Enterprise Reporting
Interactive Features and Functionality
# Table of Contents

Overview .......................................................................................................................... 3

Report Filters .................................................................................................................... 4

  Use Case ....................................................................................................................... 4

  Creating a Report Filter ............................................................................................... 5

  Removing a Report Filter ........................................................................................... 8

  Filter Operators .......................................................................................................... 9

Sorting Data .................................................................................................................... 10

  Use Case ..................................................................................................................... 10

  Removing Sorts .......................................................................................................... 11

  Creating Sorts ............................................................................................................ 12

Tracking Changes in Data ............................................................................................. 13

  Reference Data .......................................................................................................... 13

  Current Data ............................................................................................................... 13

  Types of Data to Track .............................................................................................. 13

  Use Case ..................................................................................................................... 13

  Activating the Track Changes Feature .................................................................... 14

  Configuring the Data Tracking Options .................................................................. 16

Input Controls ................................................................................................................ 17

  Determining if a report contains Input Controls ...................................................... 17

  Filtering Data using Input Controls ........................................................................ 17

Data Security .................................................................................................................. 19

Enterprise Reporting Technical Support ....................................................................... 19
Overview
Performing On-Report Analysis with the Interactive Viewing allows users to interact with reports by sorting, filtering, and in some cases creating In-Put Controls, removing columns that a report contains to highlight the information that most interest you. Additionally, you can then save a copy of that report in your Favorites folder for future use leaving the original, public report in its original state.

This feature is designed for users who do not create the reports themselves, but may require the data to be sorted or filtered differently than its original published format.

Please Note: These features are only available in reports that are written in Web Intelligence. Desktop Intelligence reports cannot be sorted or filtered beyond their published format without first downloading them to MS Excel.
Report Filters

Report Filters are easy to use and allow any user to limit the data displayed on reports, tables, charts, and sections beyond the limits of the prompt values and without the need to download the reports data to an Excel file first. Report Filters do not limit the data that is retrieved by the report query so when the filter is removed all of the data is then displayed again without the need to refresh the report. Much like Excel, the filtered values are simply hidden until the filter is removed. Report Filters are available on all public reports created with the Web Intelligence Software.

Use Case

After running the All Plans – by Academic Unit report with term code 1111 and an Academic Unit of Accounting, (Figure 1.1) you examine the results and need to temporarily focus only on the students with a Primary Academic Plan of Accountancy (BSACCY). You can do this temporarily in this report without first downloading it to an Excel file by following the below steps.

Figure 1.1

| All Plans - by Academic Unit | By Name
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Term: 1111</td>
<td></td>
</tr>
<tr>
<td>Active Academic Plans</td>
<td>Academic Subplan</td>
</tr>
<tr>
<td>Accountancy (BSACCY) MAJ</td>
<td>4/22/99</td>
</tr>
<tr>
<td>Accountancy (BSACCY) MAJ</td>
<td>6/23/09</td>
</tr>
<tr>
<td>Accountancy (BSACCY) MAJ</td>
<td>1/26/08</td>
</tr>
<tr>
<td>Accountancy (BSACCY) MAJ</td>
<td>1/14/08</td>
</tr>
<tr>
<td>Accountancy (BSACCY) MAJ</td>
<td>1/15/08</td>
</tr>
<tr>
<td>Accountancy (BSACCY) MAJ</td>
<td>8/24/08</td>
</tr>
<tr>
<td>Accountancy (BSACCY) MAJ</td>
<td>7/26/08</td>
</tr>
</tbody>
</table>
Creating a Report Filter

1. Run the All Plans – by Academic Unit report with term code 1111 and an Academic Unit of Accounting displaying the By Name report as in Figure 1.1.

2. Right click on the DATA (not column header) of the Primary Academic Plan column and highlight Filter > Add Filter
3. The Filter window (Figure 1.3) is displayed with the Primary Academic Plan values available for your filter in the left pane, a drop down list with the available filter operators at the top of the right pane and a lower right pane to contain the values you would like to filter on.

