Cognos 11.2.1

Query Studio

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June 2023

Learning Objectives

The learner will be able to:

1. Log into Cognos through a browser and launch Query Studio.
2. Select a package to pull data for a report.
3. Select fields to create a report.
4. Create a filter.
5. Run the report.
6. Group, section, and calculate data.
7. Format the report.
8. Save and view report in My Folders.

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What is Cognos?

Cognos is a web-based business intelligence tool that provides a platform for reporting, analysis and automation using relational and dimensional data. Departments and functional areas use Cognos to run reports so they have access to useful data they need.

Each night, the Banner data is copied to the Operational Data Store (ODS).

During this process, the Banner table names are converted to natural language

For example SORLCUR_DEGC_CODE becomes Degree

In the ODS, the data is grouped and joined in logical reporting views

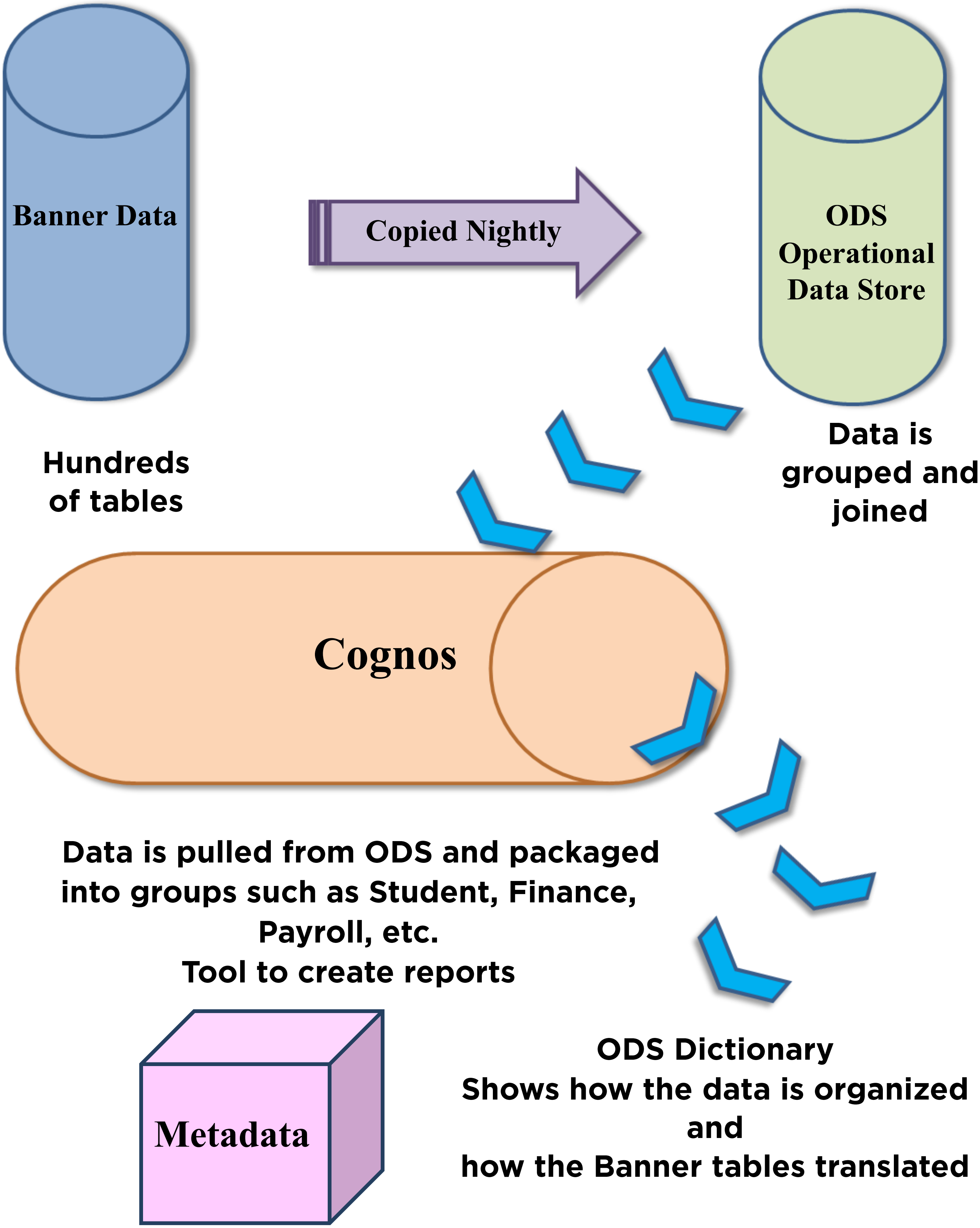
For example relationships between students, GPA and majors are established

Cognos pulls the data from the ODS and organizes it into groups or packages

For example the Student Package would include fields such as addresses, academic period, advisors, courses, major, degree etc.

The consumer then can use Cognos to create and view reports based on the Banner data from the ODS.

Reporting Tool



Cognos Access

You can access Cognos from any browser, we suggest Chrome, but to access Query Studio you must use **Firefox.**

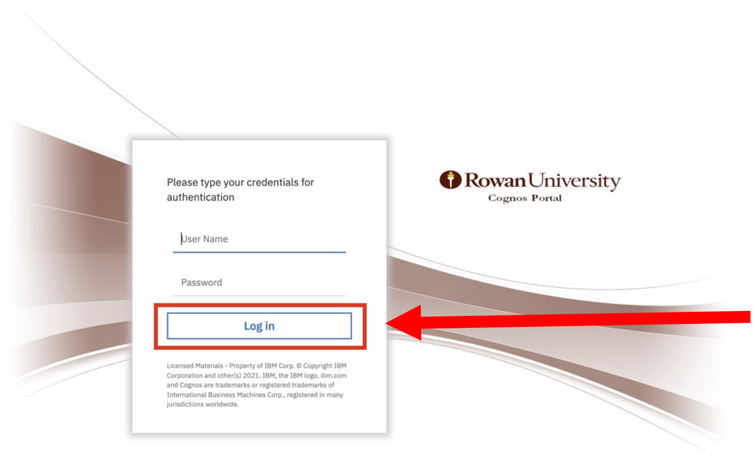
https://cognos-analytics.rowan.edu (production)

https://cognos-analytics-test.rowan.edu (test)

You must request access to **Cognos** and **Query Studio** before logging in for the first time. You can email **support@rowan.edu** to request access. If you are off campus, connect to the Rowan network using Rowan VPN or a virtual desktop.

Once you access either Cognos Prod or Cognos Test, you will be prompted to log in:

1. Log In using your Rowan NetID and password.
2. Select **Log in**.



The reports within the Cognos Production Portal access data from the ODS Production Database.

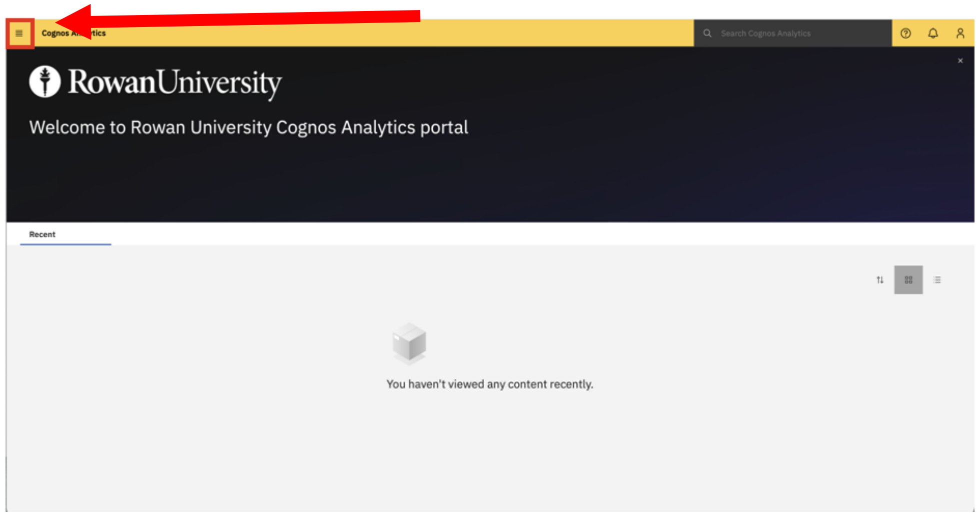
The ODS Production Database is refreshed every night from BANNER PROD.

The reports within the Cognos Test Portal access data from the ODS Test Database.

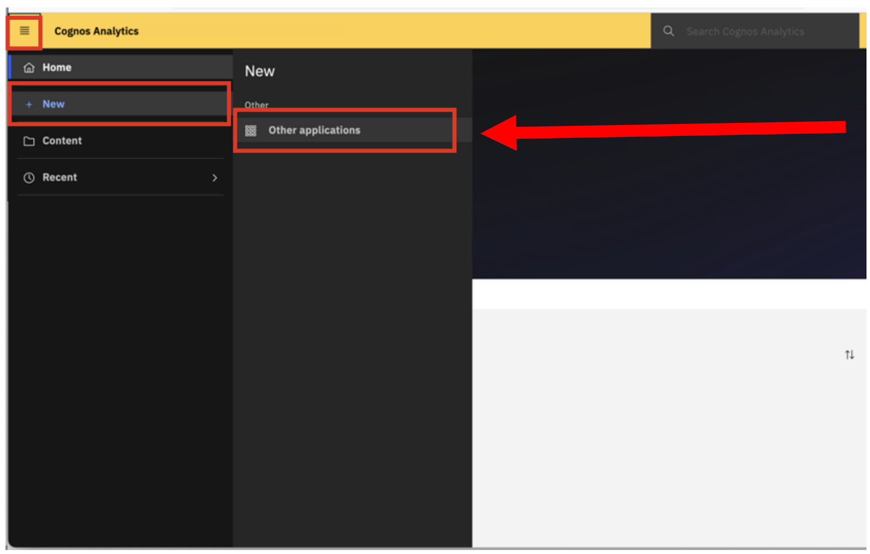
The ODS Test Database is refreshed every two weeks from BANNER FORTNGHT.

Navigate to Query Studio

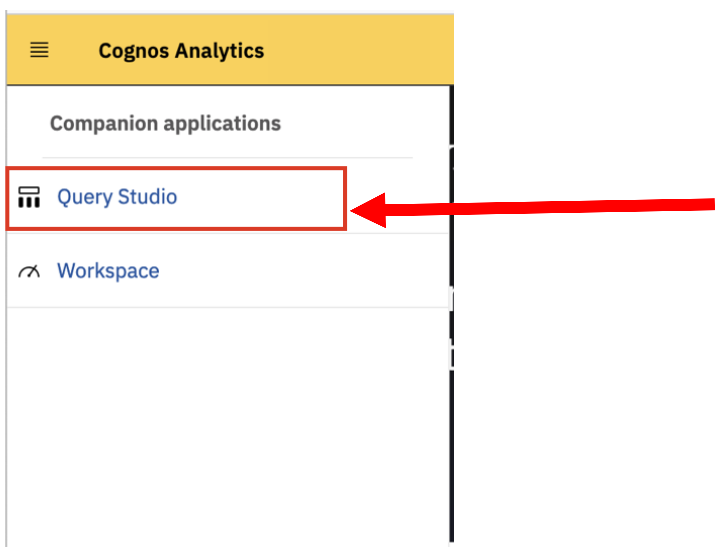
1. From the Welcome screen, select **the Hamburger Menu**



2. Select **New**
3. Select **Other applications**

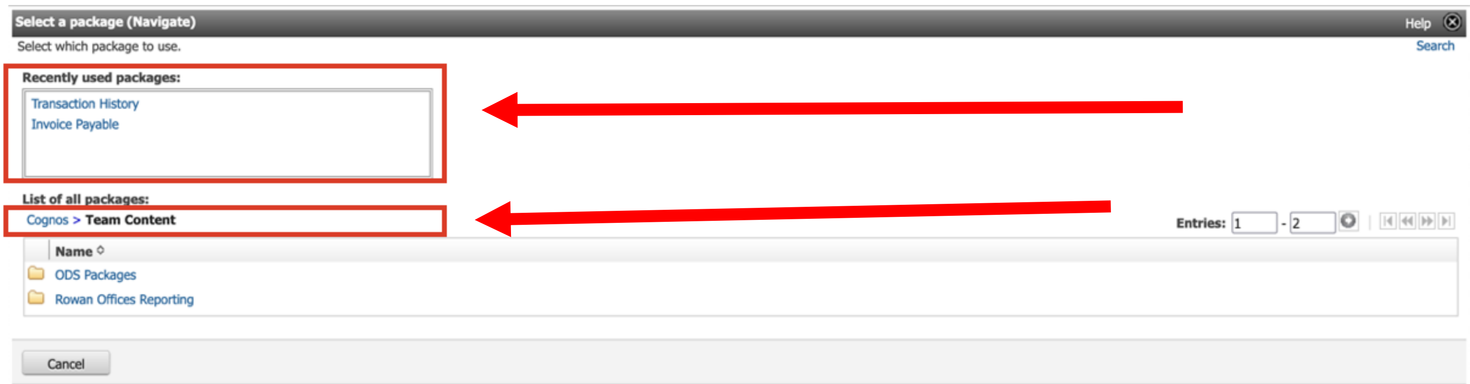


4. Then select **Query Studio**

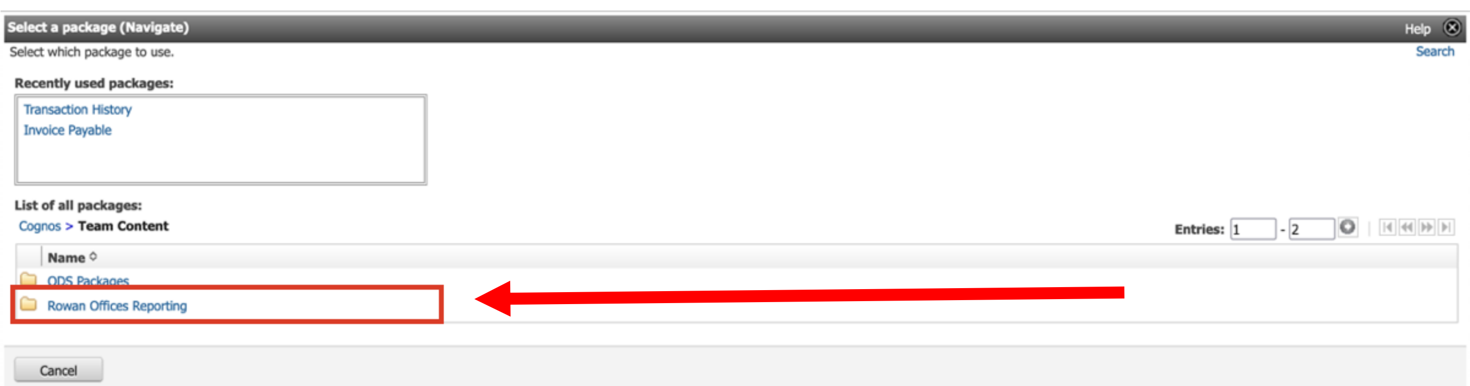


Folders

Every authenticated user can see Recently Used packages if they have any, and the Team Content folder from Cognos.

