



Business Explorer–Analyzer for Power Users BEX_305



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- Unit 9 – Query Views
- Course Summary

Prerequisites & Access



- Prerequisites
 - ♦ Access to data in IRIS R/3 Production and/or BEx Web Reporting
 - ♦ Successfully completion of either
 - BEX_300 Business Warehouse: BEx Web Reporting
 - Or**
 - BEX_SLCM_300 Business Warehouse: SLCM BEx Web Reporting
- For Access
 - ♦ Have BEX_305 on training plan
 - ♦ Signed Statement of Responsibility (SOR)
 - ♦ Successfully completion of BEX_305



Unit 1



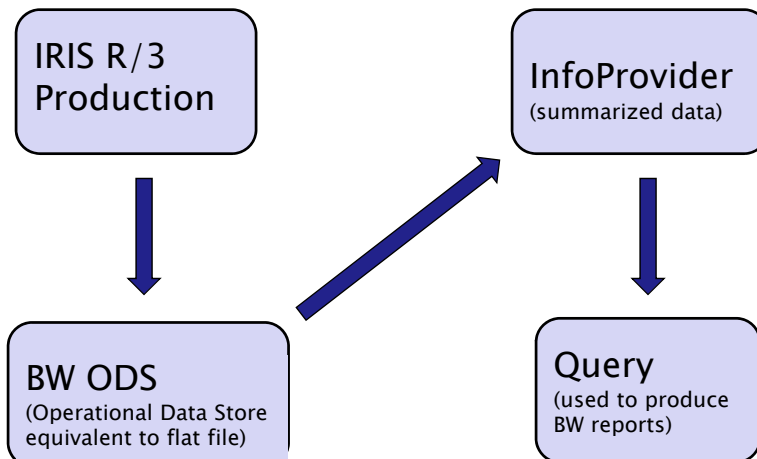
BEx Analyzer Overview

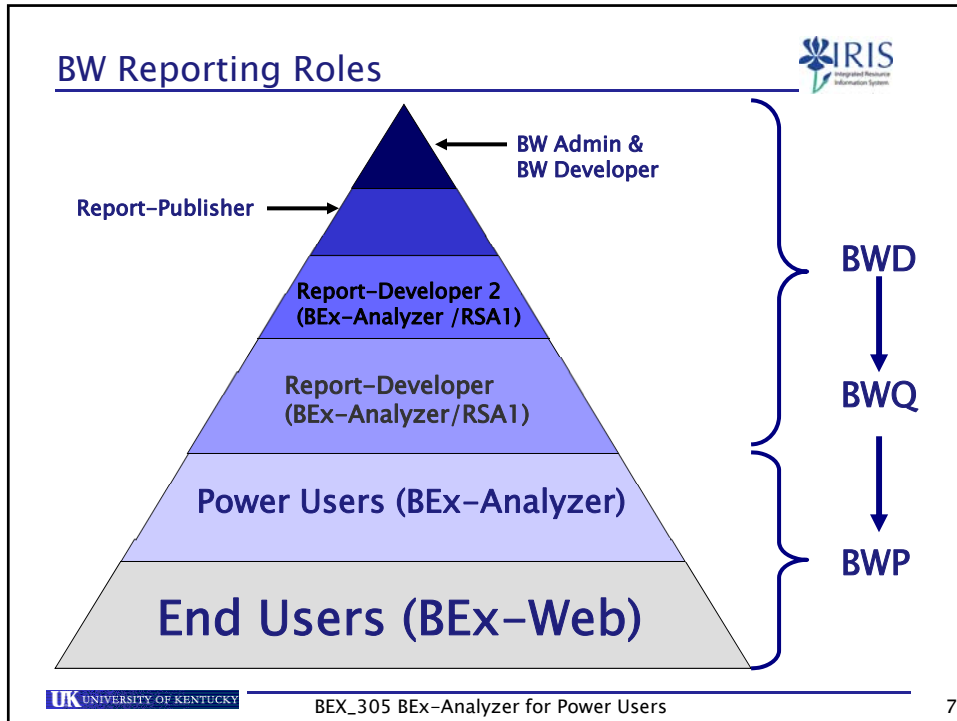
Unit 1 – BEx Analyzer Overview





- BEx Analyzer Overview
- BW Reporting Roles
- User Role Functions
- Power User Functionality
- BEx-Analyzer Access

BEx Analyzer Overview





- ## BW Reporting Roles
- 
- End Users
 - ♦ Uses BEx Web Reporting to view queries
 - ♦ Can only use queries that are assigned to a user's role

 - Power Users
 - ♦ Uses BEx-Analyzer to generate queries for ad-hoc reporting in production
 - ♦ More responsibility for Saved Views in order to help End Users
-  UNIVERSITY OF KENTUCKY
BEX_305 BEx-Analyzer for Power Users
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User Role Functions



In BW	End-User	Power User	Report Developer	Report Developer 2
Run Query	X	X	X	
Run Query View	X	X	X	
Create Query View (starting with Z...)	X	X		
Change Query View (starting with Z...)		X		
Delete Query View (starting with Z...)		X		
Create Query View (starting with V...)			X	
Change Query View (starting with V...)			X	
Delete Query View (starting with V...)			X	
Display Query View	X	X	X	
Create Query (starting with Y...)		X		
Change Query (starting with Y...)		X		
Delete Query (starting with Y...)		X		
Create Query (starting with Q...)			X	
Change Query (starting with Q...)			X	
Delete Query (starting with Q...)			X	
Display Query	X	X	X	

User Role Functions



In BW	End-User	Power User	Report Developer	Report Developer 2
Create Global Structure				X
Change Global Structure				X
Display Structure	X	X	X	
Create Variables				X
Change Variables				X
Display Variables	X	X	X	
Create Global Restricted Key Figures				X
Change Global Restricted Key Figures				X
Display Restricted Key Figures	X	X	X	
Create Global Calculated Key Figures				X
Change Global Calculated Key Figures				X
Display Calculated Key Figures	X	X	X	
Display Hierarchy			X	
Display Hierarchy (data)	X	X	X	
RSRT analyze query & comp			X	
RSRT2 analyze web item			X	
RSA1 display			X	

Power User Role Functionality



- Run, Create, Change, Delete, and Display
 - ♦ Queries
 - ♦ Query Views
- Display & Use Global Structures, Variables, Restricted Key Figures, Calculated Key Figures, and Hierarchies
- Create & Use Local Structures, Restricted Key Figures, and Calculated Key Figures
- Save Y queries within the Power User name space

BEx-Analyzer Requirements



- Web browser in Windows
 - ♦ Microsoft Internet Explorer (MS IE) 6.x and above
 - ♦ Netscape Navigator (NS) 6.x and above
 - ♦ Other web browsers, such as Firefox, are not advised (may behave differently or not at all)
- Active Directory services account
 - ♦ Domain is AD or MC

BEx-Analyzer Requirements



- SAPGUI
 - ◆ Need the most recent version
 - ◆ More information on the IRIS website
<http://www.uky.edu/IRIS/news/SAPGUI710Info.html>

- Microsoft Excel
 - ◆ Works with both the 2003 and 2007 versions
 - ◆ More information for version 2007 on the IRIS Website
 - <http://www.uky.edu/IRIS/news/desktopinformation.html>

Summary



- BEx Analyzer Overview
- BW Reporting Roles
- User Role Functions
- Power User Functionality
- BEx-Analyzer Access



BEx Analyzer

- How to Access
- BEx Analyzer
- BEx Analyzer Toolbar

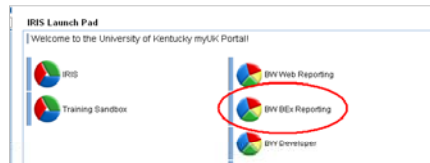
How to Access



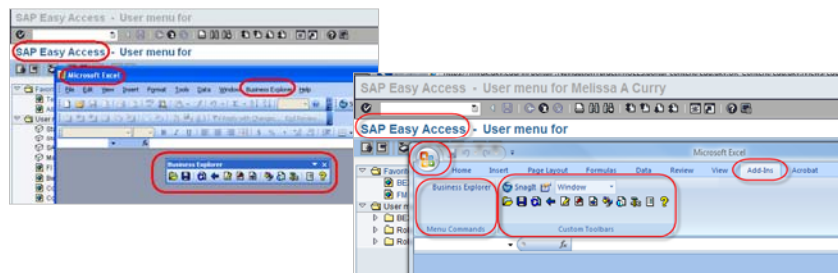
- Log on to the **myUK** portal



- Click on **BW BEx Reporting**

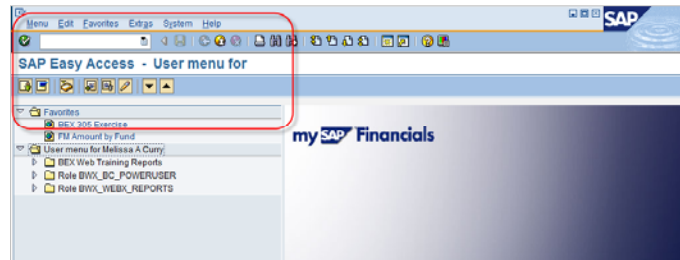


BEx Analyzer



- BEx Analyzer opens up Microsoft Excel and, in the background, the SAP Easy Access screen
 - ♦ **Excel 2003** – Business Explorer menu and floating toolbar added
 - ♦ **Excel 2007** – Business Explorer menu and toolbar added under the **Add-Ins** tab

BEx Analyzer

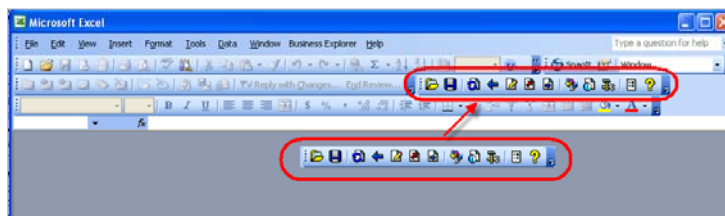


- SAP Easy Access **MUST** remain open to run your queries
- If it closes, save query, close Excel, and then go back to the portal link to reopen the BEx-Analyzer

BEx Analyzer



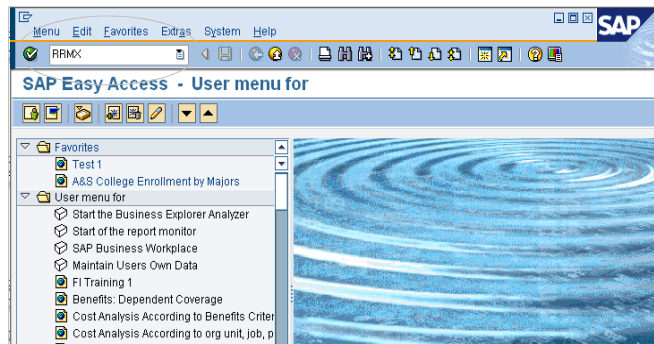
- If Excel does not seem to open, an active Excel session may be open; the new toolbar and menu could have been added to the existing session
- BEx-Analyzer Toolbar in Excel 2003 does not always show up in the same place in the group of toolbars
 - ♦ Move to desired location



BEx Analyzer



- If Excel closes accidentally and the SAP screen is still open, re-open Excel by typing **RRMX** in the **Command** field on the **SAP Easy Access Menu** window



Exercise















- Log into BW BEx Reporting



BEx Analyzer Toolbar



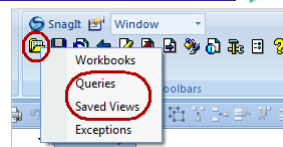
Items in **BOLD** covered during this class

- **Open**  • OLAP functions for active cells 
- **Save**  • Format 
- **Refresh query**  • Layout 
- **Back**  • Tools 
- **Change query**  • Settings 
- **Goto**  • **Help** 

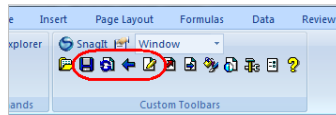
Open



- Workbooks – Used by KMSF
- Queries
 - ♦ Selection of characteristics and key figures (InfoObjects) for the analysis of the data in an InfoProvider (InfoCube, ODS, etc.)
 - ♦ Always refers exactly to one InfoProvider; can define as many queries as you like for each InfoProvider
- Saved Views
 - ♦ Created when base query is run, make changes (drill-downs, filters, etc.) and save view changes (but not data) to run later
 - Base query does not change, only the current view of the data

