Common Summon Analytics Procedures

This section describes some common procedures.

Adding Subtotals to a Report

This section describes how to add a subtotal to your report and the impact of the order of the columns on your subtotals.

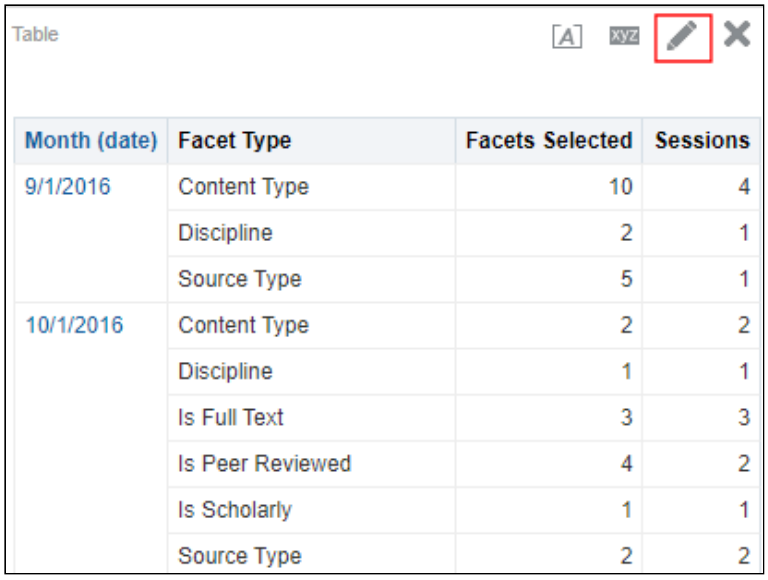
To create an analytics report with a subtotal:

1. From the Global Header, select **New > Analysis** and then select **Subject Area > Facets**.
2. Create a report with the following columns:
   - Dates > Month Date
   - Facets Types > Facet Type
   - Facets Usage > Facets Selected
   - Facets Usage > Sessions
3. Click the Results tab to display the report. For example:

Month (date)	Facet Type	Facets Selected	Sessions
9/1/2016	Content Type	10	4
	Discipline	2	1
	Source Type	5	1
10/1/2016	Content Type	2	2
	Discipline	1	1
	Is Full Text	3	3
	Is Peer Reviewed	4	2
	Is Scholarly	1	1
	Source Type	2	2

Actions per Month Report - Example

4. Calculate a subtotal for each subgroup per month.
   1. Click the Edit icon  to display the Edit view.

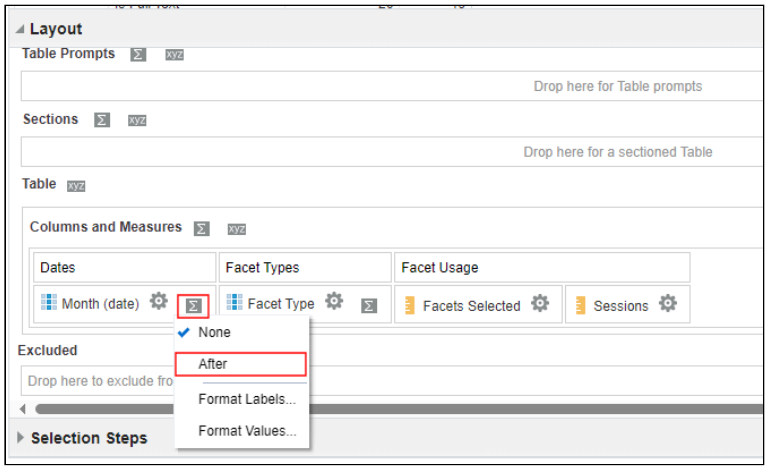


Month (date)	Facet Type	Facets Selected	Sessions
9/1/2016	Content Type	10	4
	Discipline	2	1
	Source Type	5	1
10/1/2016	Content Type	2	2
	Discipline	1	1
	Is Full Text	3	3
	Is Peer Reviewed	4	2
	Is Scholarly	1	1
	Source Type	2	2

Edit View

2. For the column that you want to calculate a subtotal, click the Sigma icon

and then click **After**. For this example, the Action Sub Group column is used.



After Option

The subtotals are now shown:

Month (date)	Facet Type	Facets Selected	Sessions
9/1/2016	Content Type	10	4
	Discipline	2	1
	Source Type	5	1
9/1/2016 Total		**17**	**6**
10/1/2016	Content Type	2	2
	Discipline	1	1
	Is Full Text	3	3
	Is Peer Reviewed	4	2
	Is Scholarly	1	1
	Source Type	2	2
10/1/2016 Total		**13**	**11**

Subtotals

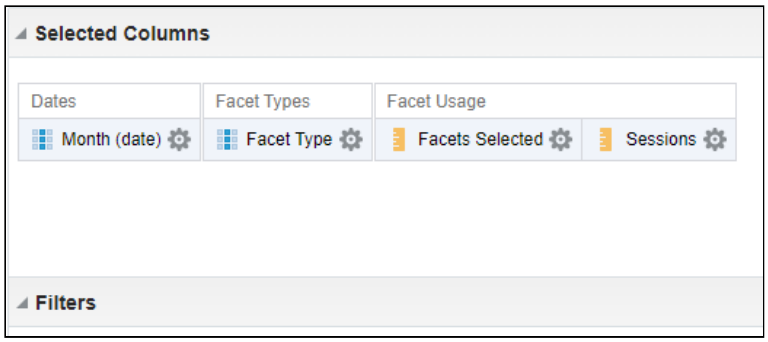
Creating a Report That Performs a Mathematical Formula on Two Columns

In the following example, one column displays the number of times a facet was selected and the second column displays the number of sessions in which the facet was selected. A third column is created that displays the number of times a facet was selected divided by the number of sessions. This gives an average of how many times the facet was selected within a single session.

