# **OBIEE**

## **Oracle Business Intelligence**

## **Enterprise Edition**



## **Rensselaer Business Intelligence** Finance Author Training

## **TABLE OF CONTENTS**

INTRODUCTION 1
User Interface1
How to Launch OBIEE1
Terminology2
How to Navigate
Tools and Menus4
Prompts (drop down lists)
Page Options
Print and Export
Rows Visible (how to view all rows of data)5
Drill to Detail
Add Column
Move Column
Remove Column
Hide/Unhide Sections
Save Current Customization
Clear Customization
Open Custom report
Subtotal
Grand Total
Add Pivot Table Section
Add Pivot Table Prompt
CREATING AN ANALYSIS, QUICK STEPS
CREATING AN ANALYSIS
Tool Icons from the Compound Layout:15
Create Pivot Table15
Browser Settings
Pop-Up Blocker
Mozilla Firefox: Adobe Flash (Shockwave Flash) must be enabled (to view graphics like charts)21
Internet Explorer, Clear Cache22
Contact Information23

## **INTRODUCTION**

Oracle Business Intelligence Enterprise Edition (OBIEE) is a web-based Business Intelligence tool that provides a full range of reporting and analytics capabilities that allow you to:

- Collect up-to-date data from your organization
- Present the data in easy-to-understand formats
- Deliver data in a timely fashion

These capabilities enable better decisions, informed actions, and the ability to implement more-efficient business processes.

There are two different user roles:

- Consumer: Utilize published reports to view and analyze data. Select from predefined prompts (drop down lists) to specify timeframe and data required.
- Author: Utilize published reports to view and analyze data. Ability to create custom, ad-hoc reports and publish the reports for consumers and authors.

#### **USER INTERFACE**

- Web-based application
- Works from all browsers (IE, Chrome, Firefox, Safari)
- Allow pop-ups from rpi.edu

#### HOW TO LAUNCH OBIEE

- Web Application (no installation or special setup required)
- URL: https://obiee.server.rpi.edu/analytics/
- Sign In (RCS User ID and RCS password)

Sign	In
orgri	

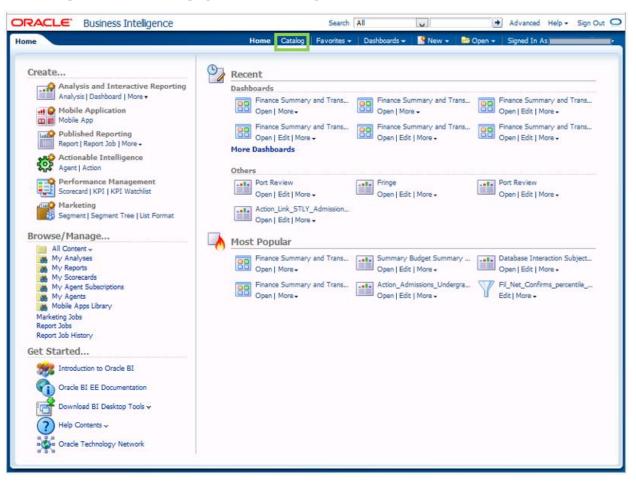
Enter your user id and password.
User ID
Password
Sign In

#### TERMINOLOGY

- **Dashboard:** An object that provides personalized views of corporate and external information. A dashboard consists of one or more pages. Pages can display anything that you can access or open with a Web browser, such as results of analyses, images, alerts from agents, and so on.
- **Analysis:** A query that a user creates on the Criteria tab in Presentation Services. An analysis can optionally contain one or more filters or selection steps to restrict the results.
- **Prompt:** A type of filter that enables the content designer to build and specify data values or the end user to choose specific data values to provide a result sets for an individual analysis or multiple analyses included on a dashboard or dashboard page. A prompt expands or refines existing dashboard and analysis filters.
- **Subject Area:** In an Oracle BI repository, an object in the Presentation layer that organizes and presents data about a business model. It is the highest-level object in the Presentation layer and represents the view of the data that users see in Presentation Services. Oracle BI repository subject areas contain presentation tables, presentation columns, and presentation hierarchies.
- **Fact table:** In an Oracle BI repository, a logical table in the Business Model and Mapping layer that contains measures and has complex join relationships with dimension tables.
  - **Aggregated:** A table that stores precomputed results from measures that have been aggregated over a set of dimensional attributes. Each aggregate table column contains data at a given set of levels. For example, a monthly sales table might contain a precomputed sum of the revenue for each product in each store during each month. Using aggregate tables optimizes performance.
- **Dimension:** A hierarchical organization of logical columns (attributes). One or more logical dimension tables might be associated with at most one dimension.
- **Dimension table:** A logical table that contains columns used by a particular dimension. A dimension table cannot be a fact table.
- **Nightly refresh:** Process where data from source tables (i.e. Banner) is transformed and put into the Data Warehouse database. The data is refreshed every evening.