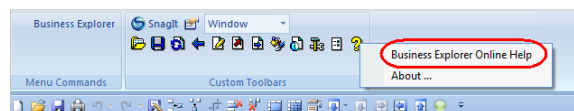


BEX View Tools

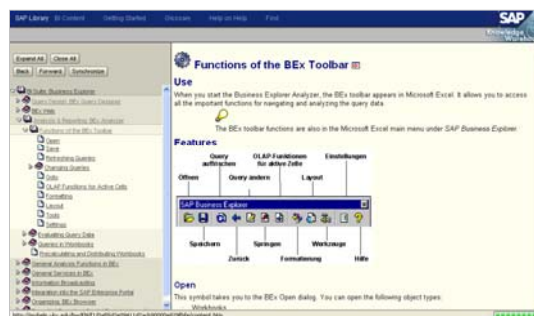


- Used after running a query view in Excel
 - ♦ Save – saves view for later recall
 - ♦ Refresh query – brings up the parameter window
 - ♦ Back – allows going back one step and undo last change
 - ♦ Change query
 - Local view – provides ability to make changes to current query, but does not allow addition of new objects to the query
 - Global definition – provides ability to make changes to current query and allows addition of new objects to the query
 - Change variable values – allows view of personalized variable values

Help



- Use the **Help** button to get to the SAP Library
 - ♦ Provides more information about BEx Analyzer

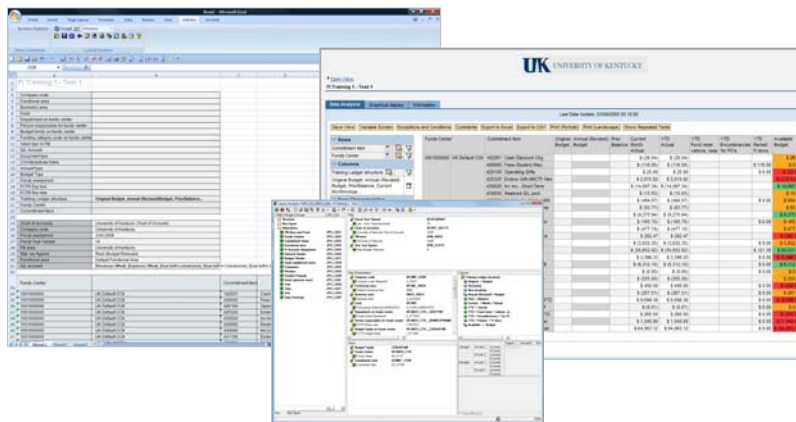


Summary



- How to Access
- BEx Analyzer
- BEx Analyzer Toolbar

Unit 3



Display Query

Unit 3 – Display Query



- Select Query Window
- Query Display
- Query Designer Window
- Query Designer Toolbar

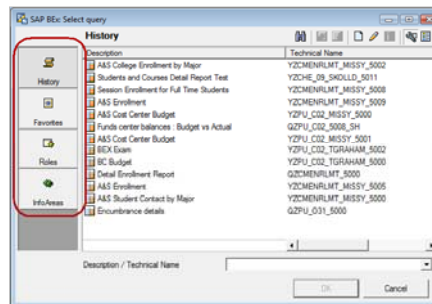
Select Query Window



- To get to **Query Designer**, click the **Open** icon and select **Queries**



- **History, Favorites, Roles, and InfoAreas** contain available queries



Select Query Window



- Contains queries you have created, opened, or recently viewed



- Contains queries you created or accessed and assigned to Favorites



- Contains Q (shared) queries; cannot change or delete; can display and do a **Save As**

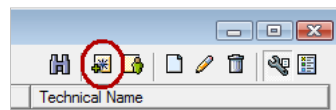
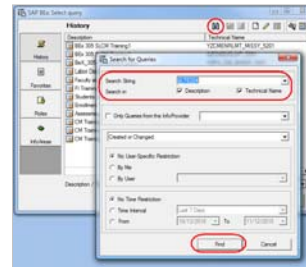


- Contains both Q (shared) and Y (Power User) queries

Select Query Window



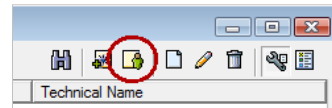
- Find
 - ♦ Use to find a particular query
 - ♦ Can be useful when you have access to a number of queries and need to find one quickly
- Add to Favorites
 - ♦ Use to bookmark a shared query to Favorites by single-clicking the query and clicking on this icon



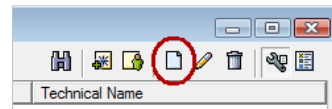
Select Query Window



- Enter in Role
 - ♦ Function not available to Power Users
 - ♦ Used by Report Publishers



- New
 - ♦ Create a new query
 - ♦ Provides access to all InfoProviders to which you have access



Select Query Window



- Change
 - ♦ Use to display or change
 - Q query opens in display mode (system message stating you do not have authorization to change displays, respond by clicking the OK button)
 - Y query opens in change mode



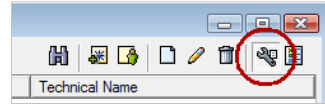
- Delete
 - ♦ Deletes the selected query
 - ♦ Cannot delete Q queries



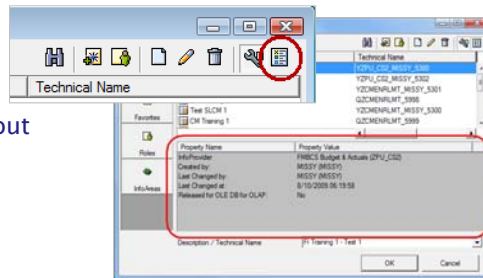
Select Query Window



- Technical Names On/Off
 - ♦ Displays technical names for roles, queries, etc.
 - ♦ Important when communicating to the BW Reporting Group



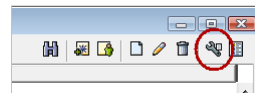
- Properties On/Off
 - ♦ Provides information about selected query



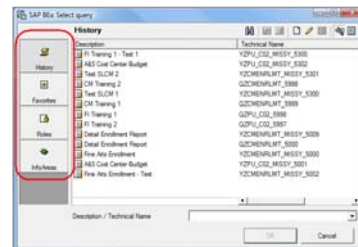
Query Display



- Click on the **Technical Name** icon
 - ♦ Descriptions can be identical while technical names are unique



- To display a query, click on either History (default), Favorites, Roles, or InfoAreas
 - ♦ Or use Find icon to search for a particular query



Query Display

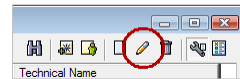


- Continue to expand until you see the query you want to display and highlight it

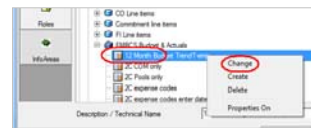


- To display the query you can:

- ♦ Click on the **Change** icon



- ♦ Right-click and select **Change**

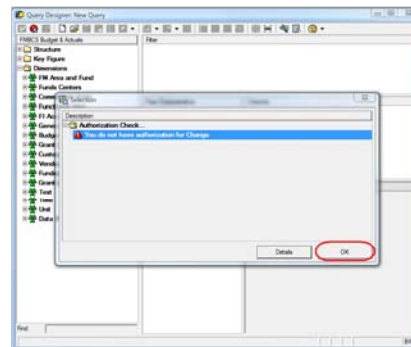


Note: Double-clicking on the query or single-clicking and clicking on **OK** will cause the query to run

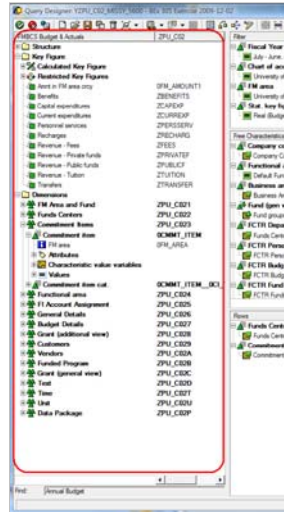
Query Display



- Q queries open with everything grayed out
 - ♦ System message states you will not be able to make changes to these reports; click **OK** to proceed
 - ♦ Use **Save As** and enter a new report name using the Naming Standards to save change



InfoProvider Frame

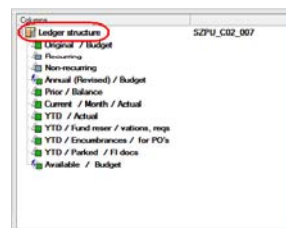
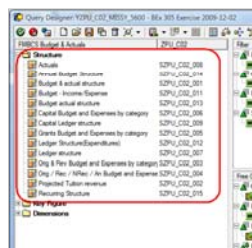


- Description and, with Technical Names on, the technical name of the InfoProvider displays at top
 - ♦ Example: the InfoProvider description is **FMBCS Budget & Actuals** technical name is **ZPU_C02**
- Provides access to everything available in the InfoProvider

InfoProvider Frame



- Elements of the InfoProvider
 - ♦ Structure (in some, but not in all, InfoProviders)
 - Reusable/Global Structures
 - Saved as reusable
 - Can be used in several queries for same InfoProvider
 - Located only in InfoProvider area



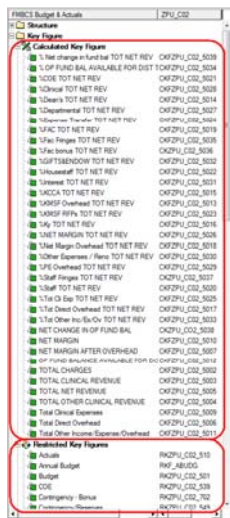
InfoProvider Frame



- Elements of the InfoProvider
 - ♦ **Key Figures**
 - May contain **Calculated Key Figures**
 - May contain **Restricted Key Figures**
 - Does contain one or more key figures that are in the InfoProvider (created by BW developers)
 - ♦ **Dimensions**
 - Characteristics are under the **Dimensions** folder



InfoProvider Frame

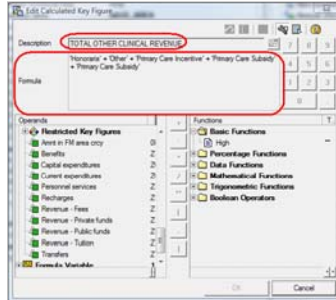
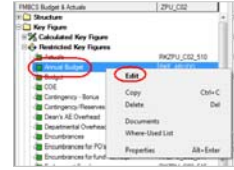


- Calculated Key Figure
 - ♦ Generated using an Expression Builder from the key figures in the Key Figure structure
- Restricted Key Figure
 - ♦ Restricted by certain values for each characteristic selected
 - ♦ May contain multiple characteristics
 - May be restricted by multiple values

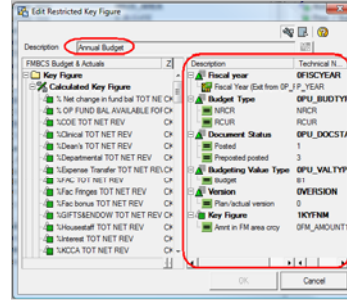
InfoProvider Frame



- To view a **Calculated** or **Restricted Key Figure**
 - Right-click on it in the InfoProvider frame
 - Select **Edit/Display** (depending on which mode you are in)



Calculated Key Figure



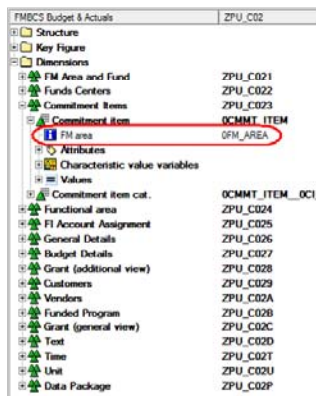
Restricted Key Figure

Characteristic Icons



Information

- If **Funds Center** selected, **FM area** will be automatically selected
- FM area** helps to define the **Funds Center**
- Can keep it or not
- Can put it in the **Filter** window and restrict it
- May not show up under a characteristic



Characteristic Icons



- **Attributes**

Characteristic	Code
Structure	ZPU_C02
Key Figure	
Dimensions	
FM Area and Fund	ZPU_C021
Funds Centers	ZPU_C022
Commitment Items	ZPU_C023
Commitment Item	OCMMT_ITEM
FM area	DFM AREA
Attributes	
Commit item cat.	OCI_TYPE
Financial transaction	ZZFEWR
Can be Posted To	ZZKATEG
Item	ZZPOSIT
Characteristic Value Variables	
Values	
Commitment item cat.	OCMMT_ITEM_OCI
Functional area	ZPU_C024
FI Account Assignment	ZPU_C025
General Details	ZPU_C026
Budget Details	ZPU_C027
Grant (additional view)	ZPU_C028
Customers	ZPU_C029
Vendors	ZPU_C02A
Funded Program	ZPU_C02B
Grant (general view)	ZPU_C02C
Test	ZPU_C02D
Time	ZPU_C02T
Unit	ZPU_C02U
Data Package	ZPU_C02P

