Budget Tool: Reporting Guide

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Accessing Reports

About the Budget Tool Reports

The Budget tool offers a series of reports that allow users to review and analyze their Budget Development, Budget Modifications, Projections, and Workflow data. In addition, the tool provides a link to archived BPS reports as reference to the prior year's budget.

There are two basic types of report formats:

- **SAP Business Warehouse (BW) Reports** = indicated by a  symbol beside the report link, this type of report provides BW functionality for different ways of viewing the data (filters, click and drag features, etc.).

- **Reports with Comments (Crystal based)** = indicated by a  symbol beside the report link, this report has a presentation quality format for printing and presenting as needed. These reports typically provide the Comments entered in various layouts.

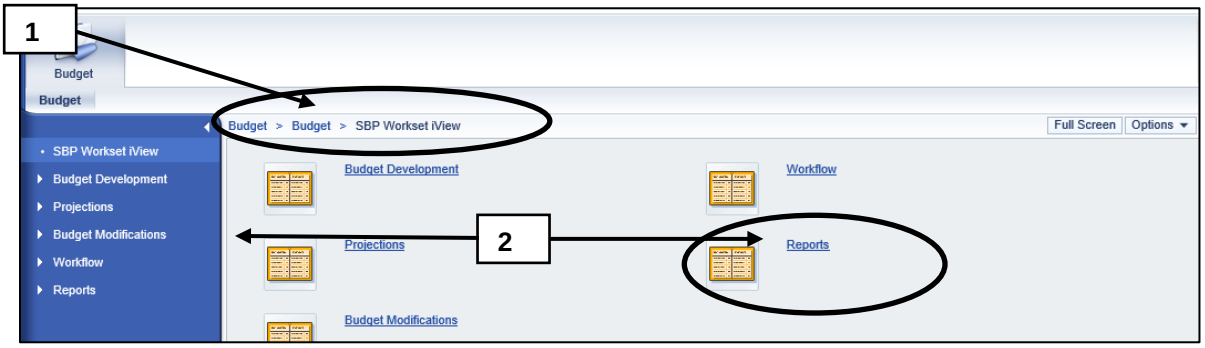
Accessing the reports is the same. However, the steps for selecting the criteria and generating a report are different between the SAP Business Warehouse (BW) based reports and reports with comments (Crystal based).

This guide covers the steps related to both types of reports.

Accessing Reports (cont.)

General Steps for Accessing All Reports

1. Access the Budget tab in Duke@Work as follows:
   - Log into **work.duke.edu** (do Not type in http://www.).
   - Click on the **Budget** tab.



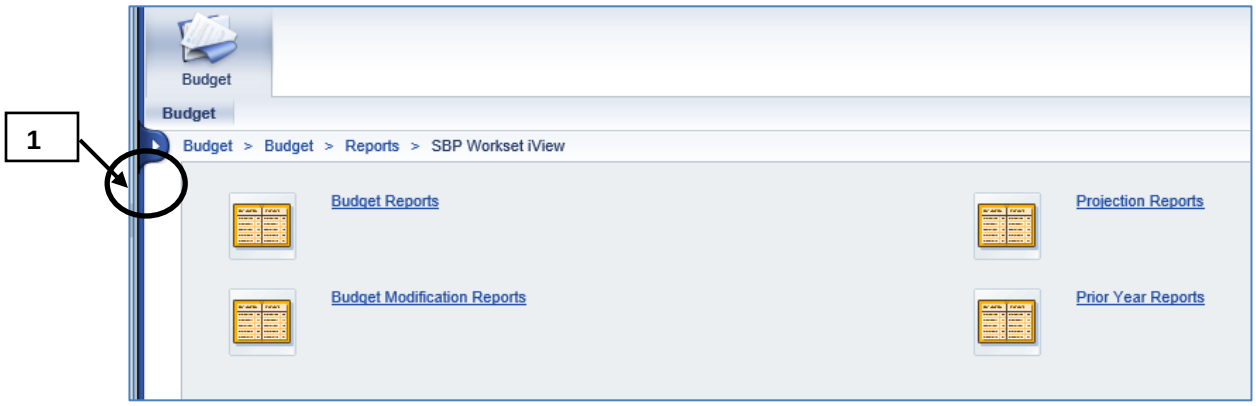
2. Once on the Budget tab, use either method to navigate and access a report, as follows:
   - Click on the underlined link for **Reports**.

     OR
   - In the left ***Detailed Navigation*** pane, click on the **Twistee** icon beside **Reports** and continue to use the Twistee icons to locate the desired report.

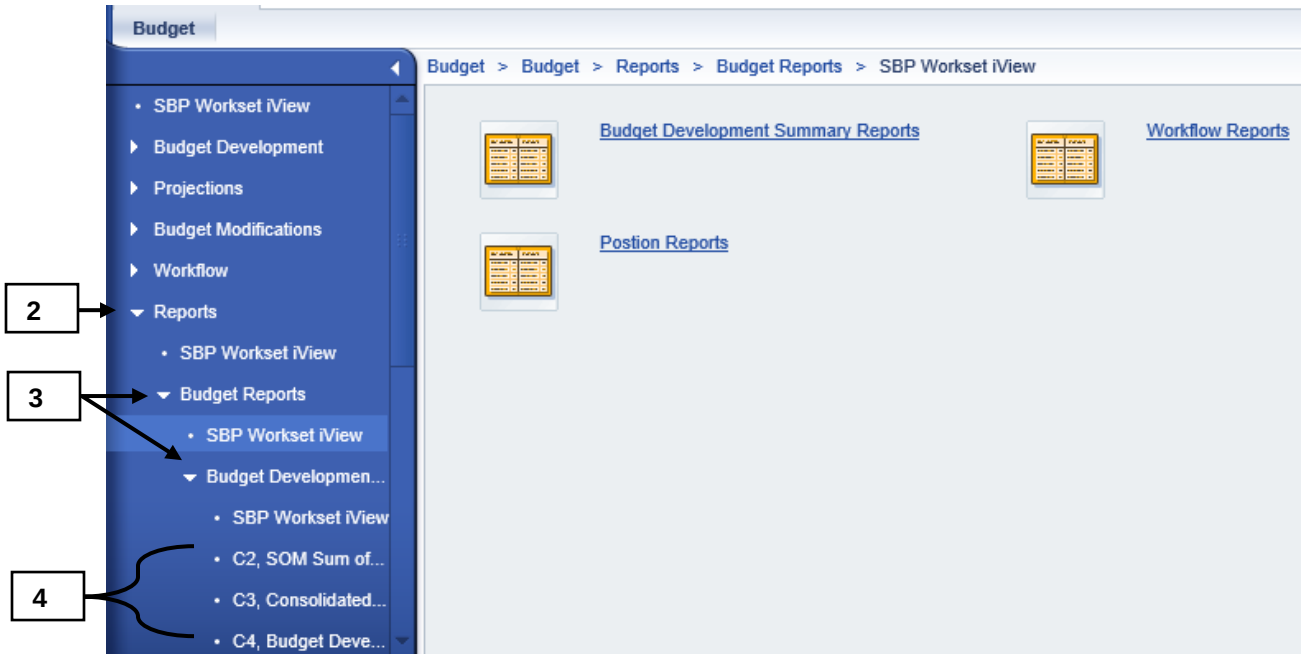
   Note: Both methods are outlined in the next steps of this guide.

Accessing Reports (cont.)

Using the Detailed Navigation Pane



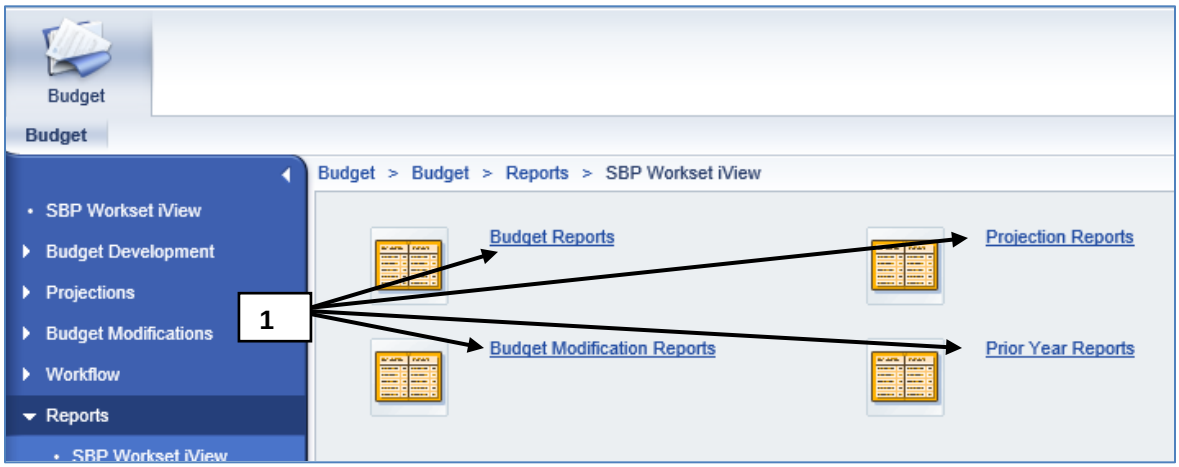
1. If the Detailed Navigation pane is not showing on the left side of the screen, use the **Expand navigation pane** (right arrow) icon to open the pane.



2. Use the *Detailed Navigation* (on left) and click on the **Twistee** icon beside **Reports** to open that folder
3. Continue to click on the Twistee icons to open the report types to open those folders, for example Budget Reports.
4. From the list, **click on the report title** to select the desired report (a screen will open with fields for report selections).

Accessing Reports (cont.)

Using the Underlined Links



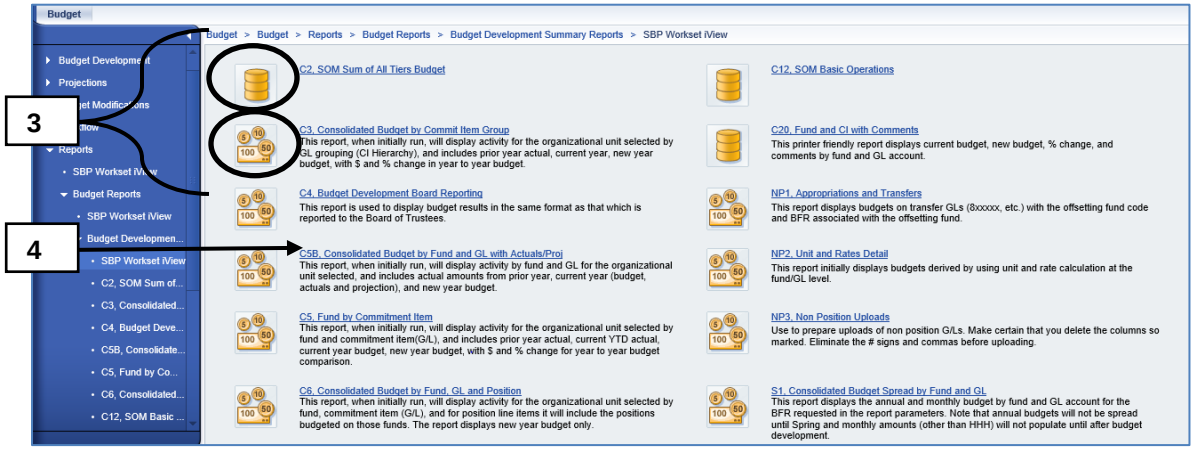
1. Once you've clicked on Reports from the Budget home page, click on the desired **underlined name link for the type of the report** as follows:

   - **Budget Reports** – summarized reports for Budget Development of Non-Position, Position Reports, and Workflow Reports used to analyze the data entered for the new year's budget.
   - **Budget Modification Reports** – reports to analyze the data entered for budget modifications as needed.
   - **Projection Reports** – reports to analyze the data entered for Fall, Spring, or Working Projections as needed.
   - **Prior Year Reports** = archived reports to use as reference to the prior year's budget.

   Note: The examples shown in the guide are for Budget Development Reports.

Accessing Reports (cont.)

2. Continue to click on **the underlined link for the type of desired reports – choices will vary by type of report chosen in the last step** (in this example, the choices are Budget Development Summary Reports which includes Non-Position reports, Position Reports, and Workflow Reports).



3. Review the reports listed with brief descriptions and notice the icon:

   -  = **SAP Business Warehouse (BW) based reports** provide functionality for different ways of viewing the data (filters, click and drag features, etc.).

   -  = **Reports with Comments (Crystal based)** provide a presentation quality (PDF) format for printing and presenting as needed, and typically provide comments.

4. Select the desired report by clicking on the underlined title (a screen will open with fields for report selections).

   *Note: If prompted by a security message, click **Yes** to continue to the next page.*

Business Warehouse (BW) Based Reports

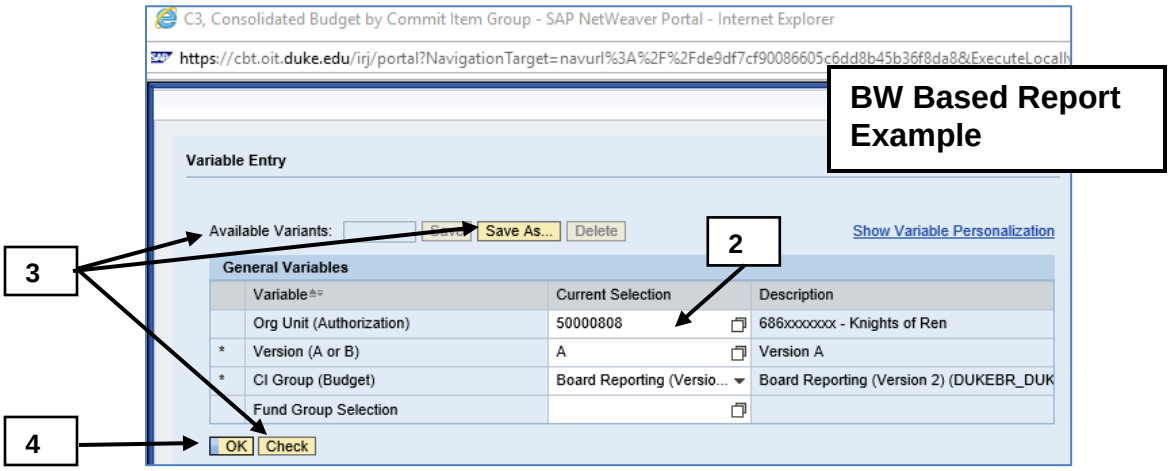
Selecting Criteria and Executing SAP BW Based Reports

Note: Many reports contain the YTD Actual amounts and utilization percentages. If needed, use those reports to review this data as you enter your new year's budget, before making projections or budget modifications, etc.

Note: The examples used in the guide are based on Budget Development Reports.

1. For ☐ Business Warehouse (BW) based reports, click on the link for the desired report (**use descriptions** listed under each link to help with choosing the desired report).

BW Based Reports (cont.)



2. Enter values in the **Current Selection** input fields or use the **Callout** / **Selection** for the fields, which **<u>vary by report</u>**, such as:

   - **Org Unit (Authorization)** – Use **Callout / Selection** button in the field to find the **HR related Org. Unit** (5000####) with corresponding BFR Code using the hierarchy OR enter the 8 digit HR related Org. Unit if known.
   - **Version (A or B)** – enter the version that is the basis for the report (remember A = Official Version for Board Reporting).
   - **CI Group (Budget)** – Use **Drop-down** button in the field to find the desired Commitment Item Group for the budget report (example, Board Reporting = the default on some reports).
   - **Fund Group Selection** = Enter or select specific fund groups (e.g., **U** = Unrestricted, **R**= Restricted, **A** = Allocated, etc.).