To create this analytics report:

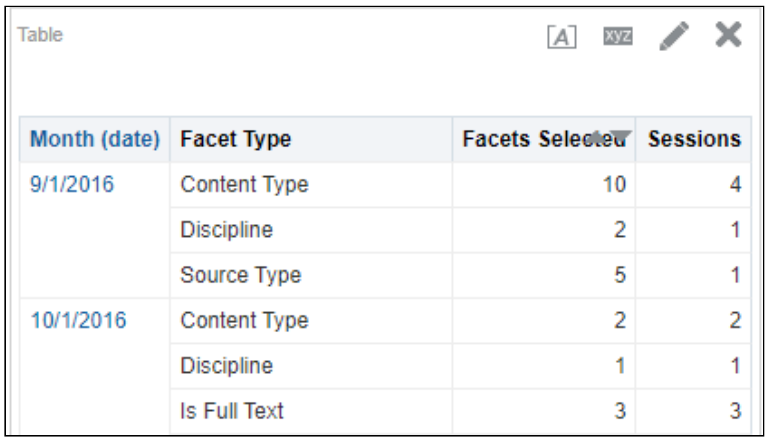
1. From Summon Analytics, select **New > Analysis** and then select **Subject Area > Facets**.
2. Create a report with the following columns:
   - Dates > Month Date
   - Facets Types > Facet Type
   - Facets Usage > Facets Selected
   - Facets Usage > Sessions

   The criteria for the report appears as follows:



Selected Columns

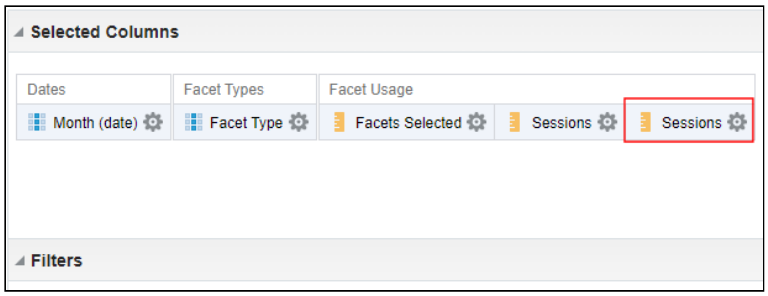
3. Click the Results tab. The following is an example of the results:



Month (date)	Facet Type	Facets Selected	Sessions
9/1/2016	Content Type	10	4
	Discipline	2	1
	Source Type	5	1
10/1/2016	Content Type	2	2
	Discipline	1	1
	Is Full Text	3	3

Report

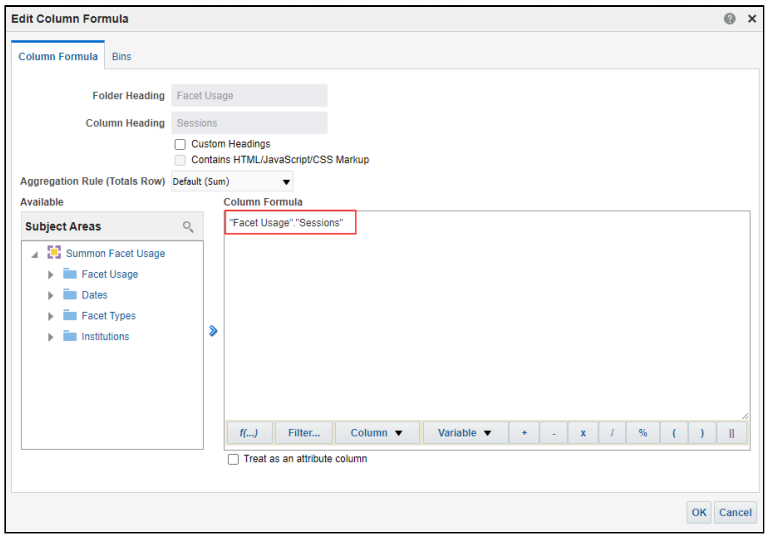
4. Click the Criteria tab and add a new column that is a measurement — for example, the Sessions column (it is okay that it is selected twice).



