" and walk up the hierarchy using the "VP for Instruction" branch, we would count and say that "All Departments" is at level 3.

If you are at Level 0, you are always at the bottom of the hierarchy (also called the "leaf" level)

UGA Dimensional Models

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Cubes Used at UGA

- Report Essbase Application
 - Report Database (11 dimensions)
 - Account
 - Period
 - Program
 - Fund
 - Location
 - Department
 - Class
 - Project
 - · Legacy Chart
 - Scenario
 - Year

- UGABUD Planning Application
 - Personal Database (12 dimensions)
 - Account
 - Period
 - Program
 - Fund
 - Location
 - Department
 - Position
 - Class
 - Project
 - Version
 - · Scenario
 - Year

Logging In to Smart View

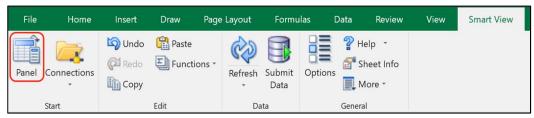
Using Smart View for the UGA Budget Management System



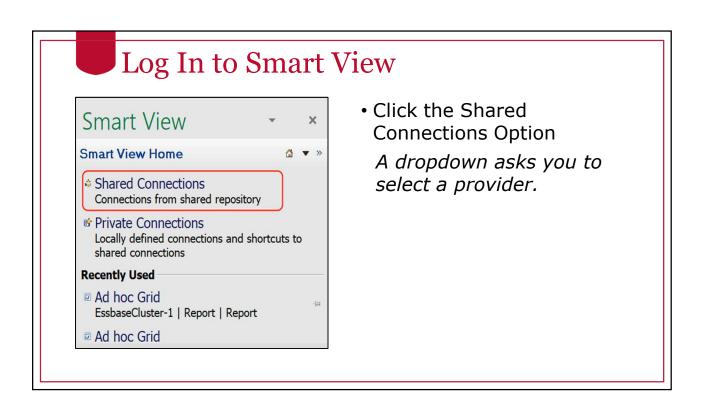
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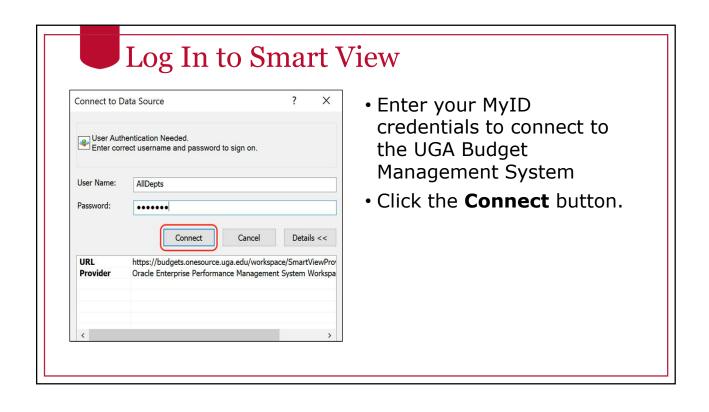
Log In to Smart View

- Go to the Smart View ribbon in Excel.
- Click on the Panel icon.



The Smart View Panel Opens



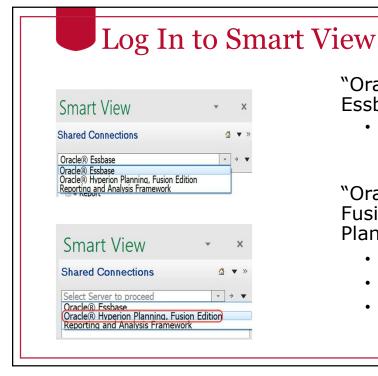




Log In to Smart View

Smart View can identify with different types of applications. You will need to select the database you want. This is the Provider.

• Select the appropriate Provider.



"Oracle Essbase" is the Essbase Provider.

Report Application

"Oracle Hyperion Planning, Fusion Edition" is the Planning Provider

- Personal Application
- Amendment Application
- Budgeting Application (future)

Private Connections Smart View Shared Connections Oracle® Essbase Report Private Connections You Confront You Confront And Private Connections You Confront And Private Connections You Confront Private Connections Free Connections Private Connections Private Connections You Confront Private Connections Private

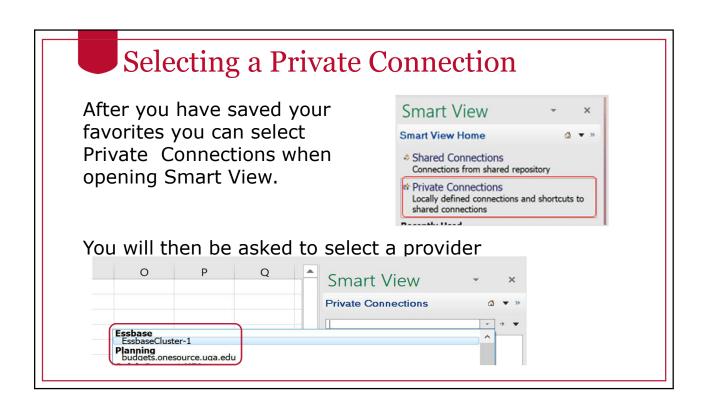
■ UGA Add to Private connections

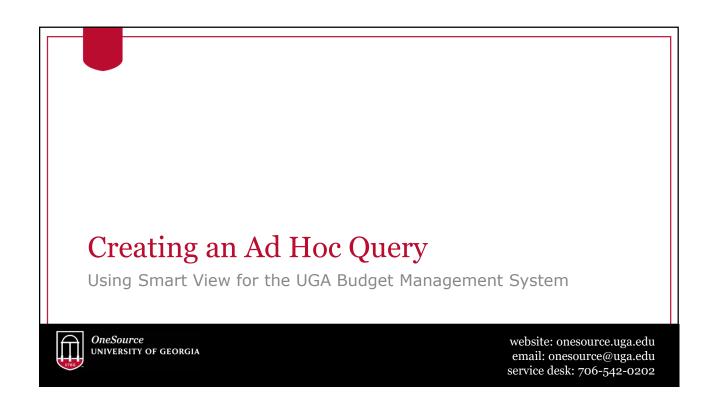
⊕ UGA Connect

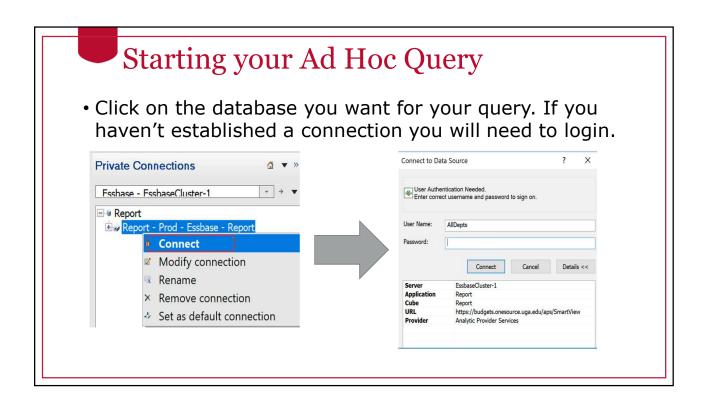
You can create a library of connections that you use frequently.