3. Once values are entered, use optional functions as desired:

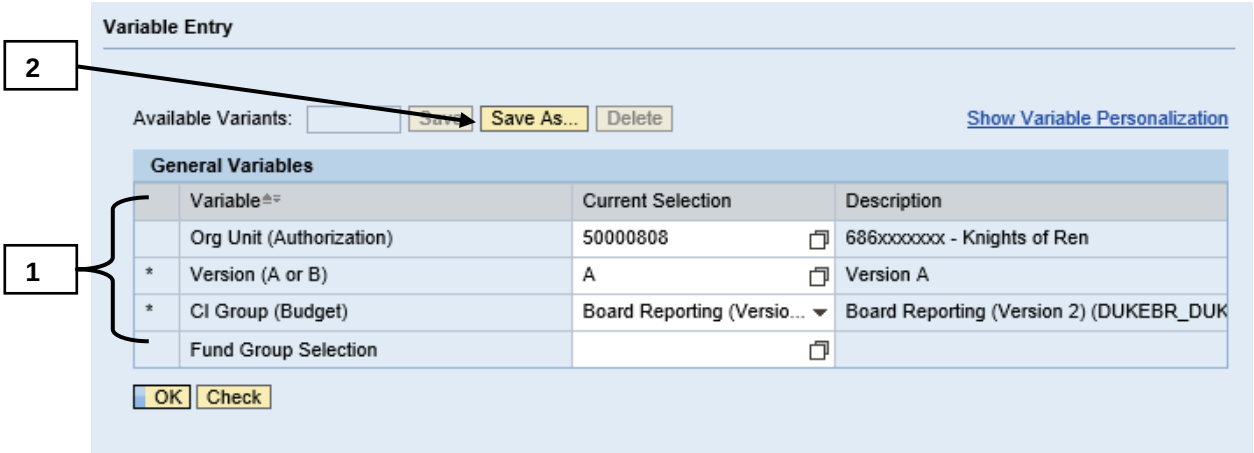
   - **Check** = use this button to verify or check the input values and identify any issues with the values selected.
   - **Save As**… = use this button to save the selection values entered in the fields as part of a **selection variant** for future use to save keystrokes (see detailed steps in next pages).
   - Use **Available Variants** to drop-down and use a saved **selection variant** to automatically enter values in the input fields and save keystrokes (see detailed steps in next pages).

4. Click the **OK** button to generate the report and use other options outlined in this Guide to review the data.

BW Based Reports (cont.)

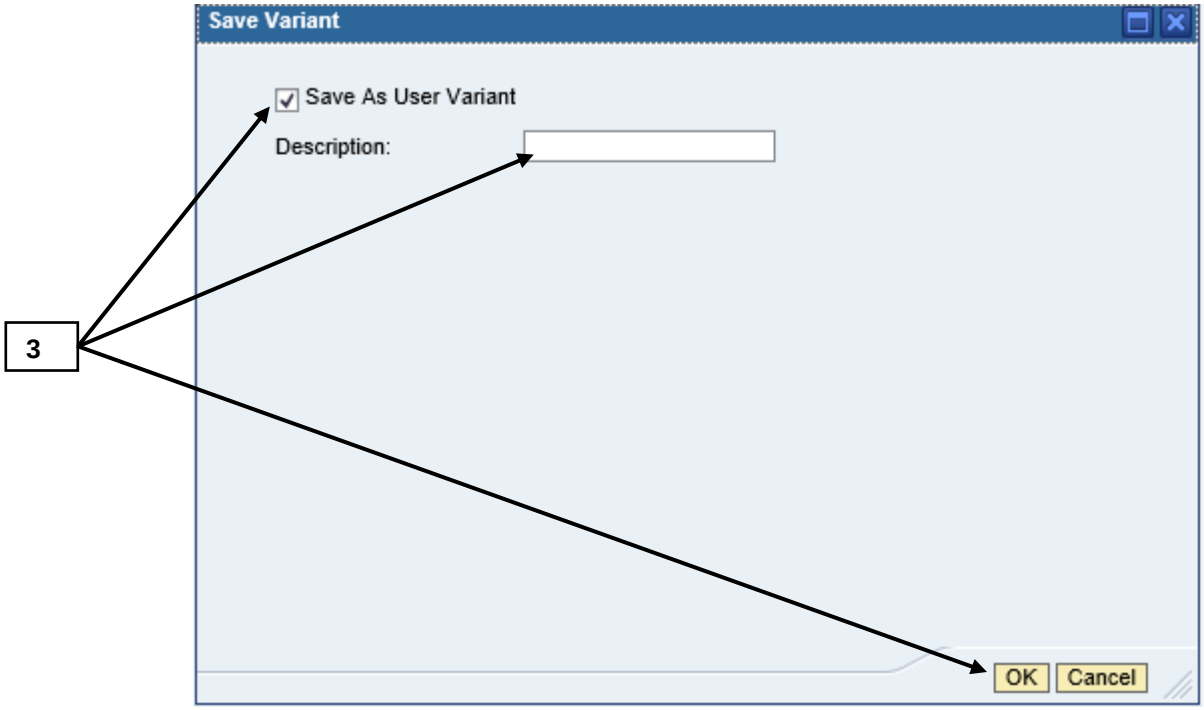
Selection Variants for SAP BW Based Reports:

Once selection criteria is entered for the BW based report chosen, users may save that selection criteria as a query variant, similar to the BEx, Business Explorer tool in SAP Business Warehouse (BW). The selection variant automatically populates the general variable entries each time a report is generated and ultimately saves the user time.

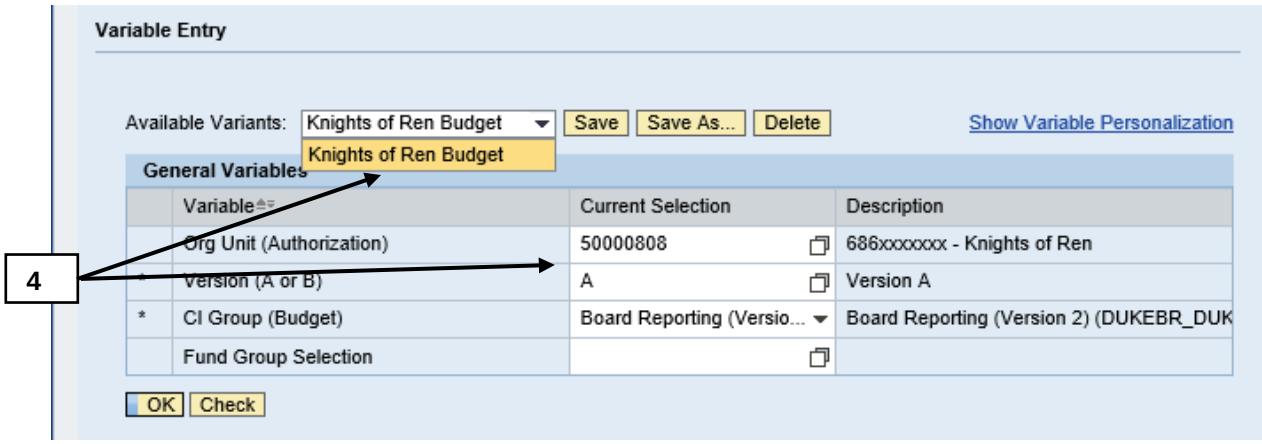


1. To create your selection variant, enter the values desired in the **Current Selection** column (such as Workflow Level, Work Version, and Org. Unit).
2. Click on the **Save As…** button.

BW Based Reports (cont.)



3. In the resulting *Save Variant* window:
   - Leave the **Save As User Variant** checkbox selected with a check mark.
   - Enter the name of the variant in the **Description** field
   - Click on the **OK** button.

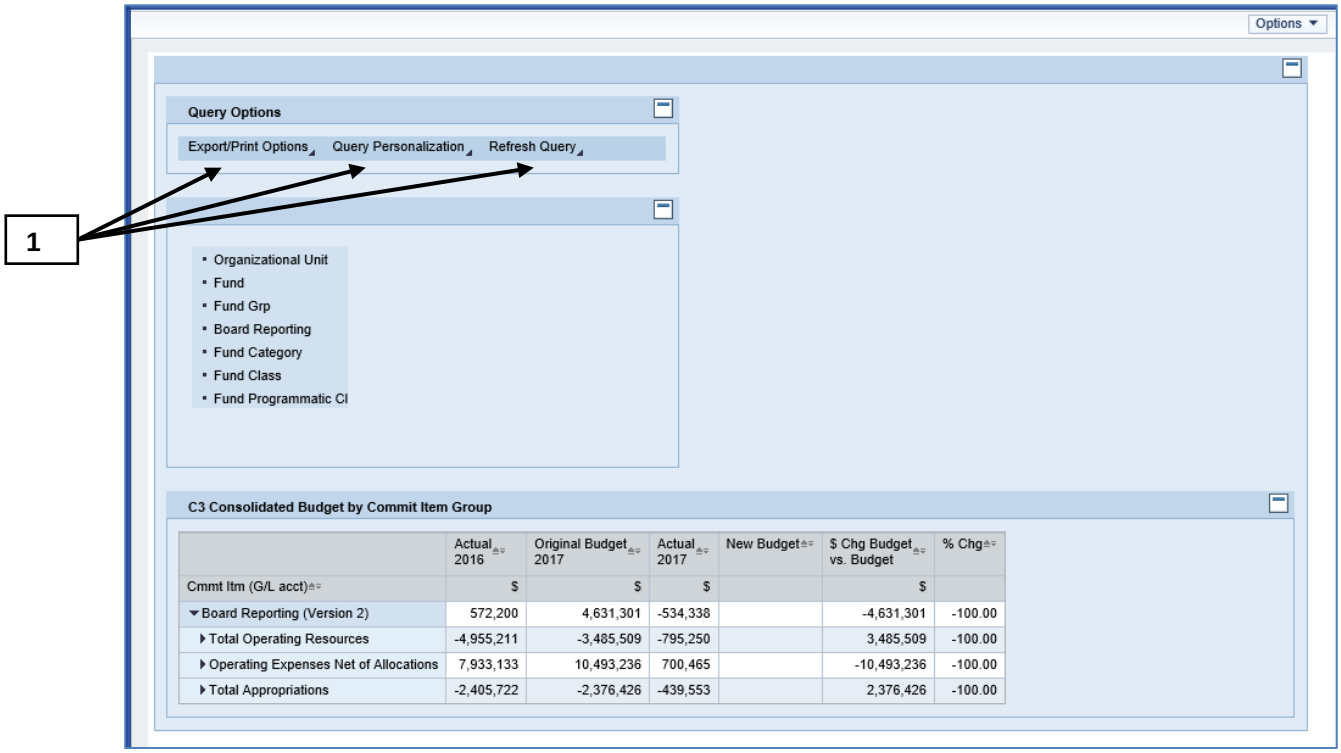


4. Each time this report is chosen and executed, use the **Drop-down arrow** in the **Available Variants** field to choose the desired variant and populate the fields and save keystrokes.

BW Based Reports (cont.)

Query Options for Executed SAP BW Based Reports

Once the SAP BW based report is executed, there are **Query Options** available to perform various functions, such as printing, exporting, etc.

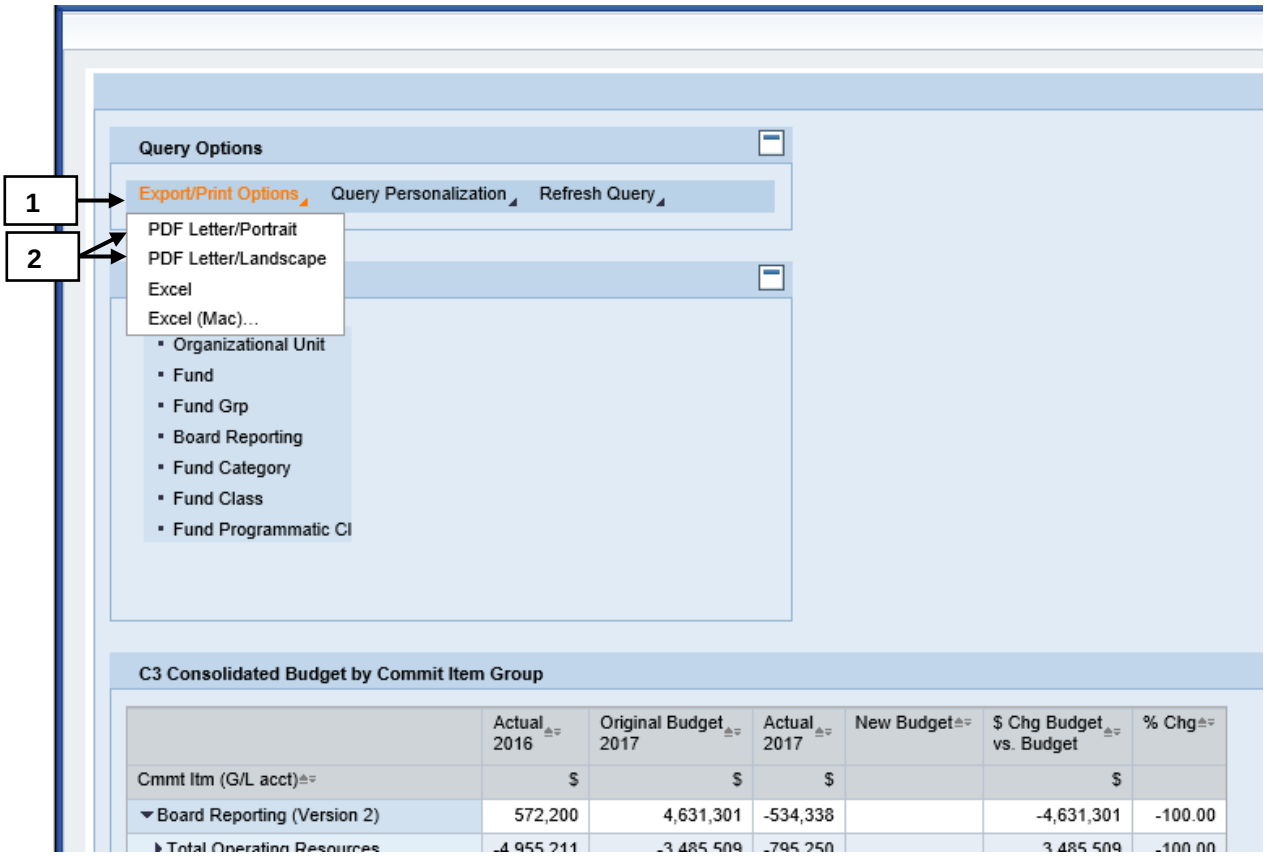


	Actual 2016	Original Budget 2017	Actual 2017	New Budget	$ Chg Budget vs. Budget	% Chg
Cmmt Itm (G/L acct)	$	$	$		$	
Board Reporting (Version 2)	572,200	4,631,301	-534,338		-4,631,301	-100.00
Total Operating Resources	-4,955,211	-3,485,509	-795,250		3,485,509	-100.00
Operating Expenses Net of Allocations	7,933,133	10,493,236	700,465		-10,493,236	-100.00
Total Appropriations	-2,405,722	-2,376,426	-439,553		2,376,426	-100.00

1. Note the **Query Options** available in the top tray that is displayed above the report:
   - **Export/Print Options** = provides PDF printing options for portrait or landscape, as well as the Export function for Excel.
   - **Query Personalization** = allows user to save any changes made to the standard view of the report as a Personalized Query and this revised view will display each time the report is executed in the future.
   - **Refresh Query** = opens the Variable Entry selection window which displays the current selected values and allows the user to change the selection values and run a new report.

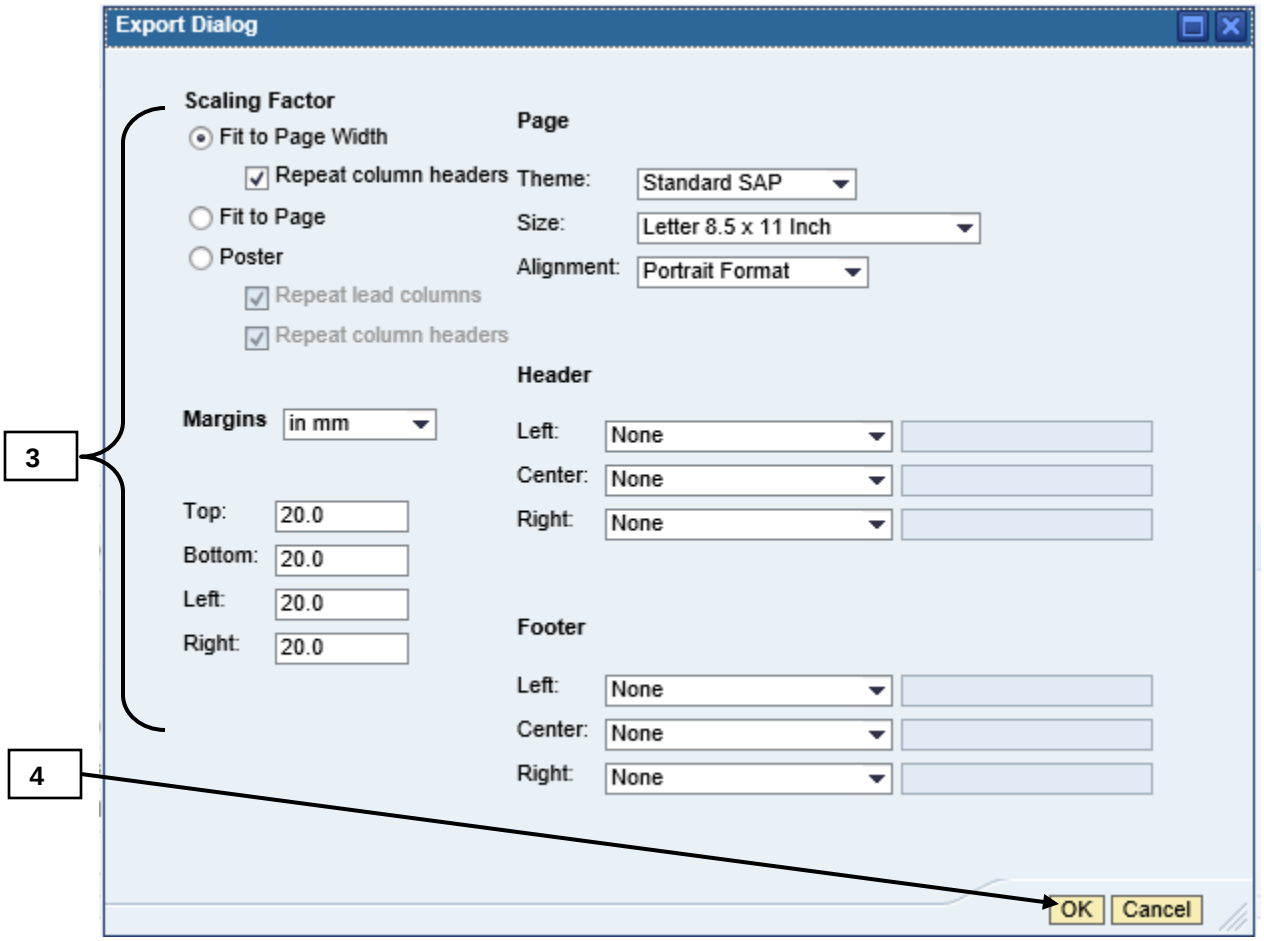
BW Based Reports (cont.)