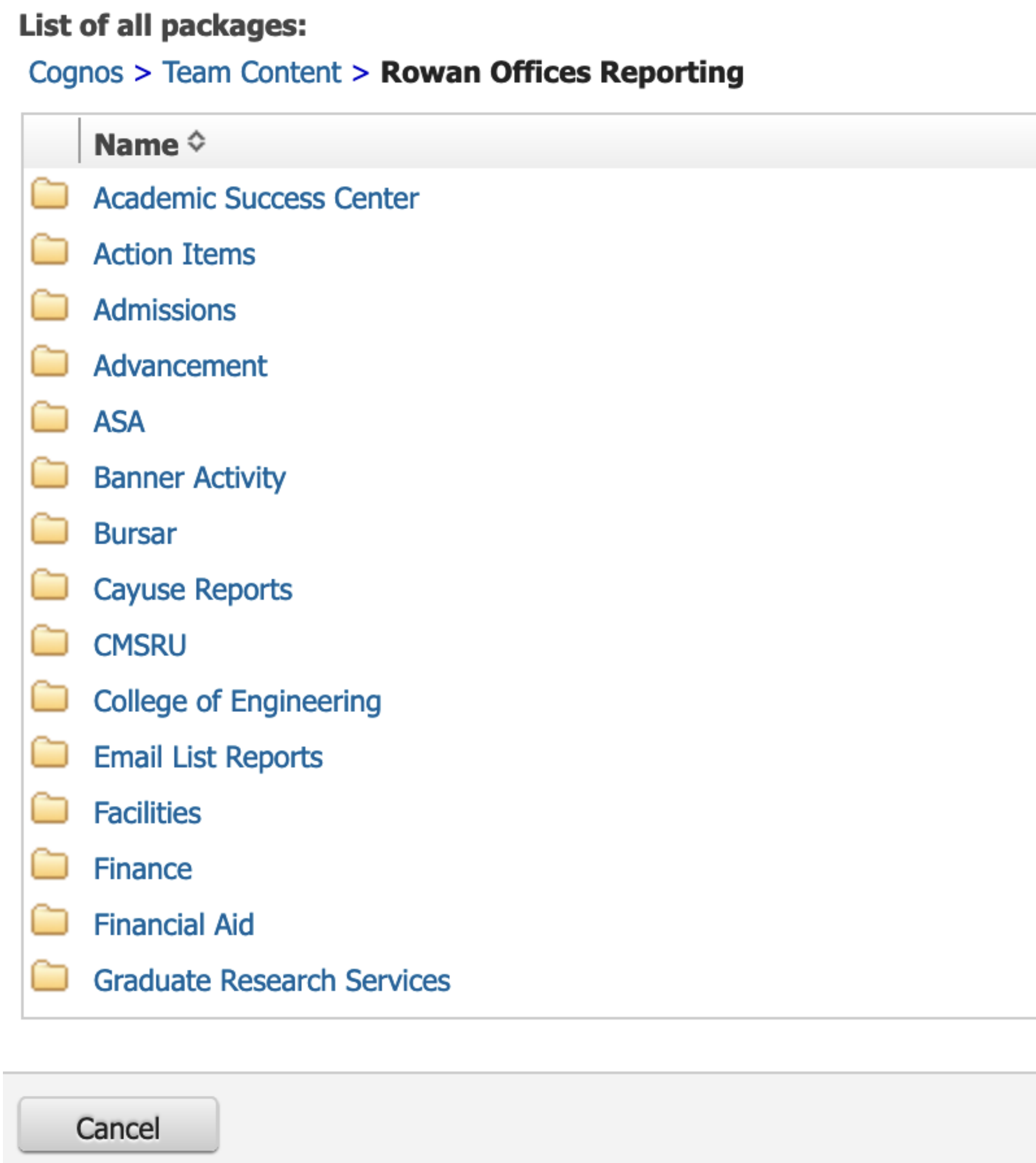


Under **all packages**, you will select **Rowan Offices Reporting**.



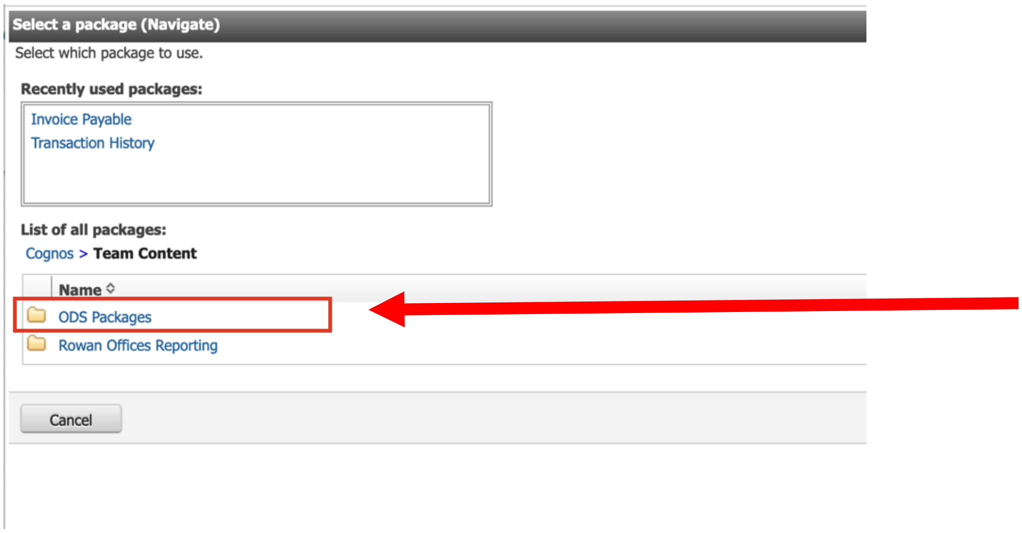
Folders

Once selected, you will only see packages (folders) to which you have access. Each package contains data that is relative to a specific group of users.

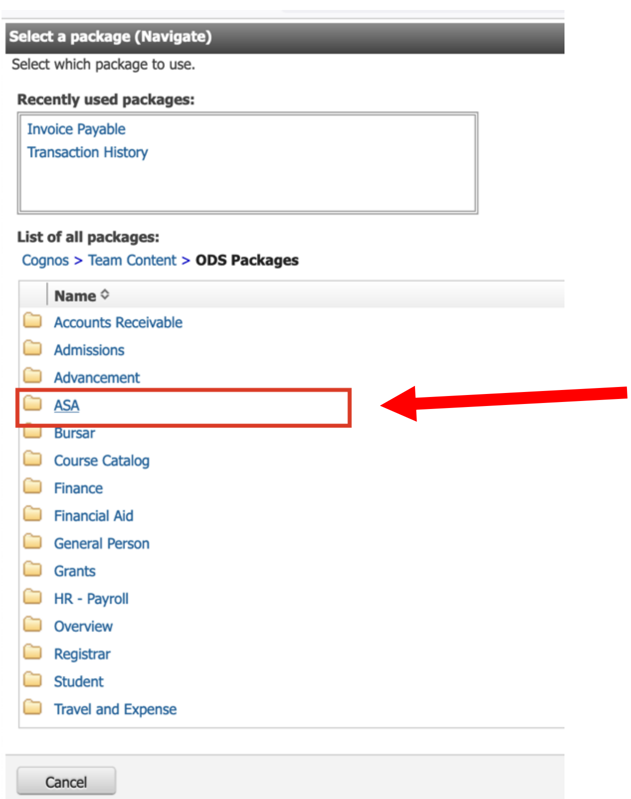


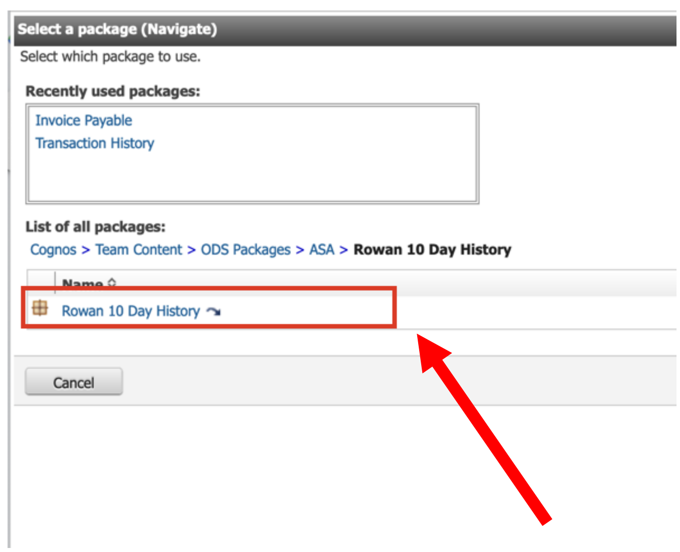
Launch Query Studio

Select **ODS Packages**



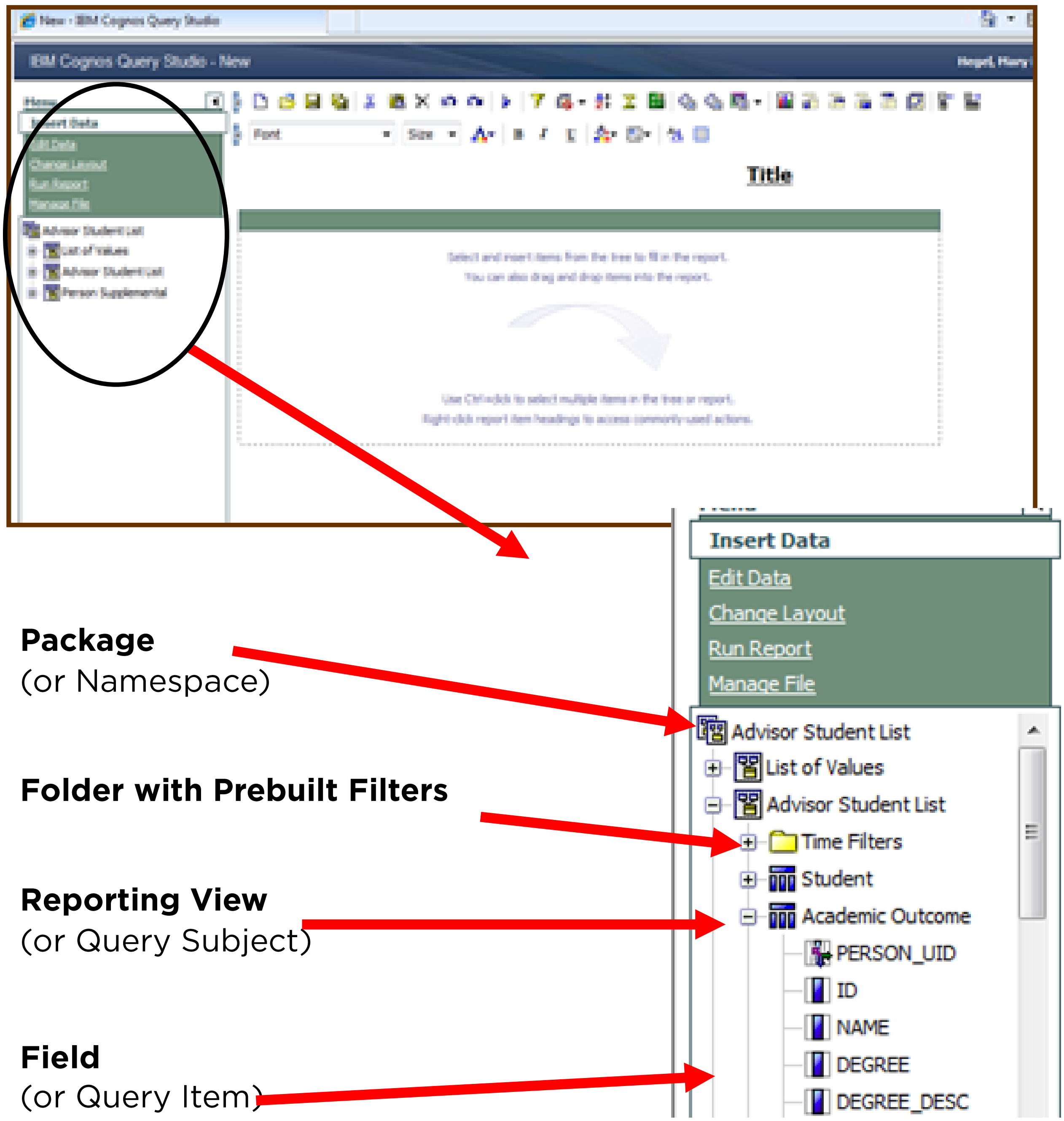
Select a data package (folder) or a recently used package. In Query Studio, you can generally only create a report from one package.





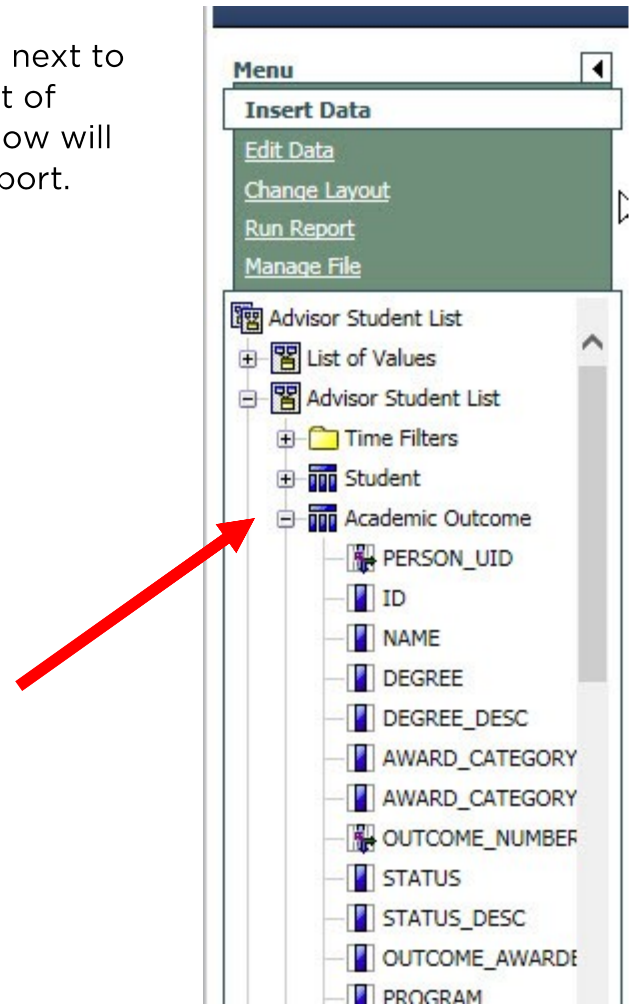
Launch Query Studio

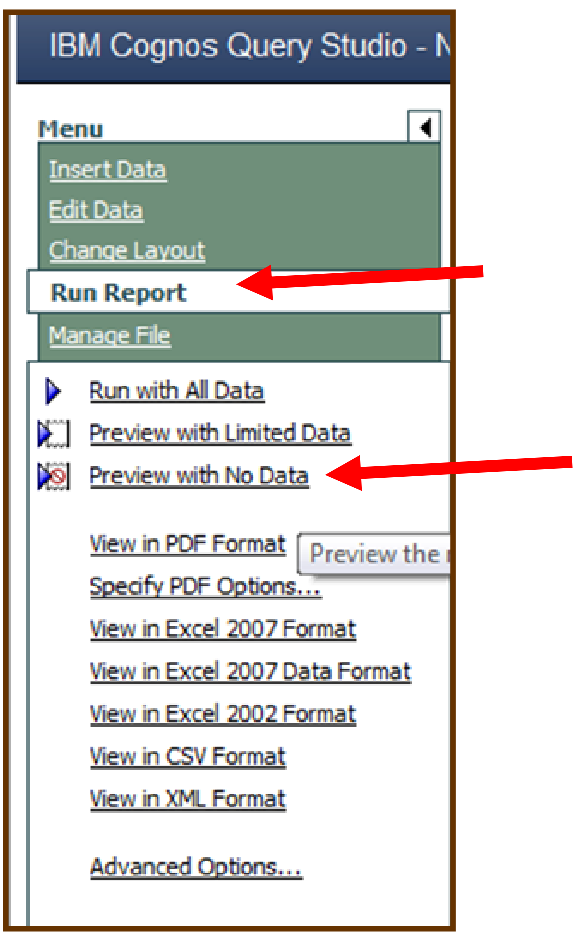
Query Studio is then launched.



Choose Package for Report

From the left side panel, select the plus sign (+) next to a Package to expand it (do not choose from List of Values), and then expand a Reporting View. Below will be a list of Fields you can choose to create a report.