- ♦ Master data attributes
- ♦ For display only
- ♦ Tied to a particular characteristic and moves with the characteristic (such as drill down or drill across)
- ♦ Cannot filter on an attribute
- ♦ May not show up under a characteristic

Characteristic Icons

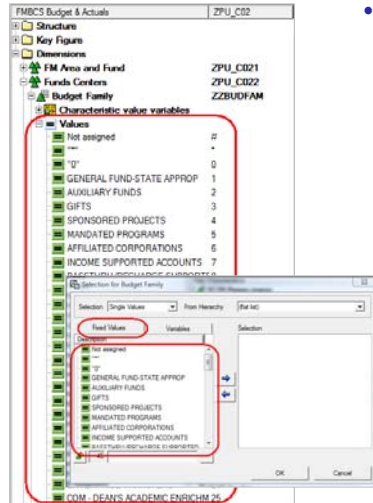


- **Characteristic Value Variables**

Characteristic	Code
Structure	ZPU_C02
Key Figure	
Dimensions	
FM Area and Fund	ZPU_C021
Funds Centers	ZPU_C022
Commitment Items	ZPU_C023
Commitment Item	OCMMT_ITEM
FM area	DFM AREA
Attributes	
Characteristic value variables	
Commitment item	BI_CMTM
Commitment item (Single Value)	BI_CITEM
Commitment item (interval)	BI_CITEMI
Values	
Commitment item cat.	OCMMT_ITEM_OCI
Functional area	ZPU_C024
FI Account Assignment	ZPU_C025
General Details	ZPU_C026
Budget Details	ZPU_C027
Grant (additional view)	ZPU_C028
Customers	ZPU_C029
Vendors	ZPU_C02A
Funded Program	ZPU_C02B
Grant (general view)	ZPU_C02C
Test	ZPU_C02D
Time	ZPU_C02T
Unit	ZPU_C02U
Data Package	ZPU_C02P

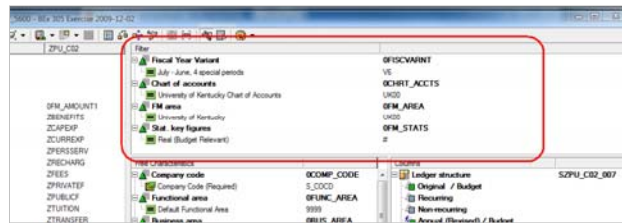
- ♦ Parameters available to use
- ♦ Details may be viewed which show whether it is
 - Mandatory or optional
 - Single value, selection option, interval, etc.
- ♦ If new variable/parameter needed, send request to BI-Requests@email.uky.edu
- ♦ All characteristics have icon, but may not have variable under it

Characteristic Icons



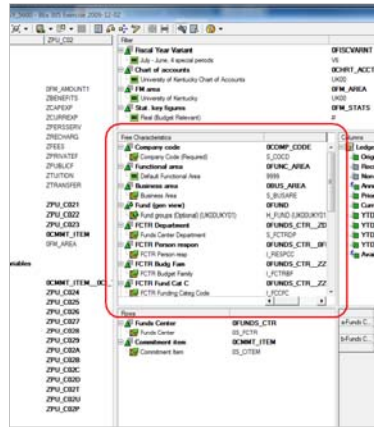
- Values
 - ♦ Gives all the possible values for the characteristic
 - **Example:** Budget Family has General Fund–State Approp, Auxiliary Funds, etc.
 - ♦ All characteristics have this icon
 - ♦ If a large number of values exist, a selection window will display

Filter Frame



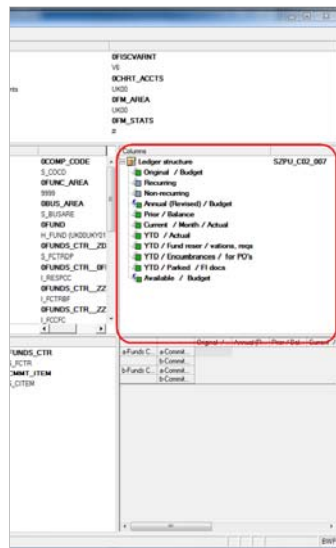
- All of the InfoProvider data is aggregated using the filter selection of the query
- Characteristics in the Filter frame do not display in the query nor can they be changed

Free Characteristics Frame



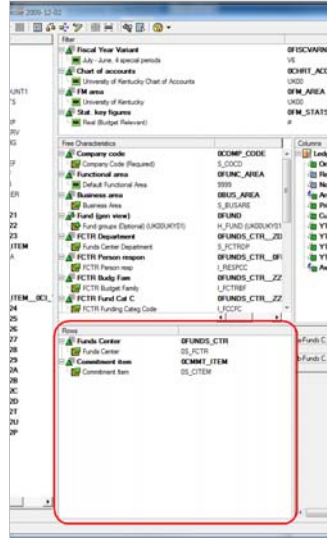
- Not displayed on the initial report
- Additional fields available to be included in the report
- Have capability for
 - ◆ Drill-down
 - ◆ Drill-across
 - ◆ Filtering

Columns Frame



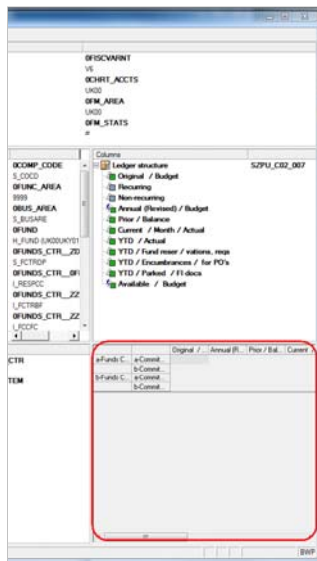
- Shown vertically in the initial report
- Normally contains key figures
 - ◆ Amounts or units for which calculations can be made
 - ◆ Examples include
 - Sums
 - Averages
 - Counts

Rows Frame



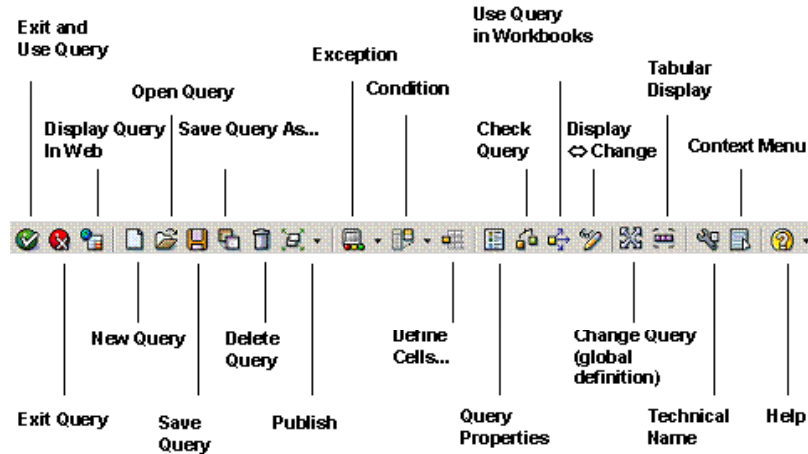
- Shown horizontally in the initial report
- Normally contains characteristics or descriptive data
- Examples include
 - ◆ Funds Center
 - ◆ FCTR Department
 - ◆ Commt/Actual Detail

Rough Draft Frame



- Displays rough draft of initial report
- Only shows what has been placed in Rows and Columns

Query Designer Toolbar



Query Designer Toolbar



• Exit and Use Query

- ◆ Exits the Query Designer and runs report in Excel
- ◆ Opens window for saving, if changes were made



• Exit Query

- ◆ Exits the **Query Designer** without running a report
- ◆ Opens window for saving, if changes were made







• Display Query in Web

- ◆ Runs query in a browser; most efficient way to run query (see Query Guidelines)




Query Designer Toolbar



-  • **New Query**
 - ◆ **New Query Select Provider** window displays
-  • **Open Query**
 - ◆ **SAP BEX: Select Query** window displays
-  • **Save Query**
 - ◆ Use to save query
-  • **Save Query As**
 - ◆ Use to duplicate the open query
 - ◆ Use to duplicate and change a **Q** query and make changes in your own name space

Query Designer Toolbar



-  • **Delete Query**
 - ◆ Deletes the existing query that is open
-  • **Exception**
 - ◆ Creating exception allows color-coding on cells that meet certain specific criteria
-  • **Condition**
 - ◆ Creating condition allows only data that meets certain criteria, defined by you, to display, such as the top ten salaries

Query Designer Toolbar



- **Query Properties**

- ♦ Set the properties of the query to meet the query guidelines



- **Check Query**

- ♦ Checks the syntax of your query



- **Use Query in Workbooks**

- ♦ Cannot use with Active Directory Services



- **Display <-> Change**

- ♦ Toggles from display mode to change mode
- ♦ Does not work on Q queries

Query Designer Toolbar



- **Change Query (global definition)**

- ♦ If in a local view, can go to the global view
 - Does not work to go from global to local



- **Tabular Display**

- ♦ Toggle that results in the report displaying in a tabular format



- **Technical Name**

- ♦ Toggles on/off the technical names

Query Designer Toolbar



- **Context Menu**

- ♦ Shows the Context Menu for what is selected
- ♦ Right-click to display the context menu quickly



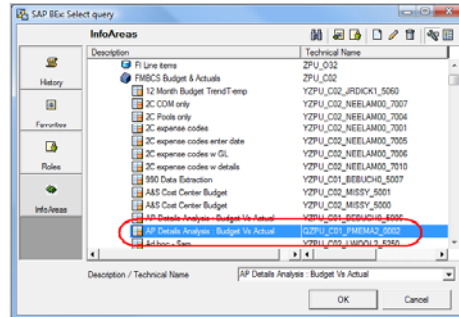
- **Help**

- ♦ Opens the SAP Library which can provide more in-depth information about the Query Designer

Summary



- Select Query Window
- Query Display
- Query Designer Window
- Query Designer Toolbar



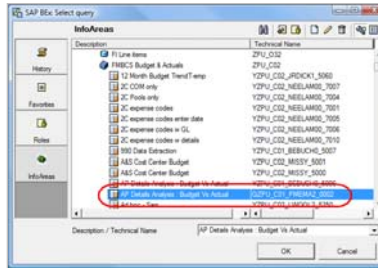
Create Using an Existing Query

- Modify Query
- Using Save As
- Add InfoObjects
- Reorganize InfoObjects
- Remove InfoObjects
- Variables
- Restrictions

Modify Query



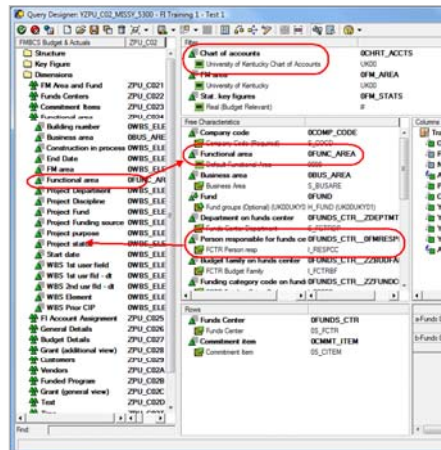
- Simple, quick way to create a new query
- Uses the InfoProvider used in the query you select
 - ♦ Will not be able to see InfoProviders that do not have existing queries
- Three ways to create new query using old query



Modify Query



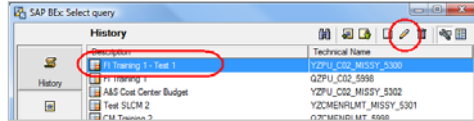
- Add or Remove
 - ♦ Info Objects
 - ♦ Attributes
 - ♦ Variables
- Restrict Info Objects
- Reorganize Info Objects
- Etc.