Printing the SAP BW Report



1. Click on the **Export/Print Options** button under **Query Options**.
2. Choose one of the print options as follows:
   - To print the report in a portrait view on letter-size paper, select the **PDF Letter Portrait** option.
   - To print the report in a landscape view on letter-size paper, select the **PDF Letter Landscape** option.

BW Based Reports (cont.)



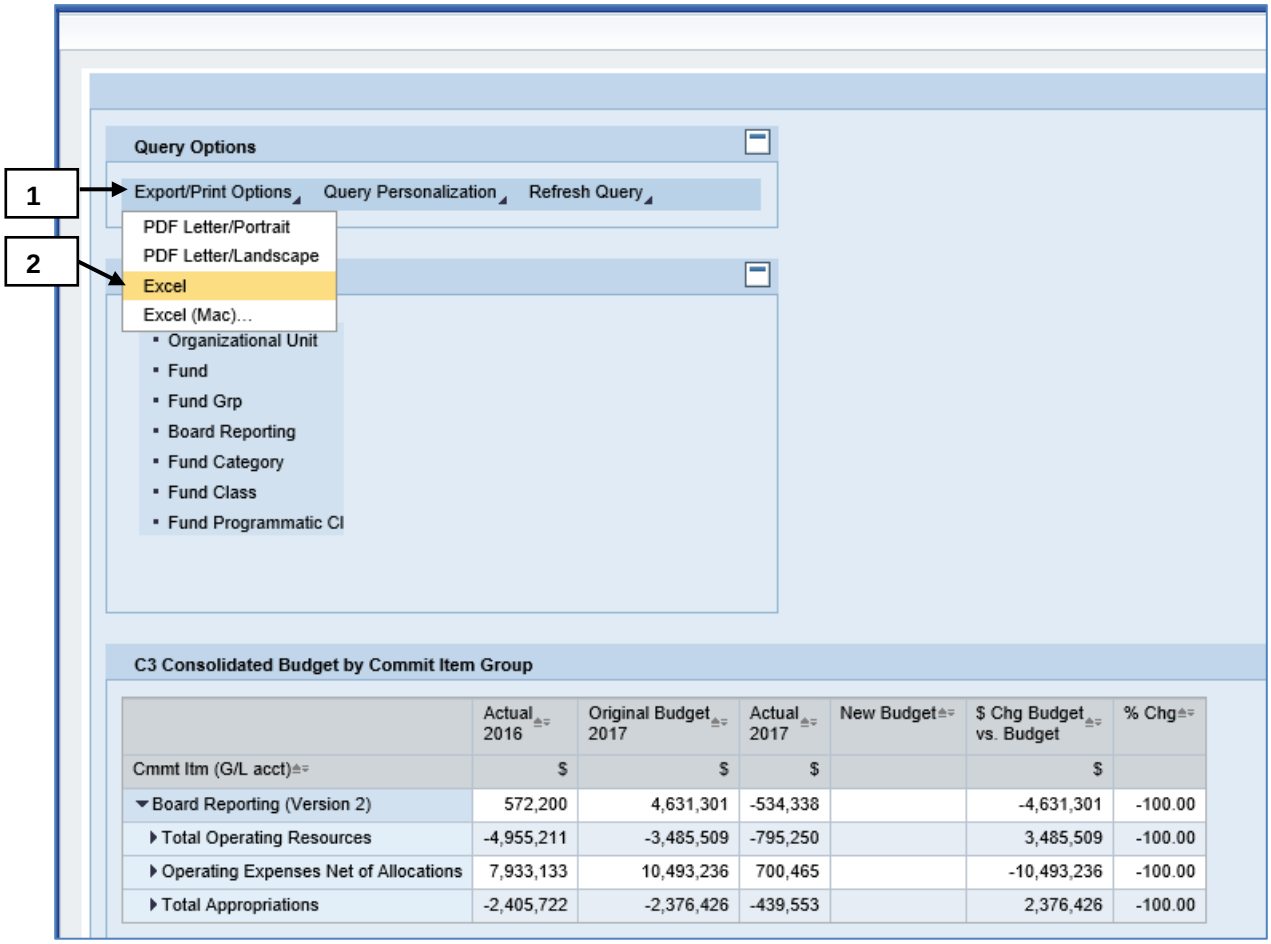
3. In the resulting window, select the desired options.

4. Click **OK** to print (to default printer for the computer).

BW Based Reports (cont.)

Exporting the SAP BW Report

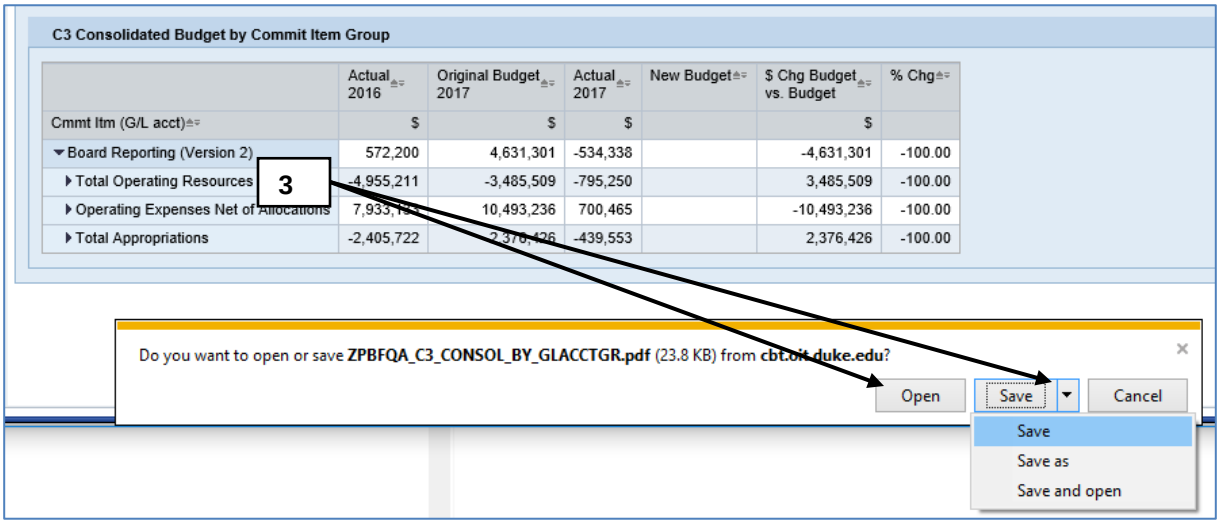
Note: There are specific reports that can be exported to Excel for the purpose of entering budget data and uploading back into BPS.



	Actual 2016	Original Budget 2017	Actual 2017	New Budget	$ Chg Budget vs. Budget	% Chg
Cmmt Itm (G/L acct)	$	$	$		$	
Board Reporting (Version 2)	572,200	4,631,301	-534,338		-4,631,301	-100.00
Total Operating Resources	-4,955,211	-3,485,509	-795,250		3,485,509	-100.00
Operating Expenses Net of Allocations	7,933,133	10,493,236	700,465		-10,493,236	-100.00
Total Appropriations	-2,405,722	-2,376,426	-439,553		2,376,426	-100.00

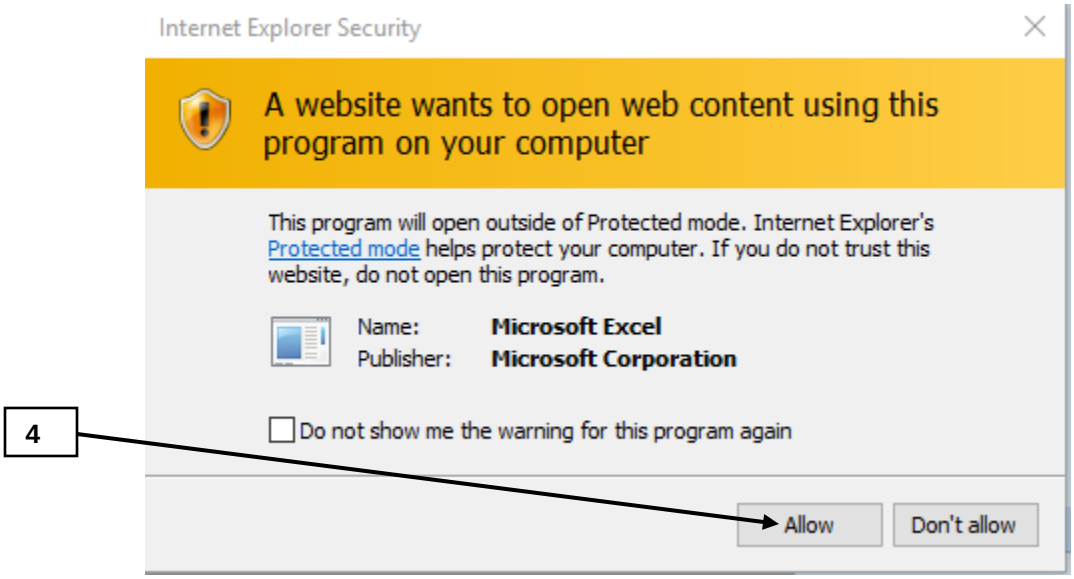
1. Click on the **Export/Print Options** button under **Query Options**.
2. Click on the **Excel** option or the **Excel (Mac)…** option as appropriate.

BW Based Reports (cont.)

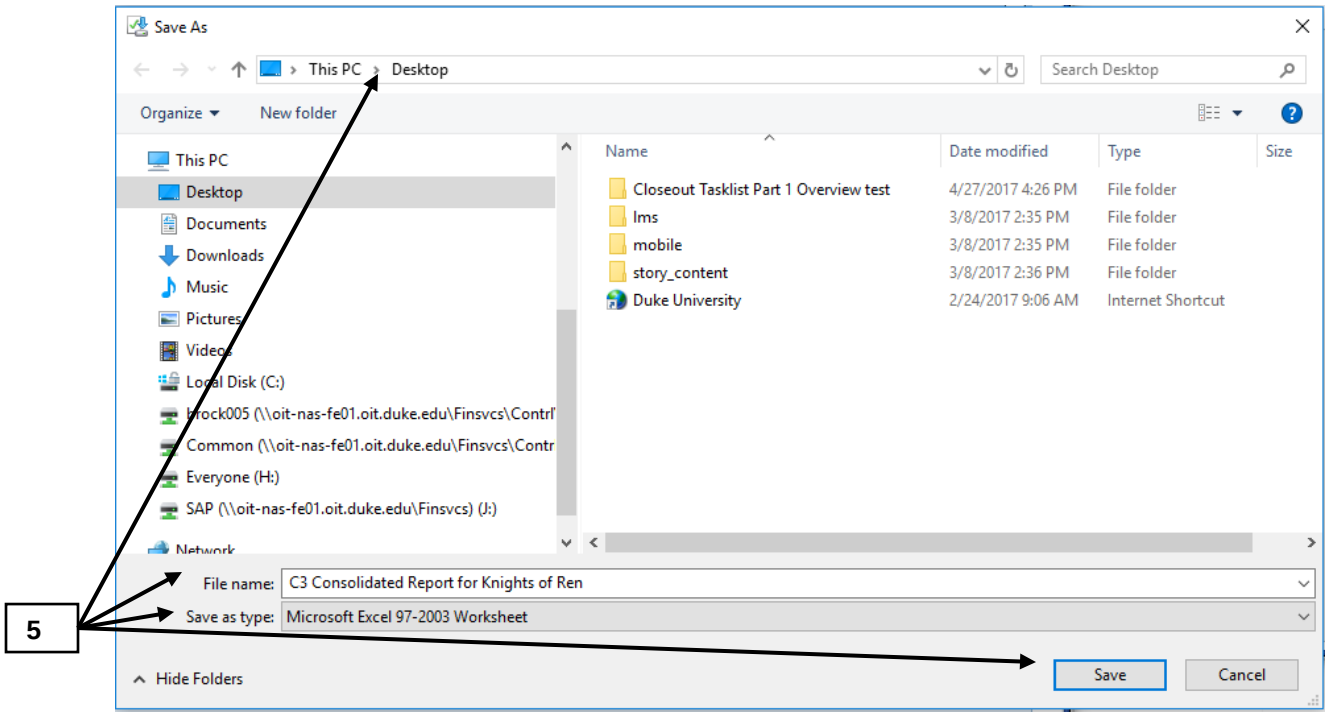


3. In the resulting window (at the bottom of screen), select an option as follows (example pertains to Excel option):
   - **Open** button - to open the file and then save at some point.
   - **Save** button – use drop-down to choose to **Save**, **Save as** (to choose a file directory path), or **Save and Open** save the file and see the next step).

BW Based Reports (cont.)



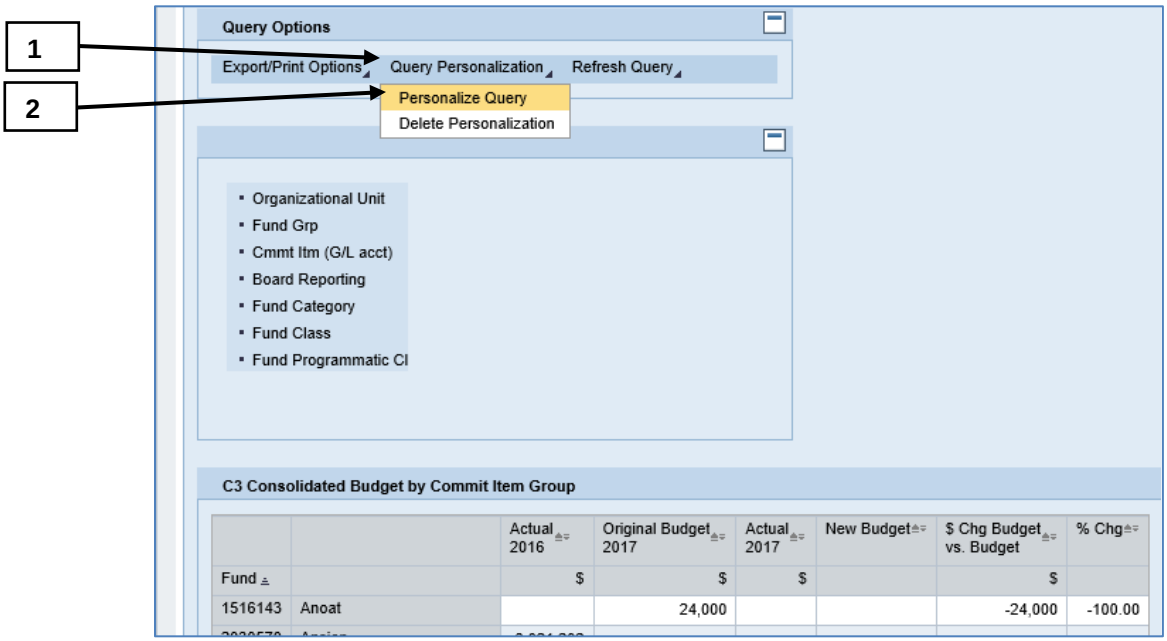
4. If the Save and Open option is chosen and an Internet Explorer Security message is displayed (PCs)**,** click **Allow** to proceed.