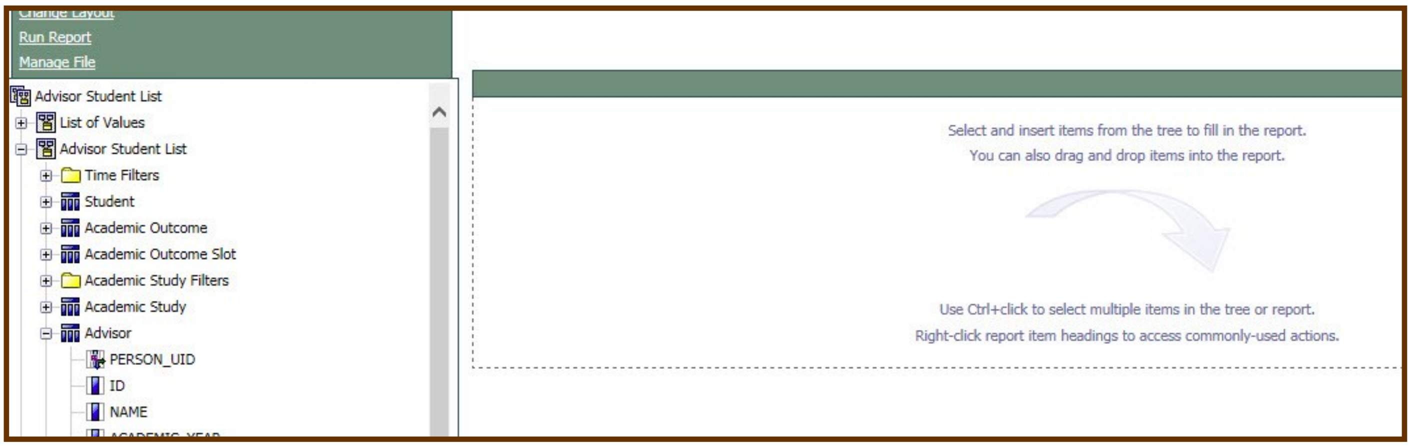


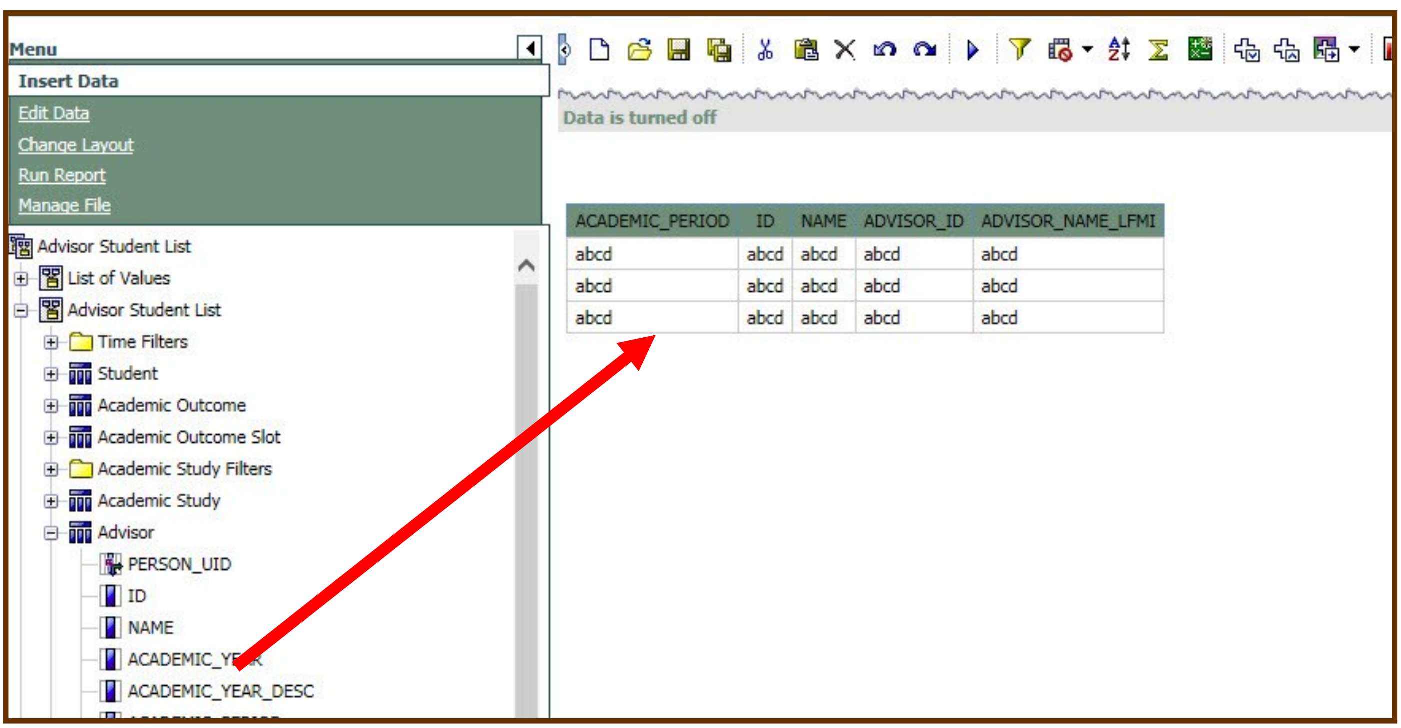
From the Menu at the top left –

1. Select Run Report
2. Select Preview with No Data
3. Then select Insert Data to return to workspace

Choose Fields for Report

Choose the Fields (which will be your columns) to populate your report. Drag and drop them into the report canvas or double click .





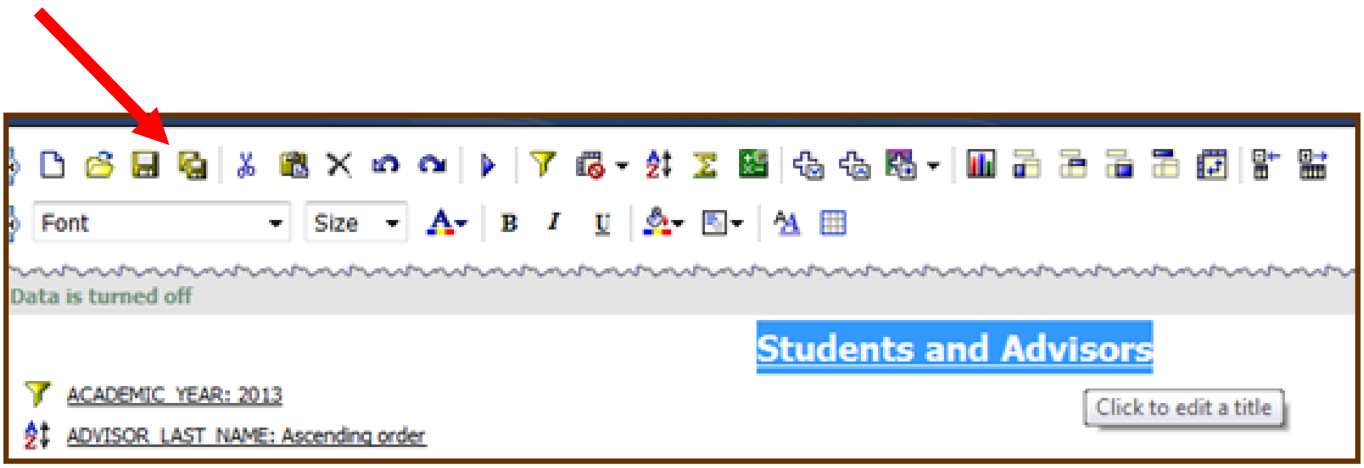
Save to My Folder

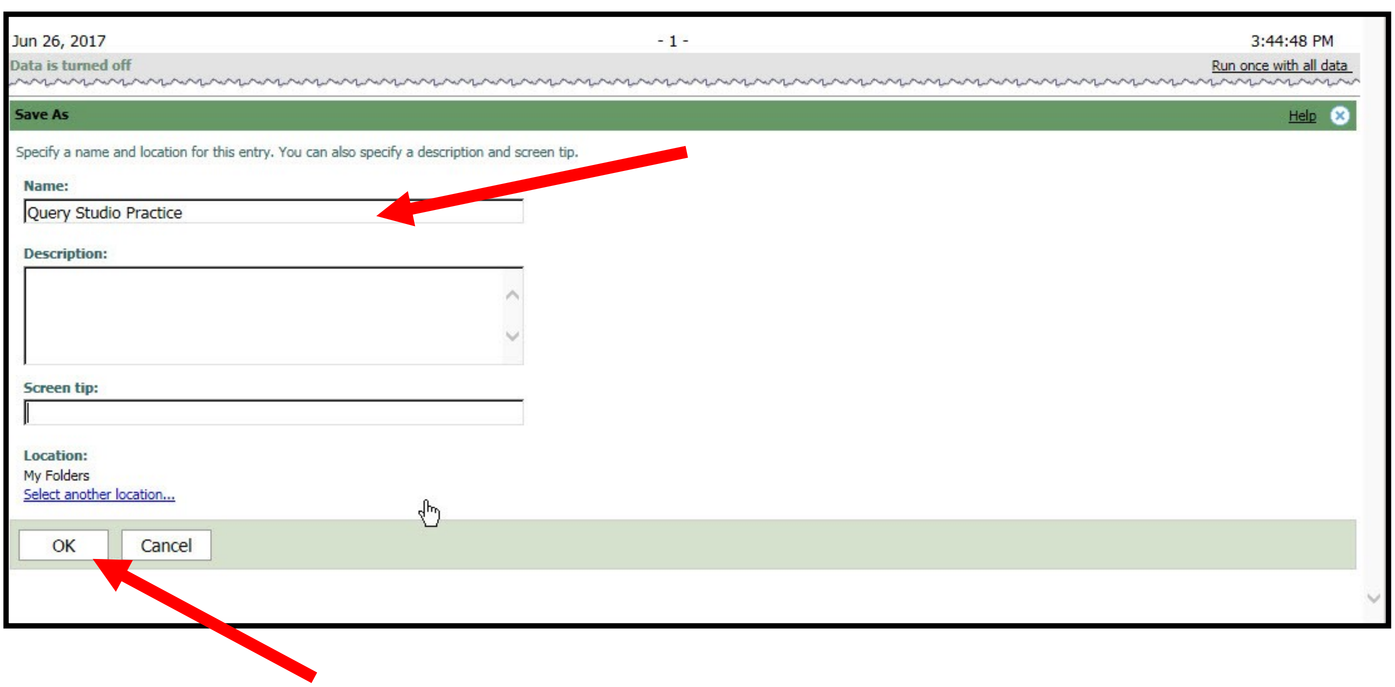
Select the Save or Save As icon from the top menu.

Name the report

Location is My Folders.

Select OK.



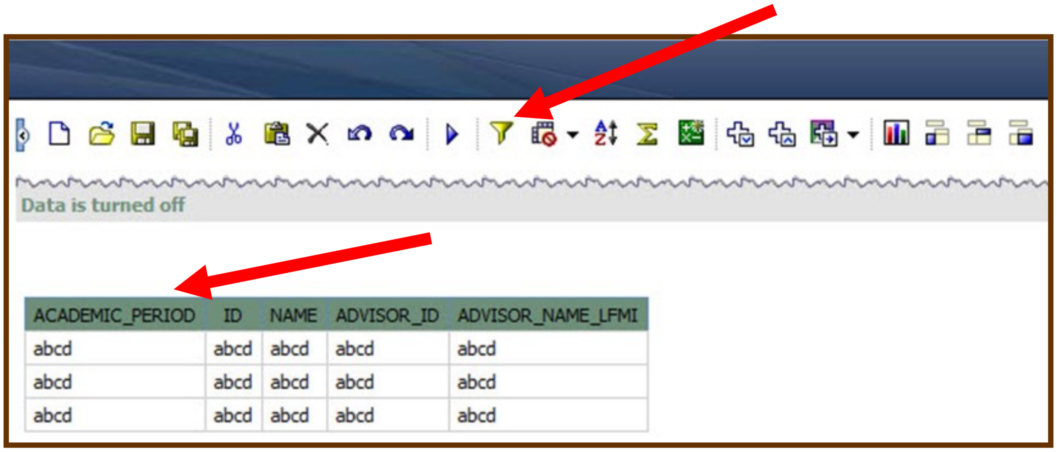


Filter Data

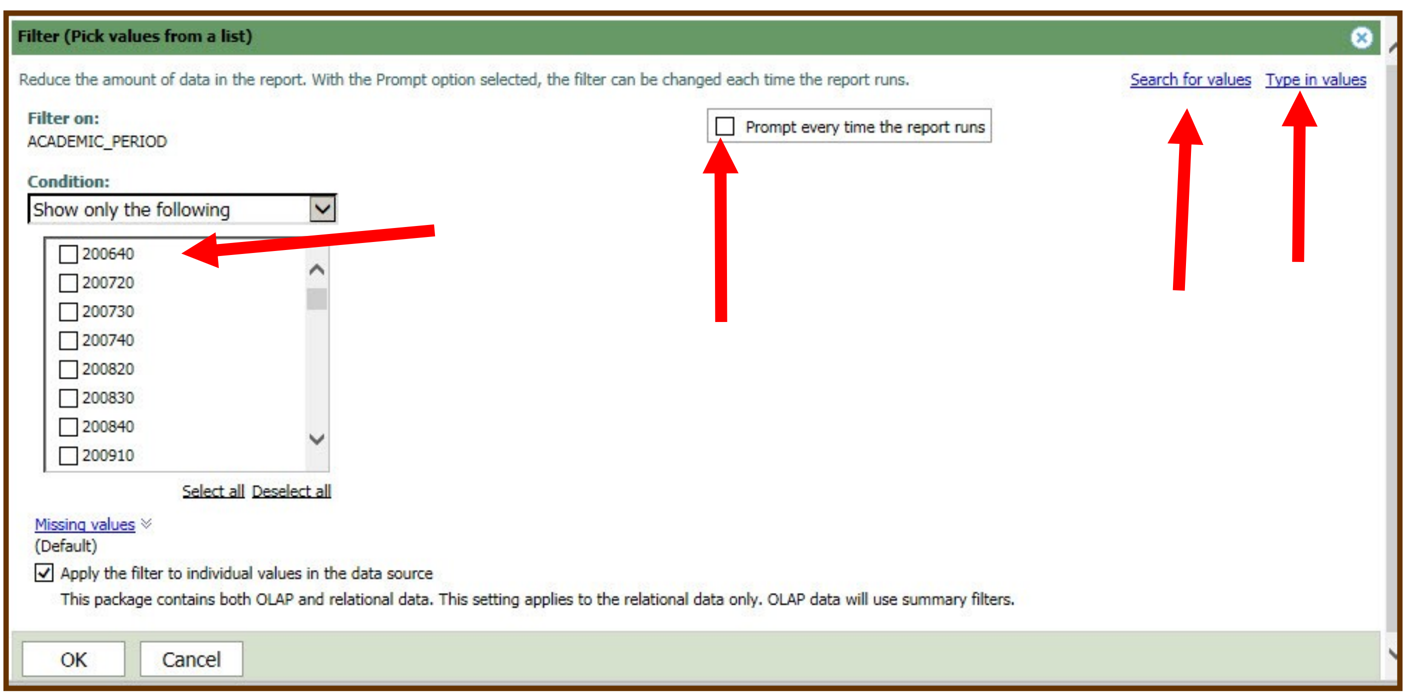
To Filter the data

Select the Field (column) you would like to filter.