Selected Columns

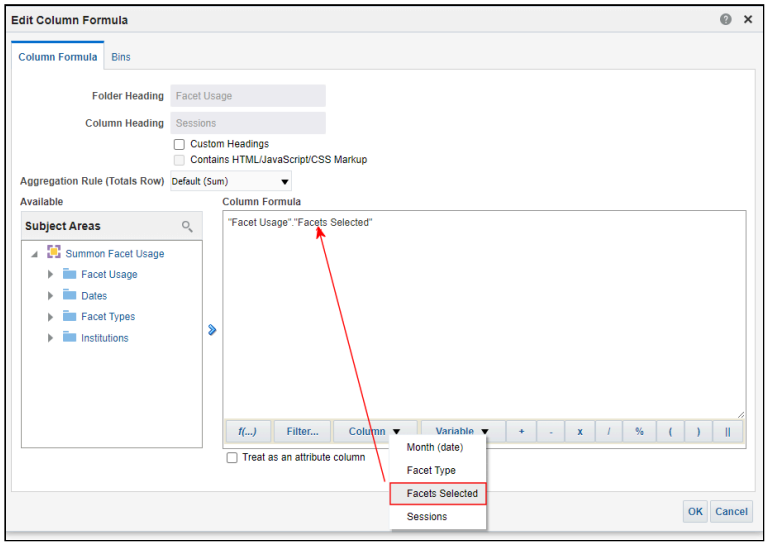
5. Click the More Options icon

of the new column and select **Edit Formula**. The Column Formula dialog box is displayed:



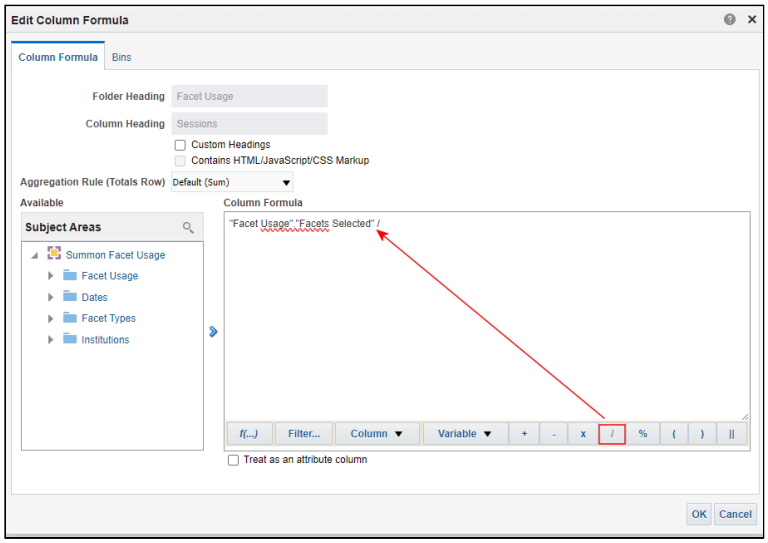
Edit Column Formula

6. Delete the existing formula.
7. At the bottom of the Column Formula box, select the Columns tab and select **Facets Selected**.



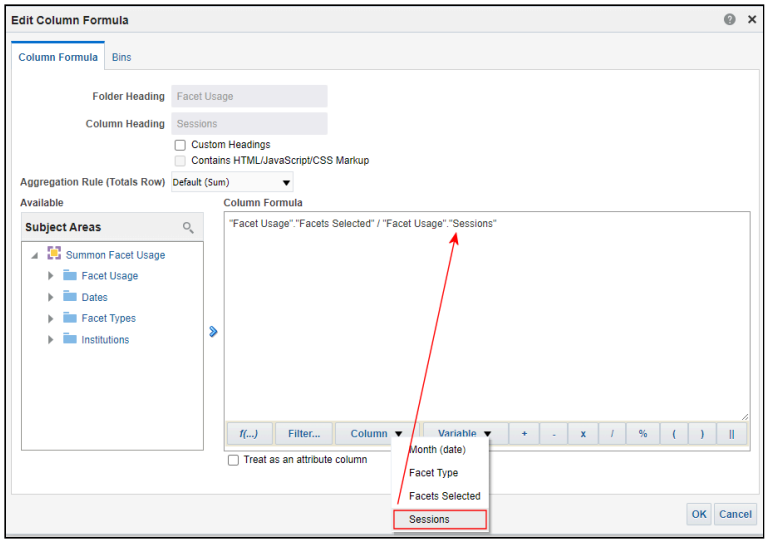
Facets Selected Option

8. Place the cursor at the end of the formula and then select the forward slash (/) button.



Add Forward Slash Symbol

9. Select the Columns tab and select **Sessions**. The formula should appear as follows:



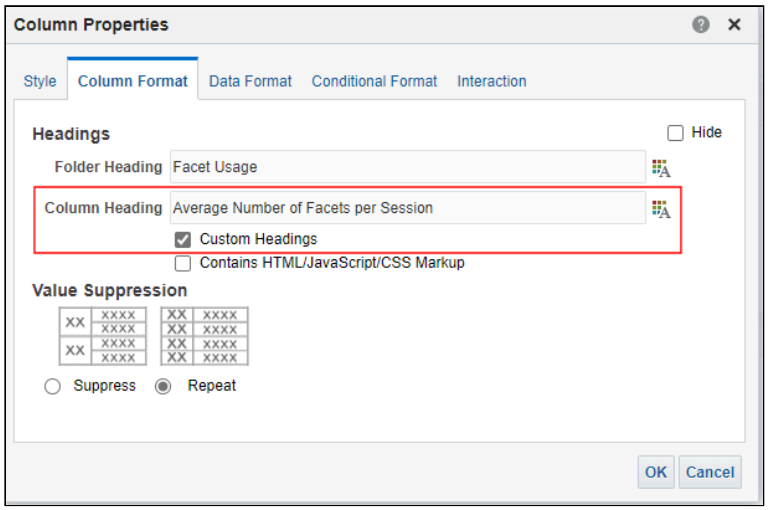
Updated Column Formula

10. Click the More Options icon

of the new column and select **Column Properties > Column Format**.