#### HOW TO NAVIGATE

• Will open to this Home page, select Catalog



• Will open a standard file explorer view

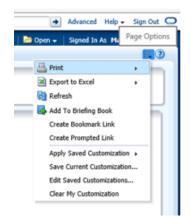
	Search All 🔽 Advanced Help + Sign O Home Catalog Favorites + Dashboards + Sign O - Signed In As	Dut 9
💁 • 🍓 G 🚰 🗰 🖬 •   🗔 🖉 📇 - 🟦 - 💥 🗎		15 (
	Type       All       Sort       Name A-Z       Show More Details         Admissions       Graduate       Last Modified 10/10/2016 3:15:34 PM   Owner weblogic       Expand   More +         Admissions       Graduate       Personal Folders       Last Modified 10/10/2016 3:15:55 PM   Owner weblogic         Expand   More +       Admissions       Undergraduate       Last Modified 10/10/2016 3:02:25 PM   Owner System Account         Expand   More +       Expand   More +       Expand   More +       Expand   More +	^
	Admissions Undergraduate Personal Folders   Last Modified 5/31/2017 8:45:10 AM   Owner System Account Expand   More +     Advancement   Last Modified 4/6/2016 2:28:07 PM   Owner System Account Expand   More -	
Test Reports     Usage Tracking     V     Vase Tracking     V	Advancement Personal Folders   Last Modified 5/25/2016 2:21:22 PM   Owner System Account     Expand   More +	,

#### **TOOLS AND MENUS**

#### Prompts (drop down lists)

- Select one or more values from the drop-down list or
- Type directly into the drop-down box or
- Search for something specific (at the bottom of the drop down list is a search box)
- Select Apply (this will process the report based on what you selected in the prompts)

#### **Page Options**



#### **Print and Export**

- Dashboard (will print or export entire dashboard, all pages)
- Page (will print or export the current page you are on)
- Report (will print or export only the report section you have selected)
- Print
  - o Printable PDF
  - Printable HTML (includes more options for resizing, headers and footers)
- Export
  - o PDF
  - Excel 2007+ (formatted data, totals are static)
  - PowerPoint 2007+
  - Web Archive (.mht)
  - o Data
    - CSV Format (raw, unformatted data, no totals)
    - Tab delimited Format
    - XML Format

#### Rows Visible (how to view all rows of data)

• By default, only a certain number of rows will be visible. If there are additional rows available, you will see the arrows below. Just select the double arrow to view all rows of data.



#### Drill to Detail

• If a field in a report is blue, there is additional detail available. Just click on the field and a new browser window will open.

#### Add Column

- Right click on a column name, select Include Column, then select from the available columns
- Or from compound layout view, drag column into table

#### **Move Column**

- Hover cursor over a column name until you see the double arrow cross icon <
- Then left click to select and drag column below the column name until you see a highlighted area where you want to insert it
- Or from compound layout view, drag column until you see the highlighted area where you want to insert it

#### **Remove Column**

- Right click on a column name, select Exclude Column
- Or from compound layout view, select the more options icon to the right of the column name, then select remove column

#### **Hide/Unhide Sections**

• Select the down arrow at the top left of the section to hide

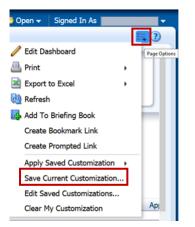
#### Summary by Org & Fund

• Select the right arrow at the top left of the section to unhide

Summary by Org & Fund

#### **Save Current Customization**

• From the Page Options menu (upper right), select "Save Current Customizations..."