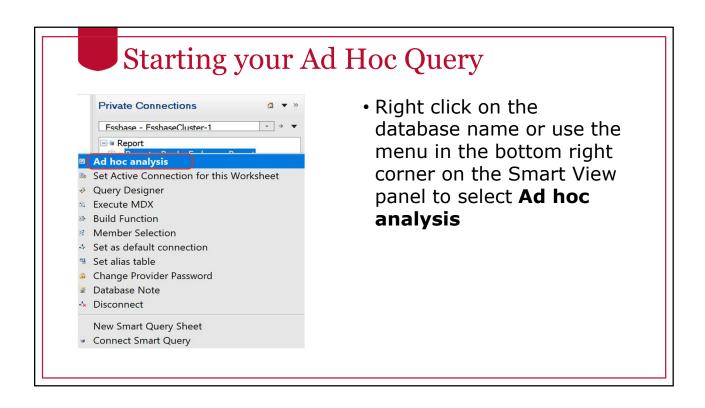
 As you drill down, you can right-click on the database and select Add to Private Connections.

Naming your Private Connection Save as Private Connection Save this connection as private connection. To access the saved connection select Private Connections section. Prod - Essbase - Report Description: Cancel OK Cancel • A good practice to naming your connection is to provide three pieces of information: the environment name, the provider type, and the database or application name.









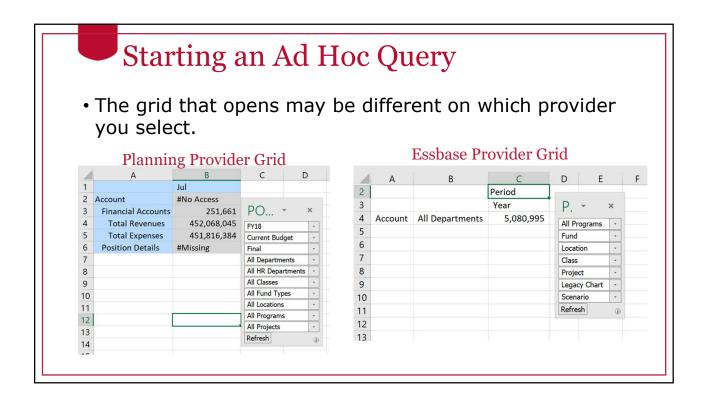
Starting an Ad Hoc Query

 If you select an application your menu will prompt you to select a database.



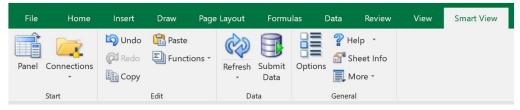


 After you select the database, the ad hoc query grid will open. If there is data from a prior session, you will be asked if you want to clear the contents.

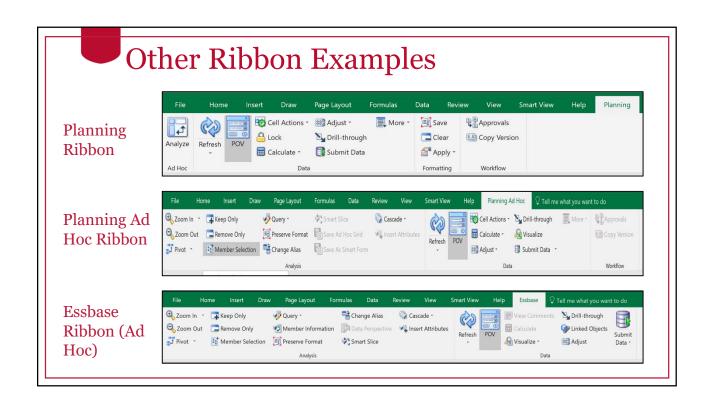


Context Sensitive Ribbons

 Different ribbons are displayed for different types of Ad Hoc Queries. Shown below is the Smart View ribbon.



- After connecting a menu specific to the active connection with all necessary commands for a data source displayed on one ribbon.
- Some commands may appear on more than one ribbon.



Ad Hoc Analysis Tools

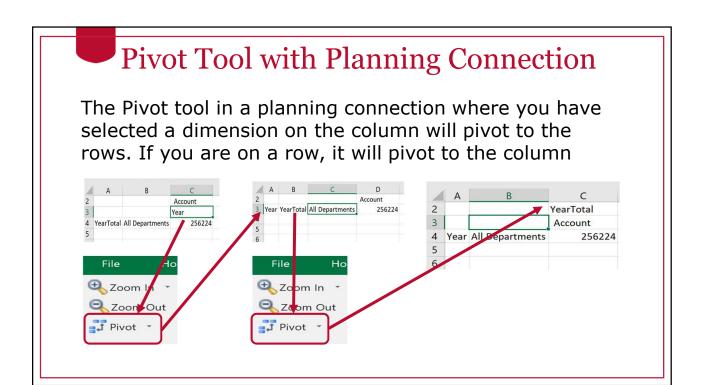
- There are several tools that are helpful in ad hoc analysis. Let's explore the following.
- Refresh
- Submit Data
- Member Selector
- · Zoom In
 - Next Level
 - · All Levels
 - Bottom Level Same Level
 - Sibling Level
 - · Same Generation Level
 - Formula