11. Select the **Custom Heading** check box.

12. Enter a new name for the column in the **Column Heading** field.



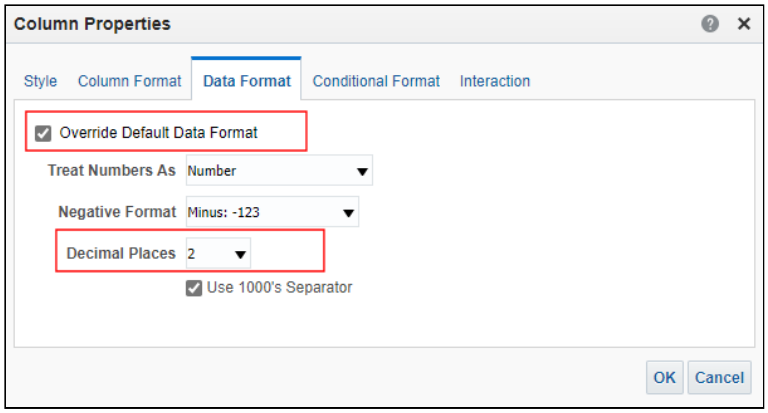
Custom Headings

13. Click the More Options icon

of the new column and select Column Properties.

14. Select the Data Format tab and check the **Override Default Data** option.

15. Select **2** from the Decimal Places drop-down list and click **OK**.



Adjusting Decimal Places

16. Click the Results tab to display the report:

Month (date)	Facet Type	Facets Selected	Sessions	Average Number of Facets per Session
9/1/2016	Content Type	10	4	2.50
	Discipline	2	1	2.00
	Source Type	5	1	5.00
10/1/2016	Content Type	2	2	1.00
	Discipline	1	1	1.00
	Is Full Text	3	3	1.00
	Is Peer Reviewed	4	2	2.00
	Is Scholarly	1	1	1.00
	Source Type	2	2	1.00

Analytics Report

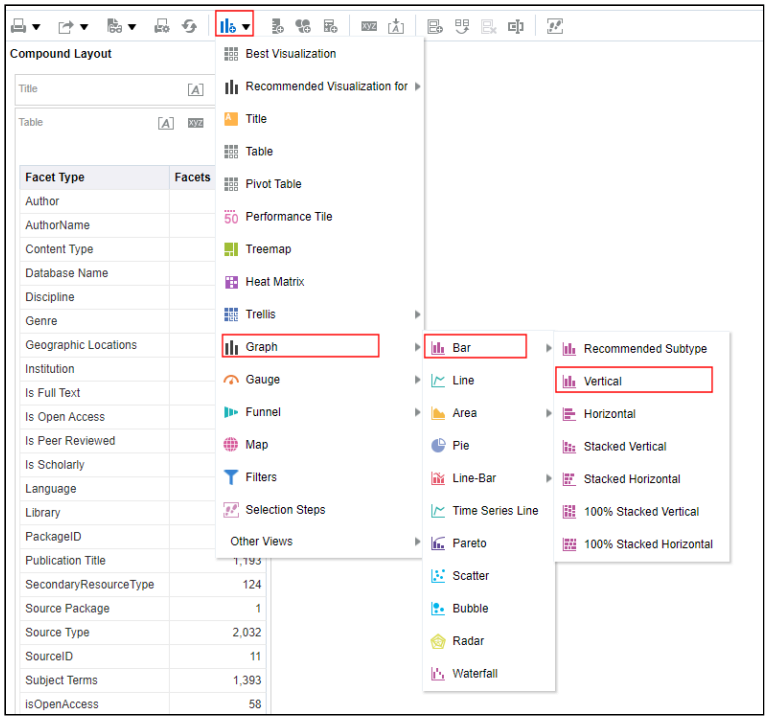
Displaying Values Above Each Bar in a Bar Graph

This section describes how to display values on the top of each bar of a Summon Analytics bar graph.

To display values on the top of each bar in a Summon Analytics bar graph:

1. In Alma Analytics, select New > Analysis and then select Subject Area > Facet Usage.
2. Create a report with the following columns, for example:
   - Facet Types > Facet Type
   - Facet Usage > Facets Selected
3. In the Results pane click the New View icon

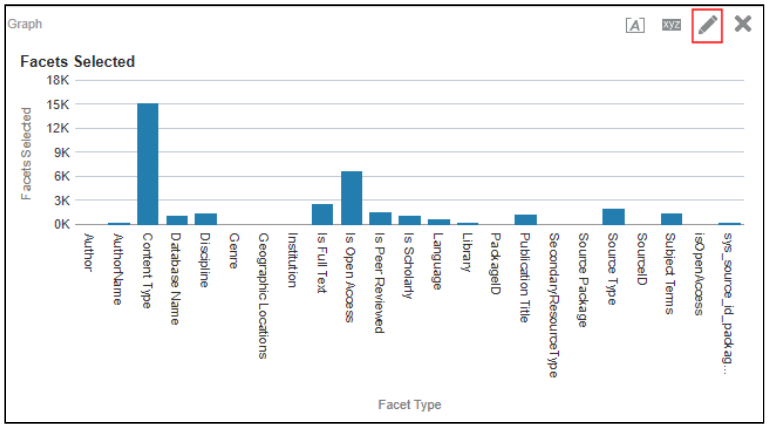
   and then select **Graph > Bar > Vertical**.