5. **If ANY of the Save options are chosen,** select where to save the file in the **Save in** field, enter values in the **File name** and **Save as type** fields, then click on the **Save** button to complete the process.

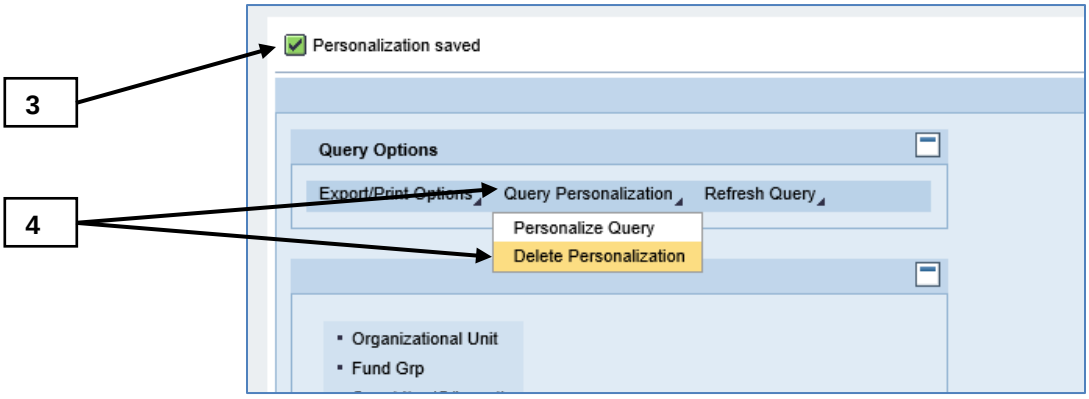
BW Based Reports (cont.)

Personalizing a Query for the SAP BW Report



1. To save any changes made to the view of the report for future use (see next pages of guide for how to make changes), click on the **Query Personalization** button under **Query Options**.

2. Click on the **Personalize Query** option.



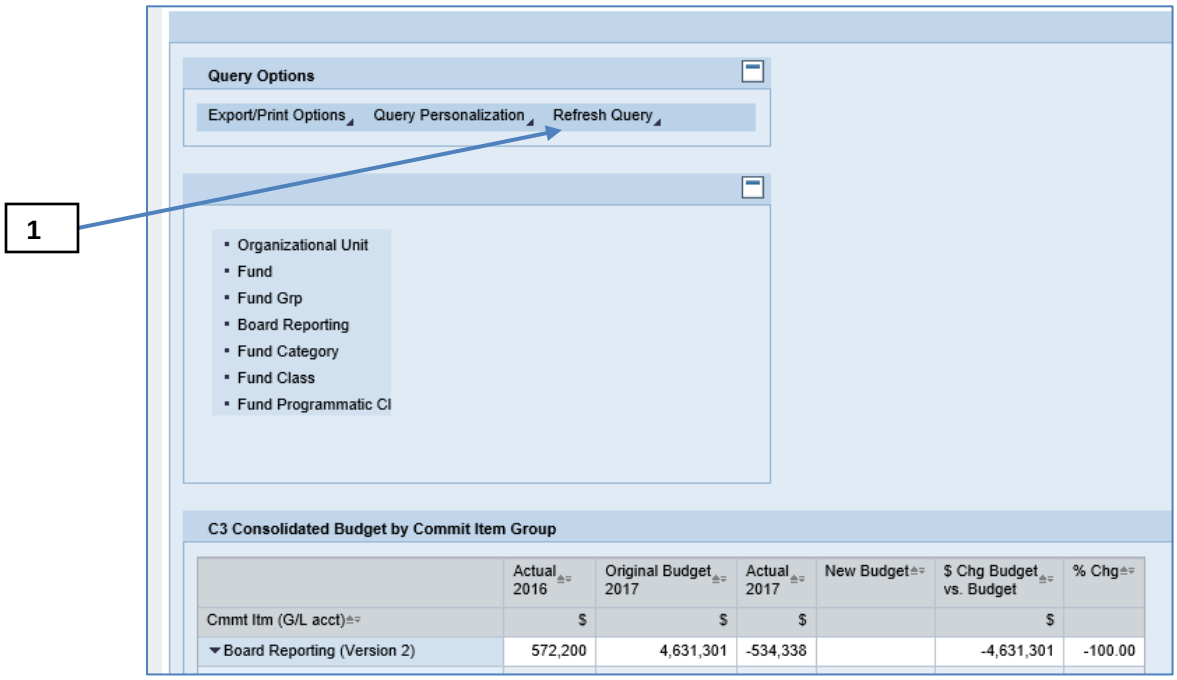
3. Review the message displayed at the top that states "Personalization saved".

   Note: The personalized view will be the default when each time the report is generated.

4. To return to the standard view, use the **Delete Personalization** option under Query Personalization.

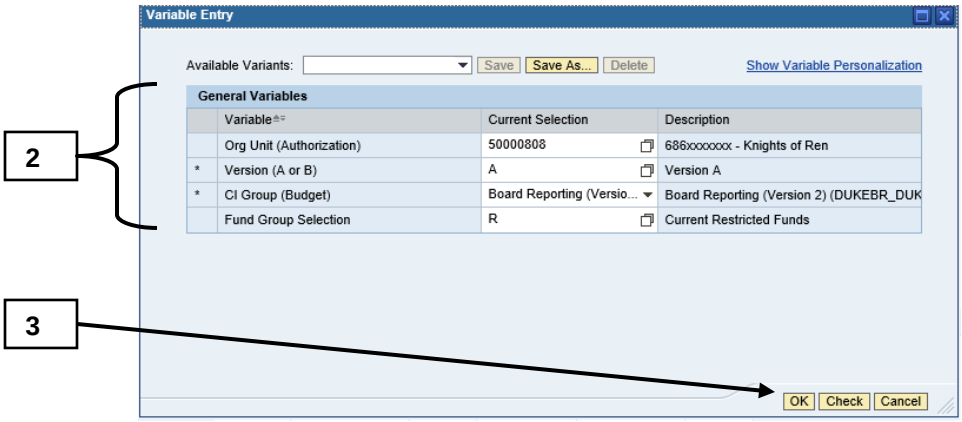
BW Based Reports (cont.)

Refreshing a Query for the SAP BW Report



Note: This option allows you to change the selection criteria without having to return to the report map and choose the report again.

1. To refresh the SAP BW report query and change any selection criteria, click on the **Refresh Query** button under **Query Options**.



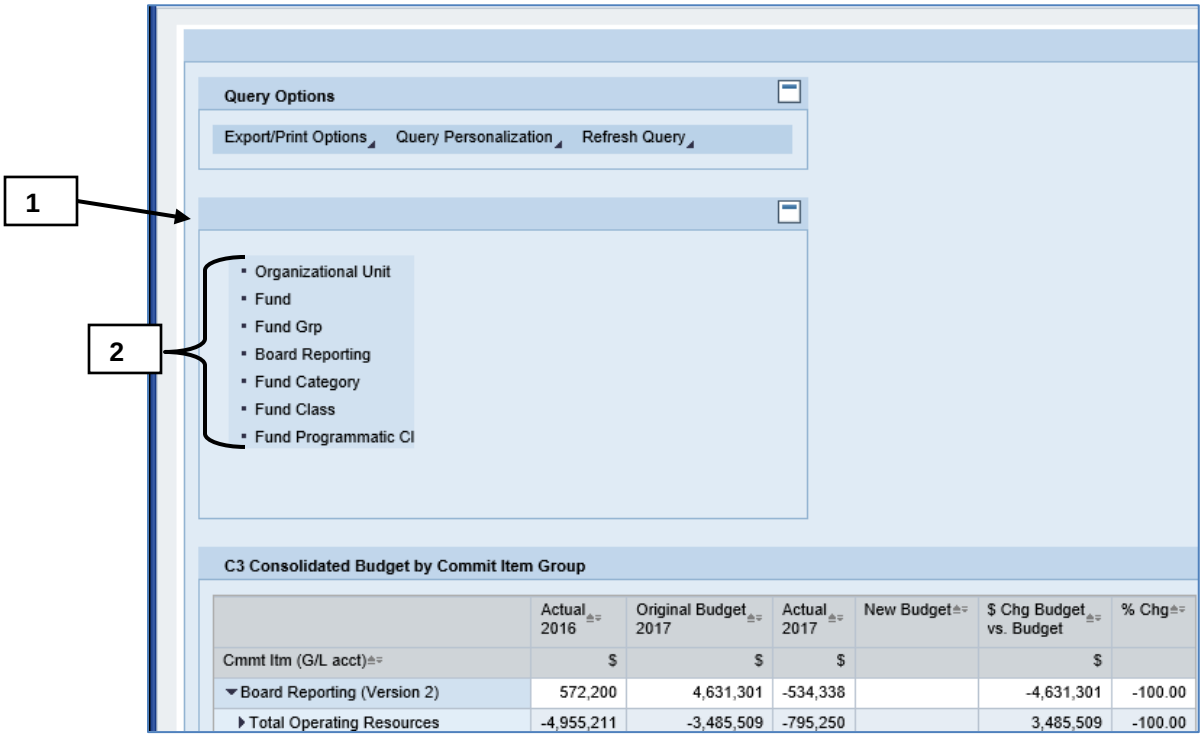
2. In the resulting Variable Entry screen, **change any selection values** in the **Current Selection** column.

3. Click the **OK** button to execute the report again with the new selection criteria.

BW Based Reports (cont.)

Characteristic Selections for Executed SAP BW Based Reports

Once a report is executed, the resulting view of the report may be changed by using the **Select Characteristics** tray and the values listed in this tray. These characteristics allow the user to use the drag-and-drop functions to add a drilldown, change or swap the view of the report (such as from a Fund view to a Commitment Item G/L Account view), etc.



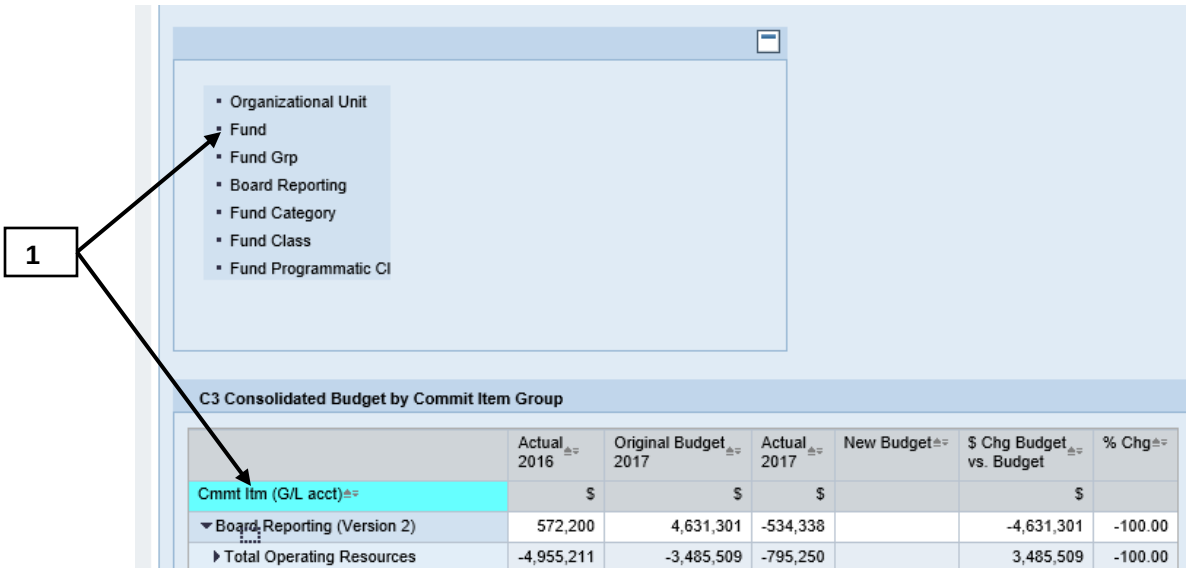
1. Review the characteristic options available in the **Select Characteristics** tray (second tray at top), which vary by report.

2. Decide which characteristic that you need to use in order to accomplish the change you'd like to make.

Note: Changing the characteristics is a drag-and-drop function. A characteristic can be dragged and dropped on a column heading to "swap" the way the report is displayed, for example from Fund to Commitment Item (G/L Account) view. A characteristic may also be used to create a drill-down to more details as covered in the next pages.

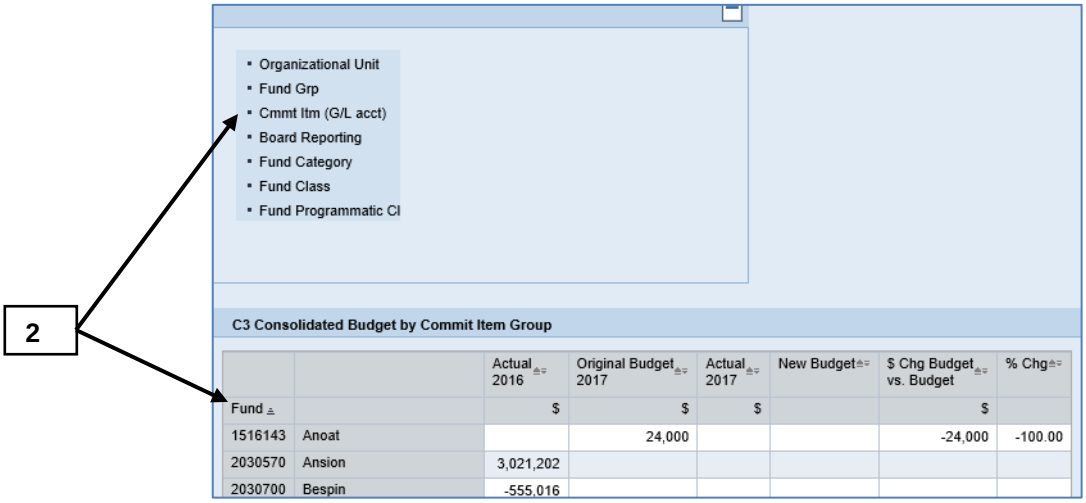
BW Based Reports (cont.)

Swapping the View of the Report Using Characteristics



1. Click on the desired characteristic and drag that characteristic **<u>on top of</u>** the desired column heading to display the column heading in an aqua-colored box (in this example, the Fund characteristic is dragged over top of the Commitment Item column heading).

Note: The column heading is displayed in an aqua-colored box as you move the characteristic over that column before the drop is completed.

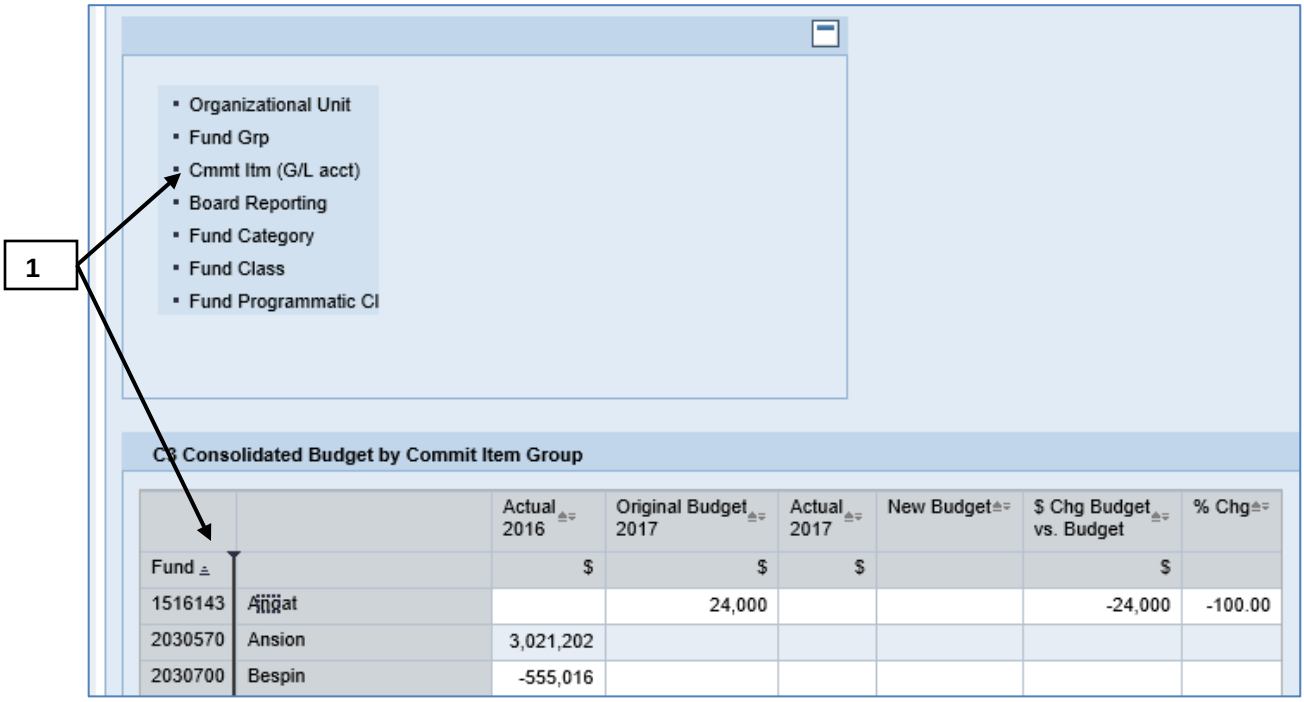


2. **Release the mouse click to drop** the characteristic into this column heading (in this example, the Commitment Item column is now “swapped with” / replaced by the Fund column to create a view for the Org. Unit by Funds vs. Commitment Item).