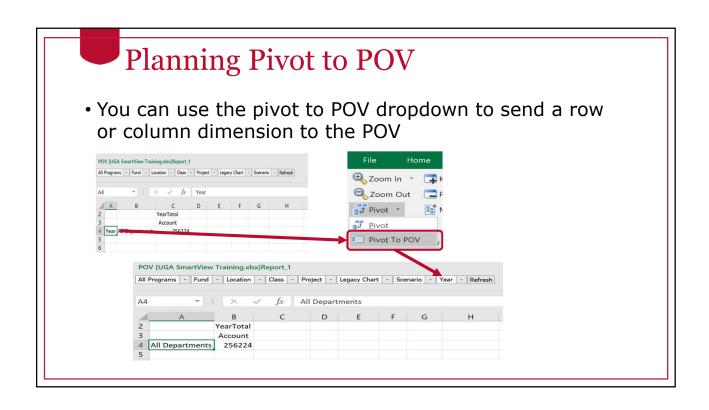
- Retaining Selected Member
- Ancestor Position
- Pivot
 - Planning Pivot
 - Essbase Pivot
 - Dragging and Dropping
- Keep Only
- · Remove Only
- Change Alias
- Cascade

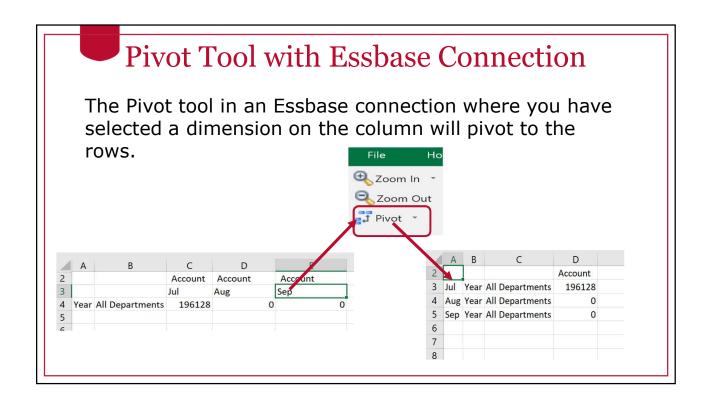
Pivot Tool

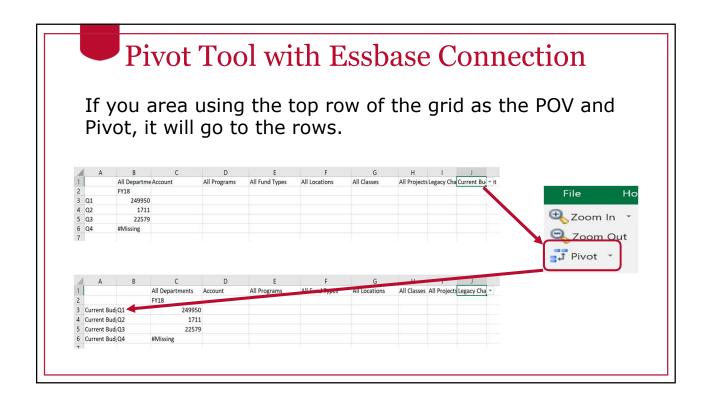
- The Pivot Tool allows you to switch the axis on which a dimension is reported.
- The default behavior of the pivot tool depends on the type of connection you are using.





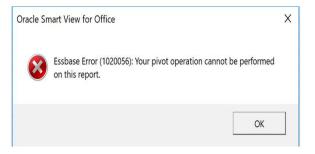






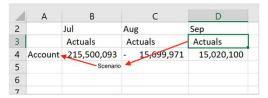
Pivot Tool with Essbase Connection

You must always have at least one dimension on the row and column. If you attempt to pivot with the last dimension on the row or column, you will get the error below:

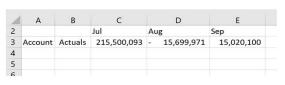


Dragging and Dropping

- You can also change the axis a dimension is on by dragging and dropping.
- For dimensions that are in the rows or columns, right click and hold down to drag and drop.

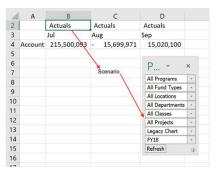


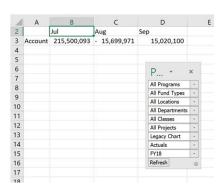
When released the grid will redraw, pivoting the dropped dimension.



Drag and Drop in Essbase

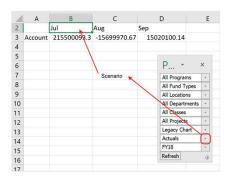
• You can drag from the grid to the POV.

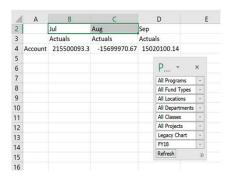




Drag and Drop from POV to Grid

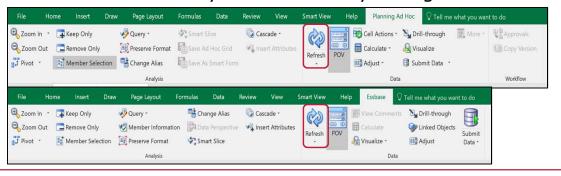
For both Essbase and Planning connections, you can right or left click on the dropdown button next to the dimension name in the POV to initiate the drag from the POV to a grid.





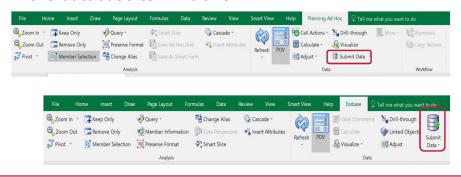
Refresh

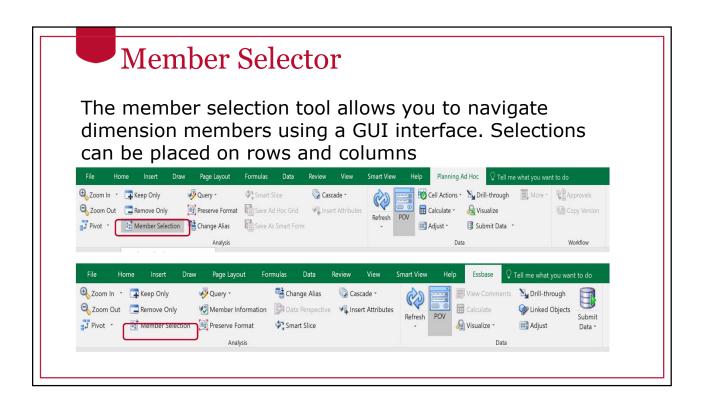
- The refresh button lets you take data from the grid you have defined and pull it into Smart View.
- If you don't have a grid open, it will open a new grid.
- If you have a grid open, data will be imported into that and will overwrite any unsaved data you might have.