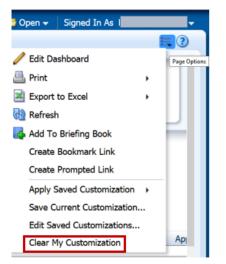


- Then add a meaningful name
- To apply this customization to this dashboard each time you open it, select "Make this my default for this page"



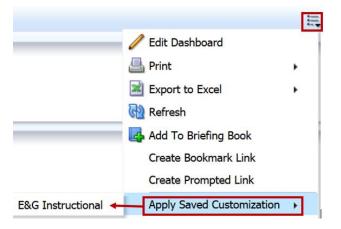
#### **Clear Customization**

• From the Page Options menu (upper right), select "Clear My Customization"



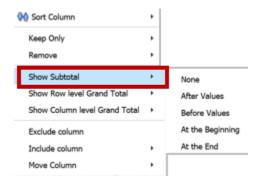
#### **Open Custom report**

- To view reports that have been saved as customizations
- The newly created customization, plus any others you have available to you, will now be accessible from the Page Options menu
- Select "Apply Saved Customization" and select customization from the list



#### Subtotal

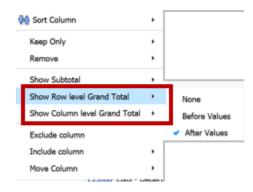
• Right click on a column name, select "Show Subtotal", then select location



• Or – from the compound layout view, select the sum icon to the right of the field and select after

#### **Grand Total**

• Right click on a column name, select "Show Row level Grand Total", or "Show Column level Grand Total", then select location



• Or – from the compound layout view, select the sum icon to the right of the field and select after

#### Add Pivot Table Section

- Hover cursor over a column name until you see the double arrow cross icon
- Then left click to select and drag column above the column name until you see a highlighted area named "Sections"
  - This will move the column above the report



• Or – from the compound layout view, drag the field up to the "Sections"

#### Add Pivot Table Prompt

- Hover cursor over a column name until you see the double arrow cross icon
- Then left click to select and drag column above the column name until you see a highlighted area named "Pivot Table Prompts"
  - This will move the column above the report as a prompt (drop-down list)

Budget Detail			
			Pivot Table Prompts
	Org Fund A	ccount Account Description	Program Level 3 Activity Document Code Document Reference Number

• Or – from the compound layout view, drag the field up to the table prompts section

#### **CREATING AN ANALYSIS, QUICK STEPS**

- From main menu, select New
- Select Analysis
- Select your Subject Area
- Save (Shared Folders, "zz Your Name", add a useful name for the report, add a useful description for your report) (*Tip: save work often*)
- Will open to Criteria Tab
  - Double click or Drag fields from Dimension and Measure folders into Selected Columns section
  - Add Filter (i.e. Fiscal Year, Org, Fund, etc.)
- Select Results tab
  - Add Pivot Table (from the New View icon)
  - Drag fields into rows
  - Drag fields to excluded section if they do not need to be visible
  - Drag fields to prompt section if needed
  - Edit properties and format as needed

#### **CREATING AN ANALYSIS**

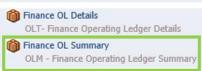
• From main menu, select New

ORACLE: Business Intelligence			Search A	II	~	+	Advanced Help 🗸 Sign Out 📿
Home	Home	Catalog	Favorites 🗸	Dashboards 🗸	New 🗸	눰 Open 🗸	Signed In As 📶

Select Analysis

눰 Open 🗸	Signed In As
nd Interactive	e Reporting
5	
ard	
ard Prompt	
on	
	Den - nd Interactive ard ard Prompt on

Select your subject area (in this example, we will use Finance OL Summary)
 Select Subject Area



• This will open the Criteria tab for a blank Analysis:

ORACLE Business Intell	igence	Search All	× •	Advanced Help + Sign Out 📿
Untitled	Home Catal	og 🛛 Favorites 🗸 📄 Dashboards 🗸	🗸 📔 New 🗸 🛛 🚞 Open 🗸	Signed In As
Criteria Results Prompts Ad	fvanced			
🖂 Subject Areas 🔍 👯 📲	🕎 4i 🛗			
V 🝈 Finance OL Summary	Selected Columns			🤹 🍇 🗋
Account    Activity   Fiscal Period	Double click on column names in the Subject Area column's properties, formula and filters, apply sort	s pane to add them to the analysis. ing, or delete by clicking or hoverin	Once added, drag-and-drop col g over the button next to its na	umns to reorder them. Edit a me.
		Drop Columns Here	<u>.</u>	
<ul> <li>Grant</li> <li>Institute Priority</li> </ul>				
In NACUBO In Organization				
<ul> <li>Organization History</li> <li>Pass Through Sponsor</li> </ul>	✓ Filters			🖓 🗱 »
<ul> <li>Program</li> <li>Sponsor</li> </ul>	Add filters to the analysis criteria by clicking on Filt the Filter pane header. Add a saved filter by clickin	er option for the specific column in t g on add button after selecting its n	the Selected Columns pane, or l ame in the catalog pane.	by clicking on the filter button in
Measures		Add Filters Here.		
🗹 Catalog 🛛 🗞 🏑 🕅				
List All				
Shared Folders				

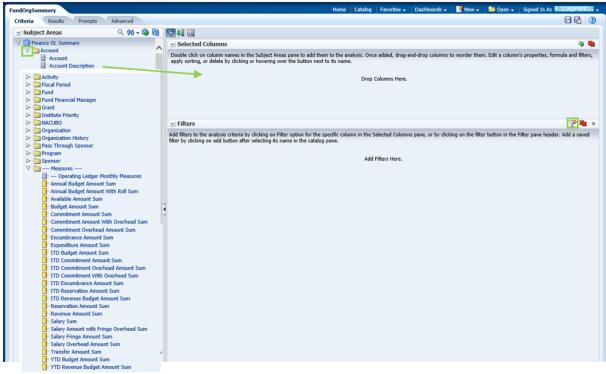
• Save your Analysis now. Select Save icon top right of screen.



- Tip: save your work often
- This will open to allow you to navigate to where you want to save this within OBIEE.
  - Save in:
    - Shared Folders, there will be a folder towards the bottom beginning with "zz", then just open the one with your name, add a useful name for the report, add a useful description for your report Analysis
      - Best practice, save in folder named with report type, in this case, this is an Analysis so save this in the Analysis folder
    - Name: Use a name that makes it clear what the intent of the report is. This will help the folders to stay organized and clear.
    - Description: Clearly describe the report.
    - Note: Shared Folders (My Folders are only accessible to you)

Save As		0 🛛
Folders	ي خ	Save In
	^	/Shared Folders/zz 🔽 🗸 🔯 🔛 🗸
> 🗀 zz (		
⊳ <b>□</b> zz (		
⊳ 🗀 zz ł		
▷ 🛄 zz ł		
▷ 22 I		
> 22 F		
		•
▷ <b>□</b> zz (		-
		Name
		UnrestrictedFundSummary
		Description
		Author training test
	~	
<	>	
		OK Cancel

- Expand Dimension and Measures folders
- Double click or Drag fields from dimension folders to the "Selected Columns" section (these will be your columns)
  - Account: Account Line Category
  - Fiscal Period: Fiscal Year, Fiscal Period
  - Fund: Fund, Fund Description
  - *Organization*: Org, Org Description
- Double click or Drag fields from Measures folders to the "Selected Columns" section (these will be your facts or calculated fields)
  - *Measures*: Budget Amount Sum, Expenditure Amount Sum, Transfer Amount Sum, Encumbrance Amount Sum, Available Amount Sum



- Add a Filter
  - Select the Filter Icon in the Filter Section
  - Select Fiscal Year, then 2018 (select or type)
  - o Select OK
  - Note: if you want to filter on a field that is not in your Selected Columns, just select the "Add More Options" box and you may select a field from the Subject Areas