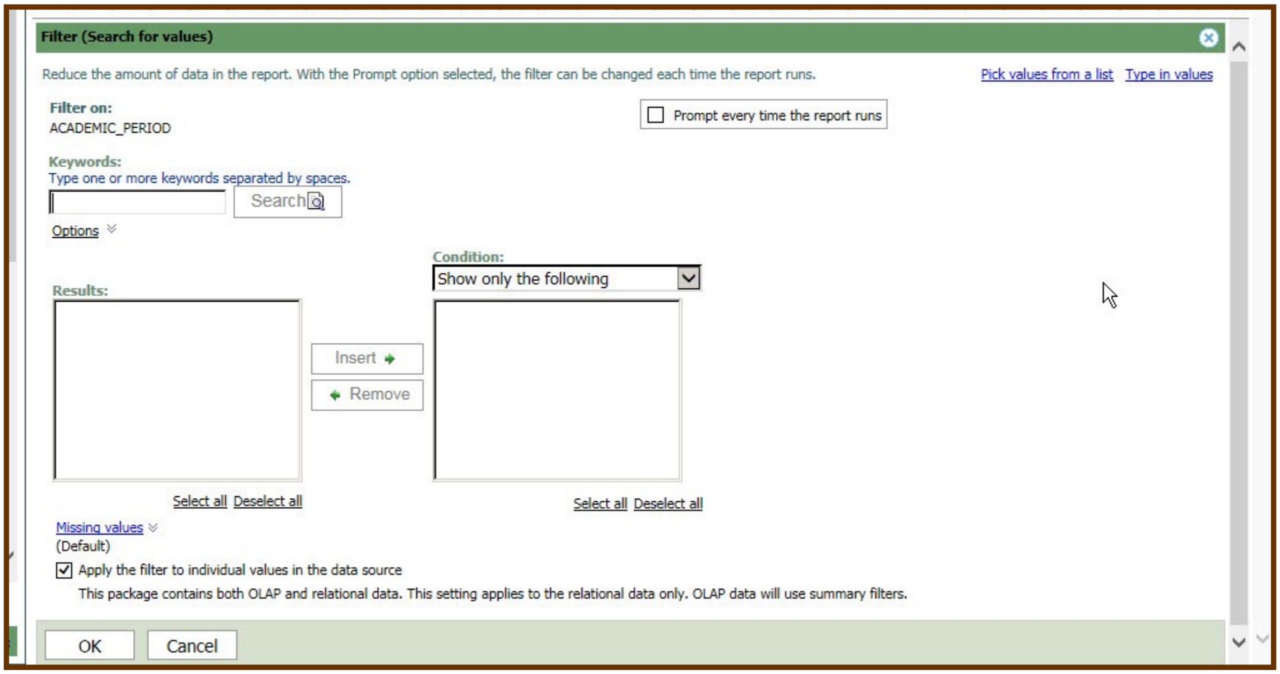
Select the Filter icon (yellow funnel) from the menu bar



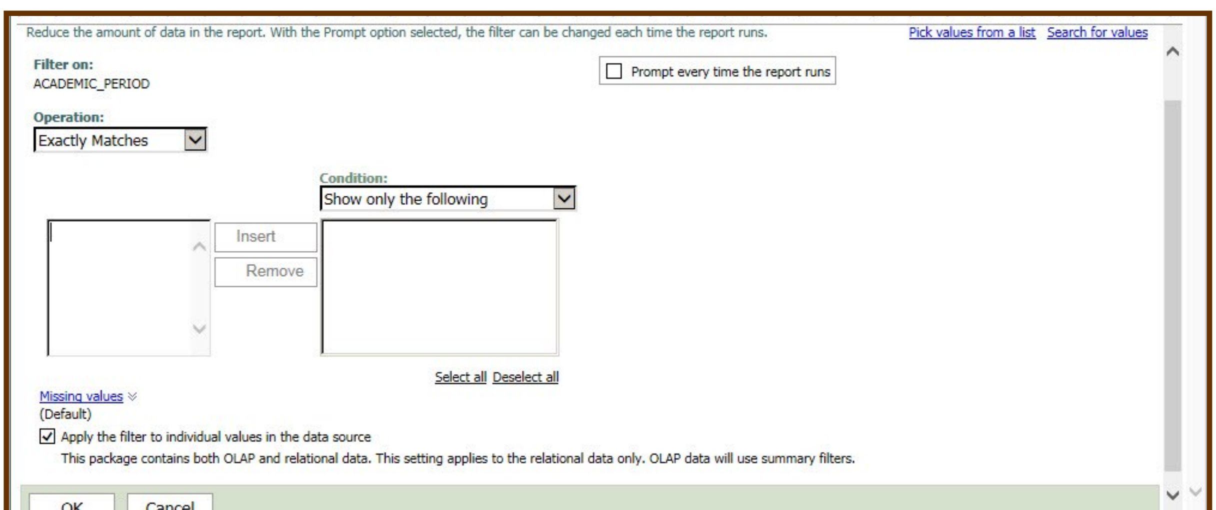
1. Choose the Conditions (parameters) for the filter or check the box next to Prompt every time the report runs. You can also search or type in a filter. Select OK



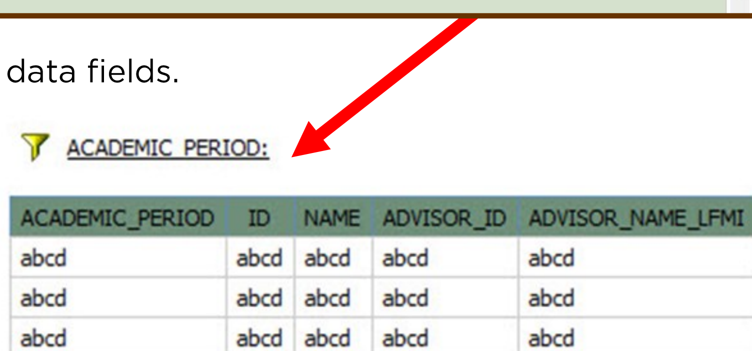
2. Search for Values or



3. Type in Values



The filter will be listed above the data fields.

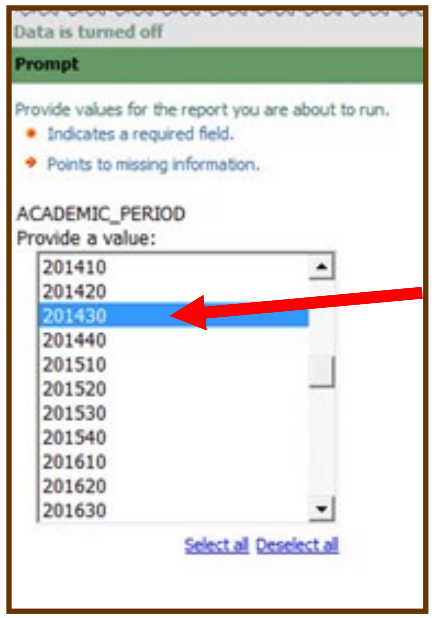


Run the Report

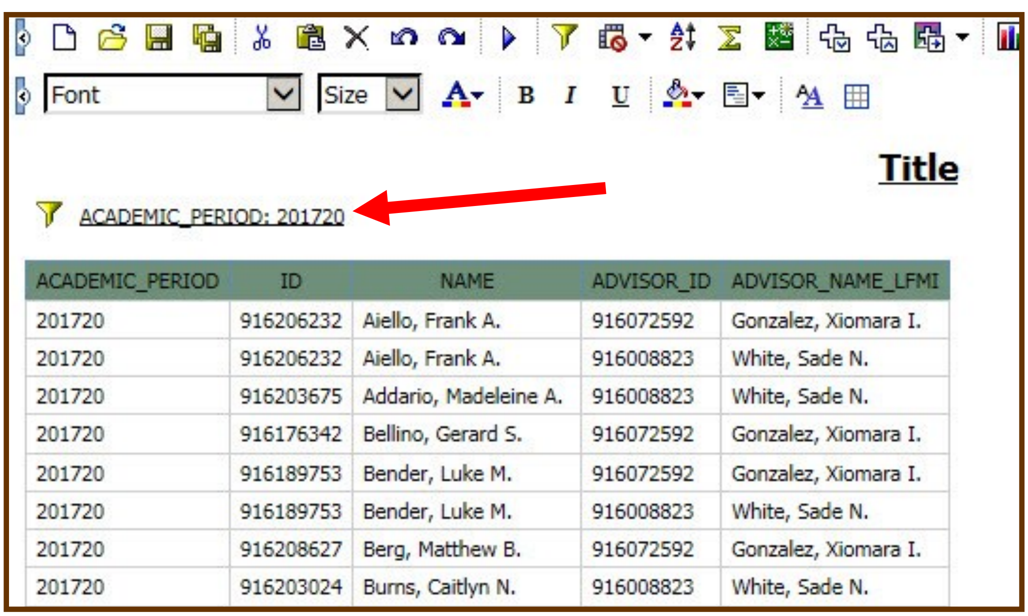
Select the **Run** icon to run the report.

If you chose - "Prompt every time the report runs" then select the value.

You can use the control key to select more than one, or the shift key to select concurrent values.



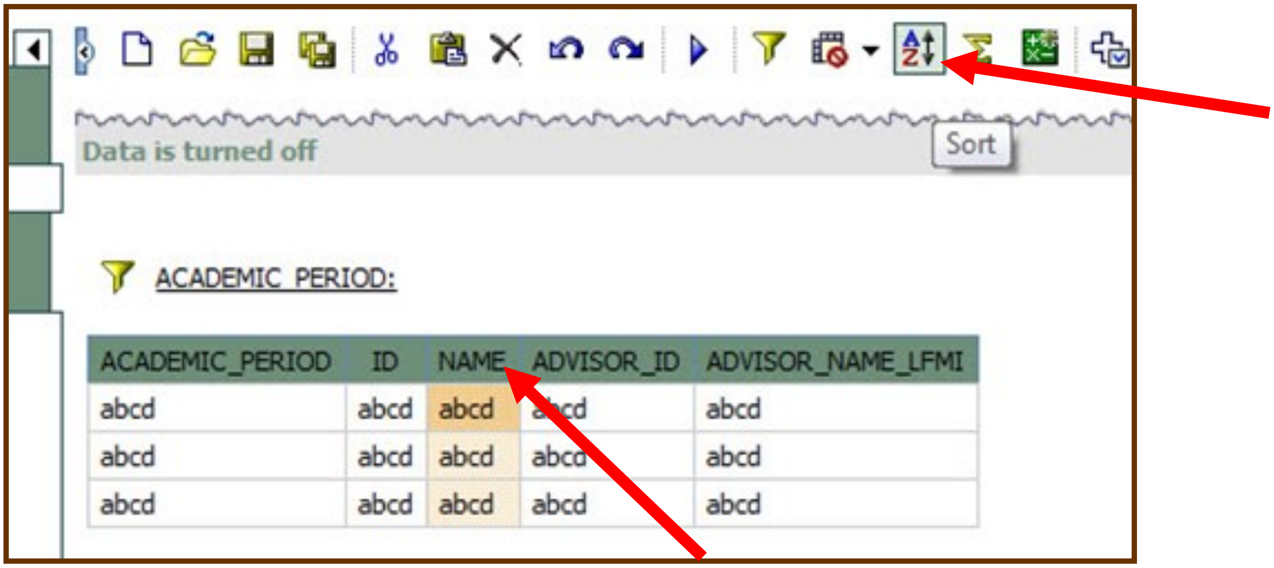
The report will appear in the Cognos window (also see filter above the data).



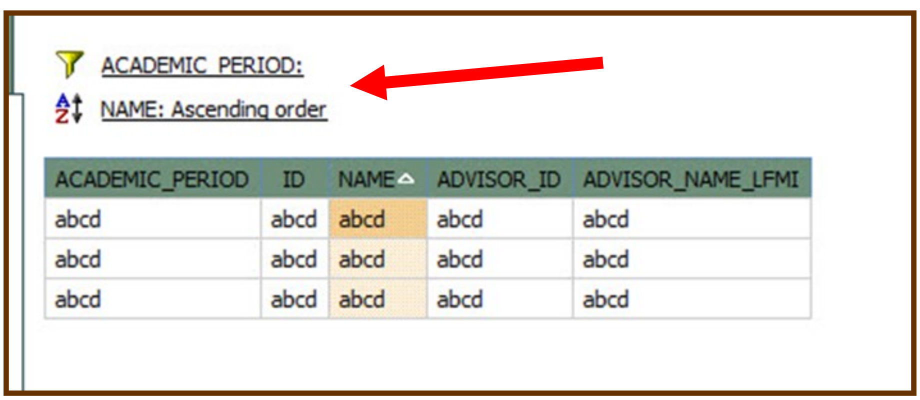
ACADEMIC_PERIOD	ID	NAME	ADVISOR_ID	ADVISOR_NAME_LFMI
201720	916206232	Aiello, Frank A.	916072592	Gonzalez, Xiomara I.
201720	916206232	Aiello, Frank A.	916008823	White, Sade N.
201720	916203675	Addario, Madeleine A.	916008823	White, Sade N.
201720	916176342	Bellino, Gerard S.	916072592	Gonzalez, Xiomara I.
201720	916189753	Bender, Luke M.	916072592	Gonzalez, Xiomara I.
201720	916189753	Bender, Luke M.	916008823	White, Sade N.
201720	916208627	Berg, Matthew B.	916072592	Gonzalez, Xiomara I.
201720	916203024	Burns, Caitlyn N.	916008823	White, Sade N.

Sort Data

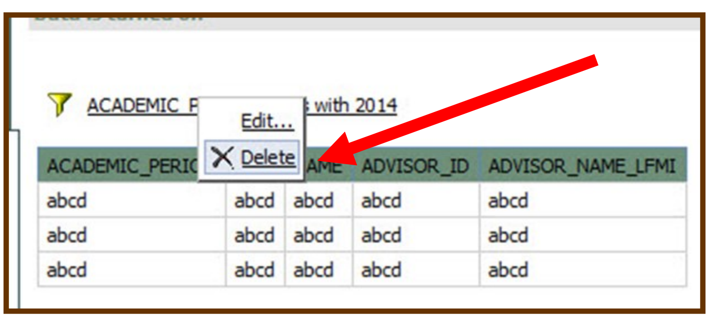
To Sort, select the field, and then choose the Sort icon in the menu bar.



The Sort will show at the top of the data (along with the filters).

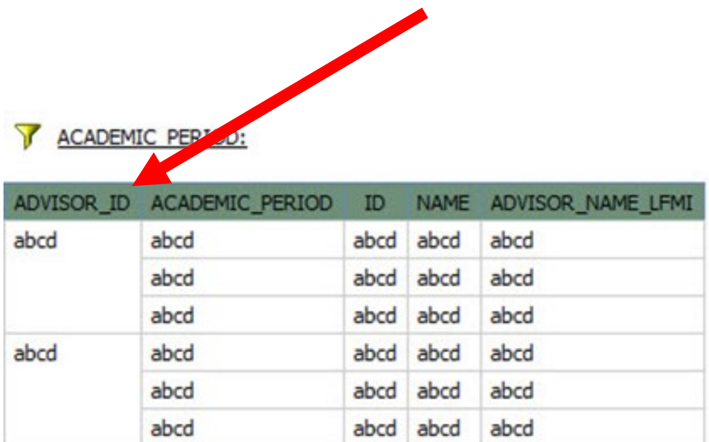


To delete a filter, right click on it and select Delete.