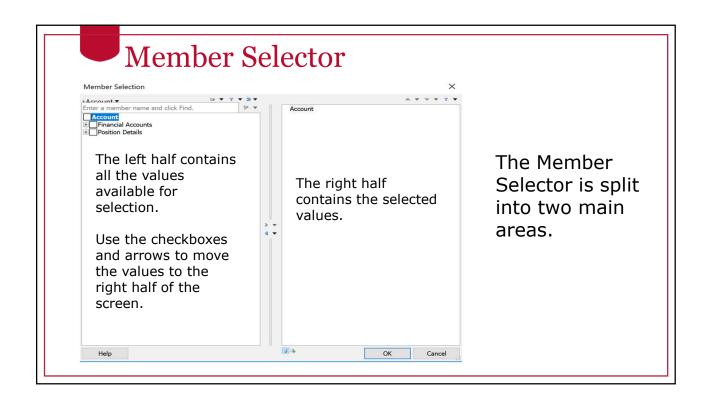


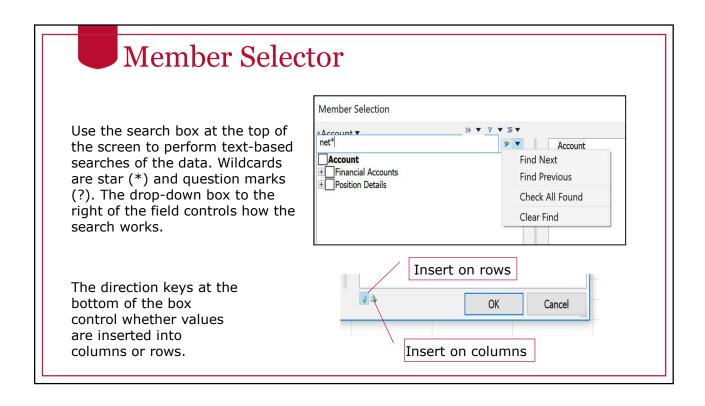
Submit Data

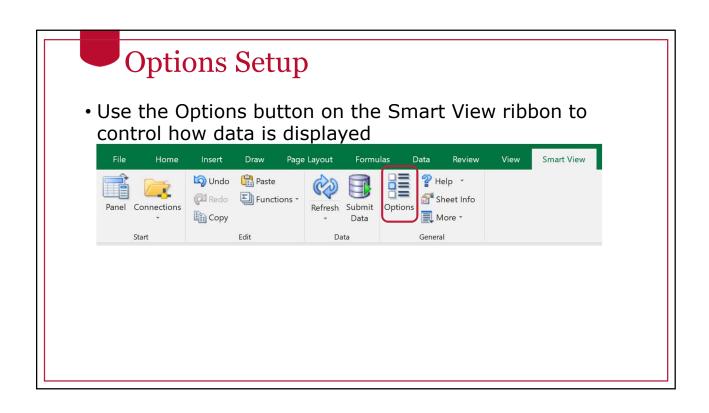
- Submit Data uploads the changes you make to Smart View into the underlying database.
 - You must have write access to the database to do this.
 - Generally, it is better to use planning applications instead of the database to limit this.









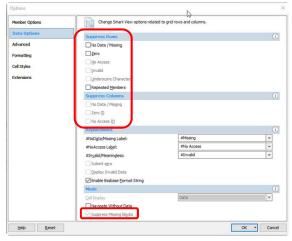


Data Options Set Up

 Choose the Data Options option in the Options dialog box.

Suppression

Smart View has the ability to hide rows and columns of data that are missing. When it does this we say the row or column is "suppressed". This is controlled from the smart view "Data Options" dialog box.

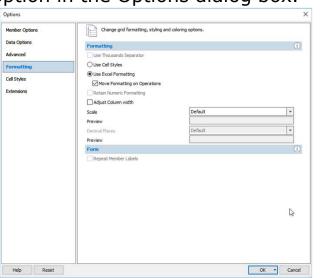


Data Options Set Up

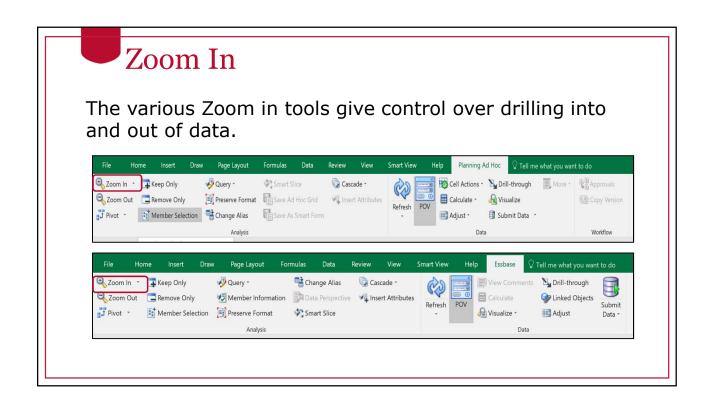
• Choose the Formatting option in the Options dialog box.

Excel Formatting

The easiest way to format data though is to use the normal excel formatting options. To use excel formatting make sure you have the "Use Excel Formatting" and "Move Formatting on Operations" option selected.



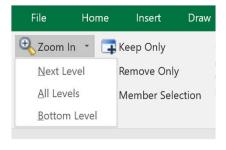
Data Options Set Up • Choose the Data Options tab in the Options dialog box. Change Smart View options related to grid rows and columns. Member Options **Numeric Zero** Advanced ☐ No Data / Missing Zero Another very useful option is the Cell Styles ability to define missing data as Invalid "Numeric Zero". Repeated Members Suppress Columns No Data / Missing No Access (t) #NoData/Missing Label: #NoAccess Label: #Invalid/Meaningless: ☑ Enable Essbase Format String ☐ Navigate <u>Without Data</u> Help Reset OK • Cancel



Zoom In Options

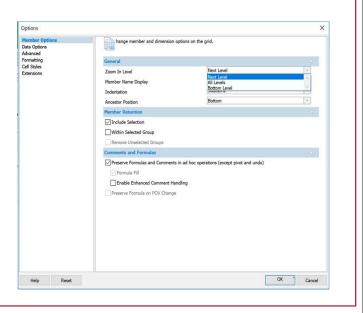
There are several options when zooming into data.

