Building Ad Hoc Reports

Cognos Query Studio enables you to build custom ad hoc reports that you may share with other Cognos users.

This guide explains the basic process of creating and saving a report using Cognos Query Studio. The recommended method is described but does not replace training. Query Studio uses data from NUFinancials that is refreshed nightly.

Contents

Upon completion of this guide, you should be able to:

- Use essential terms: star, dimension, fact, and element
- Follow the recommended method for building ad hoc reports
- Add filters and prompts to a report
- Find and insert data onto a report
- Apply a report template and other finishing touches
- Save the report to your preferred location
- Run the report in various formats

Where to get help?

For assistance, contact NUIT Support Center at 847-491-HELP (4357), or email consultant@northwestern.edu

Who has access?

This application is for experienced financial users with an understanding of their budgets, financial activities, and existing pre-configured reports.

You must request access to Query Studio using the Finance, Facilities, and Research Administration (FFRA) systems security form located on the FFRA website > Security Access. Select from the two security roles below.

Query Author security role:

- Build Ad Hoc reports
- Run Ad Hoc reports
- Use the drill-up or down-drill NU Dept ID Master Tree functionality

Ad Hoc Query Runner security role:

- Run Ad Hoc reports from Cognos Connection > Finance, Facilities, and Research Administration Reports > NUFin Ad Hoc Reports folder
Step 1: Access Cognos Query Studio

Quick navigation: From the NUPortal, select Financials > System Login > Cognos > Query my data > PS_EPM_ADHOC. From the Financial Applications Gateway, click Cognos Reporting.

1. Click Query my data.

2. Click PS_EPM_ADHOC.
Understanding Essential Terms

Understanding essential terms will help you use this system and be understood by others when discussing this system.

= STAR

Contains everything you can use to build a report. Stars are thematic; they contain certain kinds of information. The star we are using for this guide is the Ledger KK Summary star. The Ledger KK Summary star contains summary-level financial information. This means you can see totals by chart string, but you cannot see transactional details.

= DIMENSION

Major category of information. All dimensions use this symbol. However, the KK Summary Fact menu also uses this symbol. You can tell the difference between a dimension and the KK Summary Fact because the fact only contains calculations. Beneath an expanded dimension menu, you will see element columns that can be inserted into the report. For example, ChartField1 is a dimension.

OR = ELEMENT

Column of information that acts as a descriptor. Elements provide information about the dimension. For example, the ChartField1 Description element provides information about the ChartField1 dimension.

= FACT

The menu that contains all the calculations. The fact is always beneath the last dimension.

= CALCULATION

Column of dollar amounts called calculations. These columns of dollar amounts are called calculations because Cognos performs the work of adding, subtracting, or multiplying different numbers together to provide the amount.
Step 2: Find data to insert into the report

SAVE TIME... . . . .

Set your personal Ad Hoc preferences to build reports using a limited data set or no data at all. Cognos refreshes the data every time you insert a column, filter, or sort the data. When you limit the data set, it processes only a portion of the data or provides filler data. At any time, you can click Run with all data, and Cognos will run the report and show all the data you requested. Set your preferences at: Manage File > My Preferences > Select Preview with limited data or Preview with no data.
Step 3: Filter, filter, filter . . .

Filter your elements before you insert them! Filter on date range, department, department level, and project before you insert the columns. Filters narrow down the data set by excluding data. When elements are not filtered before they are inserted, Cognos must process columns of data against your entire security access for all date ranges. This uses resources and may slow down the system for other users.

This is an example of how to apply a filter without inserting the column.
Step 3: Filter, filter, filter ... (continued)

Because we filtered Level 3 Department without inserting the column, this message appears. Continue building the report. As you insert columns, data will appear.

The description of the element column appears here. For example, filtering at Level 3 of the NU Master Dept ID tree means restricting data to the school or major unit level.
Step 4: Insert element columns before you insert calculation ($) columns

Insert filters and non-dollar columns first to limit the data. Non-dollar columns include anything that is not contained in the KK Summary Fact menu. Inserting dollar amounts first taxes the system because Cognos must re-calculate each dollar amount every time you change anything.