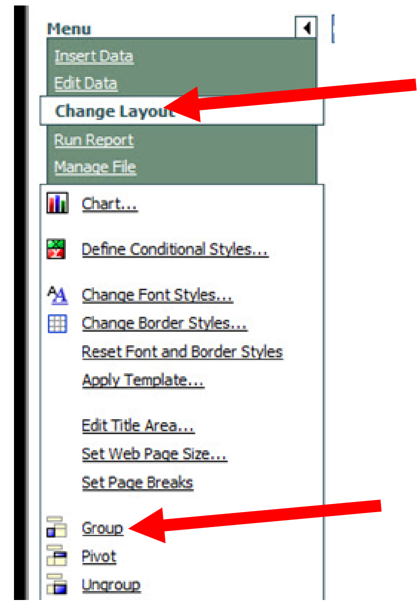


Group and Section Data

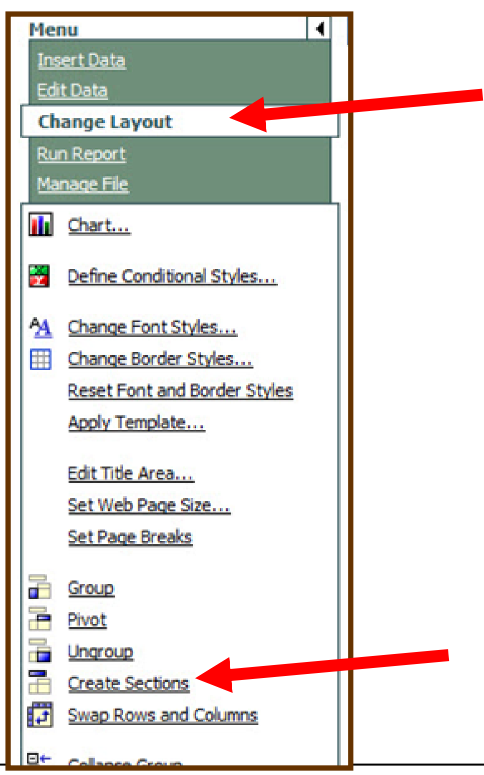
You can group the data by selecting Change Layout from the left side menu and select the column you would like to group. Select Group

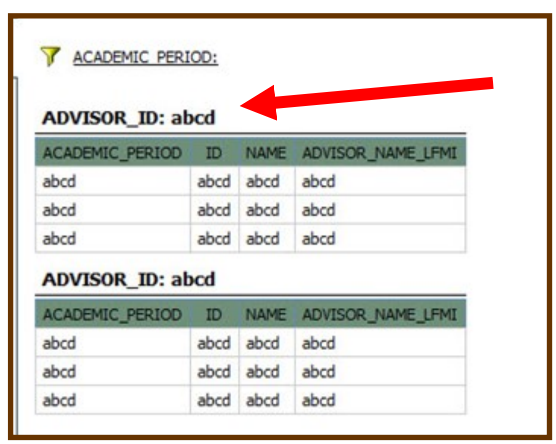


ADVISOR_ID	ACADEMIC_PERIOD	ID	NAME	ADVISOR_NAME_LFMI
abcd	abcd	abcd	abcd	abcd
	abcd	abcd	abcd	abcd
	abcd	abcd	abcd	abcd
abcd	abcd	abcd	abcd	abcd
	abcd	abcd	abcd	abcd
	abcd	abcd	abcd	abcd



To separate the data into sections, selecting Change Layout from the left side menu and select the column you would like to group (Advisor ID). Select Create Section. Select Run.





ADVISOR_ID: abcd

ACADEMIC_PERIOD	ID	NAME	ADVISOR_NAME_LFMI
abcd	abcd	abcd	abcd
abcd	abcd	abcd	abcd
abcd	abcd	abcd	abcd

ADVISOR_ID: abcd

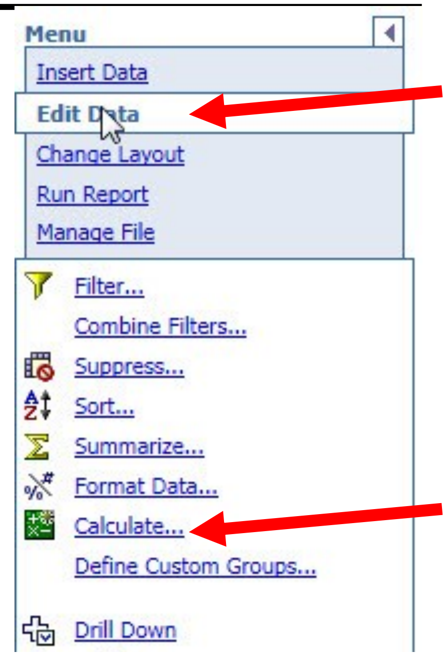
ACADEMIC_PERIOD	ID	NAME	ADVISOR_NAME_LFMI
abcd	abcd	abcd	abcd
abcd	abcd	abcd	abcd
abcd	abcd	abcd	abcd

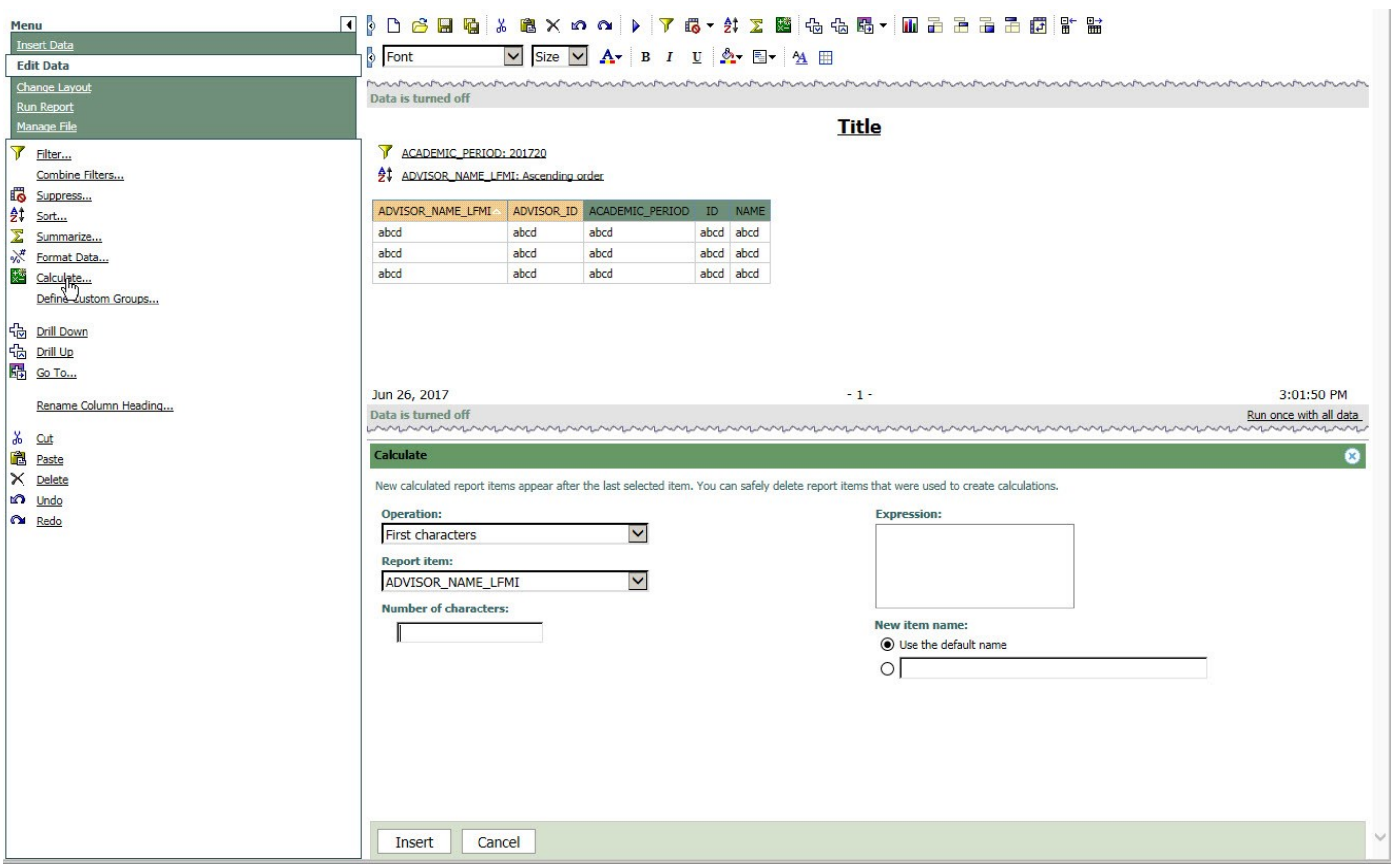
Calculate

Select Edit Data.

Select fields you would like to calculate.

Select Calculate.





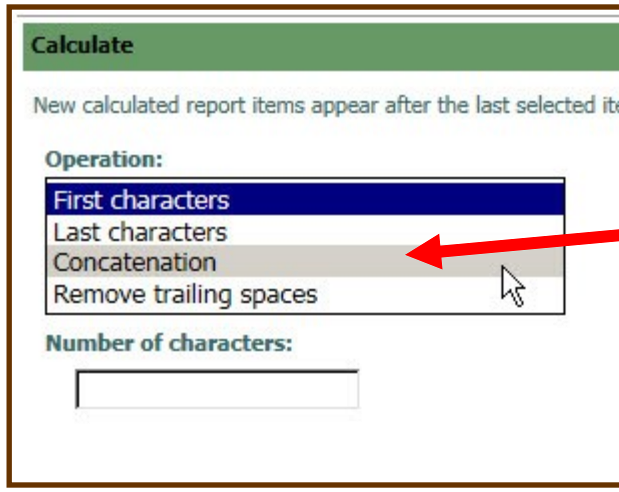
Calculate

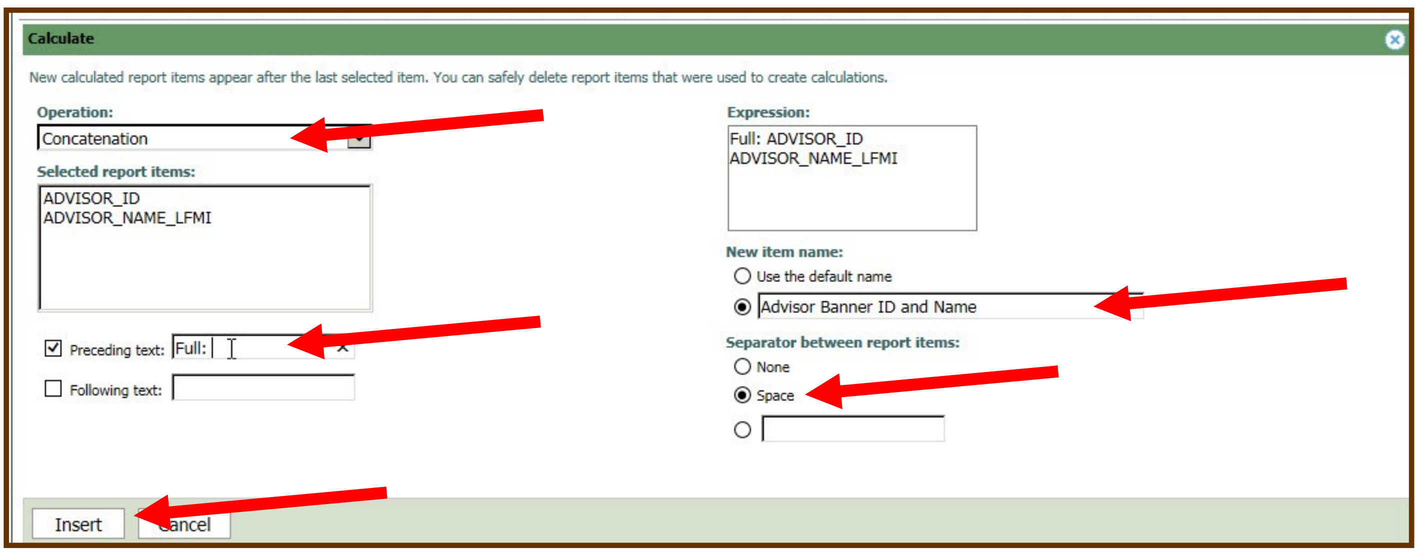
Select Concatenate from dropdown and other options such as

- Proceeding or Following word,
- New Item Name for the new column and
- Separator

Select Insert

Run





Title

ACADEMIC_PERIOD: 201720

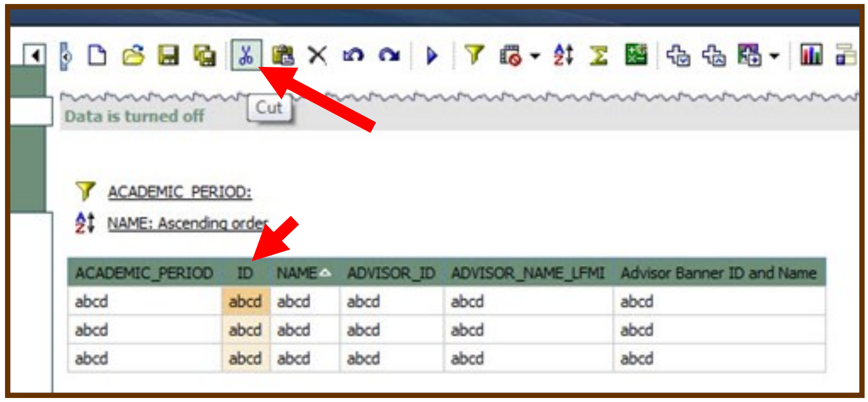
ACADEMIC_PERIOD	ID	NAME	ADVISOR_ID	ADVISOR_NAME_LFMI	Advisor Banner ID and Name
201720	916206232	Aiello, Frank A.	916072592	Gonzalez, Xiomara I.	Full: 916072592 Gonzalez, Xiomara I.
201720	916206232	Aiello, Frank A.	916008823	White, Sade N.	Full: 916008823 White, Sade N.
201720	916203675	Addario, Madeleine A.	916008823	White, Sade N.	Full: 916008823 White, Sade N.
201720	916176342	Bellino, Gerard S.	916072592	Gonzalez, Xiomara I.	Full: 916072592 Gonzalez, Xiomara I.
201720	916189753	Bender, Luke M.	916072592	Gonzalez, Xiomara I.	Full: 916072592 Gonzalez, Xiomara I.
201720	916189753	Bender, Luke M.	916008823	White, Sade N.	Full: 916008823 White, Sade N.
201720	916208627	Berg, Matthew B.	916072592	Gonzalez, Xiomara I.	Full: 916072592 Gonzalez, Xiomara I.
201720	916203024	Burns, Caitlyn N.	916008823	White, Sade N.	Full: 916008823 White, Sade N.
201720	916229296	Butler, Jamar	916072592	Gonzalez, Xiomara I.	Full: 916072592 Gonzalez, Xiomara I.
201720	916231114	Cafaro, Olivia M.	916072592	Gonzalez, Xiomara I.	Full: 916072592 Gonzalez, Xiomara I.
201720	916156812	Roberts, Frederick L.	910008604	Lofland, Samuel E.	Full: 910008604 Lofland, Samuel E.

Cut, Paste, Move and Delete Columns

To move a column, it can't be dragged, it must be cut and then pasted.

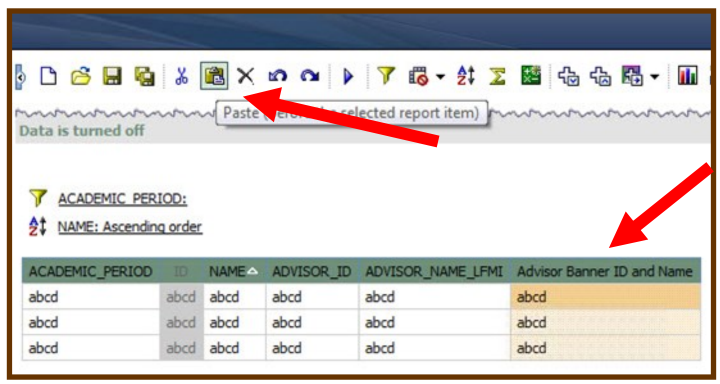
Select Column

Select scissors in menu to Cut

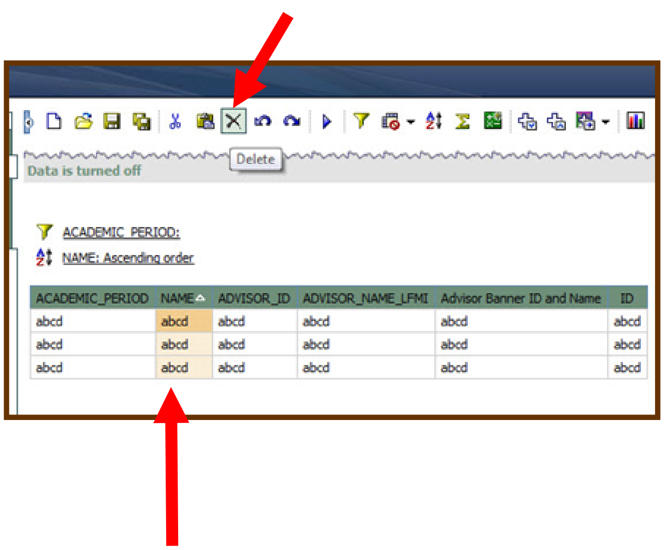


Select the column you would like to place the cut column in front of.