- 1 level down
- All levels
- The bottom level of a hierarchy



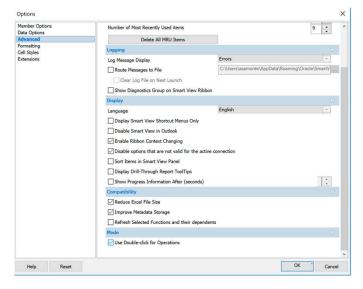
Zoom Behavior

The default behavior is set up on Member Options page of the Smart View options dialog. Select the Zoom In Level option used most often as the default.



Zoom in Option

If you selected "Use Double-click for Operations" on the Advanced options page, the Zoom In Level action you chose on the Member Options page will be performed when you double-click.

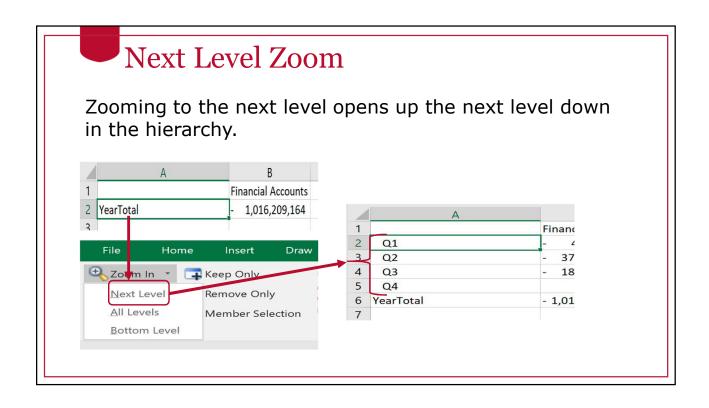


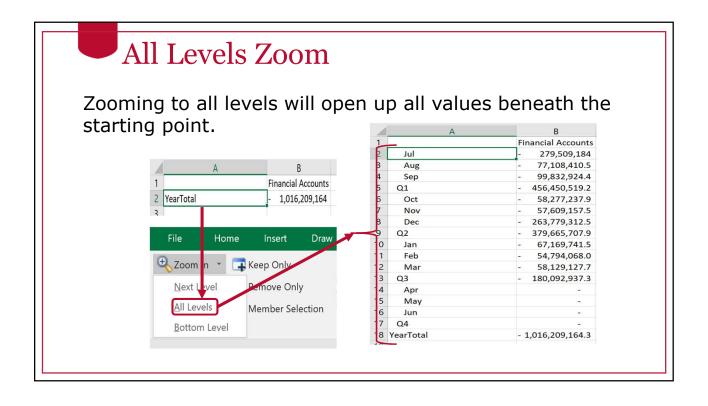
Zoom In Option

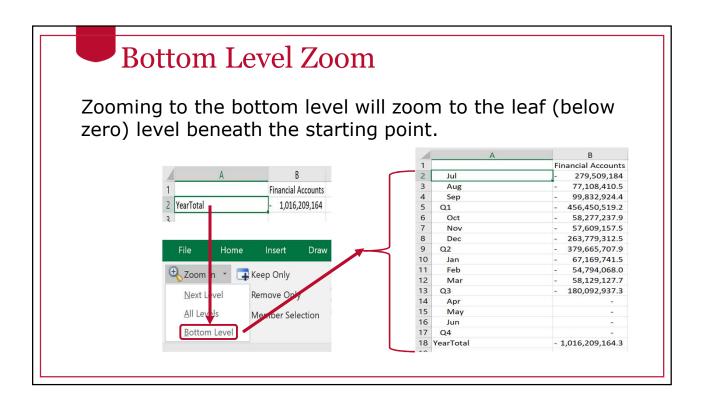
No matter what you choose as the default, you can change the type of zoom using the zoom in drop-down list on the right side of the button in the ribbon.

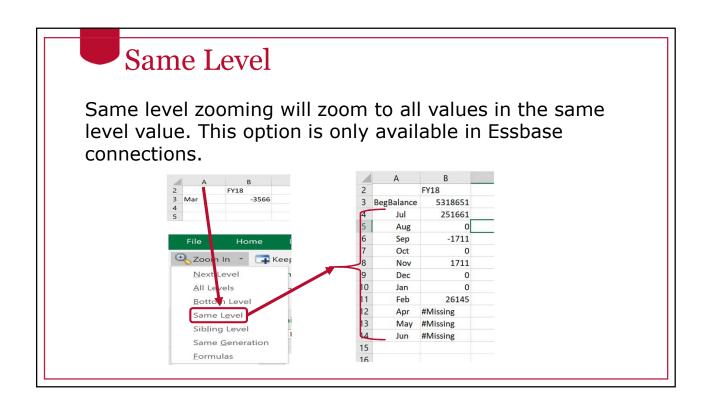
Zooming in is based on a starting point in the hierarchy that is determined by the dimension member currently selected in the grid.