Modify Query

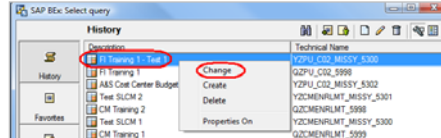


- Single-click an existing query and click on **Change**



OR

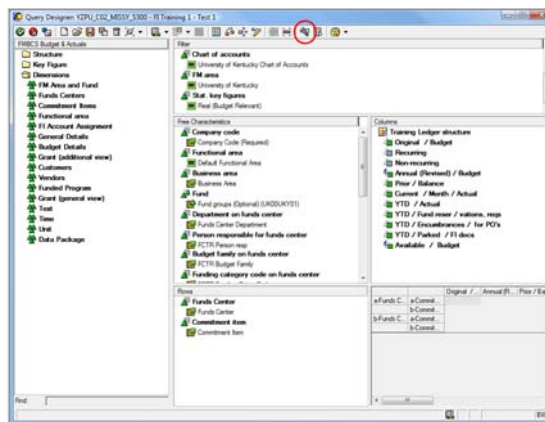
- Right-click on the query and select **Change**



Modify Query



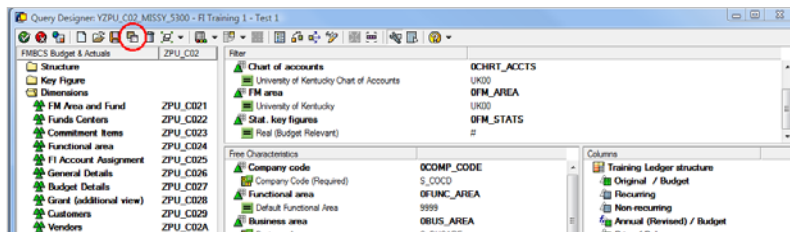
- Turn on **Technical Names**
 - ♦ Technical name of InfoProvider is needed to create a new query



Using Save As



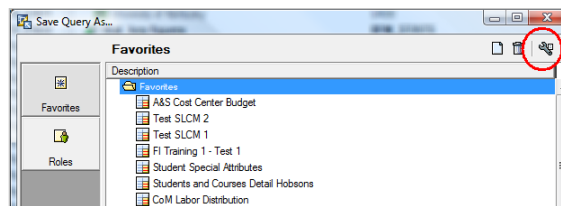
- **Remember!** Use the **Save As** functionality if you are changing an existing report
 - ♦ Ensures that changes are not made to another person's report
- To save, click on **Save As**



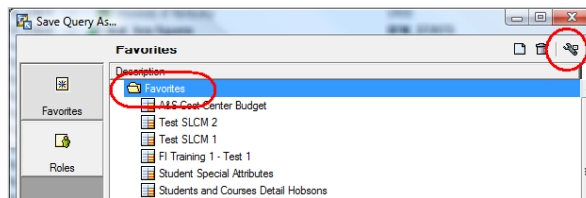
Using Save As



- Click on **Technical Name On/Off**



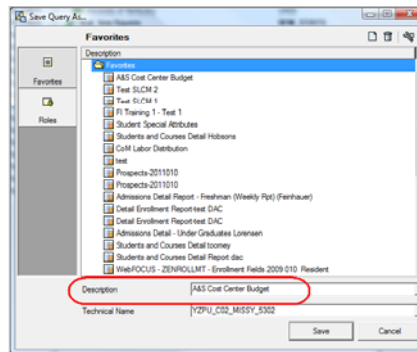
- Save all queries in the **Favorites** (default) folder



Using Save As



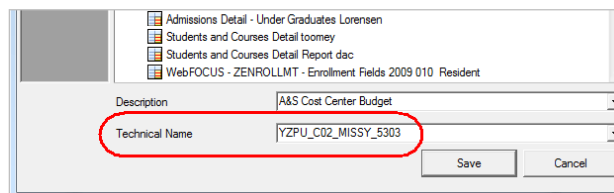
- Change the **Description** field
 - ♦ Should be as descriptive as possible
 - ♦ Can use up to 60 characters for the description



Using Save As



- Must use the **BW Query Naming Standards** for Technical Name
 - ♦ Identifies
 - Power User query
 - InfoProvider
 - User who created it
 - ♦ Shows it is a customized query
 - Use sequential numbers in the range of 5000 to 9999



Using Save As



- Enter a Technical Name following BW Naming Standards

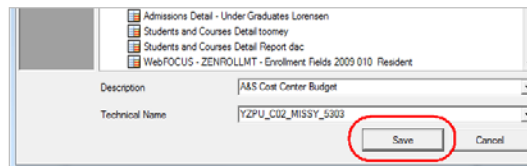
YZPU_C02_USER01_5000

- ♦ Y – is a **must** for Power Users
- ♦ **Cube** – technical name of the InfoProvider
- ♦ **Underscore**
- ♦ **Userid** – your Active Directory Services userid
- ♦ **Underscore**
- ♦ **Nnnn** – Your next number available for that InfoProvider
 - Starting number is 5000

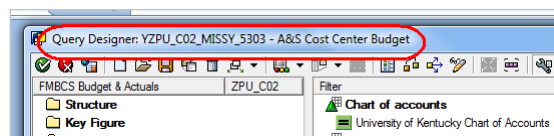
Using Save As



- Click on **Save**



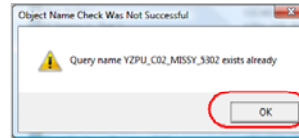
- System message displays in the status field in the lower left of the screen
- Description and technical displays in the Query Designer title bar after saving



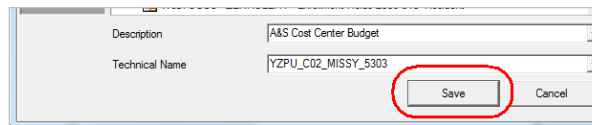
Using Save As



- If you receive a warning message telling you that the **Technical Name** is already in use...



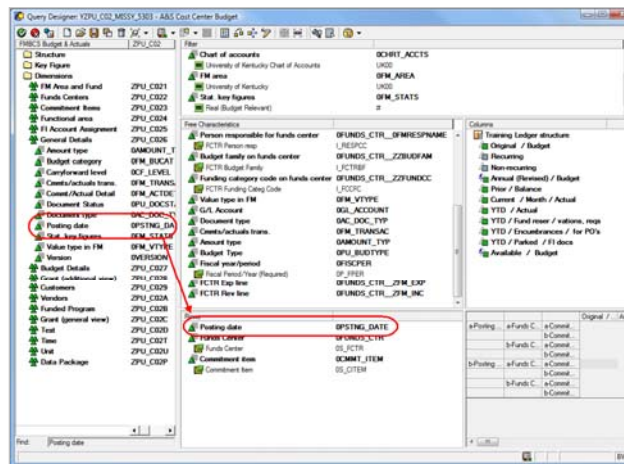
- Give the query a new **Technical Name** and then click on **Save**



Add InfoObjects



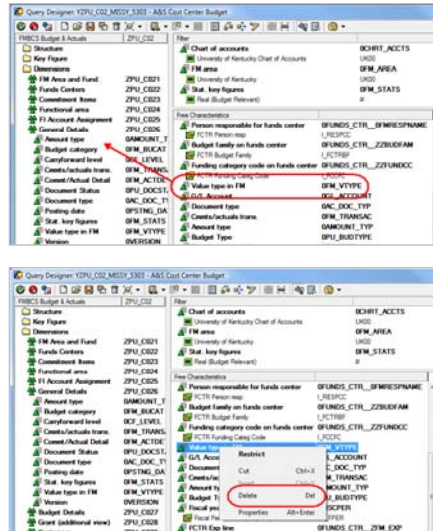
- Add objects by dragging and dropping them into the appropriate frame



Remove InfoObjects



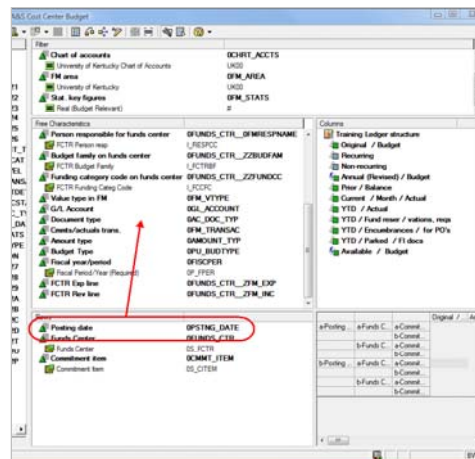
- Two ways to remove an object
 - ♦ Drag and drop it back to the InfoProvider frame
 - ♦ Right-click on the object and select Delete



Reorganize InfoObjects



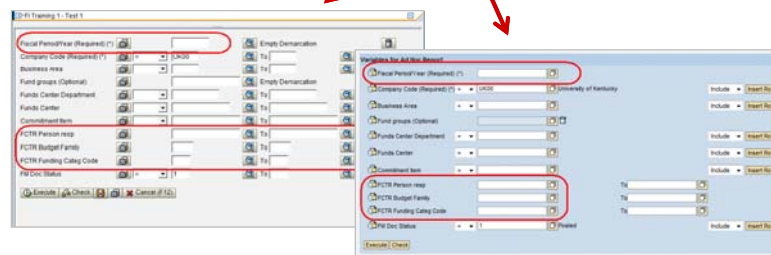
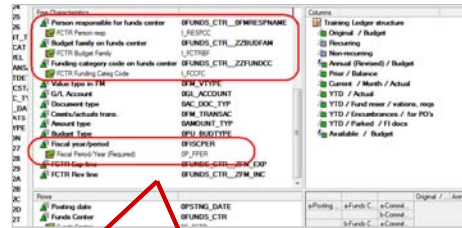
- Move objects to a different window by dragging and dropping
 - ♦ Such as from Rows to Free Characteristics
 - ♦ To move Key Figures from Columns to Rows, drag and drop the Key Figures structure



Variables



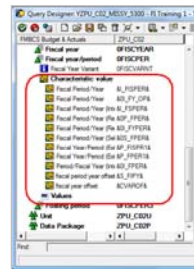
- Restrict amount of data displayed in the initial report by using a time period (as per Query Guidelines), such as **UK Fiscal Year/Per**, as a variable field



Variables



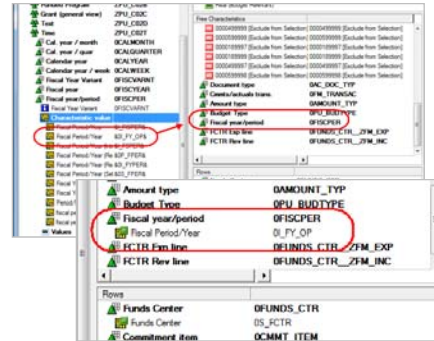
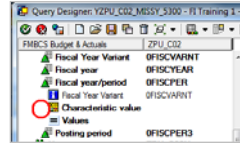
- Place a variable on the characteristic in two ways
 - By using characteristic in the **InfoProvider** frame
- OR
- After placing the characteristic in the **Rows, Columns, or Free Characteristics** frames



Variables



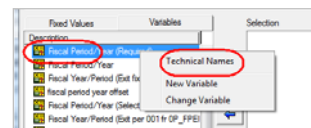
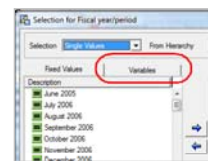
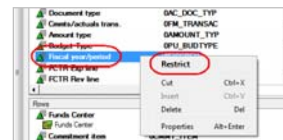
- In the **InfoProvider** frame
 - Click to the left of the **Characteristic Value Variable** for the object to display available variables
 - To see properties of variable, right-click and display or edit
 - Drag and drop the variable on **top** of the object to which it belongs



Variables



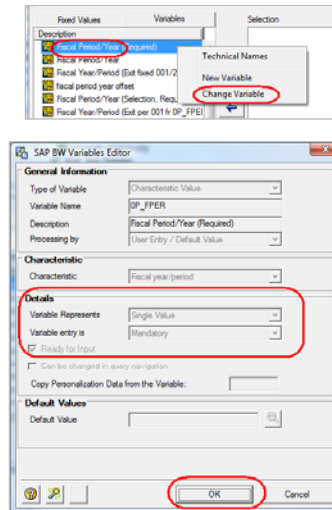
- In the **Rows, Columns, and Free Characteristics** frame
 - Move the characteristic to the desired frame
 - Right-click on it and select **Restrict**
 - Click on the **Variables** tab in the **Selection For...** window
 - Turn on **Technical Names** by right-clicking on one of the values and selecting **Technical Names**



Variables



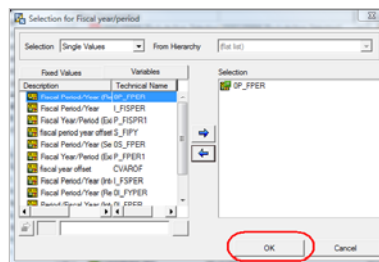
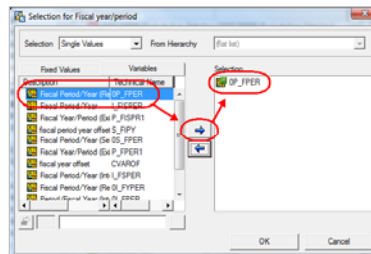
- ♦ Check the type of variable by right-clicking on it and selecting **Change**
- ♦ In the **Details** section:
 - **Variable Represents** lists if the variable is a single value or a selection option
 - **Variable Entry Is** lists if the variable is mandatory, optional, etc
- ♦ Click **OK** to close the window