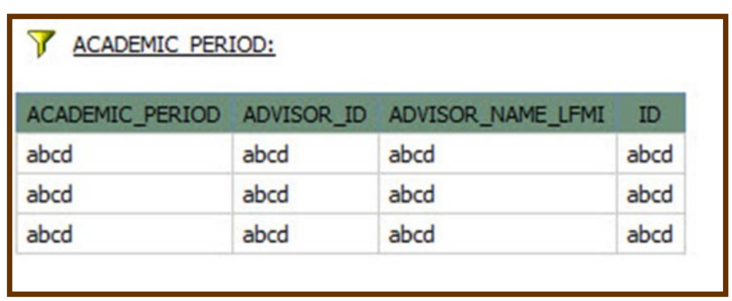
Select Paste



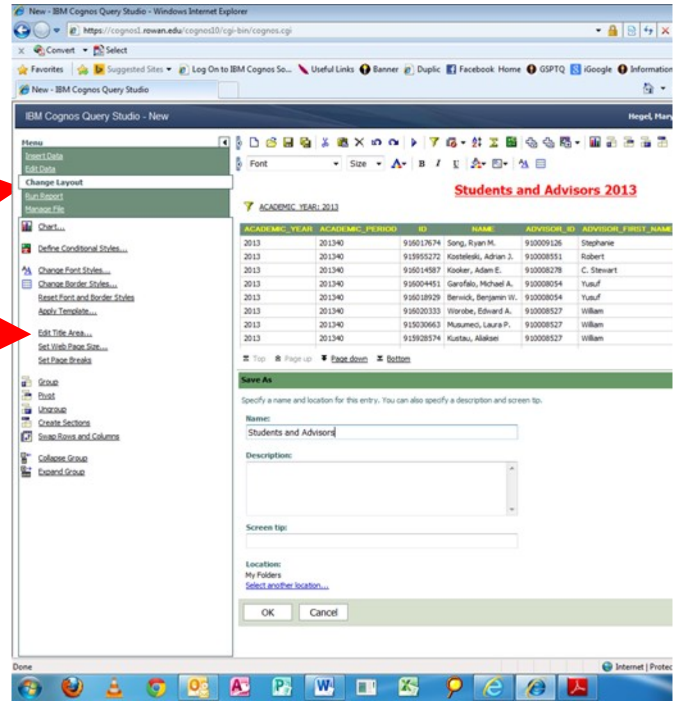
To Delete – Select column and then select Delete.



Move the ID column to the end, and delete Name and Advisor Banner ID and Name.



Edit Titles



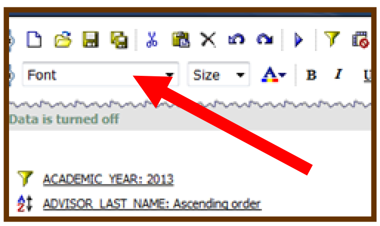
To add a custom title from the left panel menu at the top:

Select Change Layout.

Select Edit Title Area.

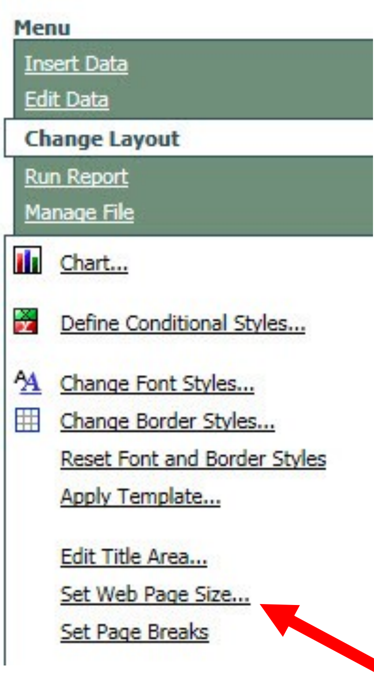
Type the name of the report title and select

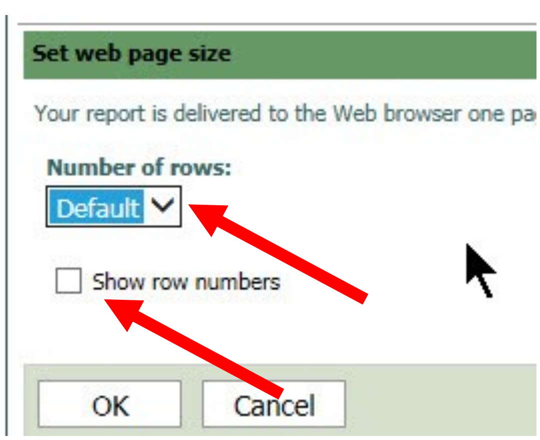
To change fonts, colors, font sizes of the title or column heads, select/highlight the text and choose the fonts etc. from the top menu bar.

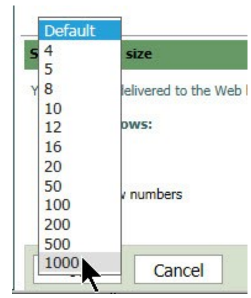


To change the number of rows displayed, select Change Layout, Set Web Page Size.

Choose the number of rows, and you can also check Show row numbers if needed.



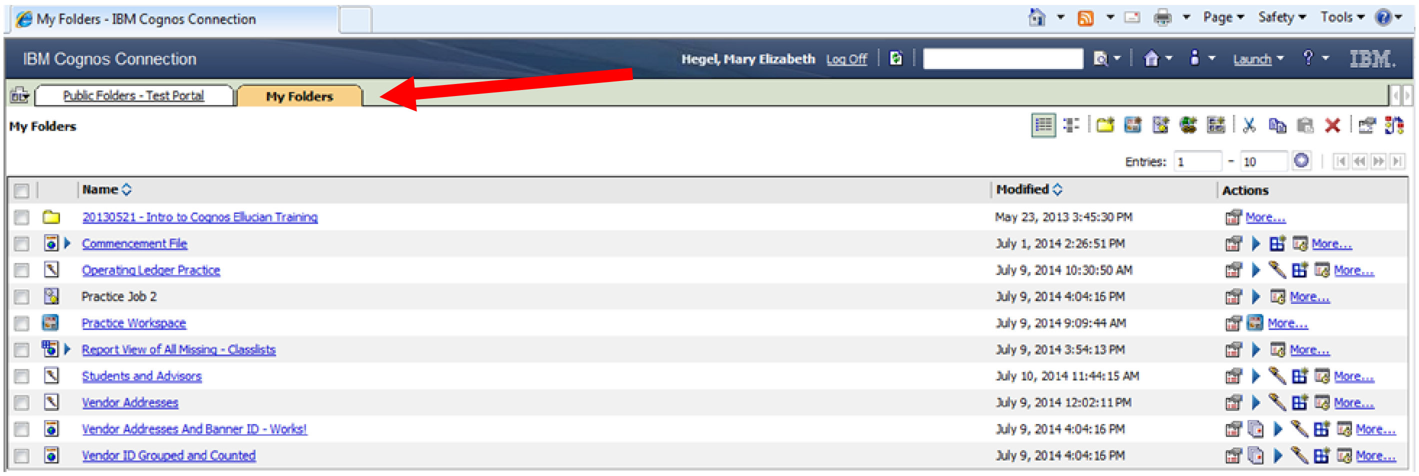




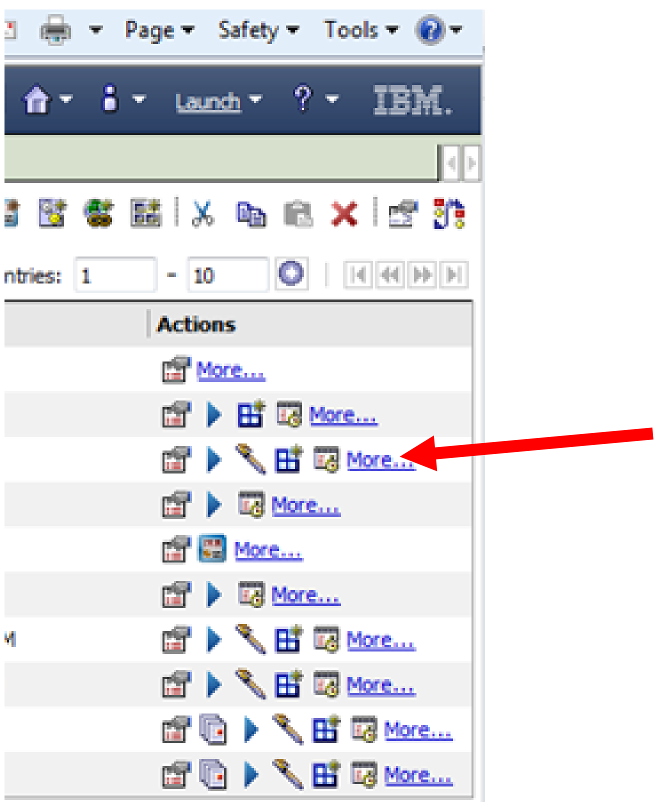
View Reports in My Folders

Select the House (Home) to go back to the main screen.

Select My Folders Tab to see your report.



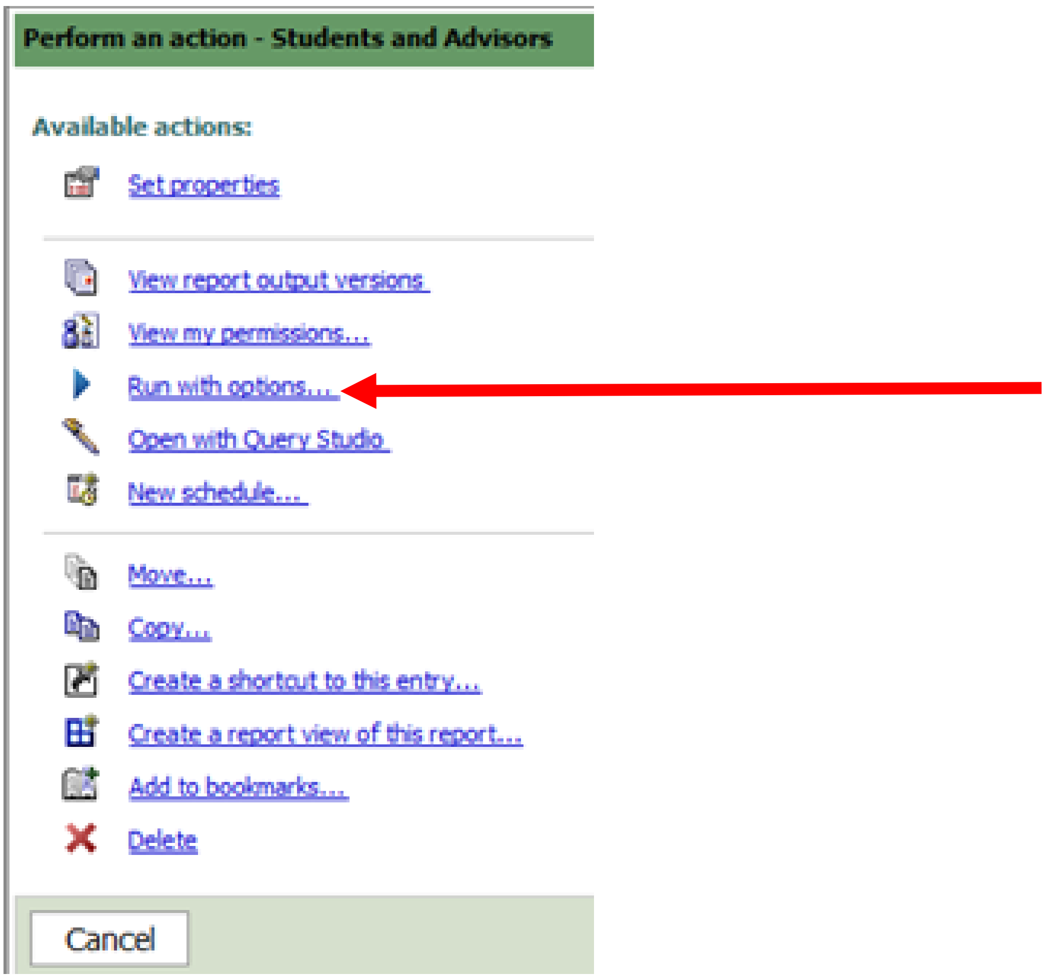
To the right of the report there are several icons. Hover over them to see their descriptions, or select More to see actions as a list with short descriptions.



Completed Reports

If you select Run with Options it will launch the Options dialog where you can choose the format, language etc. See the instructions for Cognos Consumer to schedule and email reports.

If you want others in your department to have access to a report you have created in Query Studio, contact the Cognos Administrators and provide them with the public folder it should be moved to, and who should have access to it.

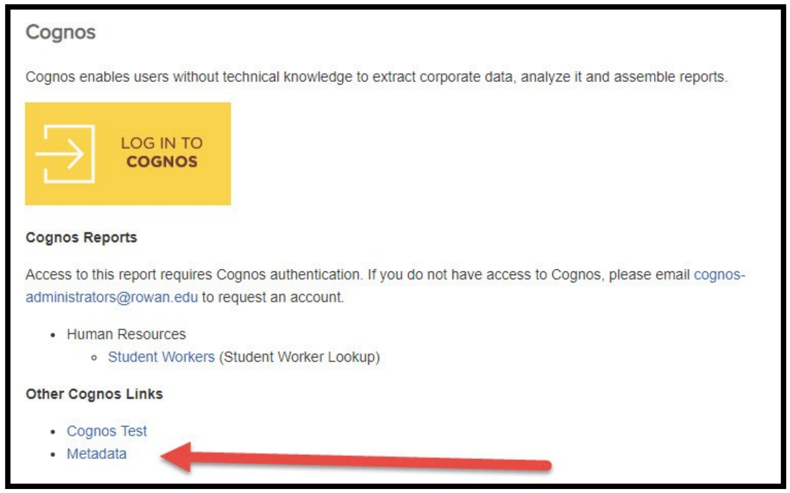


Metadata

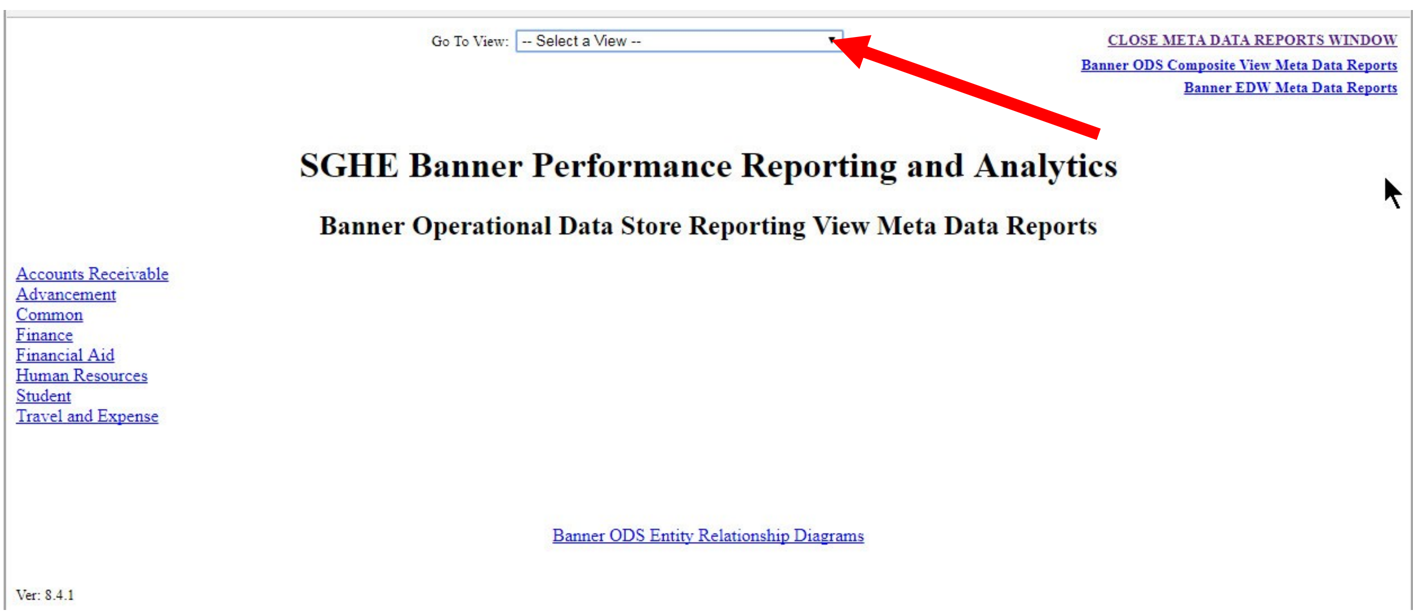
The Metadata will help you to understand the reporting views in Cognos and figure out where the data you need to include in your reports is located.