**Figure 1.3**
4. Select the ‘Equal to’ filter operator from the drop down list at the top of the right pane. *(See additional filter operators on page 9)*

**Figure 1.4**

![Filter Window](image)

5. Double Click *Accountancy (BSACCY)* in the left column to move it to the right column, or highlight it and use the top middle arrow to move it to the right.

**Figure 1.5**

![Filter Window](image)
6. Select OK to filter the data.

The report now only displays the row(s) for the student(s) with Accountancy (BSACCY) as a Primary Academic Plan. You can save this report in your Favorites folder to keep the sort in place for future use, leaving the original report in its original state by selecting the Document menu – Save As – and then navigating to your Favorites folder and selecting Ok.

Removing a Report Filter

1. To remove the report filter, right click on the first row of the Primary Academic Plan column and highlight Filter > Remove Filter.

2. Select Yes to the “Are you sure” question. This will return your data to its original state without refreshing the report.

Figure 1.6
# Report Filter Operators

The below operators are available when filtering data.

<table>
<thead>
<tr>
<th>Operator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal To</td>
<td>Display data equal to a value</td>
</tr>
<tr>
<td>Not Equal To</td>
<td>Display data not equal to a value</td>
</tr>
<tr>
<td>Greater Than</td>
<td>Display data greater than a value</td>
</tr>
<tr>
<td>Greater Than or Equal To</td>
<td>Display data greater than or equal to a value</td>
</tr>
<tr>
<td>Less Than</td>
<td>Display data less than a value</td>
</tr>
<tr>
<td>Less Than or Equal To</td>
<td>Display data less than or equal to a value</td>
</tr>
<tr>
<td>Between</td>
<td>Display data between and including two values</td>
</tr>
<tr>
<td>Not Between</td>
<td>Display data outside the range of two values</td>
</tr>
<tr>
<td>In List</td>
<td>Display data corresponding to values in a list of values</td>
</tr>
<tr>
<td>Not In List</td>
<td>Display data that does not correspond to values in a list of values</td>
</tr>
<tr>
<td>Is Null</td>
<td>Display data for which there are no values in the report</td>
</tr>
<tr>
<td>Is Not Null</td>
<td>Display data for which there is a value in the report</td>
</tr>
</tbody>
</table>
Sorting Data
The data in each sub-report is generally sorted in the order that the columns appear. You can re-sort the data to order the report in a way that most interest you. Additionally, you can then save a copy of that report in your Favorites folder for future use leaving the original, public report in its original state.

You can place sorts on multiple columns in a report. Sorts will be applied to the data in a report in the order the column appears on the report.

The sort order on a report can be determined by right clicking on the displayed columns data and hovering over the word ‘Sort’. If a sort has been placed on a column the sort type’s icon will be selected. If a sort does not exist on a particular column, the ‘None’ option will be checked.

Use Case:
After running the All Plans – by Academic Unit report with term code 1111 and an Academic Unit of Accounting, (Figure 2.1) you examine the results and need to re-sort the report by Primary Academic Plan. You can do this temporarily in this report without first downloading it to an Excel file by following the below steps.

