

# **Cognos Analytics Authoring User Guide**

**COG 401**

**Cognos Version 11.2.4**

Manual Updated: May 2024

## Business Intelligence Competency Center



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## Table of Contents

Introduction to Cognos Analytics Authoring.....	4
<b>Cognos Author Section on BICC Website.....</b>	<b>4</b>
<b>Accessing Cognos.....</b>	<b>5</b>
<b>Cognos Timeout.....</b>	<b>6</b>
<b>Launching Authoring .....</b>	<b>6</b>
<b>Select type of new report (Widget) .....</b>	<b>8</b>
<b>Select a source (data) .....</b>	<b>9</b>
<b>Saving the new report .....</b>	<b>11</b>
<b>Editing your new report .....</b>	<b>11</b>
<b>Explore the Authoring Environment.....</b>	<b>13</b>
<b>Content Panel .....</b>	<b>14</b>
<b>Authoring Tool Application Bar .....</b>	<b>15</b>
Filters.....	25
<b>Detail Filter vs Summary Filter.....</b>	<b>25</b>
<b>Create Filters.....</b>	<b>25</b>
<b>Creating a Filter from Query .....</b>	<b>26</b>
<b>Creating a Filter on the Report Page.....</b>	<b>29</b>
Prompts.....	32
<b>Create a Prompt Page and Add a Prompt.....</b>	<b>33</b>
Create a Crosstab Report .....	42
Appendix: Standard Report Template .....	50
Resources.....	51
<b>Logging Off.....</b>	<b>51</b>
<b>Cognos Authors Links and Resources .....</b>	<b>51</b>
<b>Troubleshooting .....</b>	<b>51</b>
<b>Feedback on this Document.....</b>	<b>51</b>

## Introduction to Cognos Analytics Authoring

Users with the Cognos Authoring License have the ability to author/create new reports in Cognos. The Cognos Authoring License is also required for editing existing reports in Cognos. This manual describes the basic techniques used to create reports using Cognos.