New Filter				2 🛛
Column	Fiscal Year	12		
Operator	is equal to / is in		~	
Value	2017		×	< 🕶 💏 💌 >
	Add More Options -	Clear All		
Protec	t Filter			
Conve	rt this filter to SQL			
			ОК	Cancel

- Add a Filter directly from a selected column
  - Select the drop down icon on the right of Org
  - Select the Filter icon
  - Then, select an org or type an org

	lumns					
Double click on co	olumn na	mes	in the	Subject	Areas	pane
Account	Organia	zatio	n			
Account 🗮	📄 Org	E,	Or	g Desc	ription	Ξ.
		۲	Sort		٠	
		Ŧ	Edit fo	rmula		
<			Colum	n Prope	erties	
∠ Filters		Ŷ	Filter			
Add filters to the a		×	Delete	Filter	1	opti
saved filter by click	ang on a		Save C	Column		s n

- Note: if a filter is not used, the results will be processed for all data the user has permission to view for the Subject Area of the Analysis
  - If you opened results and don't want to see the data, there will be dialog in the Compound Layout: searching...to cancel, click here



Open Results tab

FundOrgSummary		Home 🛛 Catalog 🔰 Favorites 🗸 📄 Dashboards 🗸 🛛 🎦 New 🗸 🚵 Open 🖌 🛛 Signed In As	
Criteria Results	Prompts Advanced		
<ul> <li>Subject Areas</li> </ul>	오 🚧 - 🚳 🔂 🗋	블 • 全 • 등 💀 • 🐁 행   ♀ • ₽ ↔ 암   ☵ \$2   ☵ \$2   > = \$2	
♥ I Finance OL Summar ► Account		Compound Layout	
✓ Catalog	🐁 🗔 🧷 🚱	Title 🕞 🖉 🗶	
∠ Views	🐁 🔮 - 🥖 😲 💥 👾	FundOrgSummary	
Title			
III Table		1aoe 42 🖬 🖉 🗛	
		Account Org Description Fund Fund Description Fund Home Org Description Account Org Description Fund Home Org Description Description Description Description Category	

- Views contain the objects within the Analysis
  - So far, we have a Title and a Table (data results)
- $\circ$   $\,$  To edit, you may use the toolbars next to Views, or you may use the toolbars in the Compound Layout

#### **Tool Icons from the Compound Layout:**

🔽 Format	View Properties	Edit	× Delete
Format Container  Format Container  Cel Hotschaft (System) Beckground Color Vertical Alignment: Default (System) Border Position Default (System) Border Style Default (System) Border Color  Midth Border Color  Vidth Bight Padding Top Padding Bight Padding CK Cancel	Table Properties     Image: Content paging       Style     Write Back       Data Viewing     Fixed headers with scrolling content       Content paging     Maximum Width       Poels     Maximum Height       Display Folder & Column Headings     With Clubers       Rull Values     Enable alternate styling       Row styling     Enable alternate styling       Master-Detail     Listen to Master-Detail Events       Event Channels     OK	Levolt     Table Prompts     Table     Tabl	To remove from compound Layout view

#### Views Icons (same as Tool Icons plus the following):

Add View	New View	Uplicate View	Rename View	X Delete
To add a view to the compound layout. Select view, then the icon to move the view.	<ul> <li>Best Visualization</li> <li>Recommended Visualization for</li> <li>Title</li> <li>Table</li> <li>Pivot Table</li> <li>Performance Tile</li> <li>Treemap</li> <li>Trellis</li> <li>Graph</li> <li>Gauge</li> <li>Funnel</li> <li>Map</li> <li>Filters</li> <li>Selection Steps</li> <li>Other Views</li> </ul>	To create a copy of an existing view.		To permanently delete view from analysis, not just removed from the compound layout.