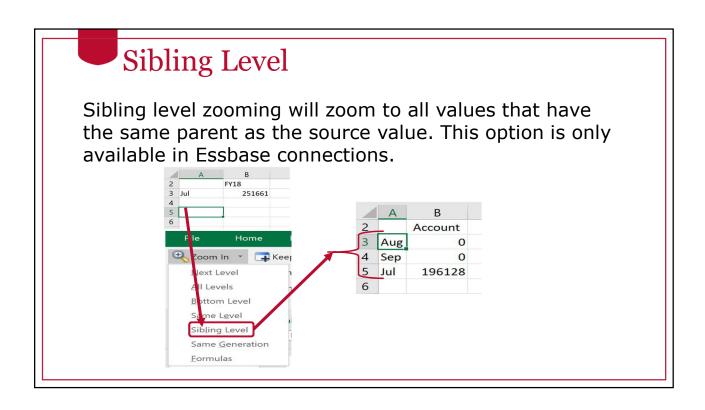


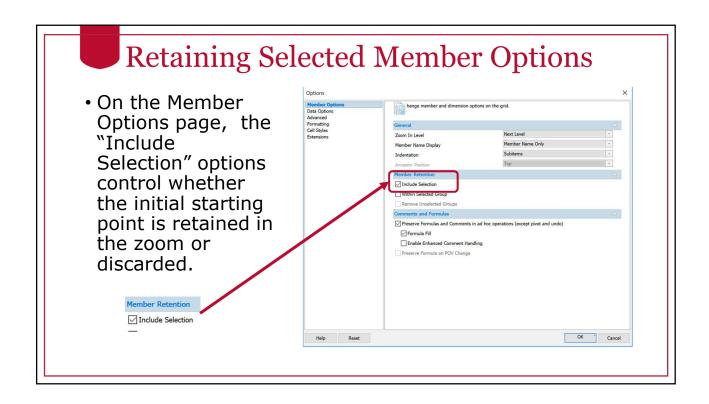


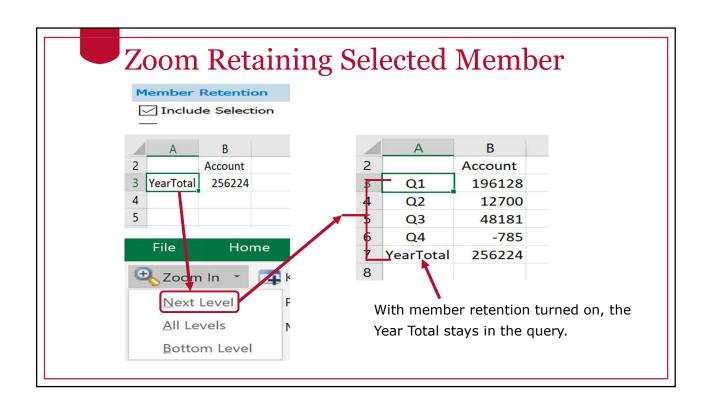


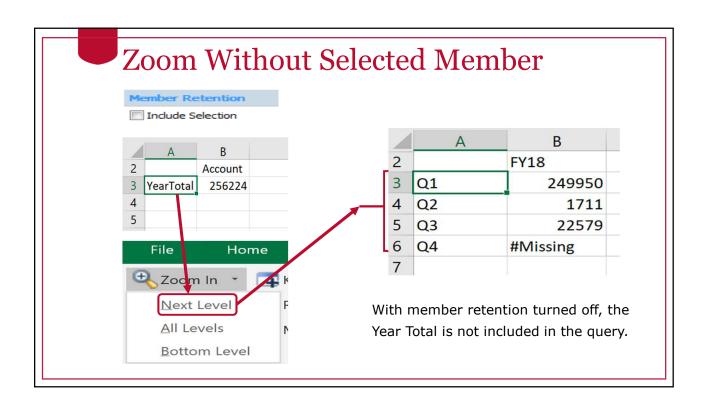








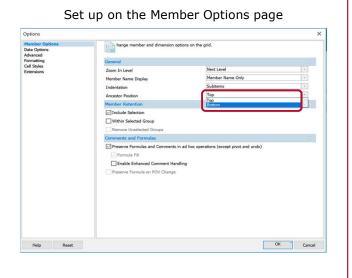




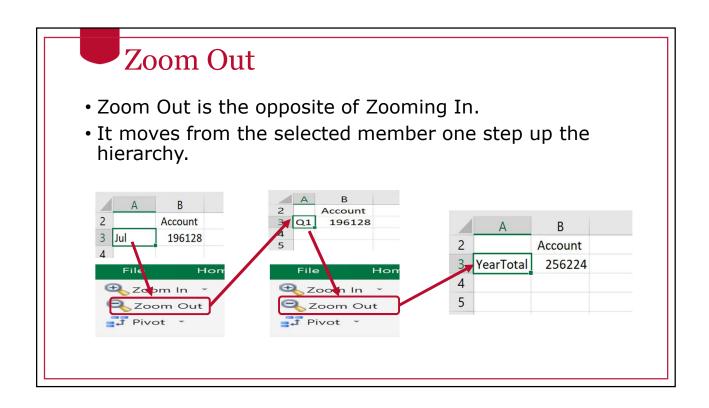
Ancestor Position Options

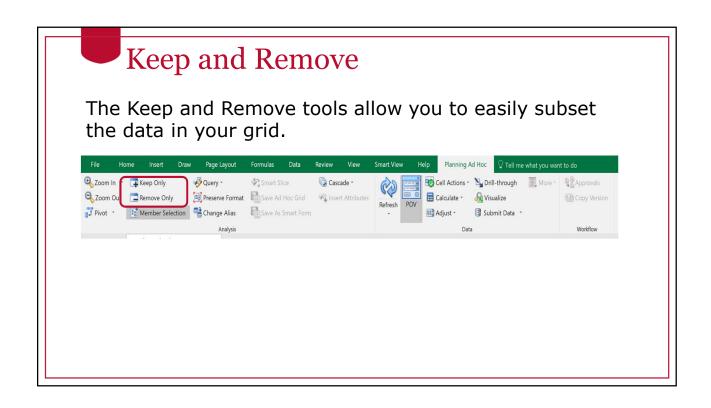
- When zooming into data, you can control how members in the hierarchy are sorted.
 - Ancestors at the top and descendants at the bottom (how database nerds like things)
 - Descendants at the top and ancestors at the bottom (how accounting nerds like things)

*Only for Planning Connections



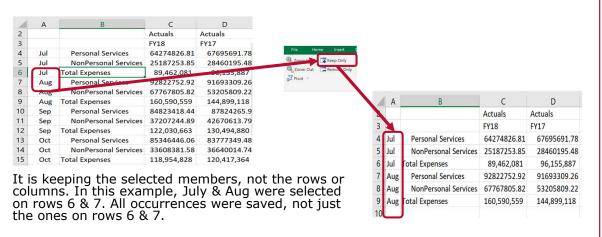
Ancestor Position Examples Ancestor Position = Top Ancestor Position = Bottom В 2 Account Financial Accounts 3 Jul 196128 2 YearTota 1,016,209,164 Q1 456,450,519.2 4 Aug 0 Jul 279,509,184.3 5 Sep O 5 77,108,410.5 6 Aug 196128 6 Sep 99,832,924.4 7 Oct 0 7 Q2 379,665,707.9 8 17700 8 58,277,237.9 Oct 9 Dec -5000 9 Nov 57,609,157.5 10 Q2 12700 263,779,312.5 11 237 Jan 180,092,937.3 11 Q3 1579 12 Feb 12 Jan 67,169,741.5 13 Mar 46365 13 54,794,068.0 14 48181 14 58,129,127.7 Mar 15 -3334 15 04 16 May 2549 16 17 Jun O 17 May -785 18 Jun 19 YearTotal 256224 19