WARNING:
Never insert a whole dimension such as Department or Project into the report.

Instead, select specific elements from a dimension. Inserting the whole dimension inserts every element column contained in that dimension. This may harm system performance for all users if your security access includes a lot of data.
Step 5: Insert calculation ($) columns

Please remember:

- Understand what the calculation ($) is before you use it.
- Each $ calculation is a unique number made up of other specific numbers.
- Refer to Data Definitions documents for a comprehensive list of elements and calculations.
- You may rename any column title, but there is no way to determine which $ type you inserted after the column has been renamed. This may be an issue if you require support from the Help Desk for an Ad Hoc report.
Step 6: Give the report a title

1. Click title to create a report title that appears here.

2. Type a title name here.

3. Select items you want to show on the report header.

4. Click OK.

Additional formatting tips:

- If you want to delete a filter after it is inserted, right-click it and select delete.
- To hide filters or sorts, double-click title and deselect filters and sorts.
- Use the cut and paste buttons to move columns.
- Select a column and click to remove duplicates and group like values.
- Click to suppress zeros and items multiplied by zeros. (To view the entire report, click Change Layout > Set Webpage Size > change Number of rows to 50.)
- Click to format the look of the numbers.
Step 7: Apply a template

Template options:

- A template applies a header, formatting, and header image to the report.
- The default template is the Northwestern University template.
- Certain school or unit templates are also available.
- If you want to upload a school or unit template into Ad Hoc, contact the help desk (1-HELP).
Step 7: Apply a template (continued)

1. Navigate to Cognos > Public Folders > PS_EPM_ADHOC. Templates are saved here.

2. Select a template.

3. Click OK.
Step 8: Apply final touches

Adding final touches:

- Get rid of duplicate values by applying grouping. Click a column then click to group data by like values.
- To break the report into sections, click a column, and then click .

1. Select the column you want to delete.
2. Click Delete.
3. Click to uncheck the box next to the filters you want to keep.
4. Click OK.
Step 9: Save the report

1. Click Save.

2. Name the report (using your school/unit naming conventions). Then type a description.

3. Click OK to save the report at this location.
### Step 9: Save the report (continued)

**Save the report in one of these locations:**

<table>
<thead>
<tr>
<th>If you want to…</th>
<th>Then save the report here…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Save a report for your own use</td>
<td>Cognos &gt; My Folders</td>
</tr>
<tr>
<td>Save a report that other Query Authors may view or modify (not final)</td>
<td>Cognos &gt; Public Folders &gt; PS_EPM_ADHOC &gt; Scratch &gt; Select the appropriate folder and subfolder</td>
</tr>
<tr>
<td>Copy a final version of the report to production, so that Query Runners may view it</td>
<td>Cognos &gt; Public Folders &gt; PS_EPM_ADHOC &gt; NUFin AdHoc Reports &gt; Select the appropriate folder and subfolder</td>
</tr>
</tbody>
</table>

Reports saved in NUFin AdHoc Reports are available to view in production immediately.
Step 10: Run the report

For Query Builders

Query Builders may build and run reports.

1. Find the report.
   - Finalized report: Public Folders > Finance Facilities and Research Administration Reports > NUFin Ad Hoc Reports > Select the appropriate school/unit folder and subfolder.
   - A report that is not final is saved in one of two locations:
     - Cognos > My Folders
     - Cognos > Public Folders > PS_EPM_ADHOC > Scratch > Select the appropriate school/unit folder and subfolder.

2. Run the report.
   a. Click on the report name to open the report. The report opens in Query Studio.
   b. Enter any required prompts. The report runs automatically. To refresh the data you can click Run from the toolbar. The report runs to HTML.
   c. To change the format of the report, click the Run Report menu link. Choose the pdf or Excel output.

For Query Runners

Query Runners may only run reports from Cognos Connection.

1. Open the report from Cognos Connection: Public Folders > Finance Facilities and Research Administration Reports > NUFin Ad Hoc Reports.

2. Enter any required prompts and run the report using the Finish or OK buttons.