Cognos 11.2.1
Query Studio

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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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<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
</table>
| 4    | What is Cognos?  
| 5    | Reporting Tool |
| 6    | Cognos Access  
| 7    | Navigate to Query Studio |
| 8    | Folders  
| 10   | Launch Query Studio |
| 12   | Choose Package for Report  
| 13   | Select Fields for Report |
| 14   | Save to My Folder |
| 15   | Filter Data  
| 17   | Run Report |
| 19   | Sort Data  
| 19   | Group and Section Data |
| 20   | Calculate  
| 22   | Cut, Paste, Move & Delete Columns |
| 23   | Edit Titles |
| 24   | View Report in My Folder |
| 25   | Completed Reports |
| 26   | Metadata  
| 32   | Resources |
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.
Banner Data

Copied Nightly

ODS Operational Data Store

Hundreds of tables

Data is grouped and joined

Cognos

Data is pulled from ODS and packaged into groups such as Student, Finance, Payroll, etc.

Tool to create reports

Metadata

ODS Dictionary
Shows how the data is organized and how the Banner tables translated
Access Cognos

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
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.

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Success Center</td>
</tr>
<tr>
<td>Action Items</td>
</tr>
<tr>
<td>Admissions</td>
</tr>
<tr>
<td>Advancement</td>
</tr>
<tr>
<td>ASA</td>
</tr>
<tr>
<td>Banner Activity</td>
</tr>
<tr>
<td>Bursar</td>
</tr>
<tr>
<td>Cayuse Reports</td>
</tr>
<tr>
<td>CMSRU</td>
</tr>
<tr>
<td>College of Engineering</td>
</tr>
<tr>
<td>Email List Reports</td>
</tr>
<tr>
<td>Facilities</td>
</tr>
<tr>
<td>Finance</td>
</tr>
<tr>
<td>Financial Aid</td>
</tr>
<tr>
<td>Graduate Research Services</td>
</tr>
</tbody>
</table>
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.

Package
(or Namespace)

Folder with Prebuilt Filters

Reporting View
(or Query Subject)

Field
(or Query Item)
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).
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

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.
Select Edit Data.
Select fields you would like to calculate.
Select 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
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.
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