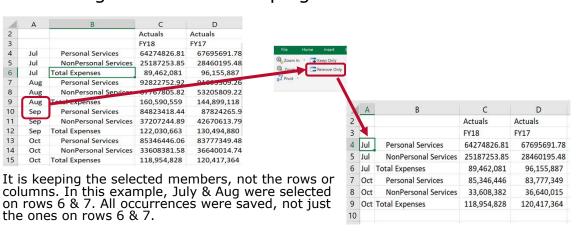


It is possible to select more than one dimension member (use control or shift keys) when using the Keep or Remove option.



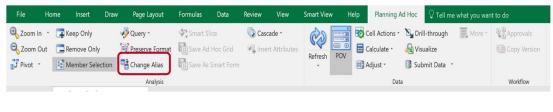


The Remove Only option is similar. It removes values from the grid instead of keeping them.



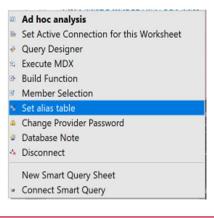
Change Alias

The Change Alias button allows you to control the alias table that is displayed in a grid (or if no alias table is used)



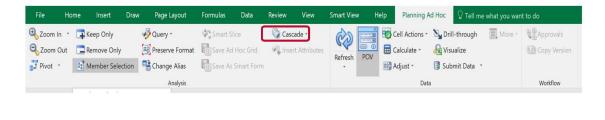
Change Alias

Tip: If you are using a private connection, you can change the default alias table associated with the connection by right clicking on the connection name.



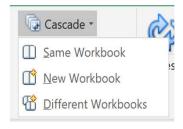
Cascade

Cascade allows you to take any dimension values selected in the POV and expand them out across multiple Excel tabs.



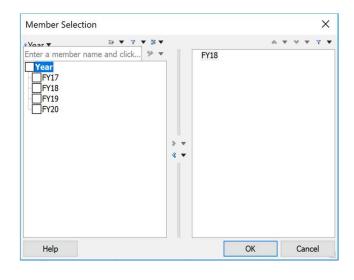
Performing a Cascade Operation

- When performing a cascade operation, it is possible to have the new tabs be in the same workbook, a new workbook or different workbook.
- If you select Different Workbooks, it will open a different workbook for each permutation instead of different tabs.



Using Member Selection

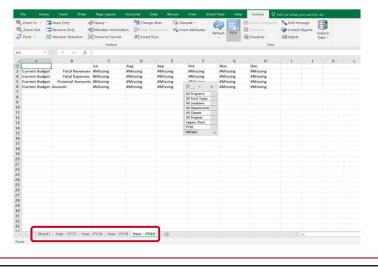
When you open the cascade dialog box, you'll be prompted to choose multiple values for any dimension that exists in the POV. Use the Member Selection tool to select the values you want.



Cascade Results

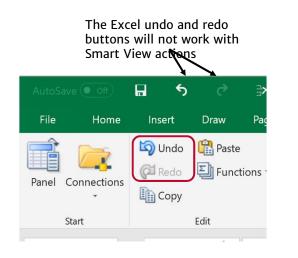
Smart View will create a new tab (or workbook) for each

selected value.

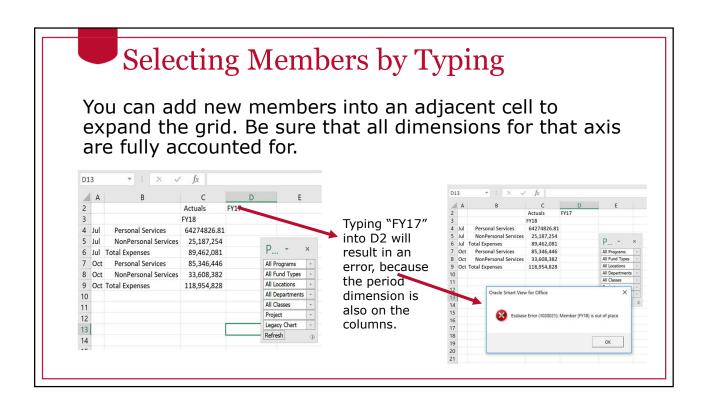


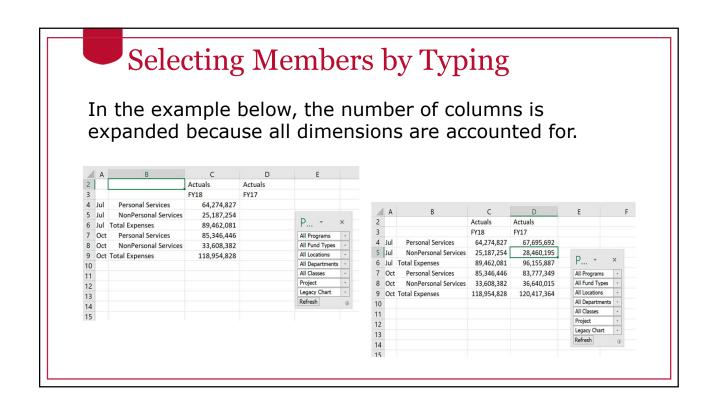
Undo/Redo

- The native Undo and Redo functionality in Excel does not work with Smart View.
- There are separate undo and redo functions on the SmartView ribbon.
- These can undo and redo many tasks.
- These cannot undo a data submission in a data form.



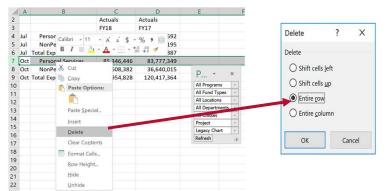
Select Members by Typing If you know It doesn't matter if you the name of a type in the member, you member name or the alias can simply name, Smart type it in the View will detect correct location the correct member and 28460195.48 in the grid. update the grid Then when you 36,640,015 appropriately. 120,417,364 press refresh, the grid will update appropriately.