BW Based Reports (cont.)

Adding the Drill-down Using Characteristics

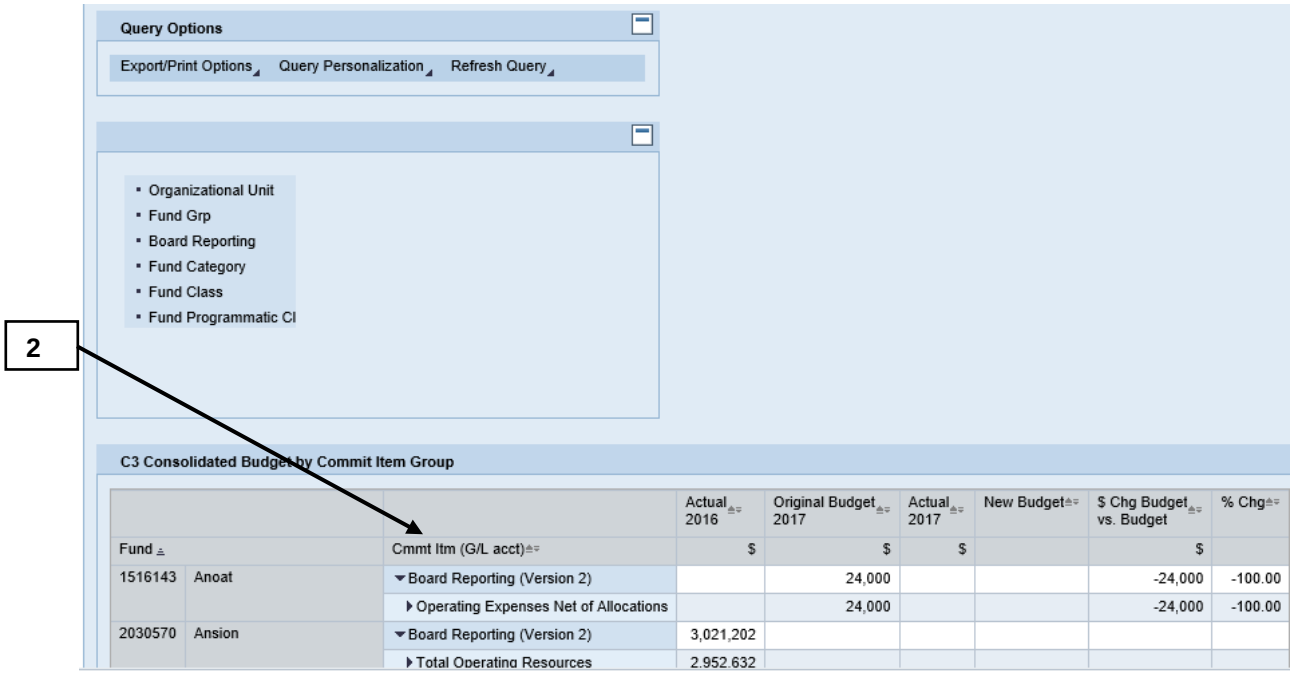
Note: Adding or "dragging" multiple characteristics into the report achieves more levels of granularity.



1. Click on the desired characteristic and drag that characteristic **<u>beside</u>** the column heading desired to display a black vertical line (in this example, the Commitment Item characteristic is dragged beside / to the edge of the Fund column to add a drill-down).

Note: The black vertical line provides a visual indicator that the drill-down column will be placed to the right of that line (in this example the Fund name is part of the Fund column even though the vertical line appears to be in between the Fund and Fund name).

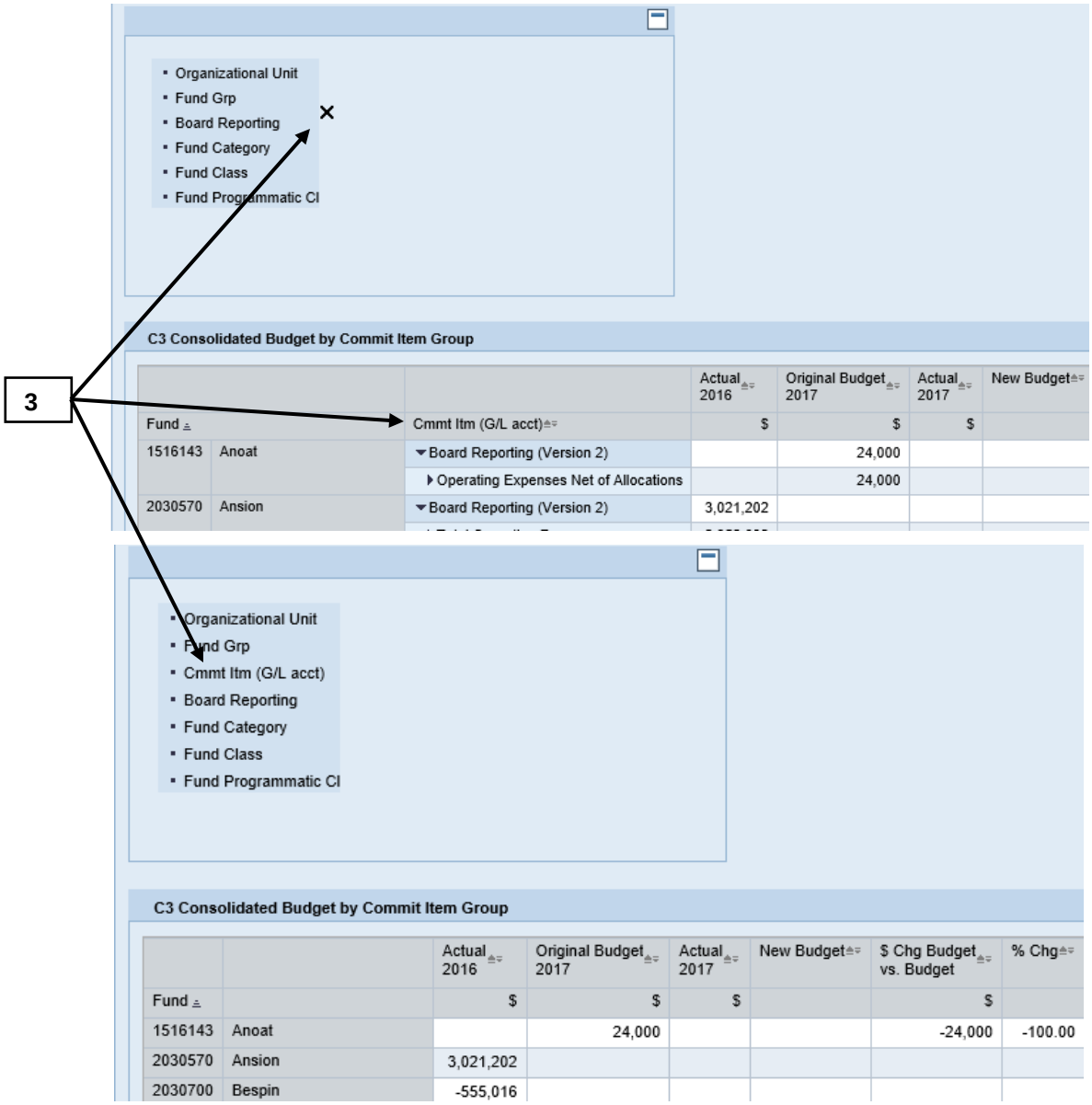
BW Based Reports (cont.)



2. **Release the mouse click to drop** the characteristic into a new column to the right of the vertical indicator - in this example, the report now has an added column with the drill-down by Commitment Itm (G/L Account) for the each Fund in the Fund column.

Note: The report now contains the detail of the new characteristic. The characteristic used for the drill-down is no longer listed in the Characteristic tray.

BW Based Reports (cont.)



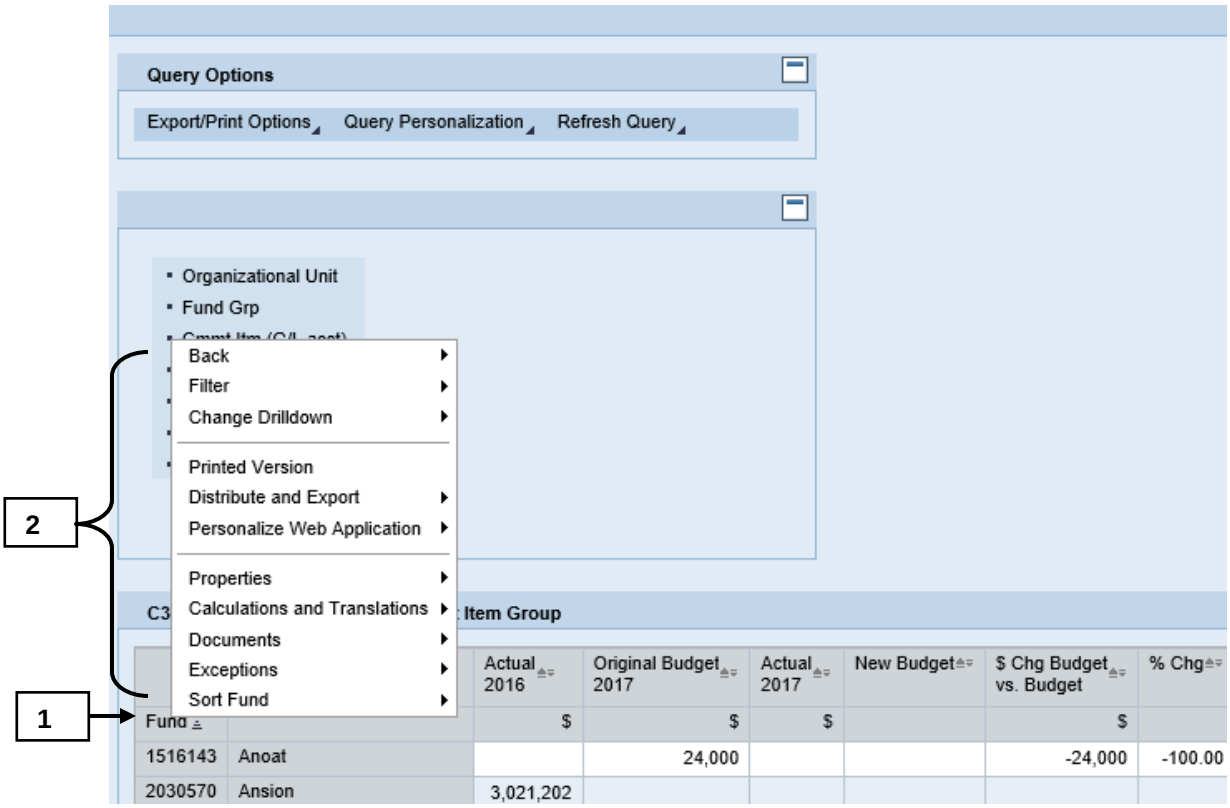
3. To **remove a characteristic drill-down:**

- Click on the column heading and drag the characteristic back to the Select Characteristics tray until an **X displays anywhere in the tray** (**be careful not to place mouse over the other Characteristic options** as this will swap the columns versus removing the one column).
- **Release the mouse click to drop** back into this tray (there will be a **X** indicator as a reference that the mouse is in the tray).
- Note that the characteristic is now removed as a drill-down in the report and is listed in the tray as an option again.

BW Based Reports (cont.)

Using Other Functions in SAP BW Based Reports

Once a report is executed, many of the other Business Warehouse functions are available in BPS for the SAP BW based reports. The Context Menu allows users to right mouse click in the report and to perform various functions. A few functions are outlined in this section. Refer to the Introduction to Business Warehouse Guide for even more functionality if desired.



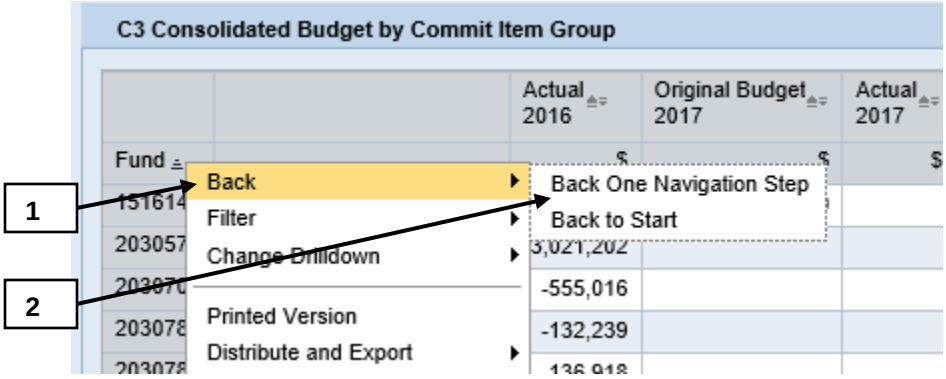
1. To access the functions, right mouse click directly on the column heading title desired, such as Fund in the example above (click on the word).

2. In the resulting window, choose one of the options outlined in the next few steps (**options vary depending on report selected**).

Note: *The Change Drill-down option contains the "swap with" and "drill-down" functionality already outlined in this Guide as drag-and-drop functionality. This option is just another way to do the same thing, so the steps are not covered again in this section.*

BW Based Reports (cont.)

Using the Back Function

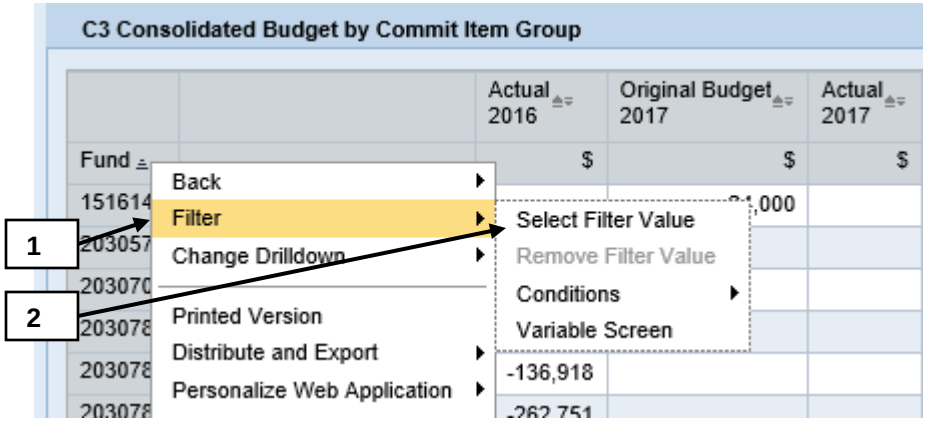


1. Right mouse click on a column heading or active field, and in the resulting window, click on the **Back** option.

2. Click on one of the following options:
   - **Back One Navigation Step** – to undo the last function performed or go back to the previous view of the report.
   - **Back to Start** – to return to the original view of the report when it was first executed.

BW Based Reports (cont.)