**Figure 2.1**

<table>
<thead>
<tr>
<th>Active Academic Plans</th>
<th>Academic Subplan</th>
<th>Effective Date</th>
<th>Career</th>
<th>Active Academic Unit</th>
<th>Primary Academic Plan</th>
<th>Requirement Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountancy (BS/ACCY)</td>
<td>Major</td>
<td>05/01/2010</td>
<td>UGRD</td>
<td>Accounting</td>
<td>Accountancy (BS/ACCY)</td>
<td>1111</td>
</tr>
<tr>
<td>Accountancy (BS/ACCY)</td>
<td>Major</td>
<td>04/01/2010</td>
<td>UGRD</td>
<td>Accounting</td>
<td>Accountancy (BS/ACCY)</td>
<td>1007</td>
</tr>
<tr>
<td>Accountancy (BS/ACCY)</td>
<td>Major</td>
<td>11/01/2010</td>
<td>UGRD</td>
<td>Accounting</td>
<td>Accountancy (BS/ACCY)</td>
<td>1007</td>
</tr>
<tr>
<td>Accountancy (BS/ACCY)</td>
<td>Major</td>
<td>11/01/2011</td>
<td>UGRD</td>
<td>Accounting</td>
<td>Business (BUPP)</td>
<td>1097</td>
</tr>
<tr>
<td>Accountancy (BS/ACCY)</td>
<td>Major</td>
<td>11/01/2011</td>
<td>UGRD</td>
<td>Accounting</td>
<td>Mechanical (BSE)</td>
<td>1111</td>
</tr>
<tr>
<td>Accountancy (BS/ACCY)</td>
<td>Major</td>
<td>04/02/2009</td>
<td>UGRD</td>
<td>Accounting</td>
<td>Accountancy (BS/ACCY)</td>
<td>1001</td>
</tr>
<tr>
<td>Accountancy (BS/ACCY)</td>
<td>Major</td>
<td>07/02/2010</td>
<td>UGRD</td>
<td>Accounting</td>
<td>Accountancy (BS/ACCY)</td>
<td>1007</td>
</tr>
</tbody>
</table>
Removing Sorts
Since most reports generally have a sort in place on one or more columns, you must first remove any existing sorts placed on columns that appear before the column you would like to sort on.

1. Run the All Plans – by Academic Unit report with term code 1111 and an Academic Unit of Accounting.
2. Right click the first data field in the Emplid column and observe that there is a checkmark next to the word none (Figure 2.2). This indicates that this sub-report is not sorted by this column.

![Figure 2.2](image-url)
3. Repeat step 2 for the Name column. Observe that the Icon next to the word *Ascending* is highlighted. This indicates that there is an Ascending sort on the Name column.

4. Select *None* to remove the sort on this column only or select *Remove Sorts* to remove all sorts on any other columns that may contain a sort.

**Creating Sorts**

1. Right click on the first data value in the Active Academic Plans column and select *Sort > Ascending*. This will sort the report by the Active Academic Plan column.
Tracking Changes in Data
Data Analysis capabilities have been expanded in reports to include the ability to track and display the changes in data to help you focus your analysis on key areas of increase or decline. The Track Changes option allows a user to run a report for one set of prompt values and then again for a second set of prompt values, displaying the differences in the data sets.

Reference Data
When you track data you establish a benchmark set of data to compare the next set of data to. This benchmark data is the Reference Data.

Current Data
When you enable the track changes option and refresh the report, the new set of data, known as the Current Data, is then displayed on the report along with the Reference Data so a visual comparison can be made.

Types of Changes to Track
The following types of data changes can be tracked within a report.

- Added data
- Removed data
- Modified data
- Increased data
- Decreased data

Use Case
After running the All Plans – by Academic Unit report with term code 1111 and an Academic Unit of Accounting, you examine the results and would like to see change in the student list from Spring 2011 to Fall 2011. You can do this in this report without downloading it to Excel and then running the report again to compare.
Activating the Track Changes Feature

1. Run the All Plans – by Academic Unit report with term code 1111 and an Academic Unit of Accounting. The displayed results will be your Reference Data.

2. In the top right hand corner of the report, select the Track menu to activate the data tracking option as in Figure 3.0.

Figure 3.0

3. The Activate Data Tracking dialog box opens (Figure 3.1) to allow you to set the data tracking options.

Figure 3.1
a. **Auto-update the reference date with each data refresh** – The current data becomes the reference data after each data refresh. The report always shows the difference between the most recent data and the data before the last refresh.

b. **Use the current data as reference data** – The current data becomes the fixed reference data and remains the reference data after further data refreshes. The report always shows the differences between the most recent data and this fixed reference data.