Variables



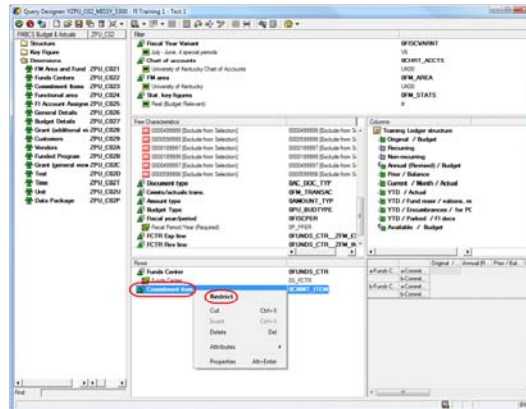
- ♦ Select the **Variable**:
 - Double-click on variable
 - OR
 - Single-click on variable, and then click **Add**
 - OR
 - Drag and drop variable into the **Selection** screen
- ♦ Click **OK**



Restrictions



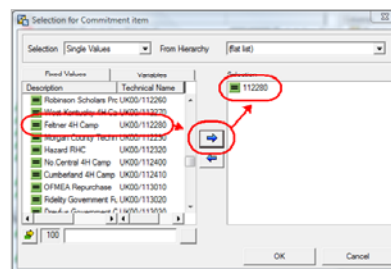
- To restrict characteristic by right-click and select **Restrict**



Restrictions



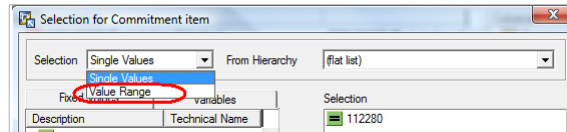
- When the **Selection** window displays, and either
 - Single-click on value from the **Description** column and click **Add** button
 - OR**
 - Double-click on value
 - OR**
 - Drag and drop in **Selection** column



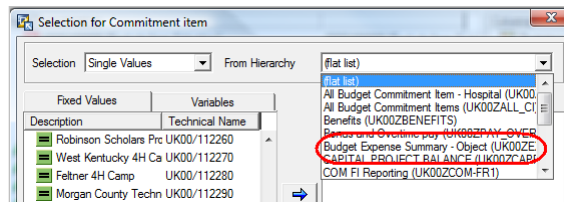
Restrictions



- Can select a range of values by choosing **Value Range** in the **Selection** field



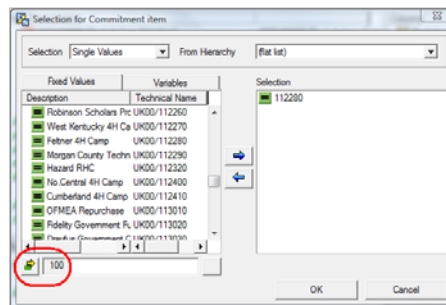
- Then choose the range



Restrictions



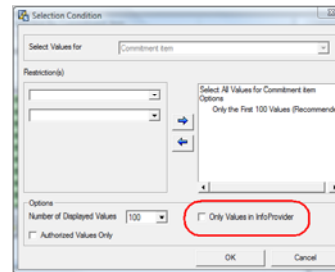
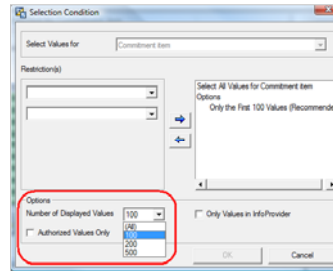
- If value not listed, may be due to limits set on the list (typically set at 100)
- Click on **Display Other Values** button to change the default setting



Restrictions



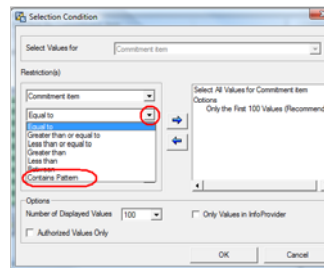
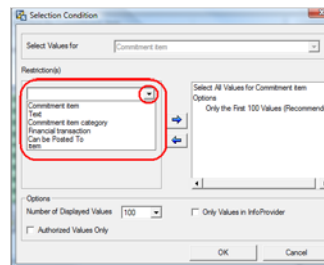
- Can select other values from **Number of Displayed Values** list
 - ♦ **CAUTION!** Use **(All)** with other restrictions are placed
 - ♦ If no other restrictions, may result in long list and long processing time
- View only the values in the InfoProvider if box checked or deselect it to view all of the valid values, even if they are not currently in the InfoProvider



Restrictions



- Can restrict the list by selecting a restriction criterion
 - ♦ Usually the same as the characteristic name
- Then select range
 - ♦ Use **Contains Pattern** to enter a partial name
 - ♦ Wildcards (*) can also be used

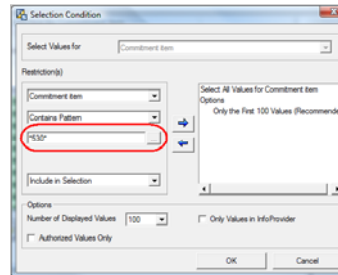


Restrictions

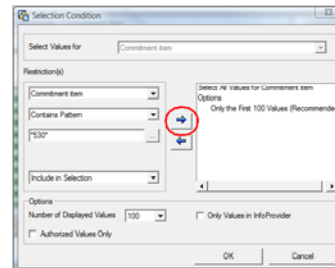


- Enter the search word or term

- ♦ Example: part of the UK department number is entered with a wildcard



- When selections are made, click on **Add**



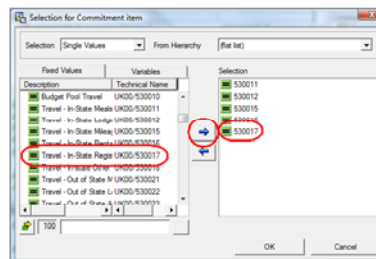
Restrictions



- Click on **OK**



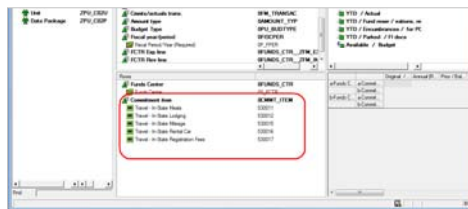
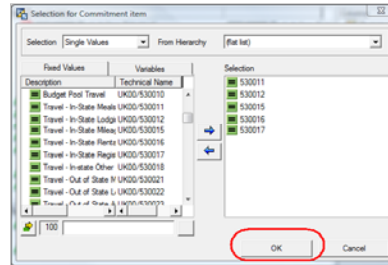
- Scroll to find your value
 - ♦ Single-click on it and click on **Add**
 - ♦ Double-click on it
 - ♦ Drag and drop it to the right-hand side



Restrictions



- Your selection will move to the **Selection** column
- Click on **OK**
- Selection will display below the characteristic



Summary



- Modify Query
- Using Save As
- Add InfoObjects
- Reorganize InfoObjects
- Remove InfoObjects
- Variables
- Restrictions

Unit 5



The screenshot displays the IRIS system interface. On the left, a navigation pane shows a tree structure of folders and reports. The main window is titled 'Run Query' and shows a data table with columns for 'Fund Center', 'Department Code', 'Original Budget', 'Actual Budget', 'Variance', 'Variance %', 'Variance \$', and 'Variance %'. The table contains multiple rows of data, with some cells highlighted in red and others in green. The table is titled 'Last Date Loaded: 12/10/2010 09:10:00'.

Run Query

Unit 5 – Run Query



- Run Query
- Via the Web
- Via Excel

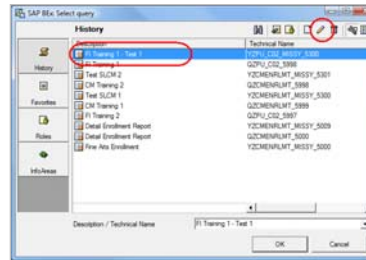
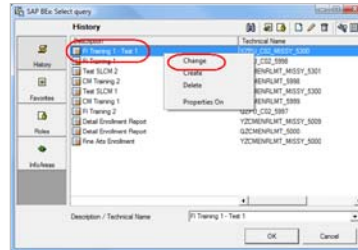
Via the Web



- Right-click on the query and select **Change**

OR

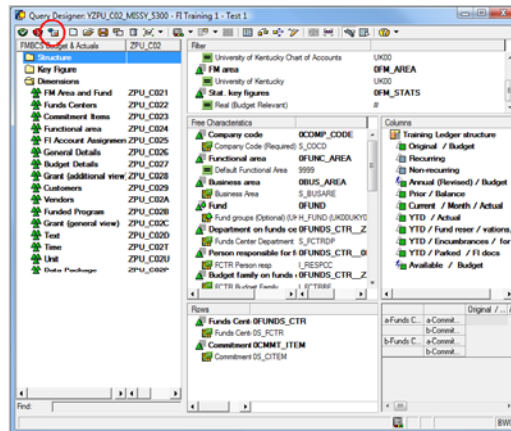
- Single-click on the query and click on the **Change** icon



Via the Web



- Click on **Display Query on the Web**
 - Looks like a spreadsheet with a world in the upper left corner



Via the Web



- Enter the required variables and any other variables you want to use
 - ♦ Required variables are identified by an asterisk (*) on the end of the variable description

- Click on **Execute**

Via the Web



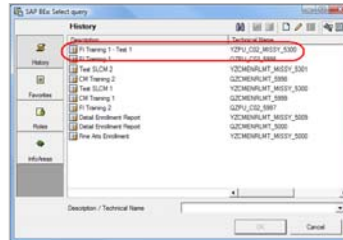
- Change report by adding **Free Characteristics**, filtering, or changing the properties on a characteristic

Account	Original Annual (Revised) Budget	Post Budget	Current Balance	YTD Actual	YTD Fund reas. (Net PCL)	YTD Encumbrance	YTD Available	Balance
400001 Cash Disburse City	\$ 118,000	\$ 118,000	\$ 118,000	\$ 118,000	\$ 118,000	\$ 118,000	\$ 0.00	\$ 0.00
400002 Fees-Student Fees	\$ 1,250.00	\$ 1,250.00	\$ 1,250.00	\$ 1,250.00	\$ 1,250.00	\$ 1,250.00	\$ 0.00	\$ 0.00
420000 Enduse GR-MSCTF-Res	\$ 2,815.82	\$ 2,815.82	\$ 2,815.82	\$ 2,815.82	\$ 2,815.82	\$ 2,815.82	\$ 0.00	\$ 0.00
430000 Int-Res-Short-Term	\$ 174,897.54	\$ 174,897.54	\$ 174,897.54	\$ 174,897.54	\$ 174,897.54	\$ 174,897.54	\$ 0.00	\$ 0.00
430001 Realized GA, year	\$ 115,930	\$ 115,930	\$ 115,930	\$ 115,930	\$ 115,930	\$ 115,930	\$ 0.00	\$ 0.00
430002 Int-Cash-Disburse-MS	\$ 1,484.57	\$ 1,484.57	\$ 1,484.57	\$ 1,484.57	\$ 1,484.57	\$ 1,484.57	\$ 0.00	\$ 0.00
431000 Enduse Actual Income	\$ 1,992.77	\$ 1,992.77	\$ 1,992.77	\$ 1,992.77	\$ 1,992.77	\$ 1,992.77	\$ 0.00	\$ 0.00
431001 Enduse Int-Debt	\$ 8,275.84	\$ 8,275.84	\$ 8,275.84	\$ 8,275.84	\$ 8,275.84	\$ 8,275.84	\$ 0.00	\$ 0.00
432000 Unretd GA, Post	\$ 4,477.10	\$ 4,477.10	\$ 4,477.10	\$ 4,477.10	\$ 4,477.10	\$ 4,477.10	\$ 0.00	\$ 0.00
440000 Rental-In-Residence	\$ 2,822.47	\$ 2,822.47	\$ 2,822.47	\$ 2,822.47	\$ 2,822.47	\$ 2,822.47	\$ 0.00	\$ 0.00
470002 Life Charges-Inst	\$ 13,832.35	\$ 13,832.35	\$ 13,832.35	\$ 13,832.35	\$ 13,832.35	\$ 13,832.35	\$ 0.00	\$ 0.00
470004 Int-Cash-Inst	\$ 159,852.82	\$ 159,852.82	\$ 159,852.82	\$ 159,852.82	\$ 159,852.82	\$ 159,852.82	\$ 0.00	\$ 0.00
470005 Int-Cash-Inst	\$ 1,396.33	\$ 1,396.33	\$ 1,396.33	\$ 1,396.33	\$ 1,396.33	\$ 1,396.33	\$ 0.00	\$ 0.00
470007 Interest Assigned IS	\$ 8,312.16	\$ 8,312.16	\$ 8,312.16	\$ 8,312.16	\$ 8,312.16	\$ 8,312.16	\$ 0.00	\$ 0.00
470008 Interest-Inst-Inst	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
470012 Loan-Application Fee	\$ 2,055.00	\$ 2,055.00	\$ 2,055.00	\$ 2,055.00	\$ 2,055.00	\$ 2,055.00	\$ 0.00	\$ 0.00
530000 Other-Inst	\$ 498.00	\$ 498.00	\$ 498.00	\$ 498.00	\$ 498.00	\$ 498.00	\$ 0.00	\$ 0.00
540004 Assoc-Inst-Inst-Inst	\$ 2,087.61	\$ 2,087.61	\$ 2,087.61	\$ 2,087.61	\$ 2,087.61	\$ 2,087.61	\$ 0.00	\$ 0.00
542111 Cont-Care-Teach-ATF2	\$ 8,888.38	\$ 8,888.38	\$ 8,888.38	\$ 8,888.38	\$ 8,888.38	\$ 8,888.38	\$ 0.00	\$ 0.00
542200 NOL-Cont-Inst-Inst	\$ 8,888.38	\$ 8,888.38	\$ 8,888.38	\$ 8,888.38	\$ 8,888.38	\$ 8,888.38	\$ 0.00	\$ 0.00
542341 NOL-Cont-Inst-Inst	\$ 2,055.00	\$ 2,055.00	\$ 2,055.00	\$ 2,055.00	\$ 2,055.00	\$ 2,055.00	\$ 0.00	\$ 0.00
542342 NOL-Cont-Inst-Inst	\$ 1,042.50	\$ 1,042.50	\$ 1,042.50	\$ 1,042.50	\$ 1,042.50	\$ 1,042.50	\$ 0.00	\$ 0.00
542343 NOL-Cont-Inst-Inst	\$ 8,888.38	\$ 8,888.38	\$ 8,888.38	\$ 8,888.38	\$ 8,888.38	\$ 8,888.38	\$ 0.00	\$ 0.00