Deleting Rows and Columns

 Use the normal Excel Delete Row or Delete Column functions to re-draw a grid and refresh. This can be an easy way to remove data.



After deleting the row in Excel and refreshing, the grid will continue to function normally.

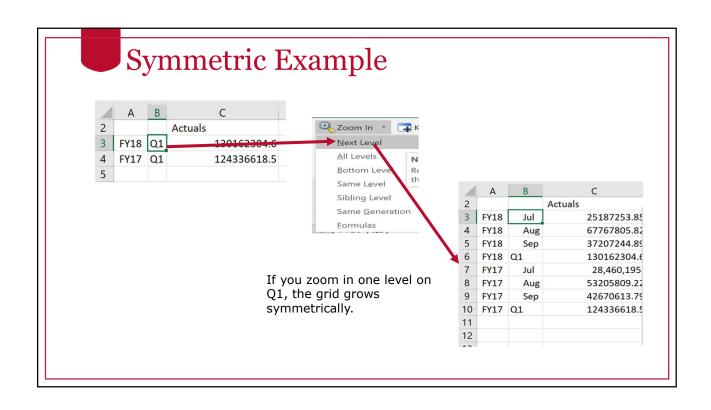
Symmetric vs Asymmetric Reporting

Using Smart View for the UGA Budget Management System



Symmetric vs Asymmetric Reporting

- The default behavior for Smart View is for data to expand symmetrically.
- This means that when there is more than one dimension on an axis, any expansion of one dimension will happen for all permutations of the other dimension members on that axis.



Asymmetric Example

- If you only want to see a select combination of dimensions on the rows, you can manually type in values and delete rows to just retain the values you want.
- Not every member of the first dimension would be associated with every member of the second dimension.

Δ	Α	В		C
2			Actuals	
3	FY18	Jul		25,187,254
4	FY18	Aug		67,767,806
5	FY17	Sep		42,670,614
6				

Hiding and Docking the POV

Using Smart View for the UGA Budget Management System



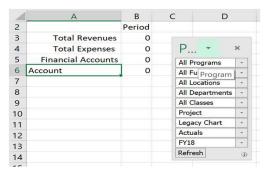
The Floating POV Box

- Use the POV button to display the floating POV box
- You have the ability to either hide or dock the POV box at any time in a Planning or Essbase query.

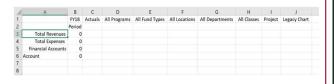


Essbase with Floating POV

Essbase with floating POV



Essbase with 1st Row as POV



You can toggle between having a separate POV box and using the first row of the grid.

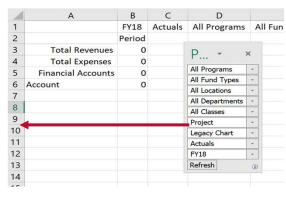
You can only use the first row as the POV on an Essbase connection.

Docking the POV

• Grab the top part of the floating POV with your mouse and drag it to one of the edges of the screen.

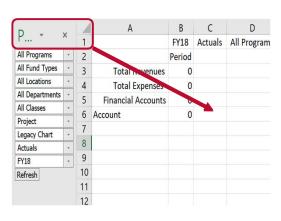
You can dock on the top, bottom, left or right side of

the screen.



Undocking the Toolbar

 Undocking is the reverse. Grab the top of the docked POV and drag it to the center part of the grid



Customizing the Quick Access Toolbar

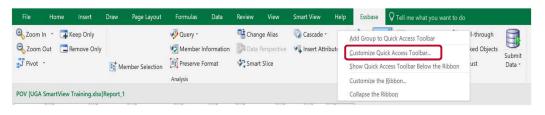
Using Smart View for the UGA Budget Management System



website: onesource.uga.edu email: onesource@uga.edu service desk: 706-542-0202

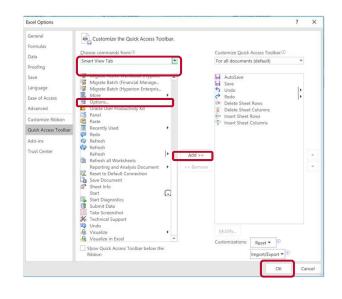
Customizing the Quick Access Toolbar

- Using standard Excel functionality you can customize the Quick Access Toolbar at the top of the Excel screen.
- To start, open the ribbon you want to customize.
- Right-click and select Customize Quick Access Toolbar from the menu that appears.



Customizing the Quick Access Toolbar

- In the Choose commands from field, select the ribbon or All Commands option to find the shortcut you are interested in.
- Select the shortcut to add.
- Click the Add button in the middle.
- When the shortcut is added to the right side, click on OK.

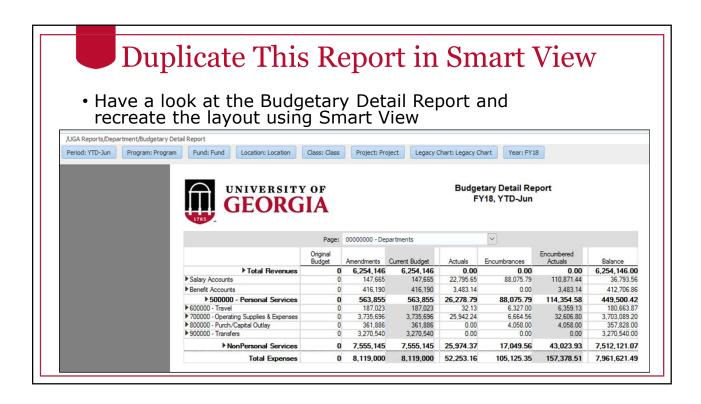




Using What You Have Learned

Using Smart View for the UGA Budget Management System





Wrap Up

Using Smart View for the UGA Budget Management System



website: onesource.uga.edu email: onesource@uga.edu service desk: 706-542-0202

Summary

During this training, you have learned to:

- Configure Smart View to create ad hoc reports
- Understand basic terminology and functionality
- Log in to Smart View
- Create an Ad-Hoc analysis
- Use Smart View tools

Resources

- OneSource Budgeting Resources page
- OneSource website Resources page
- OneSource Training Library: training.onesource.uga.edu

Contact Us

Project Information onesource.uga.edu

OneSource Service Desk onesource@uga.edu 706-542-0202