Default Bar Graph

4. Click the Edit icon

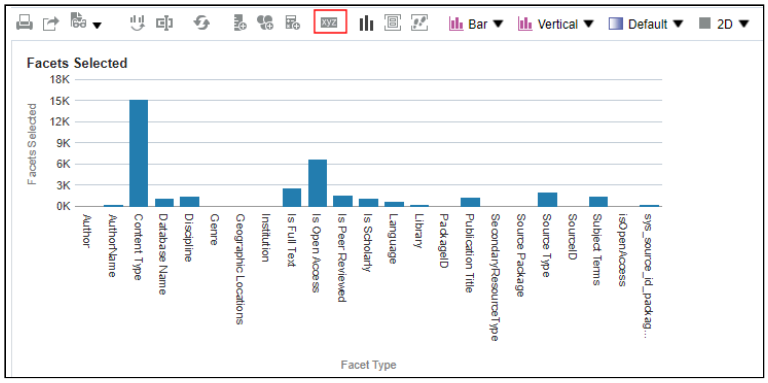
to edit the graph:



Pencil Icon

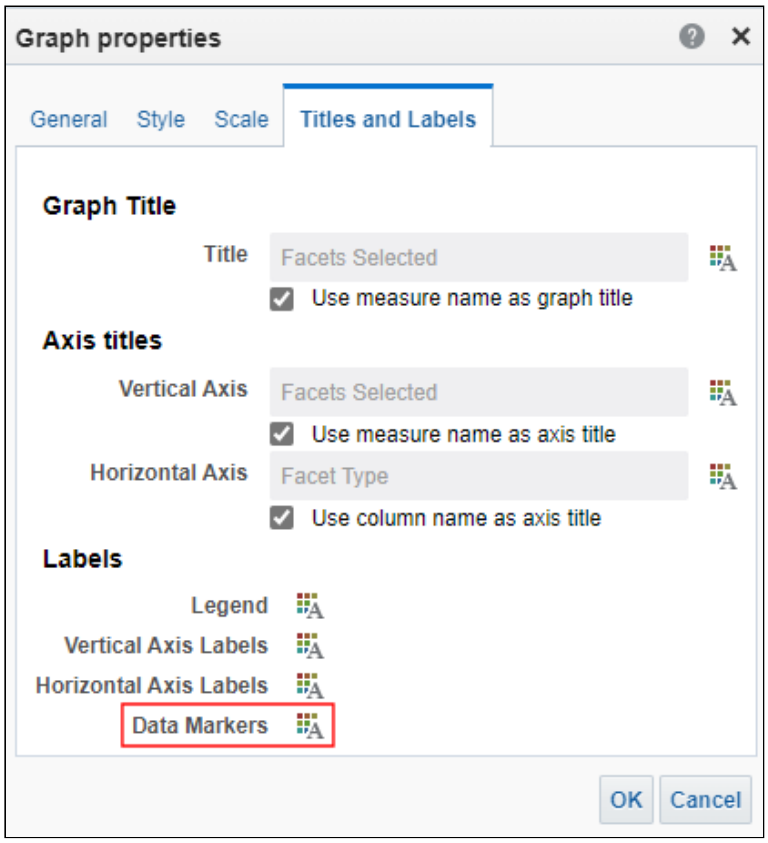
5. Click the Edit Graph Properties icon

:



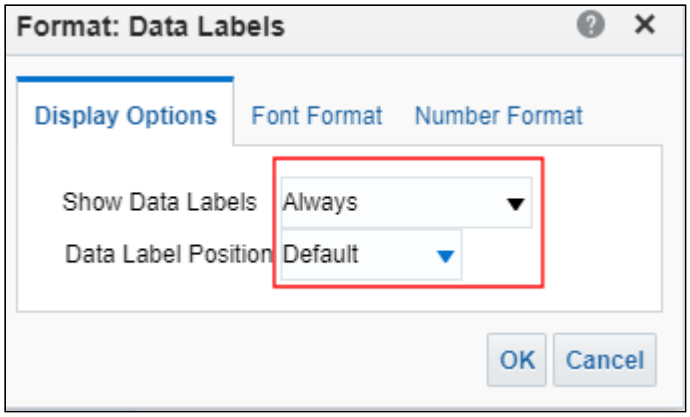
Edit Graph Properties Icon

6. On the Titles and Labels tab, click **Data Markers**:



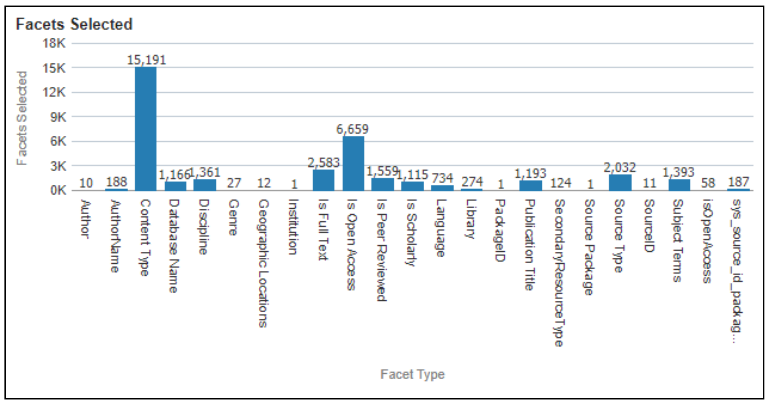
Titles and Labels

7. On the Display Options tab, set the **Show Data Labels** field to **Always** and the **Data Label Position** field to **Default**:



Display Options

The values are now displayed on the top of each bar of the bar graph:



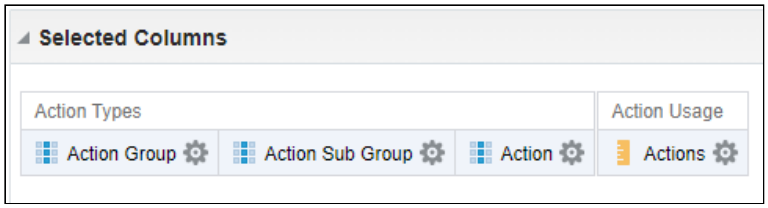
Values on Top of Each Bar

Merging Two or More Fields in a Report

You may want to put several fields together and have text between them (such as joining the Action Group, Sub Group, and Action in a single column separated by spaces). This section describes one way of merging fields.

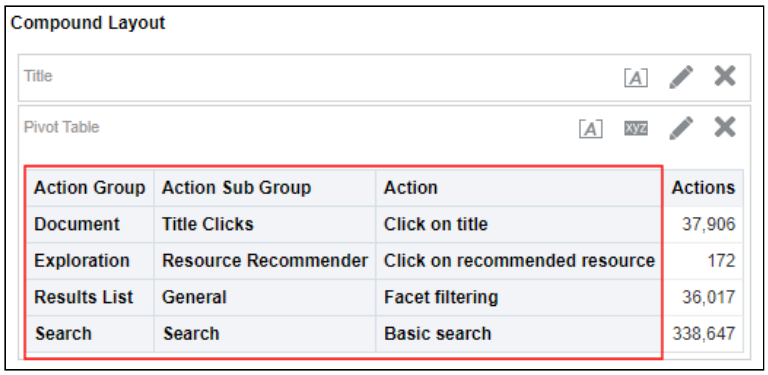
To merge two or more fields in a Summon Analytics report:

1. Select **New > Analysis**.
2. Select **Subject Area > Actions**.
3. Create a report with the following columns —for example:
    - Action Types > Action Group
    - Action Types > Action Sub Group
    - Action Types > Action
    - Action Usage > Actions



Selected Columns

4. Click the Results tab and verify that the columns have been merged:



Action Group	Action Sub Group	Action	Actions
Document	Title Clicks	Click on title	37,906
Exploration	Resource Recommender	Click on recommended resource	172
Results List	General	Facet filtering	36,017
Search	Search	Basic search	338,647

Compound Layout

5. In the Criteria tab of each column that you want to merge, click the More Options icon

and then select **Edit Formula**:

Edit Formula

The formula of the column is displayed:

Column Formula

The formulas are as follows:

- Action Group – "Summon Action Usage"."Action Types"."Action Group"
- Action Sub Group – "Summon Action Usage"."Action Types"."Action Sub Group"
- Action – "Summon Action Usage"."Action Types"."Action"

6. Click the More Options icon

.

7. Select **Edit Formula** for the Action Group field.
8. After the existing formula, add a pipe and then formulas of the field (or fields) that you want to appear. For example:

```
"Summon Action Usage"."Action Types"."Action Group" || "Summon Action
Usage"."Action Types"."Action Sub Group" || "Summon Action Usage"."Action
Types"."Action"
```

Column Formula

9. Delete the non-desired fields (Action Sub Group and Action fields) by clicking the More Options icon

next to the field and then selecting **Delete**. The updated criteria appears as follows:

Selected Columns

10. Click the Results tab. The column now contains Action Group, Sub Group, and Action:

Merged Fields - No Delimiters

11. To add delimiters between the merged fields, click the More Options icon

    and then select **Edit Formula**.

12. After each double pipe symbol (||), add the following text to include a dash between each field in the merged column results: **' - ' ||**.

    Change the following formula:

```
"Summon Action Usage"."Action Types"."Action Group" || "Summon Action
Usage"."Action Types"."Action Sub Group" || "Summon Action Usage"."Action
Types"."Action"
```

    To the following formula:

```
"Summon Action Usage"."Action Types"."Action Group" || ' - ' || "Summon Action
Usage"."Action Types"."Action Sub Group" || ' - ' || "Summon Action Usage"."Action
Types"."Action"
```

Edit Column Formula

13. Click the Results tab.

    The fields are separated with a space, dash, and space between each part:

Compound Layout

14. Rename the merged field:
    1. Click the More Options icon  and select **Column Properties**:
    2. Enter a new name in the **Column Heading** field.
    3. Select the **Custom Headings** check box.