#### **Create Pivot Table**

 $\circ~$  Select the New View icon from either the top bar of the compound layout or from the Views Pane

FundOrgSummary	Home   Catalog   Favorites 🗸   Dashboards 🗸   🎦 New 🗸   🔤 Open 🖌   Signed In A	s
Criteria Results Prompts Advanced		- 🖬 🕐
🖂 Subject Areas 🔍 👯 🕷	1 - 13 - 13 - 14 - 14 - 14 - 14 - 14	
	Compound Layout	
🗹 Catalog	Tide 🖓 🥢 🕱	
🗹 Views 🛛 🔩 💽 🗸 🐺 🗶 🛊	FundOrgSummary	
1 Title	Table	
Table Table	iabe 🖓 🖬 🦉 🔺	
	Account Org Description Fund Description Org Description Org	

(	<ul> <li>Select Pivot Table fro</li> </ul>	m the list of options
	Best Visualization	
	l Recommended Visualization for	•
	📥 Title	
	Table	
	🛄 Pivot Table	
	20 Performance Tile	
	📕 Treemap	
	Trellis	•
	🎼 Graph	•
	🗥 Gauge	•
	(D) Funnel	•
	🥶 Мар	
	🕎 Filters	
	Selection Steps	
	Other Views	•

• This will bring you to the Layout pane for the Pivot Table

ORACLE Business Intellige	nce	Search All	~	🛃 Advanced Help 🗸 Sign Out 🖸
FundOrgSummary		Home Catalog Favorites -	Dashboards 🗸 🛛 💁 🖓 New 🗸 🛛 🔤 🕻	Open - Signed In /
Criteria Results Prompts Advance	4			8
✓ Pivot Table ✓ Subject Areas Q. Q	3 0 Ge V Se 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Done Revert
♥     Image: Private OL Summary       >     Account       >     Activity       >     Priscal Period       >     Fund	9 Place Account Line Home Pund Home Org Activity Activity Fund Fund Description Period Period Period 2017 Copial 2041 Media Emerging Priorities 200207 990032			^
Grant	Layout			<b>~</b>
	ag/orp measures, columns and herarchies to determine pivot table layout.			
List Al 🗸 p	ivot Table Prompts 🗵 📾			
> My Folders D Shared Folders	rop here for Pivot prompts			
5	ections 🗵 🏢			
e	rop here for a sectioned Pivot			
Р	ivot Table 🔤			
ł	Roos XI III			
	Organization Piscal Period Account Pund Activity	Fund	Fiscal Period	Account
	Crys Description 🖏 🗵 🗧 Placet Year 🖏 🗵 🔹 Account Line Category 🖏 🗵 🗧 Fund Home Crys 🖏 🗵 🗧 Fund Home Crys 🖏 🗵	E Fund II Fund Desc	cription 🔹 🗵 🗐 Piscal Period 🖏	Account 🖳 🗵 🗎 Account Desc
Ð	xduded			
	Measure Labels			rod Acount
	li,			

- $\circ$  This is where you can modify the presentation of the data and organize it.
- Under Rows, move the fields around in the order you'd like to see the report by simply dragging and dropping. There will be a line highlighted where the field will drop. (Order: Fiscal Year, Org, Fund, Account Category)
- To exclude fields from the table, just drag them to the excluded section (remove activity description)
- Save, then select Done



• This will open to the Compound Layout where you will see the Title, Table, and Pivot Table views (scroll down to see the Pivot Table)

• Turn off "Display Results" while editing in compound layout view (if there are many rows of data, it's helpful to turn off display results so it does not process reports continually)

📇 🟦 😡 -   😲 🚋   🍓	8 8 8 🖩	
		Display Persults
Account Line Category Fiscal Year	Fiscal Period Fund Fu	d Description Org Org Description

#### o Remove the Table view from the Compound Layout

zie								9	6/	3	1
und Or	rg Summary							<b>G</b> 8			
Account	Org Description	Fund	Fund Description	Fund Home Org	Fund Home Org Description	Account Description	Account Line Category	Activity Description	Acts	1	Remove View from Compound Layout
001	Enterprise Information Services	130000	E&G - Departmental Non-salary		Enterprise Information Services	Office Operations Supplies	NonSalary	Emerging Priorities & Necessary Act	2002	^	

- Now you will just have a Title and Pivot Table view
- o Edit Title view

Compound Layout	
Title	· · · ·
Fund Org Summary	

• Change font size, bold, and center

- Edit Pivot Table properties
  - As you can see, in order to see all columns in the pivot table, you must scroll. Select Content paging (this will auto-fit columns on the page)