Go to https://irt.rowan.edu/services/data.html

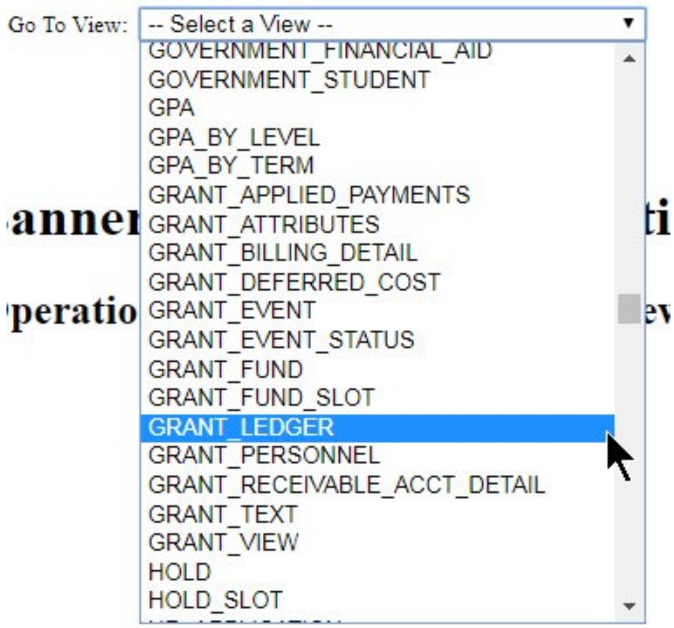
Under Cognos select Metadata



At the top of the page, select the dropdown menu to see all the views.



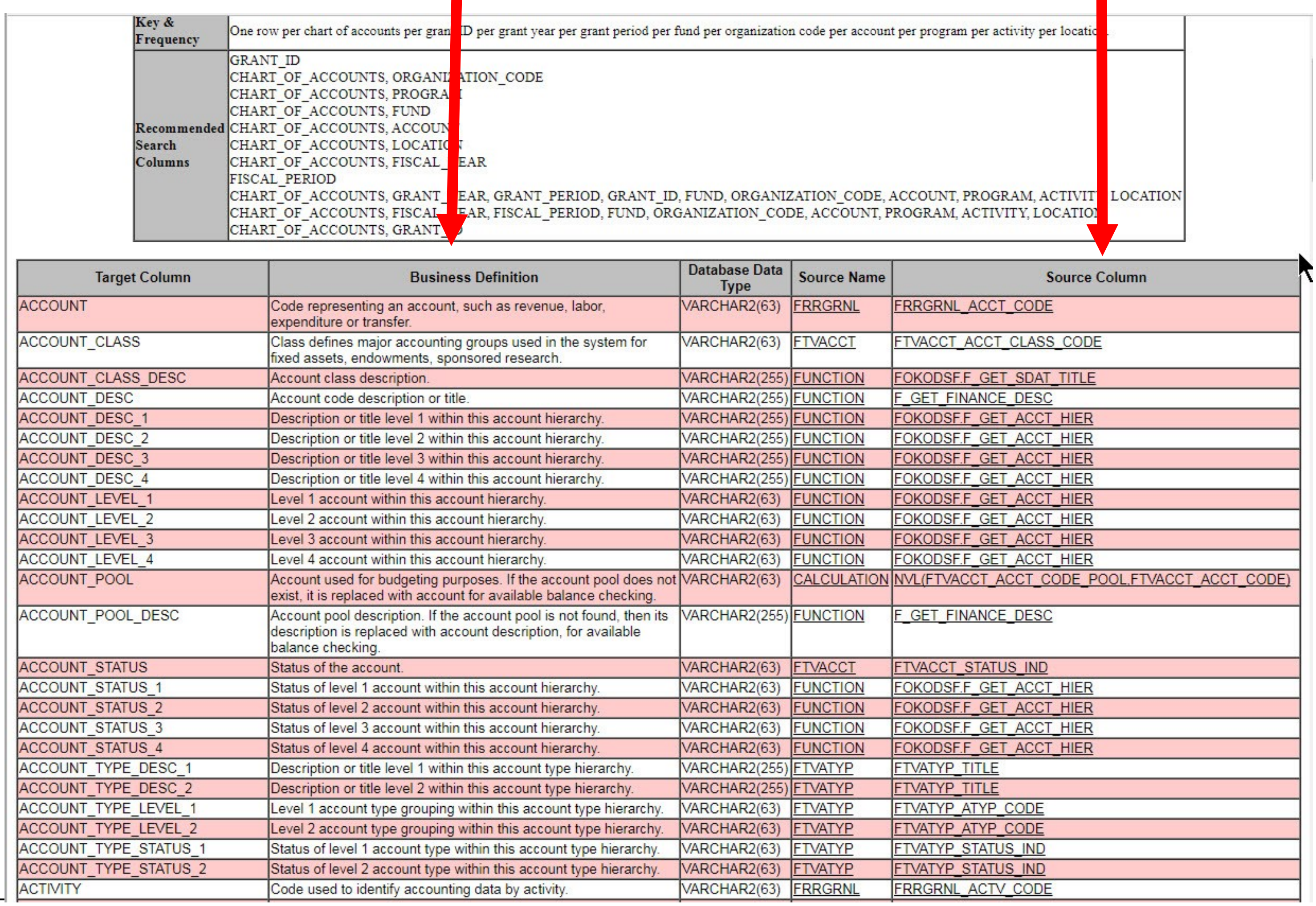
Metadata



For example, if you chose the GRANT_LEDGER view, you can see all the fields in that view, in Cognos Query Studio. You will also see the definition of that field and the source (the Banner table the data resides in).

Banner Table

Definition

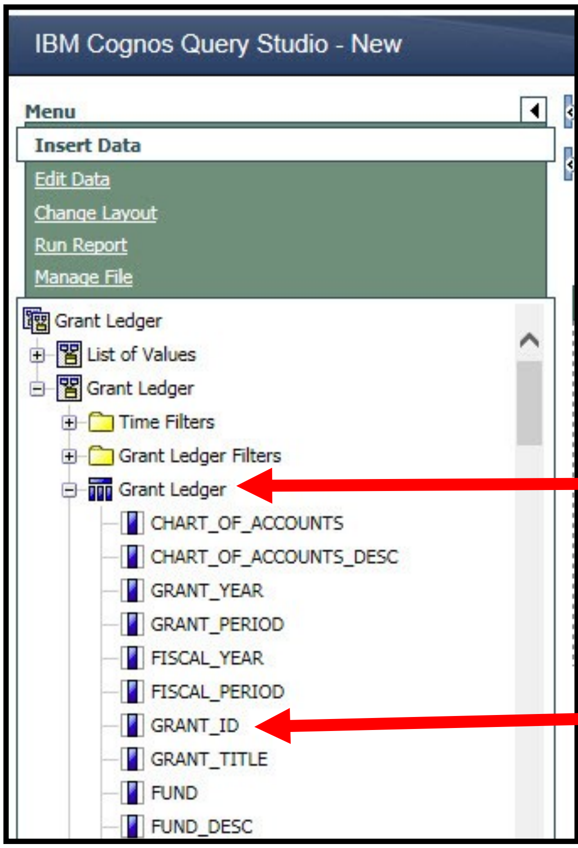


Key & Frequency	One row per chart of accounts per gran ID per grant year per grant period per fund per organization code per account per program per activity per locatic
Recommended Search Columns	GRANT_ID CHART_OF_ACCOUNTS, ORGANI ATION_CODE CHART_OF_ACCOUNTS, PROGRA CHART_OF_ACCOUNTS, FUND CHART_OF_ACCOUNTS, ACCOUN CHART_OF_ACCOUNTS, LOCATIO CHART_OF_ACCOUNTS, FISCAL_ EAR FISCAL_PERIOD CHART_OF_ACCOUNTS, GRANT_ EAR, GRANT_PERIOD, GRANT_ID, FUND, ORGANIZATION_CODE, ACCOUNT, PROGRAM, ACTIVIT LOCATION CHART_OF_ACCOUNTS, FISCAL EAR, FISCAL_PERIOD, FUND, ORGANIZATION_CODE, ACCOUNT, PROGRAM, ACTIVITY, LOCATIO CHART_OF_ACCOUNTS, GRANT_

Target Column	Business Definition	Database Data Type	Source Name	Source Column
ACCOUNT	Code representing an account, such as revenue, labor, expenditure or transfer.	VARCHAR2(63)	FRRGRNL	FRRGRNL_ACCT_CODE
ACCOUNT_CLASS	Class defines major accounting groups used in the system for fixed assets, endowments, sponsored research.	VARCHAR2(63)	FTVACCT	FTVACCT_ACCT_CLASS_CODE
ACCOUNT_CLASS_DESC	Account class description.	VARCHAR2(255)	FUNCTION	FOKODSF.F_GET_SDAT_TITLE
ACCOUNT_DESC	Account code description or title.	VARCHAR2(255)	FUNCTION	F_GET_FINANCE_DESC
ACCOUNT_DESC_1	Description or title level 1 within this account hierarchy.	VARCHAR2(255)	FUNCTION	FOKODSF.F_GET_ACCT_HIER
ACCOUNT_DESC_2	Description or title level 2 within this account hierarchy.	VARCHAR2(255)	FUNCTION	FOKODSF.F_GET_ACCT_HIER
ACCOUNT_DESC_3	Description or title level 3 within this account hierarchy.	VARCHAR2(255)	FUNCTION	FOKODSF.F_GET_ACCT_HIER
ACCOUNT_DESC_4	Description or title level 4 within this account hierarchy.	VARCHAR2(255)	FUNCTION	FOKODSF.F_GET_ACCT_HIER
ACCOUNT_LEVEL_1	Level 1 account within this account hierarchy.	VARCHAR2(63)	FUNCTION	FOKODSF.F_GET_ACCT_HIER
ACCOUNT_LEVEL_2	Level 2 account within this account hierarchy.	VARCHAR2(63)	FUNCTION	FOKODSF.F_GET_ACCT_HIER
ACCOUNT_LEVEL_3	Level 3 account within this account hierarchy.	VARCHAR2(63)	FUNCTION	FOKODSF.F_GET_ACCT_HIER
ACCOUNT_LEVEL_4	Level 4 account within this account hierarchy.	VARCHAR2(63)	FUNCTION	FOKODSF.F_GET_ACCT_HIER
ACCOUNT_POOL	Account used for budgeting purposes. If the account pool does not exist, it is replaced with account for available balance checking.	VARCHAR2(63)	CALCULATION	NVL(FTVACCT_ACCT_CODE_POOL,FTVACCT_ACCT_CODE)
ACCOUNT_POOL_DESC	Account pool description. If the account pool is not found, then its description is replaced with account description, for available balance checking.	VARCHAR2(255)	FUNCTION	F_GET_FINANCE_DESC
ACCOUNT_STATUS	Status of the account.	VARCHAR2(63)	FTVACCT	FTVACCT_STATUS_IND
ACCOUNT_STATUS_1	Status of level 1 account within this account hierarchy.	VARCHAR2(63)	FUNCTION	FOKODSF.F_GET_ACCT_HIER
ACCOUNT_STATUS_2	Status of level 2 account within this account hierarchy.	VARCHAR2(63)	FUNCTION	FOKODSF.F_GET_ACCT_HIER
ACCOUNT_STATUS_3	Status of level 3 account within this account hierarchy.	VARCHAR2(63)	FUNCTION	FOKODSF.F_GET_ACCT_HIER
ACCOUNT_STATUS_4	Status of level 4 account within this account hierarchy.	VARCHAR2(63)	FUNCTION	FOKODSF.F_GET_ACCT_HIER
ACCOUNT_TYPE_DESC_1	Description or title level 1 within this account type hierarchy.	VARCHAR2(255)	FTVATYP	FTVATYP_TITLE
ACCOUNT_TYPE_DESC_2	Description or title level 2 within this account type hierarchy.	VARCHAR2(255)	FTVATYP	FTVATYP_TITLE
ACCOUNT_TYPE_LEVEL_1	Level 1 account type grouping within this account type hierarchy.	VARCHAR2(63)	FTVATYP	FTVATYP_ATYP_CODE
ACCOUNT_TYPE_LEVEL_2	Level 2 account type grouping within this account type hierarchy.	VARCHAR2(63)	FTVATYP	FTVATYP_ATYP_CODE
ACCOUNT_TYPE_STATUS_1	Status of level 1 account type within this account type hierarchy.	VARCHAR2(63)	FTVATYP	FTVATYP_STATUS_IND
ACCOUNT_TYPE_STATUS_2	Status of level 2 account type within this account type hierarchy.	VARCHAR2(63)	FTVATYP	FTVATYP_STATUS_IND
ACTIVITY	Code used to identify accounting data by activity.	VARCHAR2(63)	FRRGRNL	FRRGRNL_ACTV_CODE

Metadata

The Report Views in Cognos Query Studio are what you see when you expand the Report packages.

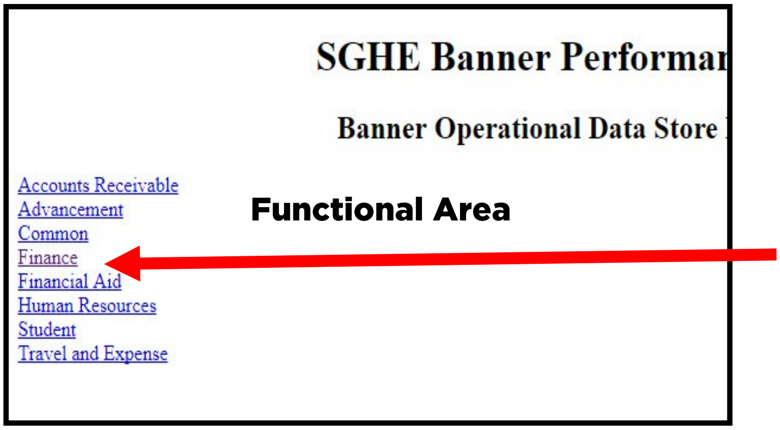


The icon for Report View is a horizontal blue bar over top three vertical blue bars.