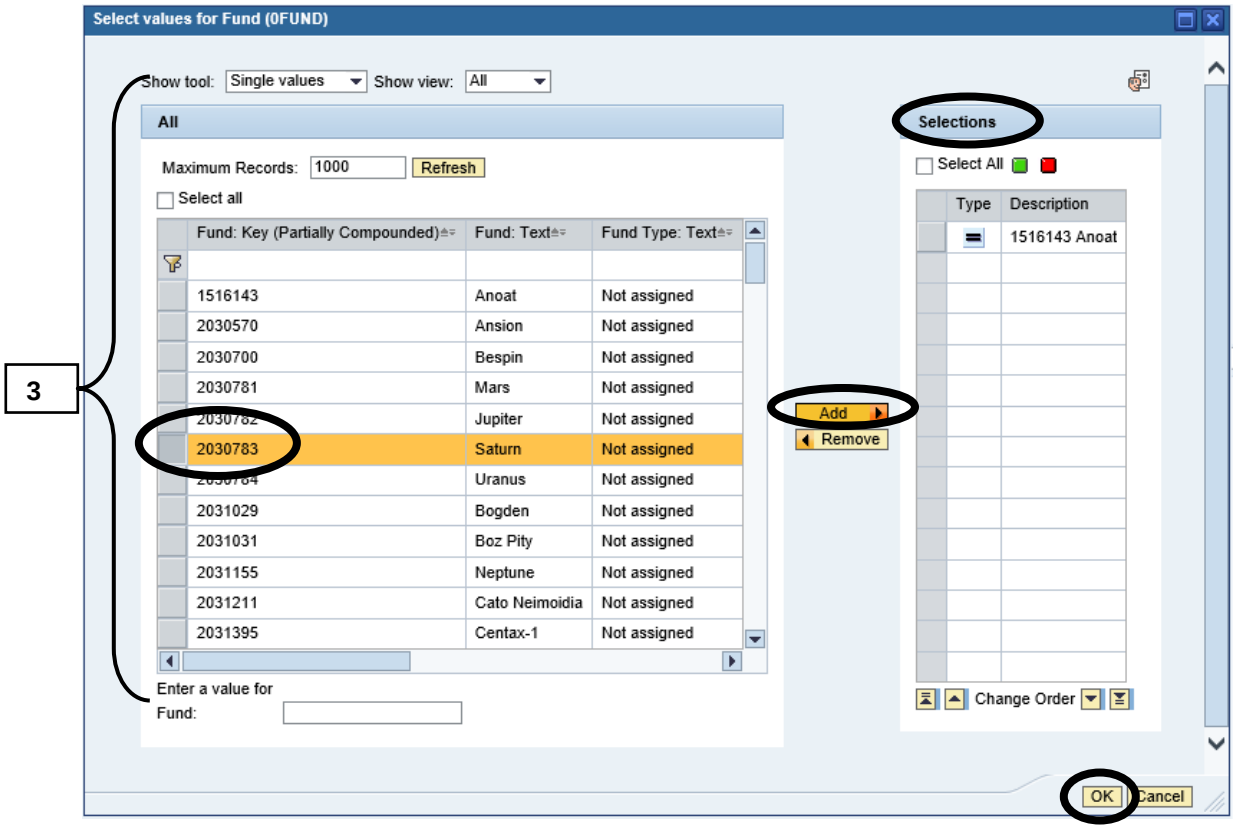
Using the Filter Function



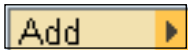
1. Right mouse click on a column heading or active field, and in the resulting window, click on the **Filter** option.

2. Click on the **Select Filter Value** option.

BW Based Reports (cont.)



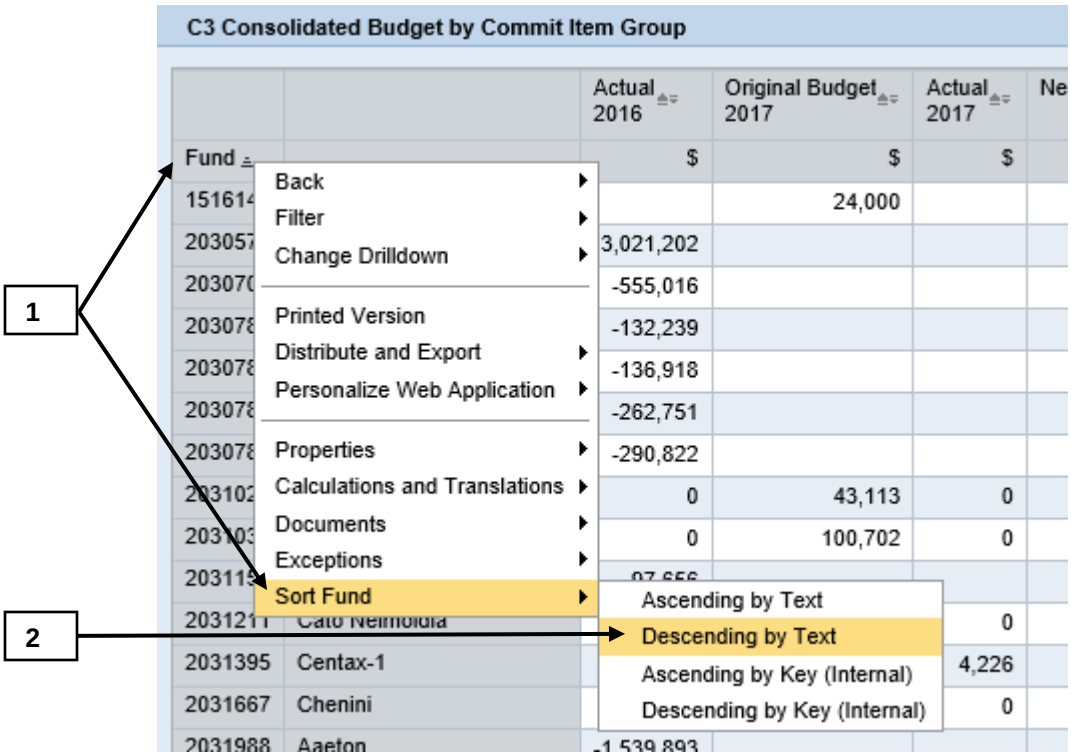
3. In the *Select values for*… window (**name varies by column selected for the filter**):

   - Click on the **box to the left of a value** under the ***All*** section to select that as the **desired filter value** (more than one may be selected).
   - Click on the  **Add** button to add the value as a filter selection under the ***Selections*** section on the right side of the screen**.**
   - To remove a filter, click on the **box to the left of a value** under the ***Selections*** section and click on the  **Remove** button.
   - When all values for the filter are selected, click on the **OK** button.

Note: *Use the **Back One Navigation Step** or **Back to Start** options to undo the action if desired or repeat steps above to remove the filters.*

Reporting (cont.)

Using the Sort Function



1. Right mouse click on a column heading or active field, and in the resulting window, click on the **Sort**… option (name varies by type of report and column chosen; in this example Sort Fund is shown).

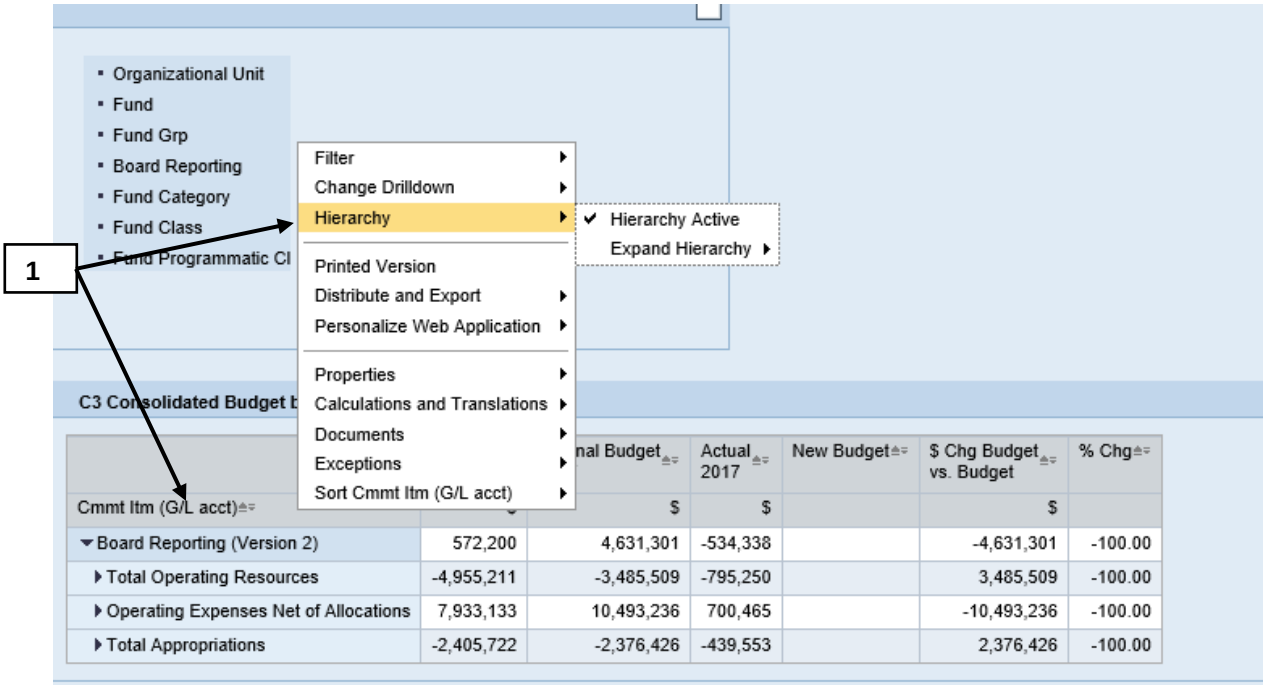
2. Click on one of the following options for the sort (may vary by column chosen) as follows:
   - **Ascending by Text** – A to Z by the text / description field.
   - **Descending by Text** – Z to A by the text / description field.
   - **Ascending by Key (Internal)** – Lowest to highest by number.
   - **Descending by Key (Internal)** – Highest to lowest by number.

Note: *Use the **Back One Navigation Step** or **Back to Start** options to undo the action if desired.*

BW Based Reports (cont.)

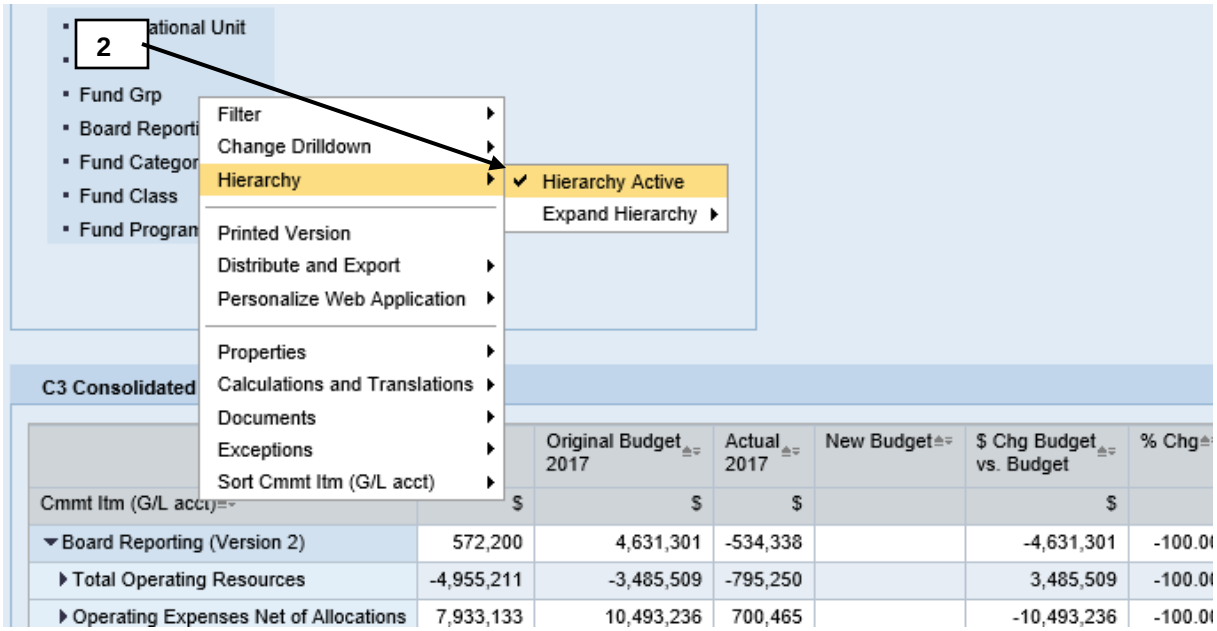
Using the Hierarchy Function

Note: *The Hierarchy function is available on reports that have levels of subtotals displayed based on a hierarchy, like Org. unit or Commitment Item Group (G/L Account group). The function allows a user to* ***expand the levels of the hierarchy versus opening each level*** *with the triangle icons which can be time consuming.* ***The function may also allow a hierarchy to be removed completely****.*

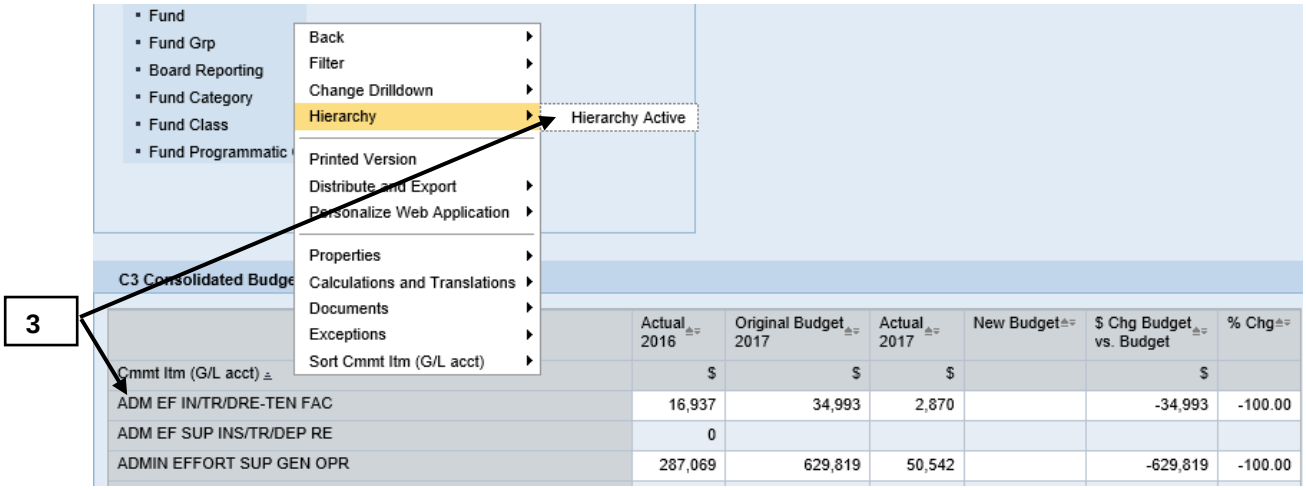


1. Right mouse click on a column heading or active field, and in the resulting window, click on or hover mouse over the **Hierarchy** option (not available on some reports).

BW Based Reports (cont.)



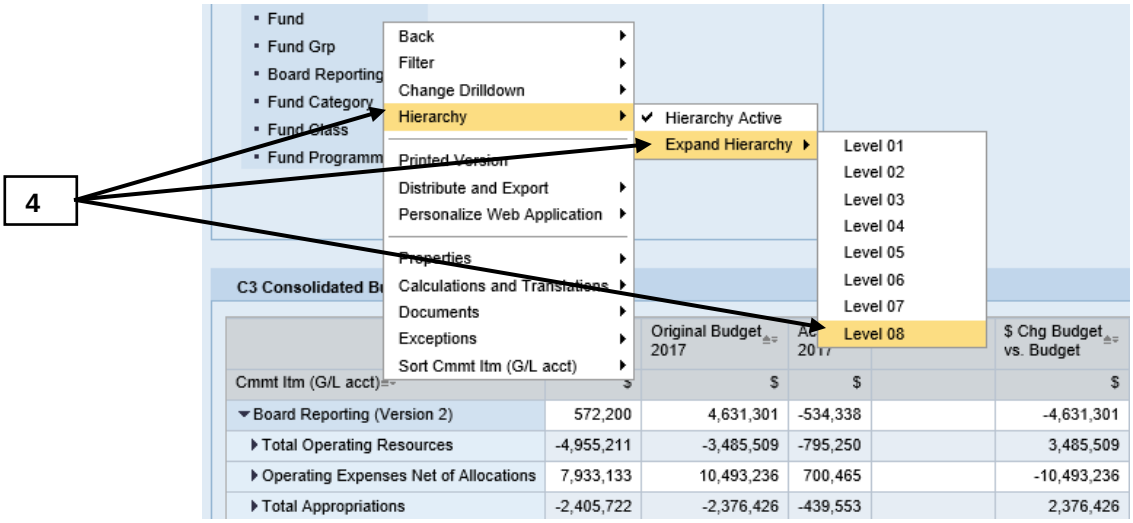
2. To remove the hierarchy (if option available), click on the check mark beside the **Hierarchy Active** option and note the following:
   - The check mark will be removed (toggles between check mark indicating active and no check mark indicating inactive with each mouse click on the Hierarchy Active option).
   - The report hierarchy is no longer active and the levels of subtotals are now removed from the view.