<table>
<thead>
<tr>
<th>Target Column</th>
<th>Business Definition</th>
<th>Database Data Type</th>
<th>Source Name</th>
<th>Source Column</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCOUNT</td>
<td>Code representing an account, such as revenue, labor, expenditure or transfer</td>
<td>VARCHAR(63)</td>
<td>FREGNL</td>
<td>FREGNL_ACCT_CODE</td>
</tr>
<tr>
<td>ACCOUNT_CLASS</td>
<td>Class defines major accounting groups used in the system for fixed assets, endowments, sponsored research</td>
<td>VARCHAR(63)</td>
<td>FYWAGT</td>
<td>FYWAGT_ACCT_CLASS_CODE</td>
</tr>
<tr>
<td>ACCOUNT_CLASS_DESC</td>
<td>Account class description</td>
<td>VARCHAR(255)</td>
<td>F_GET_FINANCE_DESC</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_DESC</td>
<td>Account code description or title</td>
<td>VARCHAR(255)</td>
<td>F_GKOSFF.GET_ACCOUNT_NAME</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_DESC_1</td>
<td>Description or title level 1 within this account hierarchy</td>
<td>VARCHAR(255)</td>
<td>F_GKOSFF.GET_ACCOUNT_GROUP</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_DESC_2</td>
<td>Description or title level 2 within this account hierarchy</td>
<td>VARCHAR(255)</td>
<td>F_GKOSFF.GET_ACCOUNT_GROUP</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_DESC_3</td>
<td>Description or title level 3 within this account hierarchy</td>
<td>VARCHAR(255)</td>
<td>F_GKOSFF.GET_ACCOUNT_GROUP</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_DESC_4</td>
<td>Description or title level 4 within this account hierarchy</td>
<td>VARCHAR(255)</td>
<td>F_GKOSFF.GET_ACCOUNT_GROUP</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_LEVEL_1</td>
<td>Level 1 account within this account hierarchy</td>
<td>VARCHAR(255)</td>
<td>F_GKOSFF.GET_ACCOUNT_GROUP</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_LEVEL_2</td>
<td>Level 2 account within this account hierarchy</td>
<td>VARCHAR(255)</td>
<td>F_GKOSFF.GET_ACCOUNT_GROUP</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_LEVEL_3</td>
<td>Level 3 account within this account hierarchy</td>
<td>VARCHAR(255)</td>
<td>F_GKOSFF.GET_ACCOUNT_GROUP</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_LEVEL_4</td>
<td>Level 4 account within this account hierarchy</td>
<td>VARCHAR(255)</td>
<td>F_GKOSFF.GET_ACCOUNT_GROUP</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_POOL</td>
<td>Account used for budgeting purposes if the account pool does not exist; it is replaced with account for available balance checking</td>
<td>VARCHAR(255)</td>
<td>F_GKOSFF.GET_ACCOUNT_GROUP</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_POOL_DESC</td>
<td>Account pool description. If the account pool is not found, then its description is replaced with account description, for available balance checking.</td>
<td>VARCHAR(255)</td>
<td>F_GKOSFF.GET_ACCOUNT_GROUP</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_STATUS</td>
<td>Status of the account</td>
<td>VARCHAR(63)</td>
<td>FYWACCT</td>
<td>FYWACCT_STATUS_IND</td>
</tr>
<tr>
<td>ACCOUNT_STATUS_1</td>
<td>Status of level 1 account within this account hierarchy</td>
<td>VARCHAR(63)</td>
<td>F_GKOSFF.GET_ACCOUNT_GROUP</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_STATUS_2</td>
<td>Status of level 2 account within this account hierarchy</td>
<td>VARCHAR(63)</td>
<td>F_GKOSFF.GET_ACCOUNT_GROUP</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_STATUS_3</td>
<td>Status of level 3 account within this account hierarchy</td>
<td>VARCHAR(63)</td>
<td>F_GKOSFF.GET_ACCOUNT_GROUP</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_STATUS_4</td>
<td>Status of level 4 account within this account hierarchy</td>
<td>VARCHAR(63)</td>
<td>F_GKOSFF.GET_ACCOUNT_GROUP</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_TYPE_DESC_1</td>
<td>Description or title level 1 within this account hierarchy</td>
<td>VARCHAR(255)</td>
<td>F_GKOSFF.GET_ACCOUNT_TYPE</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_TYPE_DESC_2</td>
<td>Description or title level 2 within this account hierarchy</td>
<td>VARCHAR(255)</td>
<td>F_GKOSFF.GET_ACCOUNT_TYPE</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_TYPE_LEVEL_1</td>
<td>Level 1 account type grouping within this account hierarchy</td>
<td>VARCHAR(255)</td>
<td>F_GKOSFF.GET_ACCOUNT_TYPE</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_TYPE_LEVEL_2</td>
<td>Level 2 account type grouping within this account hierarchy</td>
<td>VARCHAR(255)</td>
<td>F_GKOSFF.GET_ACCOUNT_TYPE</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_TYPE_STATUS_1</td>
<td>Status of level 1 account type within this account hierarchy</td>
<td>VARCHAR(255)</td>
<td>F_GKOSFF.GET_ACCOUNT_TYPE</td>
<td></td>
</tr>
<tr>
<td>ACCOUNT_TYPE_STATUS_2</td>
<td>Status of level 2 account type within this account hierarchy</td>
<td>VARCHAR(255)</td>
<td>F_GKOSFF.GET_ACCOUNT_TYPE</td>
<td></td>
</tr>
<tr>
<td>ACTIVITY</td>
<td>Code used to identify accounting data by activity</td>
<td>VARCHAR(63)</td>
<td>FREGNL</td>
<td>FREGNL_ACTIV_CODE</td>
</tr>
</tbody>
</table>
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.

See GRANT_ID Query Item in the Report View.

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

<table>
<thead>
<tr>
<th>Fund Type Level 2</th>
<th>Fund Type Status 1</th>
<th>Fund Type Status 2</th>
<th>Grant ID</th>
<th>Grant Period</th>
<th>Grant Title</th>
<th>Grant Year</th>
<th>Internal Account Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2 fund type grouping within this fund type hierarchy.</td>
<td>Status of level 1 fund type within this fund type hierarchy.</td>
<td>Status of level 2 fund type within this fund type hierarchy.</td>
<td>Unique user defined or system generated one-up number for this grant.</td>
<td>Unique two-digit identifier of a period within a grant year. Generally this contains values between 00 and 14.</td>
<td>Shortened name or title for the grant.</td>
<td>Converted unique two-digit identifier code for the grant year to a four-digit year.</td>
<td>Predefined values that represent account types linked to level one.</td>
</tr>
</tbody>
</table>
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.

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.
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.
Resources

Contact Information

For more information, questions or concerns contact: support@rowan.edu
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Training and Instructional Support
http://www.rowan.edu/irt-training
irt-training@rowan.edu