4. Leave the first option selected and click OK.

5. In the top right hand corner of the report, select Refresh Data to bring up the prompt window to establish the Current Data to compare to the Reference Data. Figure 3.2

**Figure 3.2**

6. Replace the 1111 term code with 1117 and hit OK.

The report now displays the Reference data along with the Current Data.
Configuring the Data Tracking Options

You can change the way the tracked data appears by changing the tracking options. Access the Data Tracking Options window (Figure 3.4) by selecting the Data Tracking Options icon in the top right hand corner of the report. Figure 3.3

Figure 3.3

Change the options to format the appearance of the

Figure 3.4

Data Tracking Options

Select which changes you want to display and their formats.

Dimensions

- Insertions  
  AbCd123  

- Deletions  
  AbCd423  

Details

- Changes  
  AbCd123  

Measures and details (numerical values only)

- Increased values  
  $100.00  

- Decreased values  
  $100.00  

More Information

Use this dialog box to change the reference data and to define the cell formats used to display changed data.
Input Controls

Input controls provide users with a convenient method for filtering and analyzing report data in a variety of combinations. Input Controls are defined during report development using standard Windows controls such as text boxes or radio buttons. These controls are then associated with report elements such as tables or section headers to filter data on that particular element.

When you select a value in an input control, Web Intelligence filters the values in the associated report element(s) to display data only for the value you selected. Although only one value can be selected per Input Control, you can use multiple Input Controls to filter the data on a report in many different combinations.

Determining if a report contains Input Controls

Public Reports that contain Input Controls will indicate this newly implemented feature in the Report Description. If a report does not include Input Controls but you feel it may improve the reports usability, contact reporting@nau.edu with the report name, location, and the data and report element you would like to see filtered by the input control. Enterprise Reporting Solutions will determine if the report is suitable for use with Input Controls and facilitate the change process if appropriate.

Filtering Data Using Input Controls

1. Login to Enterprise Reporting and Navigate to the LOUIE – Student Reports – Daily Enrollment folder. Note that the description of the Enrollment Information report indicates that it includes Input Controls.

   Figure 4.0

   ![Enrollment Information](image)

   Provides Enrollment Variances for multiple terms. This report contains Input Controls.

2. Double click on the Enrollment Information report and run it for the prompt values of your choice.

3. If the Input Control menu is not displayed in the Navigation Map as in Figure 4.0a select the Input Controls icon located at the bottom of the Navigation Map as in Figure 4.0b.

   Figure 4.0a

   ![Navigation Map](image)

   Figure 4.0b

   ![Input Controls - Enrollment Variances](image)
There can be one or several Input Controls defined for a report. This report contains 13 Input Controls that upon the initial run will be set to include all values. You can select 1 or more control values to filter the data that is displayed in the chart. The chart data will be filtered in the order that the Input Control is listed in the panel.

**Figure 4.1**

- **Enrollment Variances**
- **Spring 2012 As of 02/09/2012 Compared to Spring 2011 As of 01/27/2011**
- **These variances are based on unduplicated enrolled student counts. Students must be enrolled in at least one class to be counted.**
- **The variance percentage is Spring 2012 Headcounts minus Spring 2011 Headcounts divided by Spring 2011 Headcounts.**
- **If the chart is not visible, there are no data that meets the Input Control settings. Adjust or reset them to continue analysis.**

![Enrollment Variances Chart](chart-image-url)
4. Select “Undergraduate” from the Academic Career Input Control and observe the chart change to display data for Undergraduates only.

5. Select “Female” from the Gender Input Control to further filter the data in the chart to display data only for Undergraduate Females.

6. Adding a 3rd Input Control by selecting “College of Arts and Letters” from the Academic College Input Control, filters the data one more time and displays the Enrollment Variance for Undergraduate Females in the College of Arts and Letters.

**Data Security**

It is important to be aware that you can jeopardize Northern Arizona University and risk losing your job by misusing student information, either intentionally or unintentionally. Maintaining the confidentiality of specific records is not only important from an ethical standpoint, as it relates to our students, but it is absolutely essential from a legal standpoint.

**Enterprise Reporting Technical Support**

For Technical Support with Enterprise Reporting or general questions about NAU’s Data Warehouse: E-Mail Enterprise Reporting Solutions at Reporting@nau.edu

For immediate assistance: Call the Solution Center at 523-1511