3. Review the results with the hierarchy removed and note that the Hierarchy Active button is unchecked.

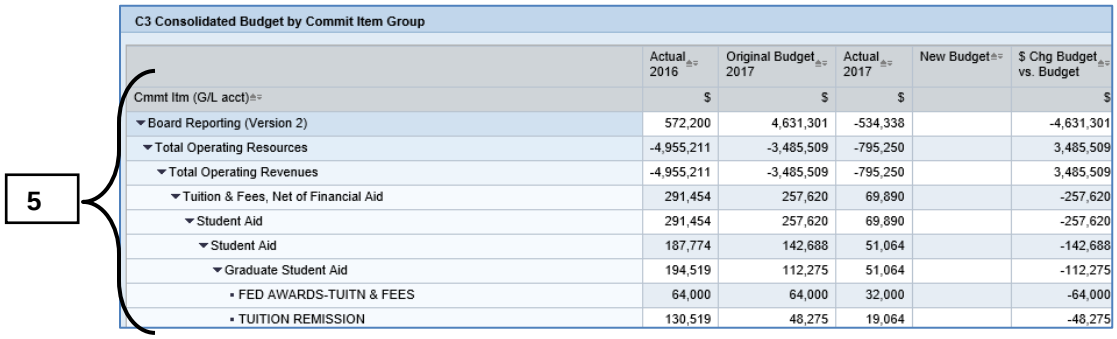
*Note: Use the **Back One Navigation Step** or **Back to Start** options to undo the action if desired.*

BW Based Reports (cont.)



4. To expand or collapse the hierarchy (if hierarchy is active), right mouse click on the column heading, choose the Hierarchy option, click on the **Expand Hierarchy** and follow these steps:

   - Review the levels displayed in the resulting pop-up box that indicate the levels of the hierarchy that are now displayed (for Org. Units this depends on the level of the Org. Unit in that organization and varies by Org. Unit selected).
   - Click on a level to expand to that level (i.e. open the triangle icons – the higher the level chosen, the more granular the data will be on the report.
   - Use the highest level displayed (the bottom of the list) to expand the hierarchy fully (all triangle icons are open/pointing down to display the most granular level of detail available).



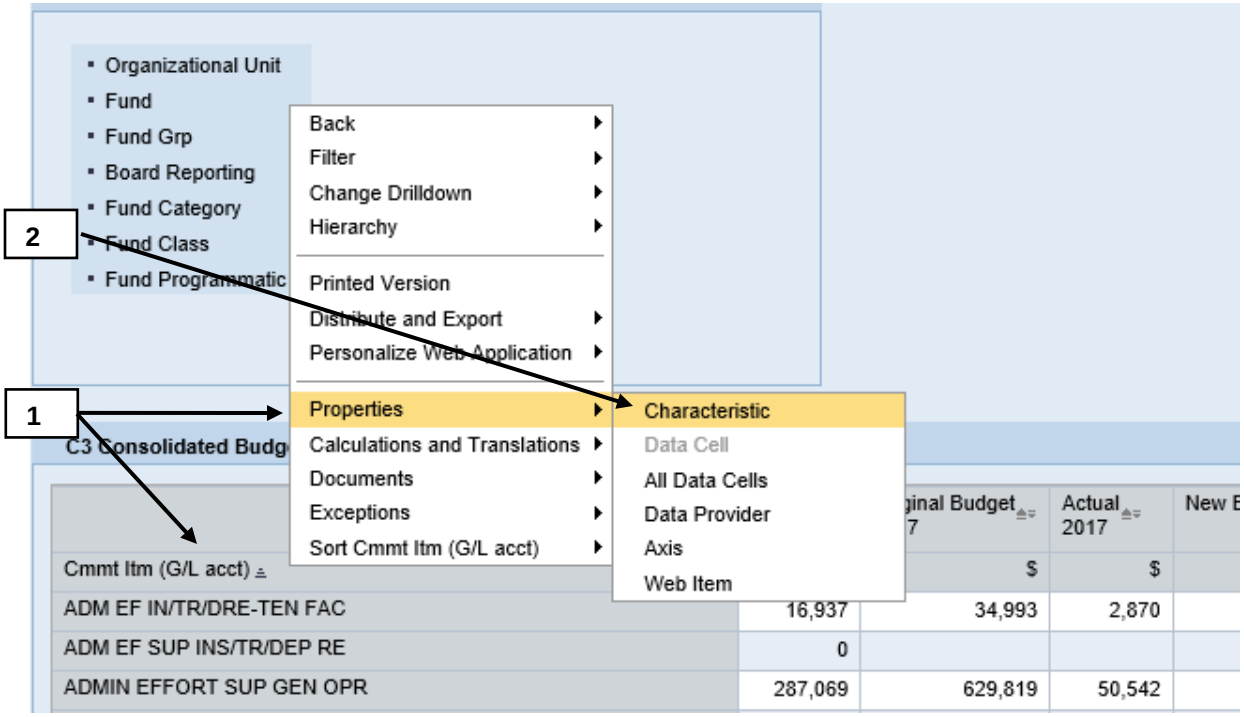
5. Review the results with triangle icons expanded based on the level chosen.

Note: *Use the **Back One Navigation Step** or **Back to Start** options to undo the action if desired.*

BW Based Reports (cont.)

Displaying Columns for Additional Information (Numbers, Names, etc.)

Note: When changing the view of a report using other options outlined in this section of the guide, you may wish to also add and display the name (text) or number (key) associated with a column of data. For instance if the name of the Commitment Item (G/L Account) is displayed and you'd like to also see a number associated with the G/L Account, use these steps to select and add the column. Names associated with this function will vary by type of report and column chosen.

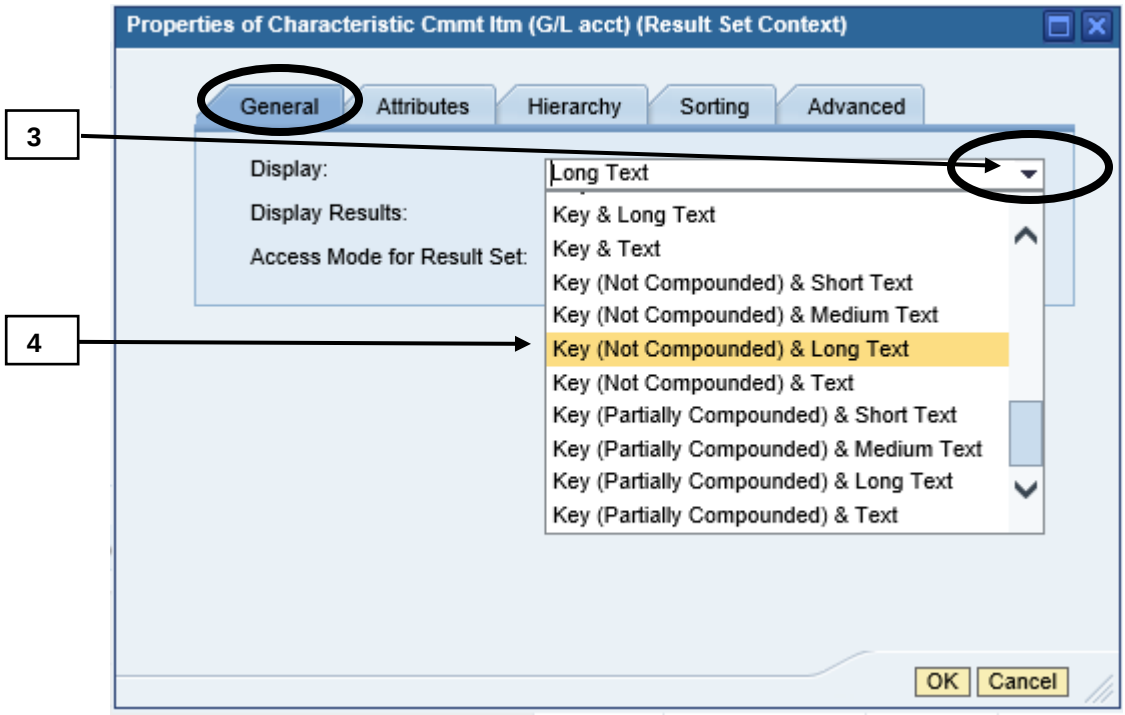


Note: In this example, the type of report and selection made for the report only display the name of a Commitment Item (G/L Account). To show the G/L Account number, the steps below are used.

1. Right mouse click on a column heading or active field within the column that needs added information, and in the resulting window, click on the **Properties** option.

2. Click on **Characteristic** to open a dialog box.

BW Based Reports (cont.)



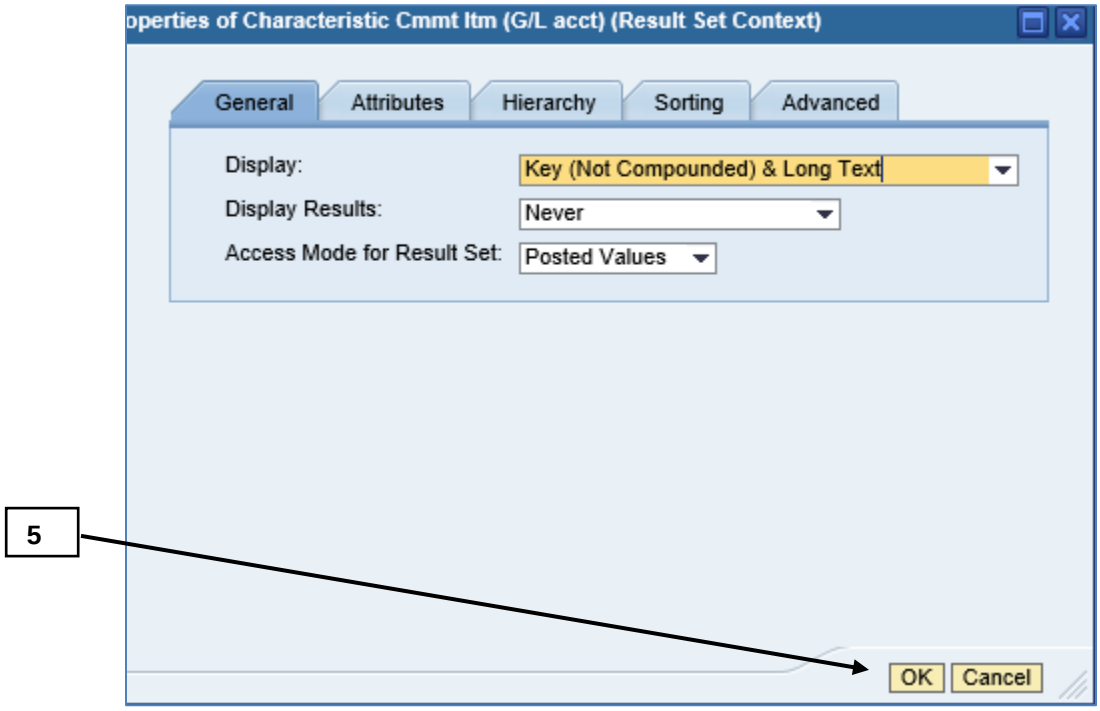
3. In the resulting window under the **General** default tab, use the **Drop-down** in the Display field (Long Text shows in this example).

Note: The Drop-down in the Display field on the General tab is the easiest way to add a number or text to a column. As an alternative, the Attributes tab may be used as well to choose and add a separate column that would contain the key or text.

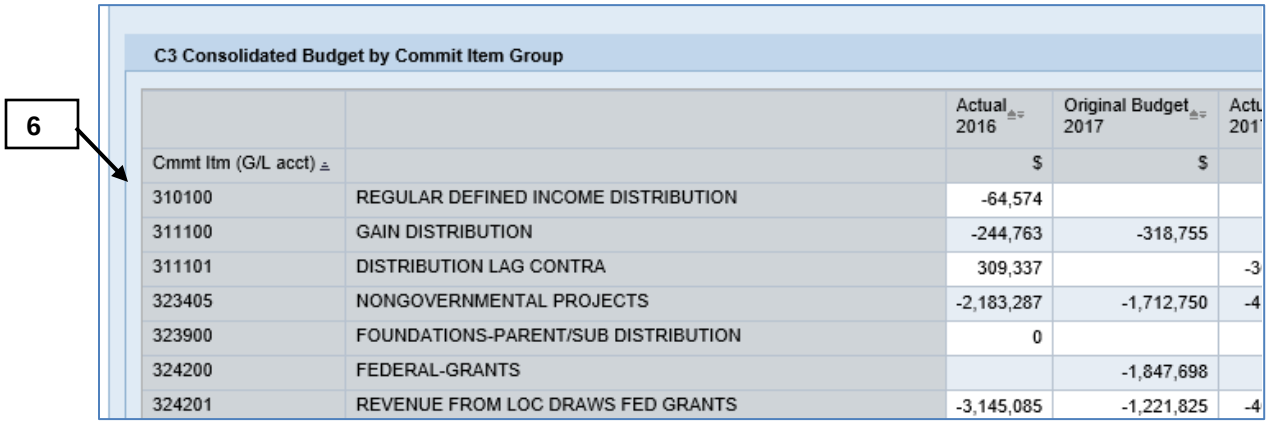
4. From the Drop-down menu, scroll through the many options and select an option that best suits your needs, as follows:

- Any option indicated as Key represents the number.
- Any option indicated as Text or Name represents a description or name.
- If you are interested in sorting numerically, then you'd want to select an option that begins with the word Key (in this example, Key Not Compounded and Long Text is a good choice as some Key choices show the word DUKE in front of the number).
- Experiment with selecting various options available until you find the right one for your needs.

BW Based Reports (cont.)



5. Once an option is selected, click OK to apply the choice to the report.



Cmmt Itm (G/L acct)		Actual 2016 $	Original Budget 2017 $	Actu 201
310100	REGULAR DEFINED INCOME DISTRIBUTION	-64,574		
311100	GAIN DISTRIBUTION	-244,763	-318,755	
311101	DISTRIBUTION LAG CONTRA	309,337		-3
323405	NONGOVERNMENTAL PROJECTS	-2,183,287	-1,712,750	-4
323900	FOUNDATIONS-PARENT/SUB DISTRIBUTION	0		
324200	FEDERAL-GRANTS		-1,847,698	
324201	REVENUE FROM LOC DRAWS FED GRANTS	-3,145,085	-1,221,825	-4

6. Review the additional information now added to and displayed in the column (in this example the Commitment Item / GL Account number is added to the beginning of the column for easy sorting).