Via Excel

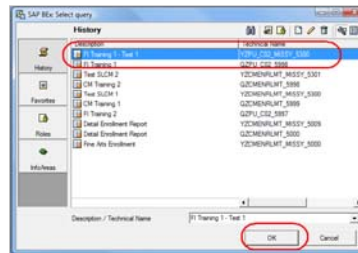


- Three ways to run query via Excel
- From SAP BEx: Select Query window
 - ◆ Double-click on query



OR

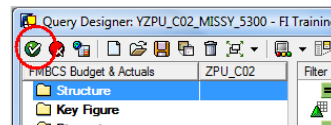
- ◆ Single-click on query and click on OK



Via Excel



- From opened query in Query Designer, click on Quit and Use Query



- Enter required values and any optional ones



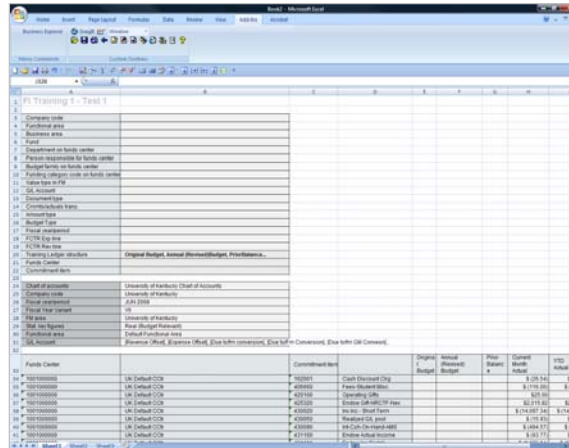
- Click Execute to run



Via Excel



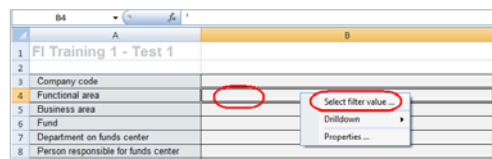
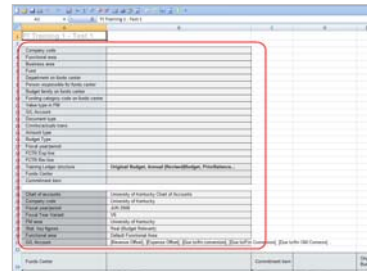
- Report has all the limitations of Excel, so be aware of how much data you are requesting



Via Excel



- The InfoObject list will be located at the top of the spreadsheet
- Filter by right-clicking on a characteristic or key figure and selecting **Select Filter Value...**



Via Excel



- Add and/or change drill-downs, drill-across, change properties, etc.
 - ◆ Looks different than web report

Via Excel

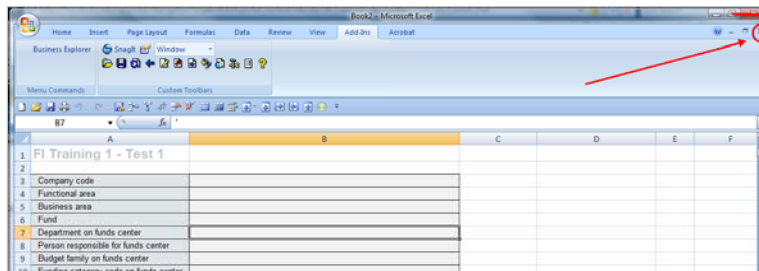


- Cannot hide repeated values in Excel
 - ◆ Need to go back to **Query Designer** and uncheck the box if you want every cell populated
- Can change structures from drill-down to drill-across and visa versa

Via Excel



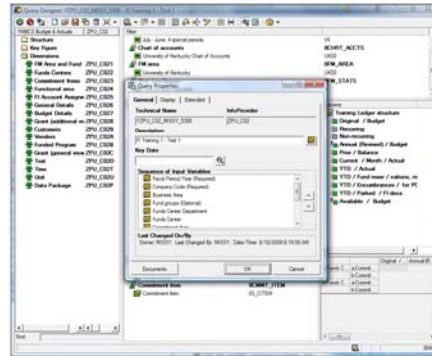
- Can save the spreadsheet if needed
- Exit out of the Spreadsheet, but not out of Excel and BEx Analyzer



Summary



- Run Query
- Via the Web
- Via Excel



Properties

- Properties
- Characteristic Properties
- Query Properties

Properties



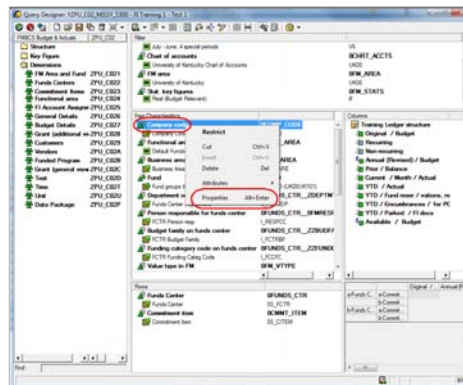
- Use BEx Query Guidelines to make the query more efficient and standardized
 - ♦ Query Guidelines are available at http://myhelp.uky.edu/rwd/HTML/BW/BEX_Query_Guidelines.pdf
- Two types of properties
 - ♦ Characteristic
 - ♦ Query



Properties of Characteristics



- Right-click on each characteristic in both **Rows and Free Characteristics** frames
 - ♦ Do not need to change characteristics in the **Filter** frame
- Select **Properties**



Properties of Characteristics



- Change **Display As** to **Key and Text** if available
 - ♦ If the characteristic text will always be the same as the key, just display as **Key**
 - ♦ If the default is **Standard Key and Text**, it also meets the Query Guidelines

Properties of Characteristics

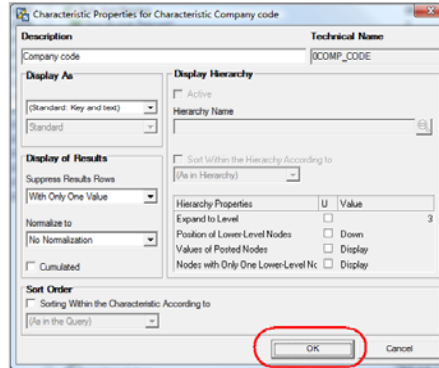


- Change **Display of Results / Suppress Results Rows** from **Never** to **With Only One Value**
 - ♦ **Never** means the Results rows always displayed
 - ♦ (Recommended) **With Only One Value** will suppress the Results rows when there is only one value that it represents
 - ♦ **Always** means the Results rows are not displayed

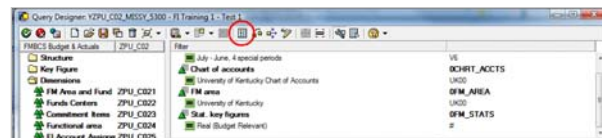
Properties of Characteristics



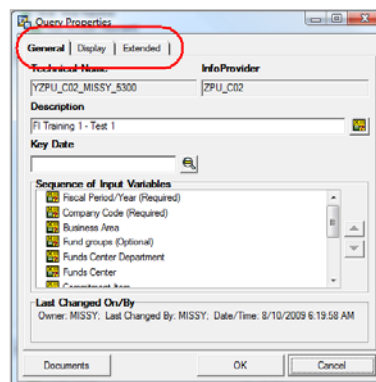
- Click OK
- Remember! Change the properties for all characteristics in both the Rows and Free Characteristics frames



Query Properties



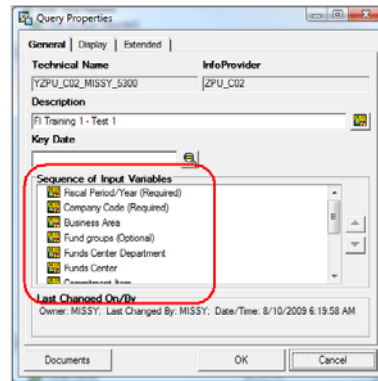
- To change properties of the query, click on **Query Properties**
- **Query Properties** window displays with three tabs
 - ♦ Generic
 - ♦ Display
 - ♦ Extended



Query Properties



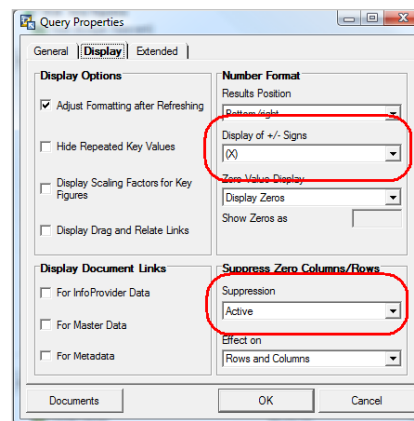
- On the **General** tab
 - ♦ Arrange multiple variables using these priorities
 - Required time variables
 - Required non-time variables
 - Optional variables
 - ♦ Optional variables should be put in logical order
 - ♦ Check existing, published queries to view logical order



Query Properties



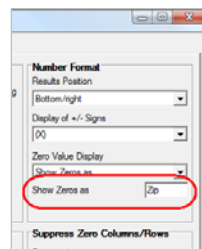
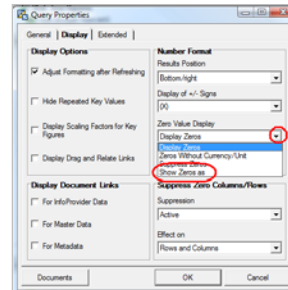
- Display Tab
 - ♦ Change **Display of +/- Signs to (X)**
 - ♦ In the **Suppress Zeros** box, change **Suppression to Active**
 - Actively suppresses the zeros



Query Properties



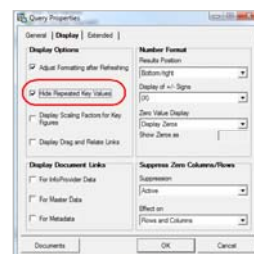
- Display Tab (Optional settings)
 - ♦ Zero Value Display – allows you to set how a zero will be displayed
 - ♦ Select **Show Zeros As** in the **Zero Value Display** field
 - ♦ Enter how the zeros should display in the **Show Zeros As** field



Query Properties



- Display Tab (Optional settings)
 - ♦ Hide Repeated Key Values – affects report exported to Excel or run it in Excel/BEx-Analyzer
 - If checked, will hide repeated key values
 - If unchecked, will populate every cell of the spreadsheet
- When finished setting query properties, click **OK**