Pivot Table Properties	0 🛛
Data Viewing	Fixed headers with scrolling content     Content paging
	Paging Controls Bottom
	Rows per Page
Display Folder & Column Headings	Only column headings \vee
Null Values	Include rows with only Null values
	Include columns with only Null values
Row styling	📃 Enable alternate styling 💹
	Alternate Innermost Column 🗸
Master-Detail	Listen to Master-Detail Events
	Event Channels
	OK Cancel

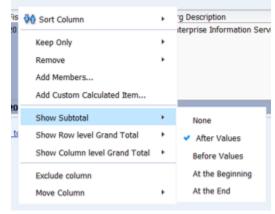
- Save
- Add Prompt to Pivot Table
  - Edit Pivot Table
  - Drag Fiscal Period up to the Pivot Table Prompts section
     Drag/drop measures, columns and hierarchies to determine pivot table layout.

Pivot Table Prompts	
Fiscal Period	
Eiscal Period	

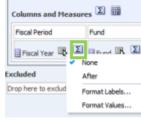
- Save, select Done
- You will now see a drop down list at the top of the Pivot Table view for Fiscal Period

Pivot Table				
Fiscal I	Period	01	~	_
Fiscal		01		
Year	Fund	02		Des
2017	Auxilia Servic	03		8.
	Enter	04		ati
		05		
		06		
		07		
		08		
		09		
		10		
		11		
		12		
	1			-

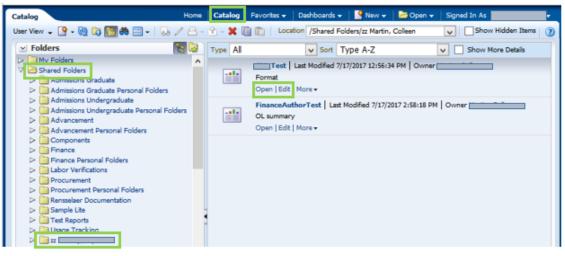
- Add subtotal for Fiscal Year
  - Right click on Fiscal Year Column, select Show Subtotal, then select After Values



- o Save
- OR:
  - From the compound layout view, Edit Pivot Table
  - Select the Sum icon to the right of the fiscal year field:

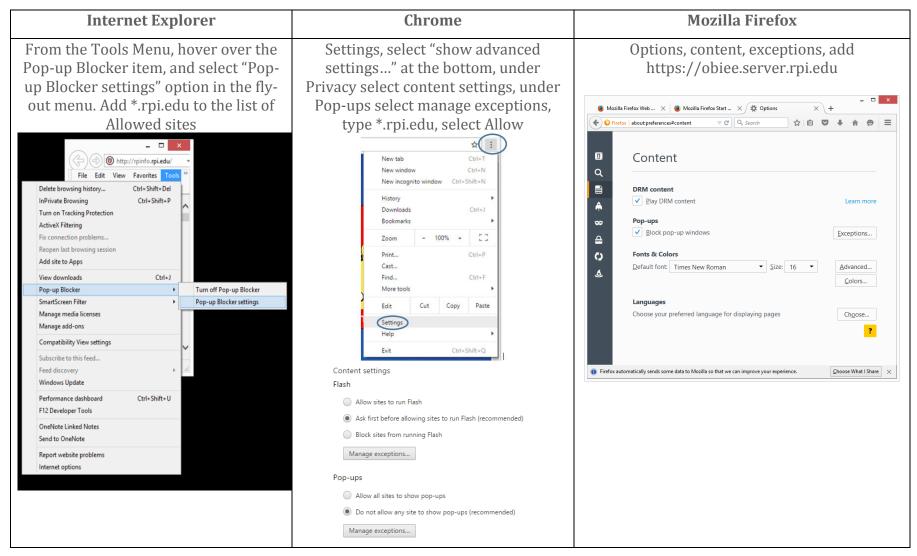


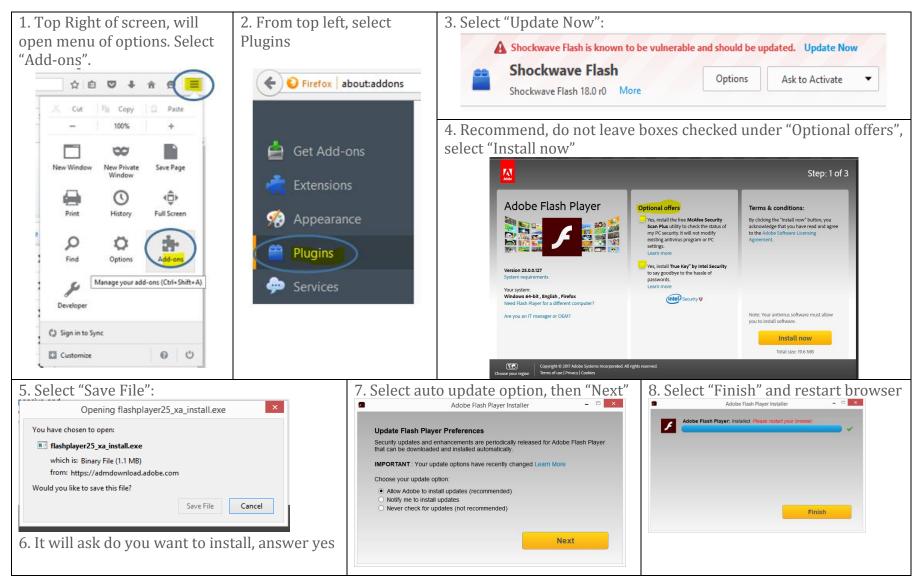
- Then select "After"
- To find your Analysis:
  - Catalog, Shared Folders, folder towards the bottom beginning with "zz" then your name
  - You will see your analysis with options to Open or Edit



#### **BROWSER SETTINGS**

#### **Pop-Up Blocker**

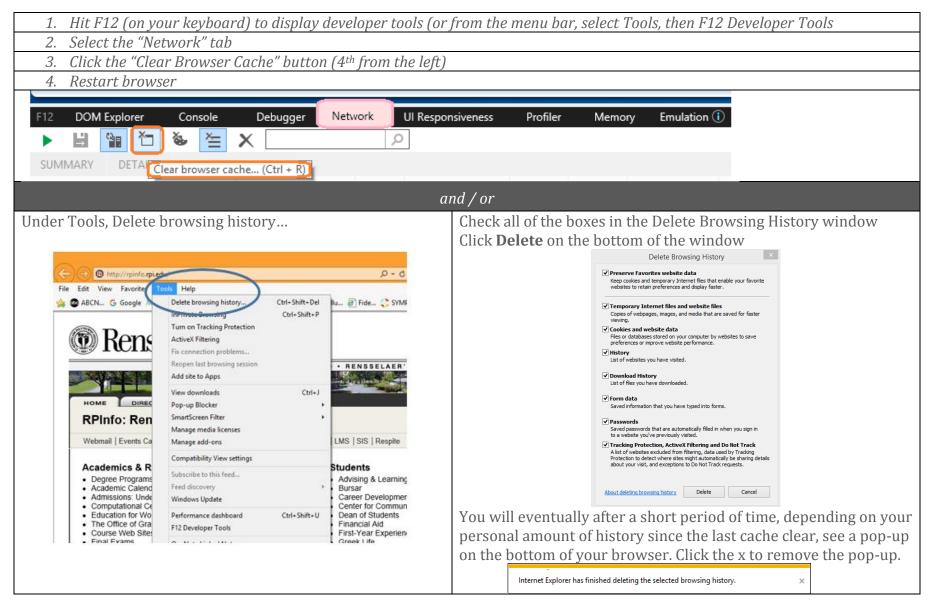




#### Mozilla Firefox: Adobe Flash (Shockwave Flash) must be enabled (to view graphics like charts)

#### **Internet Explorer, Clear Cache**

(If menu in isn't visible or there is no content, in IE, the cache may need to be cleared)



### **CONTACT INFORMATION**

If you have any questions or comments, please E-mail the data warehouse group: Email: Data Warehouse Support <u>iacs-dw-sup@lists.rpi.edu</u>

NOTES