*Note: Use the **Back One Navigation Step** or **Back to Start** options to undo the action if desired.*

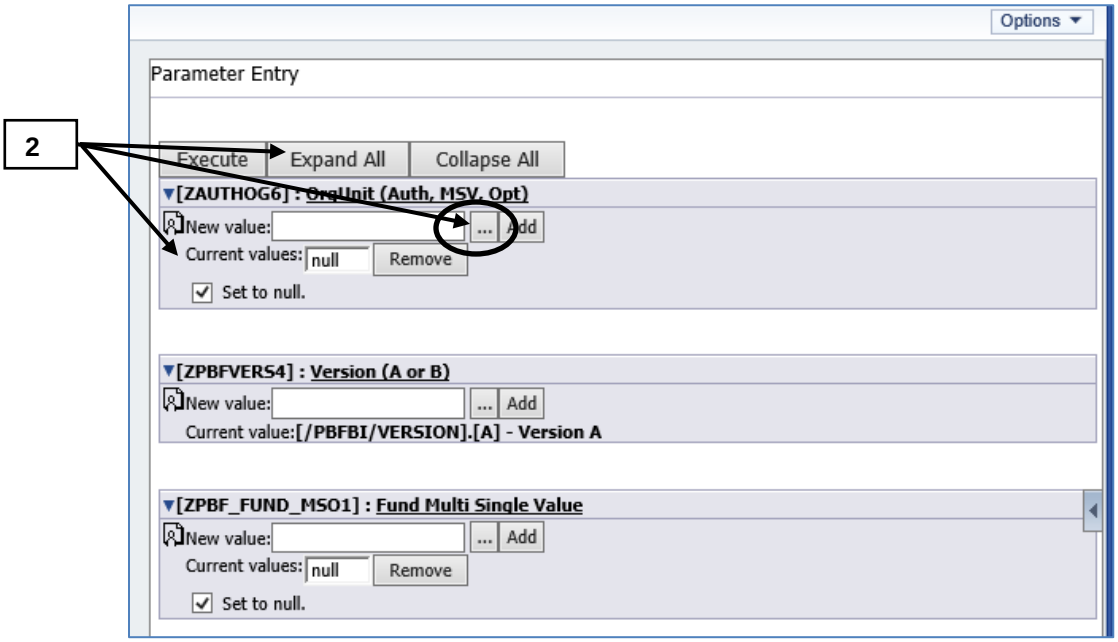
Reports with Comments (Crystal Based)

Steps for Selecting Data and Executing Reports with Comments:

Note: Reports with Comments (Crystal based) are denoted with the  *symbol beside the report link and are displayed in a more printer friendly PDF format. The most frequently used fields for selection of the data for the these reports are outlined in this section of the guide.* ***The input fields and the order of the fields may vary by report****.*

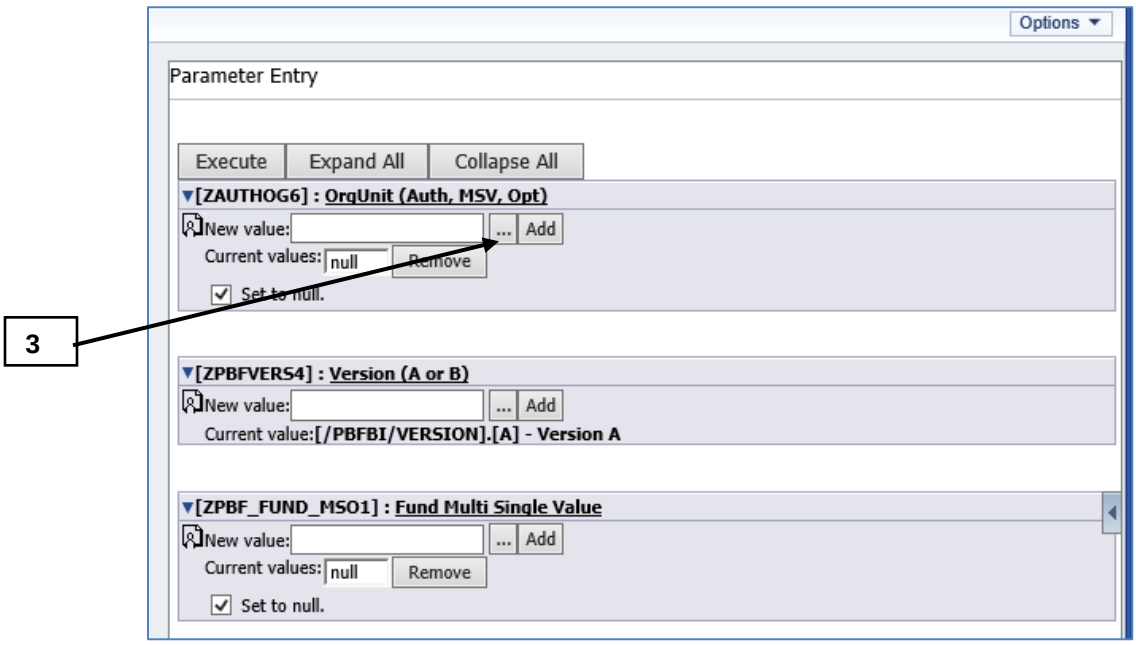
1. To access reports with comments that are denoted with the  icon, click on the underlined link for the desired report (**use descriptions** listed under each link to help with choosing the desired report).

Reports with Comments (cont.)



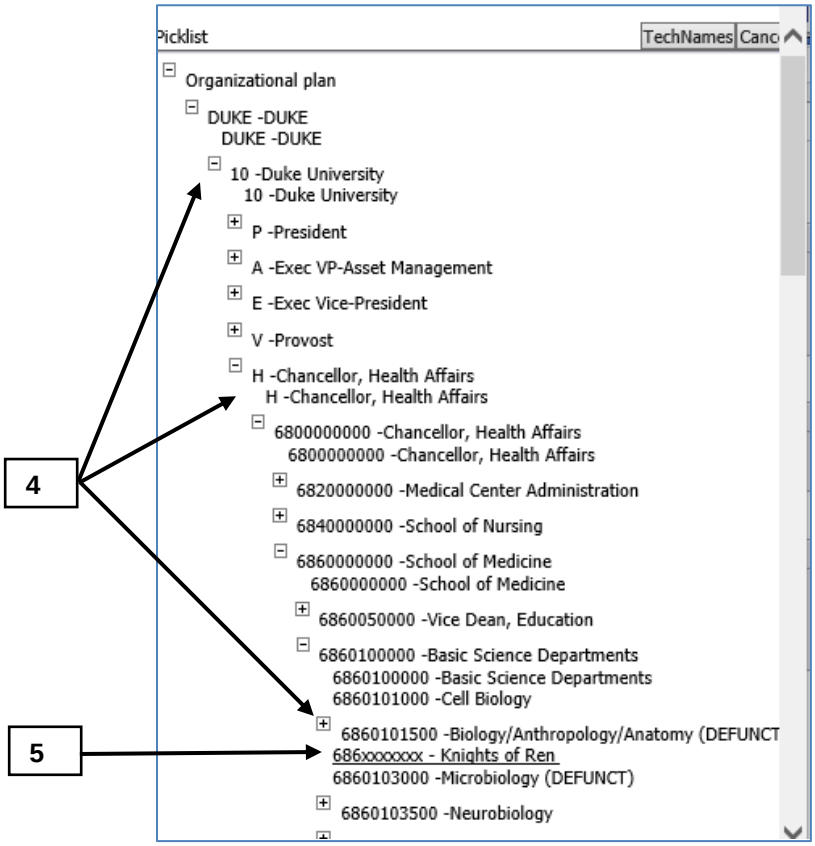
2. Review the fields available for selecting the data to be included in the report and note the following:
   - The selection fields listed will vary by report.
   - Each selection field is displayed in a separate shaded section (if sections are not open, use the individual "twistee" icon to the far left of each section to open or click on the **Expand All** button).
   - ALWAYS use the ... **Drop-down** button to select a value from a "Picklist" box in the **New value:** field (entering a value in this field does not work well, so the Drop-down is recommended).
   - When the **Drop-down** button is used to select a value, the value will automatically update to the **Current value:** field and represents the value that will be used to select and generate data for the report.
   - The **Set to null checkbox** is used to display a check mark which basically selects all the available values for that field (as applicable per other fields like the **Org Unit** field (BFR Code or HR Org Unit).
   - Review the more commonly used Projection report fields below for more on specific details.
   - See examples outlined on next pages.

Reports with Comments (cont.)



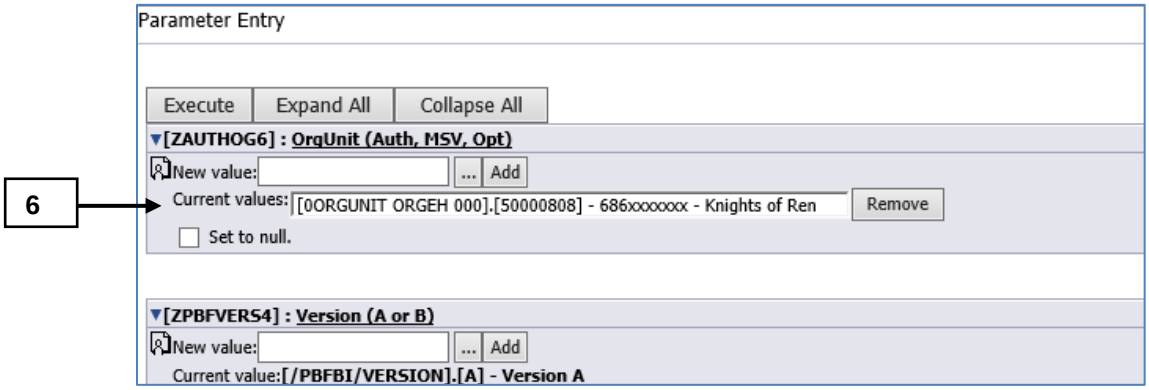
3. To select the **level of BFR Code/ HR Org Unit desired** for the report, click on the ... **Drop-down** button for the **Org Unit** field to display a Pick List.

Reports with Comments (cont.)



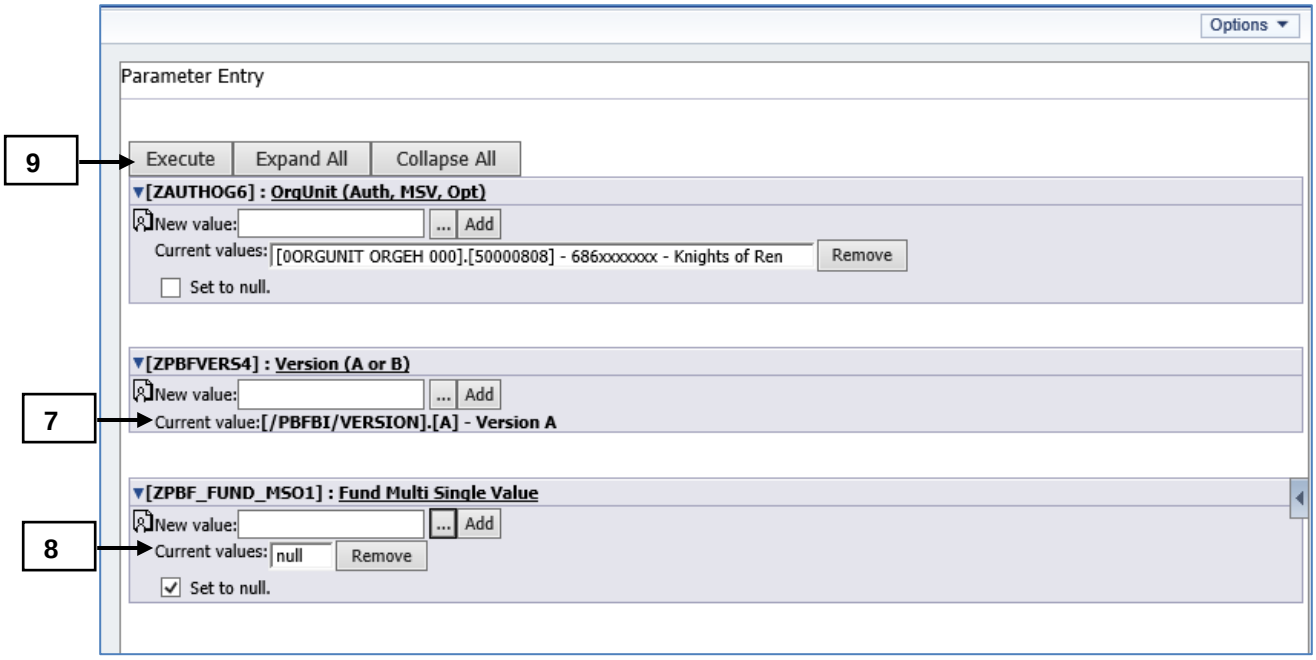
4. Open folders with the **+** icons to find your organization and choose a BFR Code value as desired (all funds for the Org. Unit will be included unless the Fund Multi Single Value field option is available and shown in later steps).

5. Click on the Org. Unit (BFR Code) to be selected for the report (once cursor is placed on the Org. Unit an underlined link appears).



6. Verify the correct Org. Unit is now displayed in the Current Values: field.

Reports with Comments (cont.)



7. In the Version (A or B) section, use the **Drop-down** button and select the appropriate Version for the report and verify the version is displayed in the Current Value: field.

8. For the **Fund Multi Single Value** option if applicable:

   - To select the report for a single fund or funds within the Org. Unit selected, click on the **Drop-down** button and choose the fund (tip: click on the **Technical Names** button in the upper right corner to add the 7 digit cost objects to the Picklist for reference).

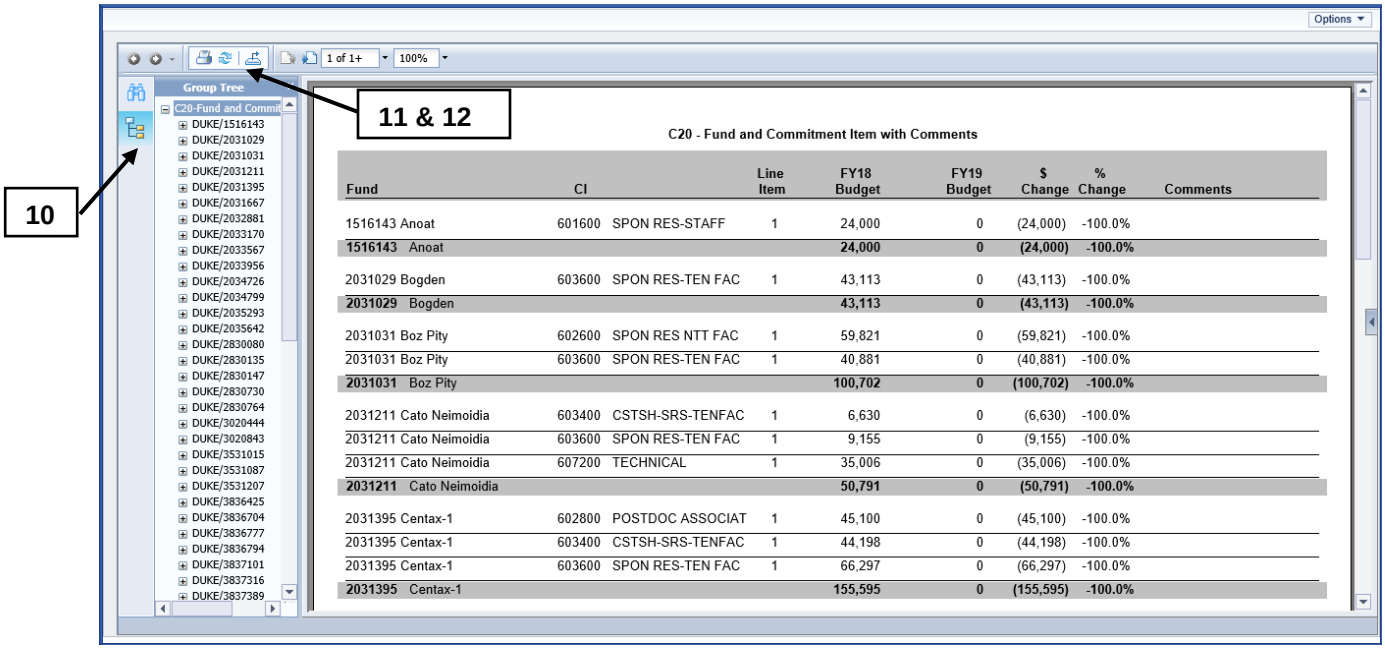
     OR

   - To select all funds associated with a selected Org. Unit / BFR Code, leave the check in the checkbox beside **Set to Null** to keep the defaulted **Current value: Null**.

9. Once all fields are entered as desired, click on the **Execute** button at the top of the window to generate the report.

   Note: *As a reminder, **the input fields and the order of the fields may vary by report.***

Reports with Comments (cont.)



Fund	CI		Line Item	FY18 Budget	FY19 Budget	$ Change	% Change	Comments
1516143 Anoat	601600	SPON RES-STAFF	1	24,000	0	(24,000)	-100.0%	
1516143 Anoat				**24,000**	**0**	**(24,000)**	**-100.0%**	
2031029 Bogden	603600	SPON RES-TEN FAC	1	43,113	0	(43,113)	-100.0%	
2031029 Bogden				**43,113**	**0**	**(43,113)**	**-100.0%**	
2031031 Boz Pity	602600	SPON RES NTT FAC	1	59,821	0	(59,821)	-100.0%	
2031031 Boz Pity	603600	SPON RES-TEN FAC	1	40,881	0	(40,881)	-100.0%	
2031031 Boz Pity				**100,702**	**0**	**(100,702)**	**-100.0%**	
2031211 Cato Neimoidia	603400	CSTSH-SRS-TENFAC	1	6,630	0	(6,630)	-100.0%	
2031211 Cato Neimoidia	603600	SPON RES-TEN FAC	1	9,155	0	(9,155)	-100.0%	
2031211 Cato Neimoidia	607200	TECHNICAL	1	35,006	0	(35,006)	-100.0%	
2031211 Cato Neimoidia				**50,791**	**0**	**(50,791)**	**-100.0%**	
2031395 Centax-1	602800	POSTDOC ASSOCIAT	1	45,100	0	(45,100)	-100.0%	
2031395 Centax-1	603400	CSTSH-SRS-TENFAC	1	44,198	0	(44,198)	-100.0%	
2031395 Centax-1	603600	SPON RES-TEN FAC	1	66,297	0	(66,297)	-100.0%	
2031395 Centax-1				**155,595**	**0**	**(155,595)**	**-100.0%**	

Note: Be sure to adjust (add websites to allow security) or turn off pop-up blocker settings as needed in order to use this type of report.

10. Once in the report, use the **Group Tree** button to the left of the report to display a list of cost objects / funds included in the report and click on a fund to navigate to that fund in the report (split window may be sized through the click and drag function).

11. Use the **Refresh** button at the top left to update the selection for the report as needed.

12. Use the **Export** button to both export AND print as needed. To print, export the file to PDF format and then print.