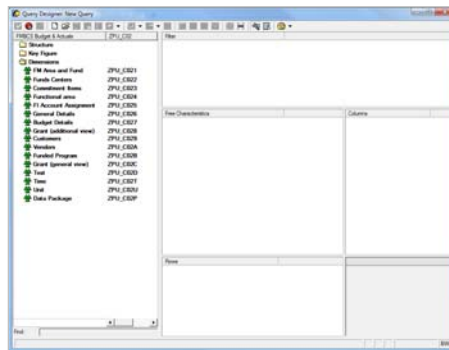


Summary



- Properties
- Characteristic Properties
- Query Properties

Unit 7



Create Query

Unit 7 – Create Query



- Create Query Without Using Existing Queries
- InfoProvider Icons
- Save Query

Create Query



- To create a query, first determine what data you want to retrieve
- For example, to create a financial report on certain funds centers within a specific college, you may want:
 - ♦ Fiscal year/period, G/L Account, Fund, Functional Area, Encumbrances, Amnt in FM Area Crcy, etc.
- Determine which InfoProvider contains needed data

InfoProvider Icons



- InfoCube

- ◆ Provides both master data and transactional data
- ◆ Quick because it is summarized data



- Master Data InfoObjects

- ◆ Provides only master data
- ◆ Quick



- Operational Data Store (ODS)

- ◆ Stores consolidated and cleansed transaction data on a document level
- ◆ Slower than using InfoCubes or Master Data InfoObjects
- ◆ Faster than MultiProviders or InfoSets

InfoProvider Icons



- MultiProviders

- ◆ Combines data from several InfoProviders with a union operation making it available for reporting
- ◆ Slower than using InfoCubes, Master Data InfoObjects, ODS objects



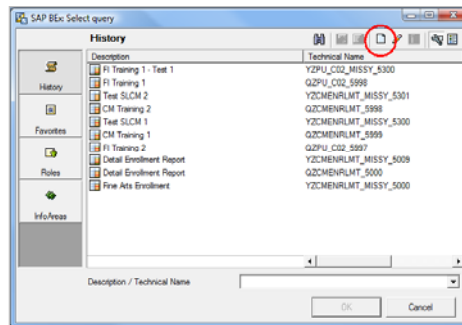
- InfoSets

- ◆ Allows creation of reports on ODS objects, InfoCubes, and InfoObjects
- ◆ Slower than using InfoCubes, Master Data InfoObjects, ODS objects

Create Query



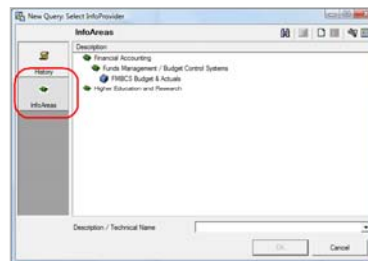
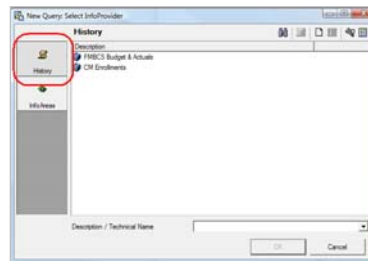
- Create a query without using an existing query
 - ♦ Allows use of any InfoProvider to which you have access
- Open **SAP BEx: Select Query** window and click **New**



Create Query



- **History**
 - ♦ Shows InfoProviders have used in past
- **InfoAreas**
 - ♦ Shows all InfoProviders to which you have access



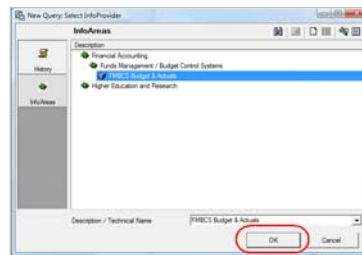
Create Query



- Single-click on the InfoProvider



- Click on OK button



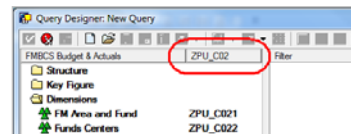
Save Query



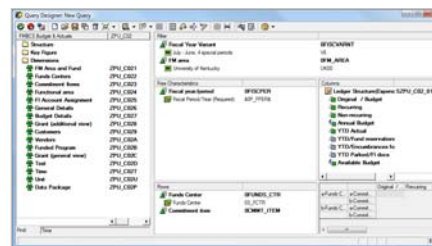
- To save, click on **Technical Names**



- InfoProvider's technical name will be needed to save the query



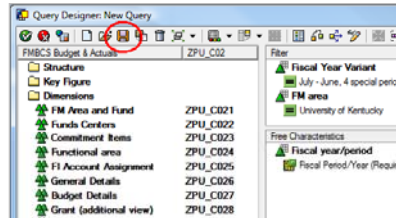
- Create the query as described in earlier units



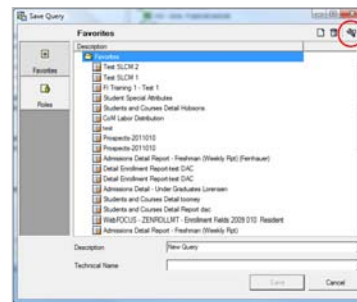
Save Query



- Click on the **Save** icon
 - ♦ If you click on one of the first seven icons, the system will ask you if you want to save



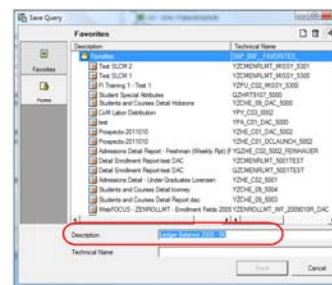
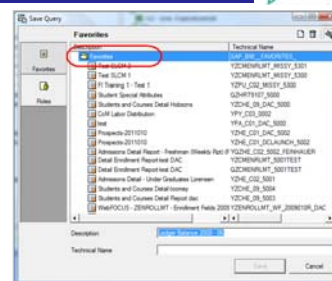
- Click on **Technical Names** in the **Save Query** window



Save Query – Description



- **Favorites** is the default setting
- In the **Description** field, enter a concise description of the report
 - ♦ Should be as descriptive as possible
 - ♦ Can use up to 60 characters for the description



Save Query – Technical Name



- You must use the **BEx Query Naming Standards** for the Technical Name
 - ♦ Identifies it as a Power User's query
 - ♦ Provides the InfoProvider's identity
 - ♦ Provides the identity of the User who created it
 - ♦ Shows that it is a customized query
 - Customized queries should use sequential numbers in the range of 5000 to 9999

Students and Courses Detail report doc YZCNE_02_3000
WebFOCUS - ZENROLLMT - Enrollment Fields 2008 YZENROLLMT_WF_2009010R_DAC

Description: Ledger Balance 2008 - 06

Technical Name: YZPU_C02_MISSY_5304

Save Cancel

Save Query – Technical Name



- Enter a Technical Name following BW Naming Standards

YZPU_C02_USER01_5000

- ♦ Y – is a **must** for Power Users
- ♦ **Cube** – technical name of the InfoProvider
- ♦ **Underscore**
- ♦ **Userid** – your Active Directory Services userid
- ♦ **Underscore**
- ♦ **Nnnn** – Your next number available for that InfoProvider
 - Starting number is 5000

Save Query



- Click on **Save**

- System message appears in the status field in the lower left of the screen

- After saving, description and technical displays in the **Query Designer** title bar

Save Query



- If you receive a warning message telling you that the **Technical Name** is already in use...



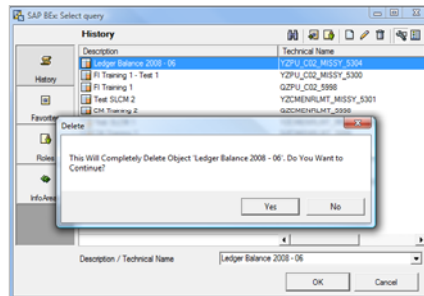
- Give the query a new **Technical Name** and then click on **Save**

Summary



- Create Query Without Using Existing Queries
- InfoProvider Icons
- Save Query

Unit 8



Delete Query

Unit 8 – Delete Query



- Delete a Query

Delete Query



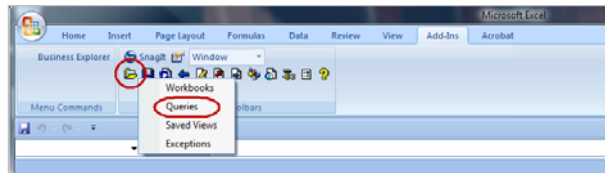
- Be careful when deleting a query to make sure you are deleting the correct one
- **Be aware of the technical name to ensure you are deleting your query** and not someone else's query, since the descriptions can be identical
- You **cannot delete** a query with a technical name starting with **Q**
- **If you are not sure, STOP! DO NOT PASS GO!....**



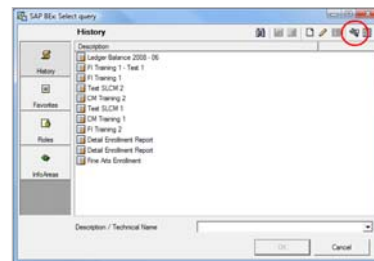
Delete Query



- Click on **Open** and select **Queries**



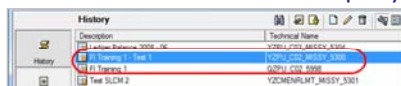
- Click on **Technical Names**
 - ◆ Ensures correct query is chosen



Delete Query

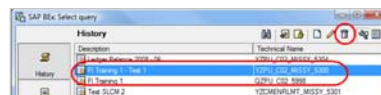


- Drill down to query
 - ◆ Check the technical name to confirm the correct query is selected

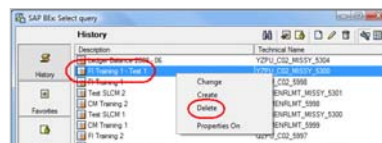


- Single-click on the query and choose the **Delete** icon

OR



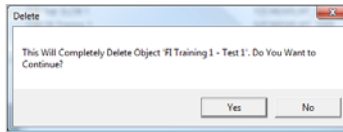
- Right-click on the query and select **Delete**



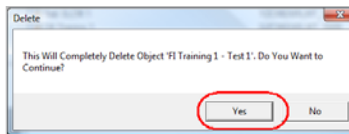
Delete Query



- A system message asking if you want to delete this query will display



- If you do want to delete the query, click on **Yes**



- Your deletion is complete

Summary



- Delete a Query



Query Views

- Creating & Saving a Query View
- Run a Query View
- Change a Query View
- Delete a Query View

Query Views



- A query view is a picture of a query that saves any formatting done to the output of the query (the report)
- Examples of formatting
 - ♦ Hiding key figures from the initial display of the report
 - ♦ Drill-down
 - ♦ Drill-across
 - ♦ Swap columns

Query Views















- Can save and run query views from BEx-Web, just like the End User
- Power user can do more
 - ♦ Can actually change the original query view
 - ♦ Can delete the original query view
 - The only way to delete a query view is through BEx-Analyzer

BEx Analyzer Toolbar



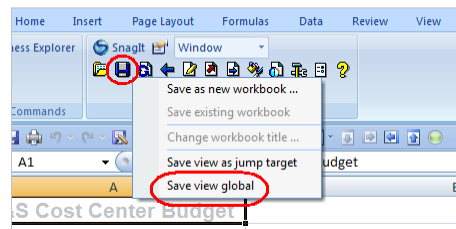
Items in **BOLD** covered during this class

- **Open** 
- **Save** 
- **Refresh query** 
- **Back** 
- **Change query** 
- **Goto** 
- **OLAP functions for active cells** 
- **Format** 
- **Layout** 
- **Tools** 
- **Settings** 
- **Help** 

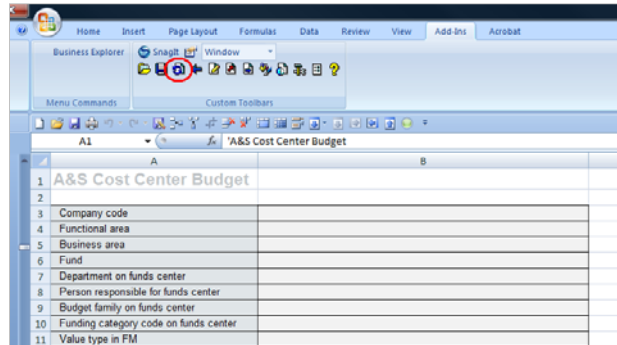
Save



- Save as new workbook
 - ♦ Used by KMSF
- Save view as jump target
 - ♦ Used by KMSF
- Save view global
 - ♦ Saves view for later recall it
 - ♦ To use first run query in BEx Analyzer/Excel