Column Heading

    4. Change the **Column Heading** field.
15. Click the Results tab to see the results:

Compound Layout

Using the CASE Condition to Change Text in a Report

You can use the CASE condition to have an alternate text displayed as a value in an analytics report. In this example, the CASE condition is used to make the following changes:

- The value for the LCC Facet type is changed to **Library of Congress**.
- The value for the Journal Facet type is changed to **Journal title**.

To use the CASE condition:

1. Create a report with the following columns from the Facet Usage subject area:
    - Facet Types > Facet Type
    - Facet Usage > Facets Selected
2. In the Criteria column, click the More Options icon  of the Facet Type column and select **Edit Formula**. The Column Formula dialog box opens:

Edit Column Formula - Action Group

3. Delete the existing formula.
4. Click the Function button in the Column Formula area:

Function Button

5. The Insert Function dialog box opens:

Insert Function Dialog Box

6. Select the **Expressions** folder and then **Case (Switch)**:

Select Expressions Folder

The formula now displays as follows:

Column Formula

The placeholder expressions (expr2, expr3, and expr4) need to be changed as follows:

- expr2 – Replace **expr2** with **LCC**. The value must be enclosed in single quotes.
- expr3 – Replace **expr3** with **Library of Congress**. The value must be enclosed in single quotes.
- expr4 – Should be the **Facets Types."Facet Type"** field. This can be done by selecting **Facet Types/Facet Type** in the Subject Areas pane, highlighting **expr4** in the formula, and then clicking the right arrow.

Edit Column Formula

The formula should now appear as follows:

Updated Column Formula

7. Click the More Options icon

   of the new column and select **Column Properties > Column Format**.
8. Select the **Custom Heading** option.
9. Enter a new name for the column in the **Column Heading** field.

Column Properties

10. Click the Results tab to display the report. **LCC** now displays as **Library of Congress**.

LCC Displays in Results

11. It is possible to add multiple conditions as shown in the following steps:

Adding Multiple Conditions

The report should now appear as follows:

Updated Results

Conditionally Changing the Text Format in a Report

You can change the text in an analytics report to be different colors in order to identify different values at a glance. The following report is used as an example that highlights actions that occurred more than 10,000 times.

Example Reports with Multiple Actions

To conditionally change the format of a value in a Summon Analytics report:

1. In the **Actions** field, click the More Options icon

   and select **Column Properties**:

Column Properties

2. On the Conditional Format tab, select Add Condition > Actions.

Conditional Format

3. For example, configure the following fields and then click **OK** to add the new condition:
   - Operator – Select **is greater than**.
   - Value – Select **10000**.
4. Select **is greater than** from the **Operator** field and then select **10000** from the **Value** field.

Add New Condition

5. Select the style for the value – for example, change the background color to yellow.

Change Value's Background to Yellow

Actions that are greater than 10,000 now have a yellow background in results.

Highlighted Values in Results

Creating a Prompt in a Report

You can create a Summon Analytics report with prompts that ask you to select the variables with which to create a report. The report in this example is for a report on the number of Search group actions within a date range. You are prompted to enter a date range, which is used to create the report.

Note

Although there are three kinds of prompts available in Summon Analytics reports (column prompt, variable prompt, and image prompt), this example only demonstrates the column prompt.

To create the analytics report:

1. Select New > Analysis.
2. Select Subject Area > Actions.
3. Select from the following columns — for example, the **Action Group** column:
   - Action Types > Action Group
   - Action Types > Action Sub Group
   - Action Types > Action
   - Action Usage > Actions
4. Click the More Options icon

   and select **Filter**.
5. In the New Filter dialog box, specify the following fields.
   - **Operator** – Select **is equal to / is in**.
   - **Value** – Select **Search**.

Add New Filter

Note

Do not set filters for the columns that you want to have a prompt.

---

6. Click the Results tab. For example, the following is displayed:

Report Results

7. On the Prompts tab, click the plus sign to add a new prompt.

Prompts Tab

8. Select **More Columns**.

More Columns Option

9. Select the **Dates > Date** field.

Select the Date Option

10. In the New Prompt dialog box, specify the following fields for the date and click **OK**.
    - **Operator** – Select **is between**.
    - **User Input** – Select **Calendar**.

New Prompt Dialog Box

11. Navigate to the report from the Catalog/Dashboard in which it was saved.
12. Click the **Open** action (not Edit) to run the report.

Run Report - Open Action

The prompts are displayed:

Date Prompt

13. Specify the date range and click **OK**.

Managing Reusable Columns

Reusable columns allow you to add common functionality to many reports without having to maintain these columns for each report. All changes made to a reusable column are applied automatically to all reports that use it.