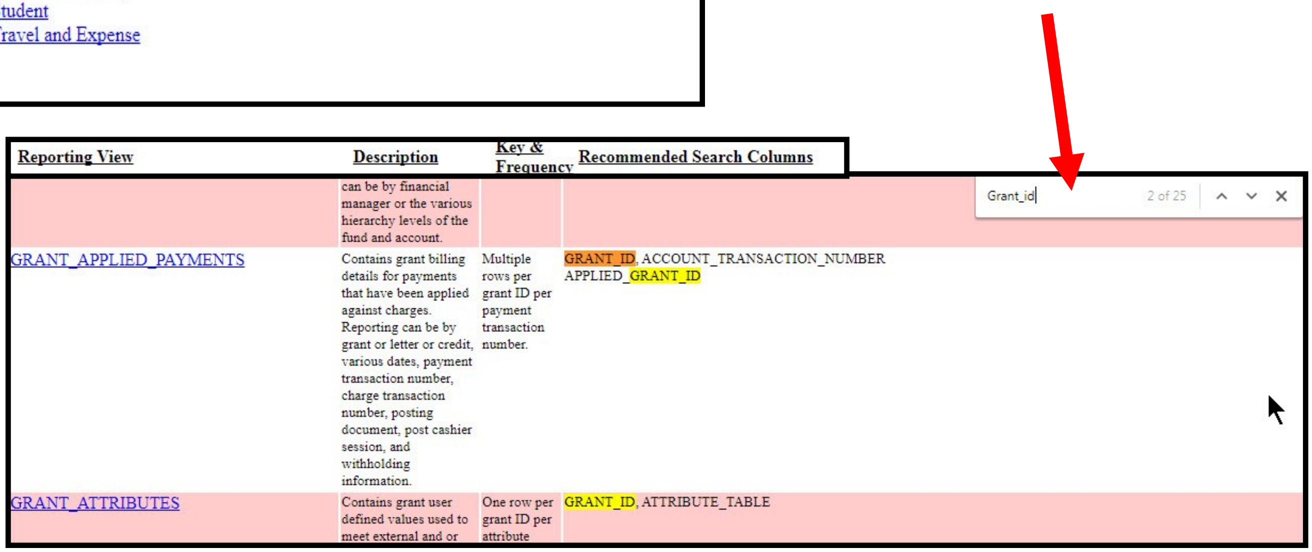
Here is the definition for GRANT_ID in the Metadata (this is located in the Grant Ledger Report View).

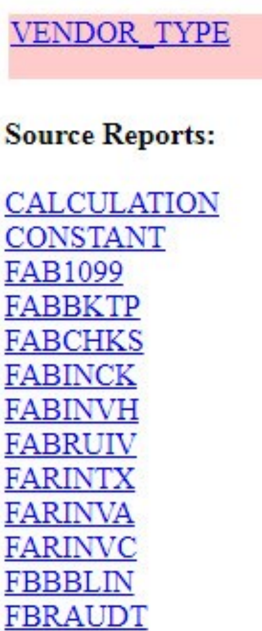
FUND_TYPE_LEVEL_2	Level 2 fund type grouping within this fund type hierarchy.	VARCHAR2(63)	FTVFTYP	FTVFTYP_FTYP_CODE
FUND_TYPE_STATUS_1	Status of level 1 fund type within this fund type hierarchy.	VARCHAR2(63)	FTVFTYP	FTVFTYP_STATUS_IND
FUND_TYPE_STATUS_2	Status of level 2 fund type within this fund type hierarchy.	VARCHAR2(63)	FTVFTYP	FTVFTYP_STATUS_IND
GRANT_ID	Unique user defined or system generated one-up number for this grant.	VARCHAR2(63)	FRRGRNL	FRRGRNL_GRNT_CODE
GRANT_PERIOD	Unique two-digit identifier of a period within a grant year. Generally this contains values between 00 and 14.	VARCHAR2(63)	CONSTANT	HARD CODED VALUES '00' THROUGH '14'
GRANT_TITLE	Shortened name or title for the grant.	VARCHAR2(255)	FUNCTION	FRKIDEN.F_GET_FRBGRNT_TITLE
GRANT_YEAR	Converted unique two-digit identifier code for the grant year to a four-digit year.	VARCHAR2(63)	FUNCTION	FOFYCNV
INTERNAL_ACCOUNT_TYPE	Predefined values that represent account types linked to level one	VARCHAR2(63)	FTVATYP	FTVATYP_INTERNAL_ATYP_CODE

To see all the Report Views in which a Query Item appears, you can select the functional areas from the left side of the Metadata page and then select Control F from your keyboard to do a search of the page.



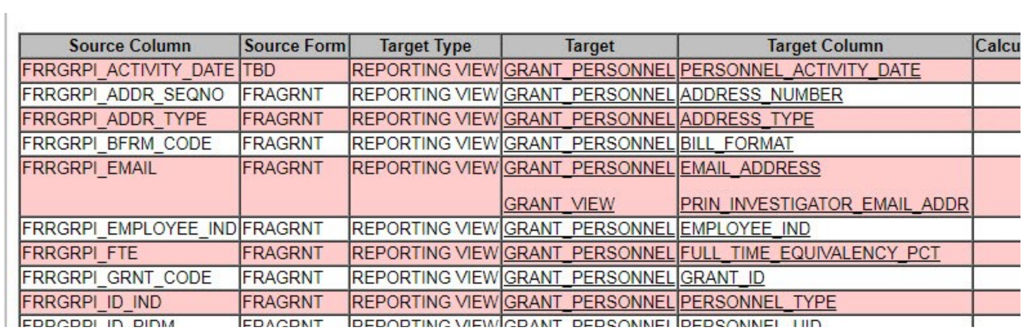
Search





If you scroll to the bottom you will see all the tables associated with that package.

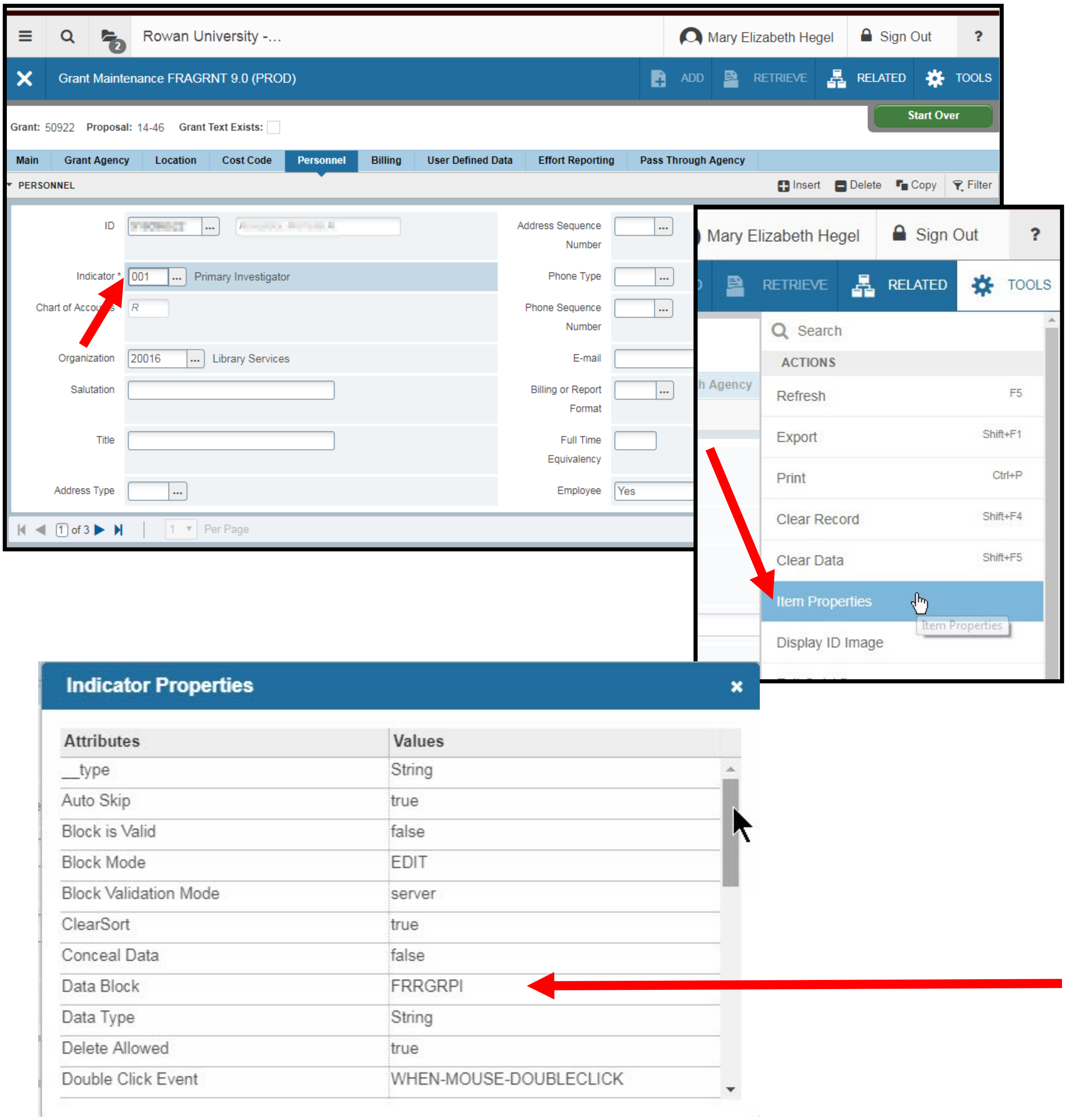
Select one of the tables and you will see all the Report Views (Target) associated with that Table.



Source Column	Source Form	Target Type	Target	Target Column	Calcu
FRRGRPI_ACTIVITY_DATE	TBD	REPORTING VIEW	GRANT_PERSONNEL	PERSONNEL_ACTIVITY_DATE	
FRRGRPI_ADDR_SEQNO	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	ADDRESS_NUMBER	
FRRGRPI_ADDR_TYPE	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	ADDRESS_TYPE	
FRRGRPI_BFRM_CODE	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	BILL_FORMAT	
FRRGRPI_EMAIL	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL GRANT_VIEW	EMAIL_ADDRESS PRIN_INVESTIGATOR_EMAIL_ADDR	
FRRGRPI_EMPLOYEE_IND	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	EMPLOYEE_IND	
FRRGRPI_FTE	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	FULL_TIME_EQUIVALENCY_PCT	
FRRGRPI_GRNT_CODE	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	GRANT_ID	
FRRGRPI_ID_IND	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	PERSONNEL_TYPE	
FRRGRPI_ID_PIDM	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	PERSONNEL_UID	

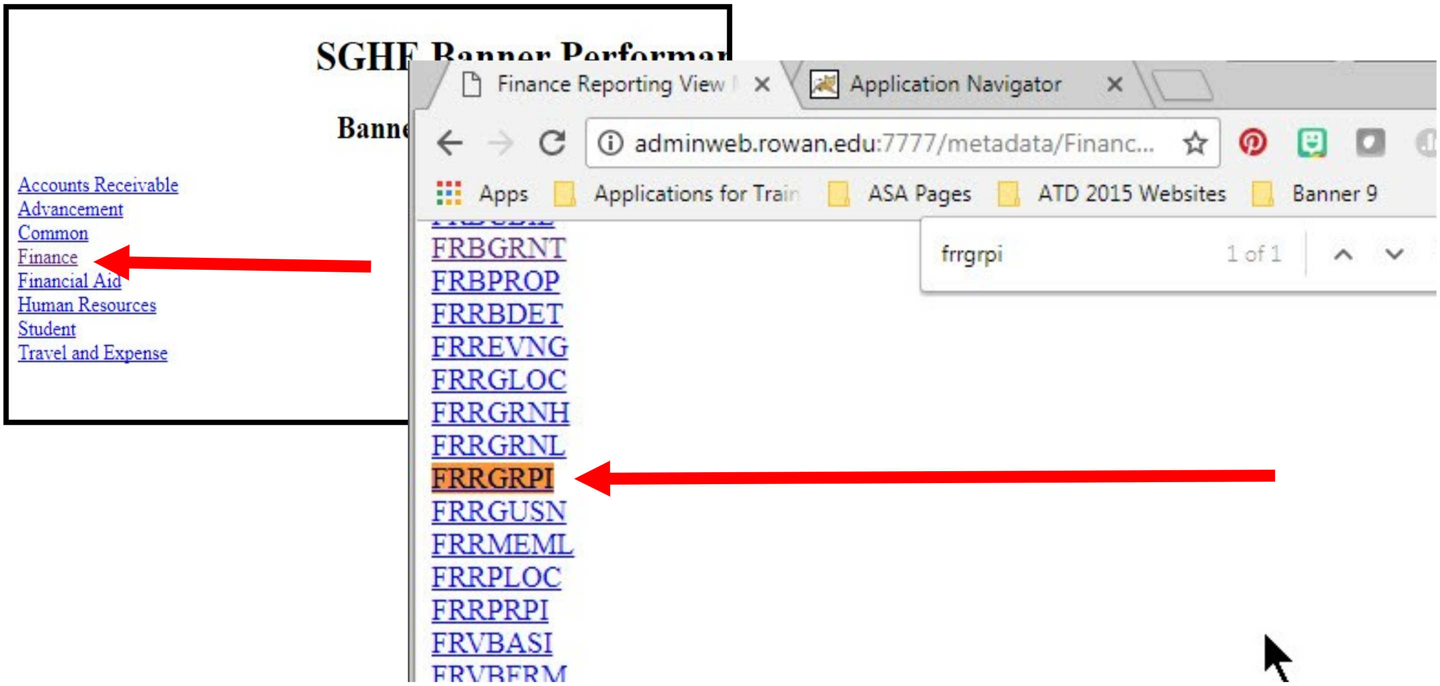
Metadata - From Banner

If you know where your data is located in Banner. you can find the table. Open the form you use in Banner 9. Select the field. Select Tools. Select Item Properties. The Data Block in Indicator Properties will usually tell you the table where your data resides.



Metadata - From Banner

Do a search for that form in the Package on the Metadata page (for example this one is from the Finance package)



Select one of the tables and you will see all the Report Views (Target) associated with that Table.

Source Column	Source Form	Target Type	Target	Target Column	Calculation Fo
FRRGRPI_ACTIVITY_DATE	TBD	REPORTING VIEW	GRANT_PERSONNEL	PERSONNEL_ACTIVITY_DATE	
FRRGRPI_ADDR_SEQNO	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	ADDRESS_NUMBER	
FRRGRPI_ADDR_TYPE	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	ADDRESS_TYPE	
FRRGRPI_BFRM_CODE	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	BILL_FORMAT	
FRRGRPI_EMAIL	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL GRANT_VIEW	EMAIL_ADDRESS PRIN_INVESTIGATOR_EMAIL_ADDR	
FRRGRPI_EMPLOYEE_IND	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	EMPLOYEE_IND	
FRRGRPI_FTE	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	FULL_TIME_EQUIVALENCY_PCT	
FRRGRPI_GRNT_CODE	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	GRANT_ID	
FRRGRPI_ID_IND	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	PERSONNEL_TYPE	
FRRGRPI_ID_PIDM	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	PERSONNEL_UID	
FRRGRPI_ORGN_CODE	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	ORGANIZATION_CODE	
FRRGRPI_PHONE_TYPE	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	PHONE_TYPE	
FRRGRPI_SALUTATION	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	PERSONNEL_SALUTATION	
FRRGRPI_TELE_SEQNO	FRAGRNT	REPORTING VIEW	GRANT_PERSONNEL	PHONE_SEQ_NUMBER	
FRRGRPI_TITLE	FRAGRNT	REPORTING VIEW	GRANT_VIEW GRANT_FUND GRANT_PERSONNEL	PRINCIPAL_INVESTIGATOR_TITLE PRINCIPAL_INVESTIGATOR_TITLE PERSONNEL_TITLE	NA
FRRGRPI_USER_ID	TBD	REPORTING VIEW	GRANT_PERSONNEL	PERSONNEL_USER_ID	

Contact Information

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