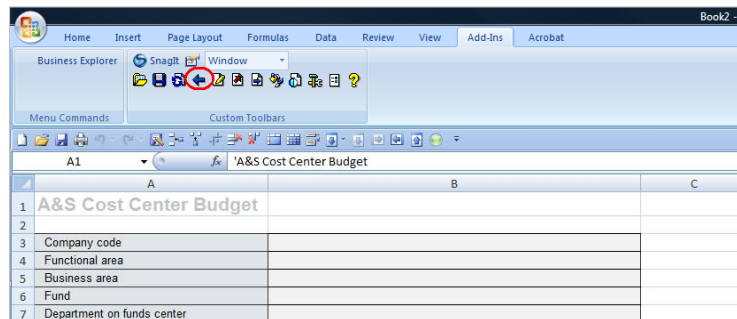


Refresh Query



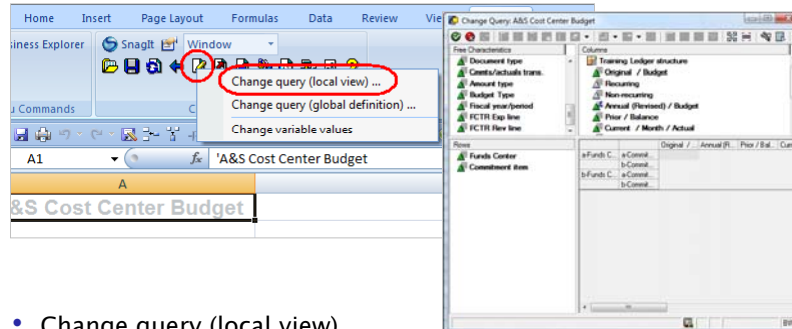
- First run the query in BEx-Analyzer
- Brings up the parameter window for you to adjust the values of the variables

Back



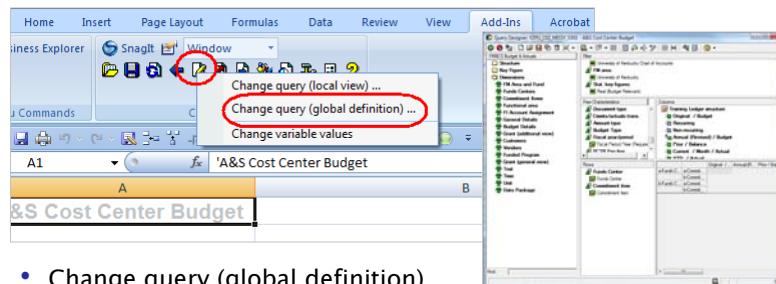
- First run the query in BEx-Analyzer
- Allows you to go back one step and undo the last change

Change Query



- Change query (local view)
 - ♦ Provides ability to create local calculated and restricted key figures for the current query view
 - ♦ Does not allow addition Key Figures, Characteristics or restriction characteristic values on the query level

Change Query

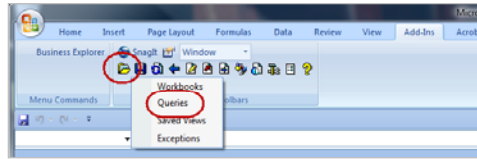


- Change query (global definition)
 - ♦ Provides ability to add Key Figures and/or Characteristics and restrict the characteristic values on the query level
- Change variable values
 - ♦ Returns to the parameter screen, so variable values can be changed
 - ♦ Also allows you to see your personalized variable values

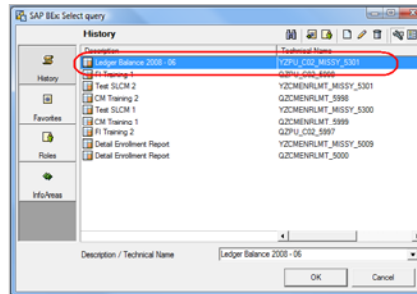
Create Query View



- First and foremost, **RUN THE QUERY** in Excel
- Click on **Open** and select **Queries**



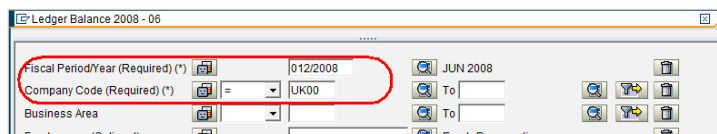
- Drill-down to a query and double-click on it



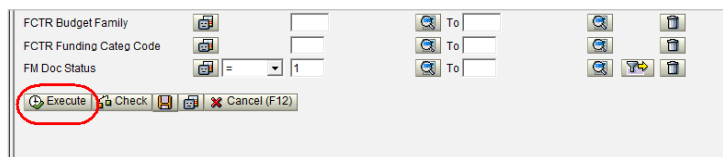
Create Query View



- Enter any restricted variables along with any other variables



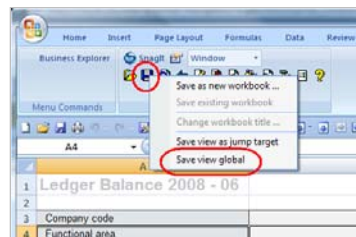
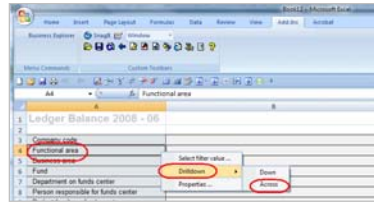
- Click on **Execute**



Create Query View



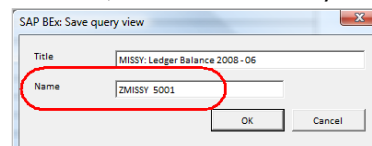
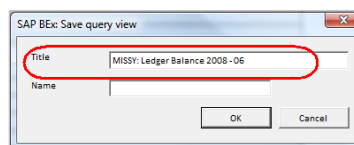
- Make any changes you want to make
 - ♦ Examples
 - Right-click on characteristic to select filter value
 - Drill-down
 - Change properties
- Click on **Save** and select **Save view global**



Create Query View



- Enter a title for your query view
- Using the **Query View Naming Standards**, Enter a name for your query view
 - ♦ **UserID: Name of Query**

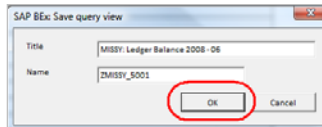


Remember: Query View Technical Names have the following format: **ZuserID_nnnn**

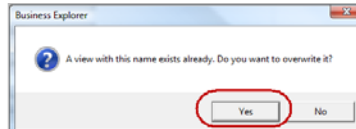
Create Query View



- Click on **OK**



- If technical name already exists, a system message will display

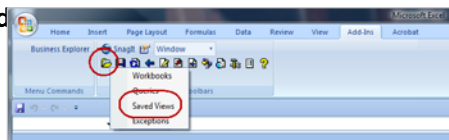


- ♦ If you are not positive that you typed in the technical name correctly **DO NOT PRESS YES!!!!!!!**
 - Change the name, if needed, to save

Run Query View



- Click on **Open** and select **Saved Views**

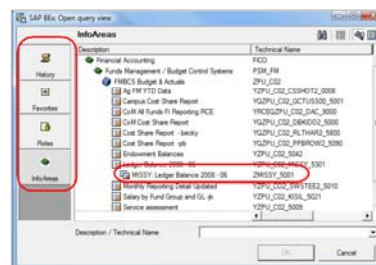


- Turn on **Technical Names**



- Query views under listed under query

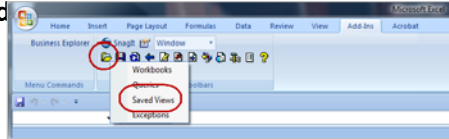
- ♦ Same listings as seen on **SAP BEx: Open Query** window



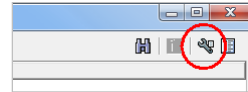
Run Query View



- Click on **Open** and select **Saved Views**

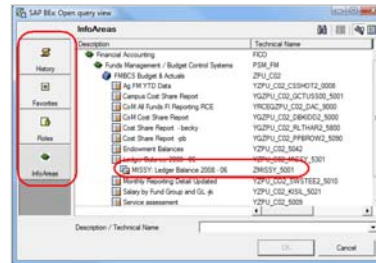


- Turn on **Technical Names**



- Query views under listed under query

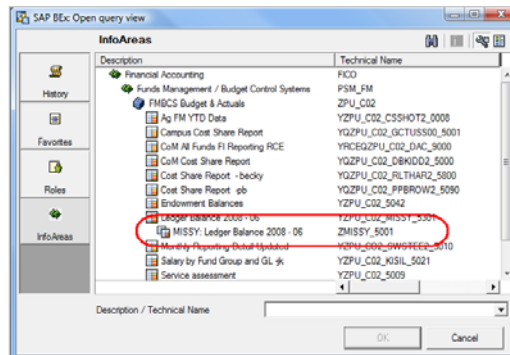
- Same listings as seen on **SAP BEx: Open Query** window



Run Query View



- Find view and double-click on it to run
- Can do a find if part of the description or technical name is known

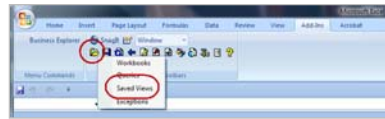


Delete Query View

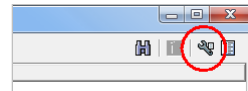


Power Users are responsible for deleting query views for end users

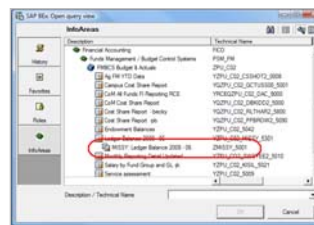
- To delete a query view, click on **Open** and select **Saved Views**



- Turn on **Technical Names**



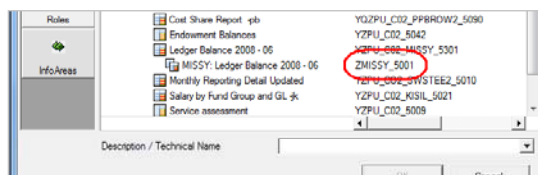
- Find the view
 - Caution!** Be sure to double-check the **Technical Name**



Delete Query View



- Triple-check the **technical name** and user ID to make sure the correct one is selected!!!
 - May want to get the request in writing
 - Be sure that the person making the request has authorization to request the deletion

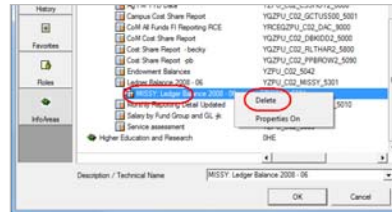


- Notify the end user that the sequence number or technical name can be reused

Delete Query View

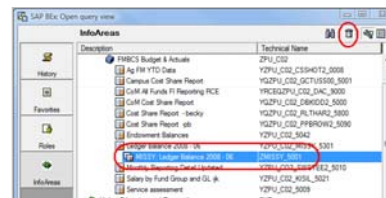


- Delete the query view by either:
 - ♦ Right-clicking on the query view and selecting **Delete**



OR

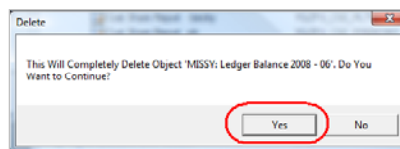
- ♦ Highlight the query view and click on the **Delete** icon



Delete Query View



- When the Delete system message displays, click on **Yes**



- Notify the end user that the sequence number or technical name can be reused

Summary



- Creating & Saving a Query View
- Run a Query View
- Change a Query View
- Delete a Query View

Power User Help Websites



- myHelp website:
 - ♦ <http://myHelp.uky.edu/rwd/HTML/BW.html>
 - ♦ Contains Quick Reference Cards (QRCs), course manuals, BW Frequently Asked Questions, and other job aids
- IRIS website
 - ♦ <http://www.uky.edu/IRIS/BW/>
 - ♦ Contains Documentation, Assistance & Support, and other references
- For the list of current Power Users, go to:
 - ♦ http://www.uky.edu/IRIS/BW/documents/PowerUserList_003.pdf
- For questions or assistance contact:
 - ♦ BI-Requests@email.uky.edu

Course Summary



- Understand how to:
 - ♦ Display a Query
 - ♦ Create Using an Existing Query
 - ♦ Save a Query
 - ♦ Run Query
 - ♦ Setting Properties
 - ♦ Create Query
 - ♦ Delete Query
 - ♦ Create/Change/Delete Query View