Creating a Reusable Column

To create a reusable column:

1. Create a new report by selecting **New > Analysis** and a Subject Area (such as **Summon Action Usage**).
2. Add any new field (such as **Date**) to the report.
3. From the new column's menu, select **Edit formula** to open the Edit Column Formula dialog box:

Column Menu - Edit Formula

1. Specify the following fields:
   - **Custom Headings** – Select this check box.
   - **Column Heading** – Enter the display label for the reusable column.
   - **Column Formula** – Specify the formula used to display the information for the column.

Edit Column Formula Dialog Box

2. Select **OK**.

4. From the column's menu, select **Save Column As** to open the Save As dialog box.

Column Menu - Save Column As

1. Specify the following fields:
   - **Save In** – Select the location under My Folders or Shared Folder to which you want to save the reusable column.
   - **Name** – Specify a name that conveys the column's functionality.
   - **Description** – Specify a description for the column if more information is needed.

Save As Dialog Box

2. Select **OK**.

Deleting a Reusable Column

If a reusable column is no longer needed, make sure that it is not used by any report before deleting it.

To delete a reusable column:

1. Open the Catalog page.
2. Navigate to the reusable column's location in the Folders window.
3. From the reusable column's menu, select **Delete**.

Column Menu - Delete

Modifying a Reusable Column

After a reusable column has been created, you can modify it properties and formula.

To edit a reusable column:

1. Open the Catalog page.
2. Navigate to the reusable column's location in the Folders window.
3. From the reusable column's menu, select **Edit** and the following options as needed: **Column Properties** or **Edit Formula**.

Column Menu - Edit

4. In the selected dialog box, make your changes to the reusable column and save your changes.

Renaming a Reusable Column

After a reusable column is created, you can rename it.

To rename a reusable column:

1. Open the Catalog page.
2. Navigate to the reusable column's location in the Folders window.
3. From the column's menu, select **Rename** to open the Rename dialog box:

Column Menu - Rename

1. Specify the following fields:
   - **Name** – Specify a new name for the reusable column. This may be useful to convey any changes to the column.
   - **Preserve references to old name of this item** – Select this check box to make sure that all reports using this column retain their association with this reusable field. Otherwise, links to this reusable column will be broken.

Rename Dialog Box

2. Select **OK**.

Adding the Data Availability or Data Updated Timestamp to a Report Header

Summon Analytics allows you to add the following timestamp types to your reports:

- Data Available As Of - The time and date on which data from from Summon was last processed and made available for viewing in Summon Analytics reports.
- Data Updated As Of - The time and date on which the data was last extracted from Summon.

Note

Since a timestamp can be used in any report without customization, you could store them in reusable columns for easy access. For more information, see Creating a Reusable Column.

To add a timestamp to a report:

1. Modify an existing report.
2. From the Criteria tab, add a new field (for example, **Date**) and then move it to the first column position on the left side of the table.
3. From the new column's menu, select **Edit formula** to open the Edit Column Formula dialog box:

Column Menu - Edit Formula

1. Specify the following fields:
   - **Custom Headings** – Select this check box.
   - **Column Heading** – Enter the display label for the reusable column (for example, **Data Updated As Of**).
   - **Column Formula** – Specify the formula used to display the information for the reusable column. The timestamps are stored with the **`NQ_SESSION.DATA_UPDATED_AS_OF`** and **`NQ_SESSION.DATA_AVAILABLE_AS_OF`** variables. If a variable has not been set by Ex Libris, the system will return the default date of January 1, 1920.

     Examples:

     - If you want to display the date when the data was last extracted from Summon, enter the following formula:

       ```
       VALUEOF(NQ_SESSION.DATA_UPDATED_AS_OF)
       ```

     - If you want to display the time in EST (US Eastern Standard Time), which is UTC-05, enter the

following formula:

```
TIMESTAMPADD(SQL_TSI_HOUR, -5, TIMESTAMPADD(SQL_TSI_MINUTE, -0,
VALUEOF(NQ_SESSION.DATA_UPDATED_AS_OF) ))
```

- If you want to display the time in ACST (Australian Central Standard Time), which is UTC+09:30, enter the following formula:

```
TIMESTAMPADD(SQL_TSI_HOUR, 9, TIMESTAMPADD(SQL_TSI_MINUTE, 30,
VALUEOF(NQ_SESSION.DATA_UPDATED_AS_OF) ))
```

Edit Column Formula Dialog Box

2. Select **OK**.

4. On the Results tab, select the Pencil icon of the data container (normally a table) holding the new column.

Edit New Column's Data Container

5. In the Layout pane, move the new column in the Column and Measures section to the Excluded section and then select Done to prevent the new column from appearing in the results.

Exclude New Column from Display

6. Above the Compound Layout pane, select **Narrative** under **New View > Other Views** menu to add a narrative to the report.

Add Narrative to Report

7. Move the Narrative container to the desired position in the report (such as the row below the Title).

8. In the Narrative container, select the Pencil icon to open the Narrative dialog box.

9. Specify the following fields in the Narrative dialog box and then select **Done**:

   - **Narrative** – Specify the label for the narrative and the column in which the data was stored. For example: **Data Updated As Of: @1**.
   - **Rows to display** – Set to **1** so that the data does not repeat for every row in the report.

Edit the Narrative's Text

10. Open the report to confirm that it is working as expected.

Sample Report Output