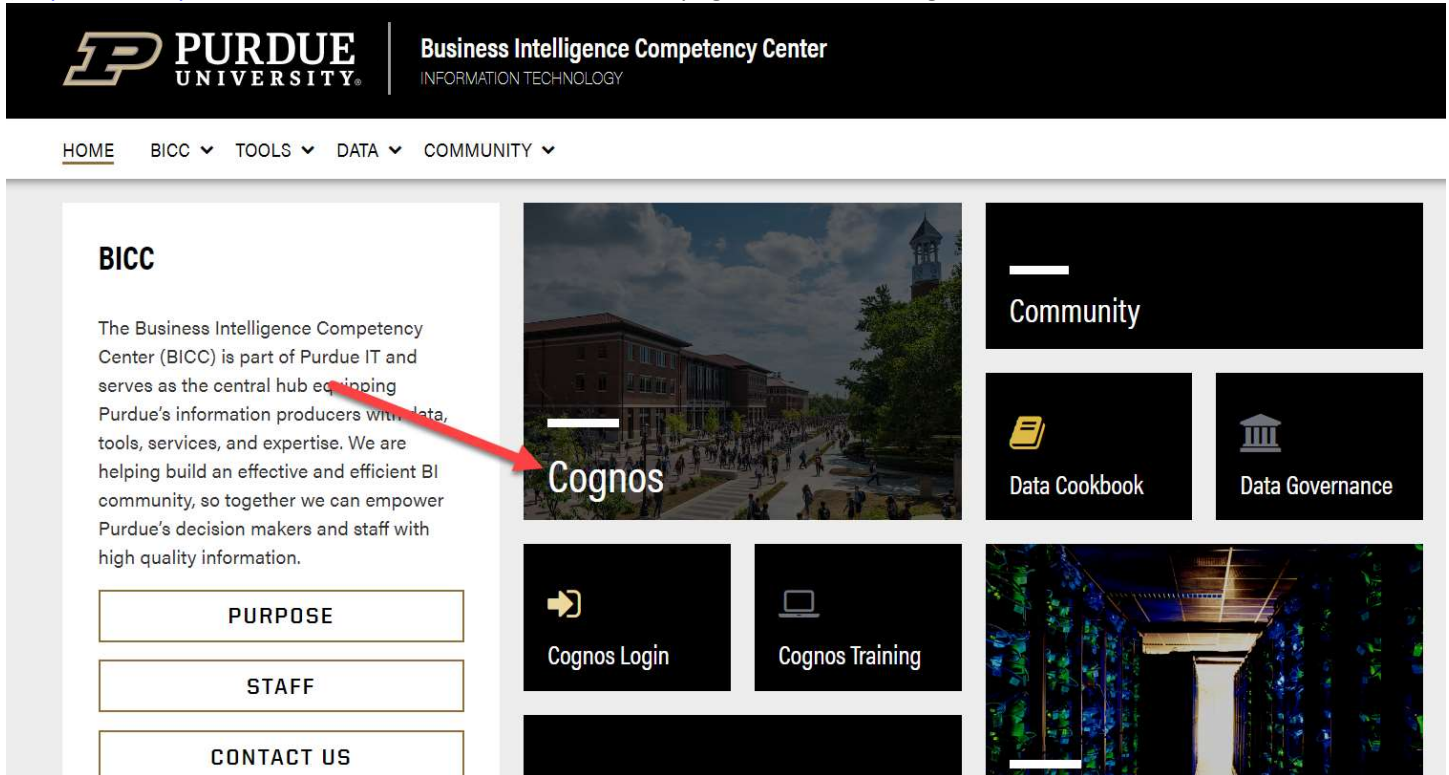
### Use Warnings for All Users

- Users must have a Cognos Authoring license to create or edit reports.
- Users must renew credentials in Cognos after changing their university password.
- User security may affect the available data sources used to create reports.

**This training manual assumes users have completed COG 101 Cognos Analytics Navigation**

## Cognos Author Section on BICC Website

Cognos Authoring resources are located on the BICC website. Navigate to the BICC website (<https://www.purdue.edu/bicc>). Once on the BICC homepage, click on the Cognos tile, and then the authors section.



COGNOS

Access

Authors



Landscape

FAQ & Support

Training

Usage Information

## About Cognos

Cognos is a web-based suite of tools from IBM that offers a full range of business intelligence capabilities including reports, analysis, dashboards, scorecards, mobile BI and more. Cognos is Purdue's primary BI tool and is used to access many of the university's BI environments including Student ODS/EDW, the Finance and HR data marts, and GM AIMS.

**Cognos Licensing levels are as follows:**

- **Consumer** - users are licensed to consume existing or standard reports as needed using the Cognos web portal. Users with this license generally consume existing reports to complete their daily tasks and are not required to know the data at a detailed level. Basic data training is required for this role.
- **Authoring** - the report writing tool used to build reports.

The Cognos Author section contains various sections that have links to videos regarding each of these different objects that you can create in the authoring tool. The videos provide additional information on using those features in the Cognos Authoring Tool.

## Accessing Cognos

### Training Environment

The URL to log into Cognos for training purposes is:

<https://qa.reporting.purdue.edu/>

- 1) Log in with your career account and password.

**Purdue Login**

Career Account Username

Password

[Need help?](#)

Note: Unauthorized access or misuse of computer resources or disclosure of sensitive information may result in disciplinary or legal action. Read Purdue's [Acceptable Use Policy](#).

- 2) Click Log in to continue.
- 3) The IBM Cognos Analytics portal will open.

## Production Environment

When you are ready to build reports utilizing production data, log into the following URL:

<https://reporting.purdue.edu/>

## Cognos Timeout



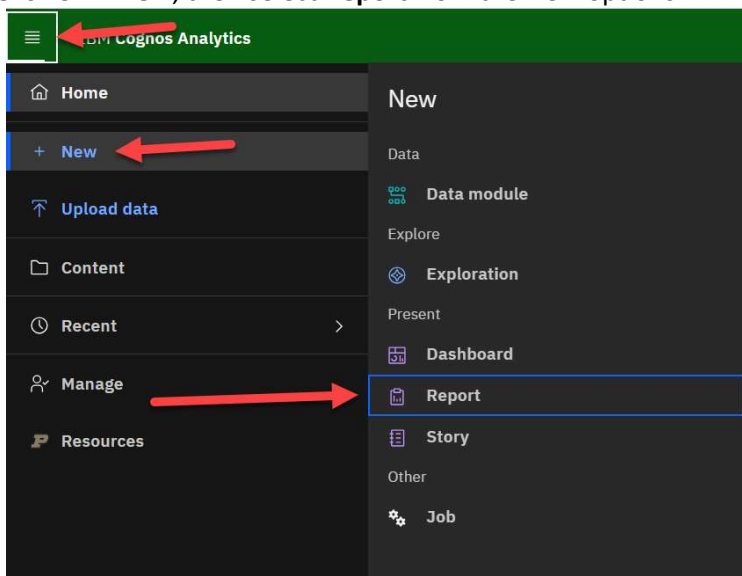
If Cognos detects inactivity for two hours, it will timeout. When you come back to the application after a timeout, you will be automatically taken to the sign on screen. Once you sign on again, the application will take you back to where you were before you signed back in. Any reports that were open are still open and available and the environment remains the same as before the timeout.

## Launching Authoring

Authoring opens within the Cognos Analytics portal. When launching Authoring, you will select a Report Template. Report templates allow the report author to pick a layout presentation. Both the Student and Business areas have created their own templates. These templates are also available in the Template folder. See “Using Standard Templates” to understand how to open the template. Combined with a Theme, you can pick a layout with a set of colors.

### Steps:

1. Log into <https://qa.reporting.purdue.edu>.
  - **NOTE:** We will be working in the above test environment for this training. **Outside of this training**, the general use URL (PROD) for Cognos is <https://reporting.purdue.edu>
2. Click on the **Hamburger (Open Menu)** in the upper left corner.
3. Click on **+ New**, then select **Report** from the New options.

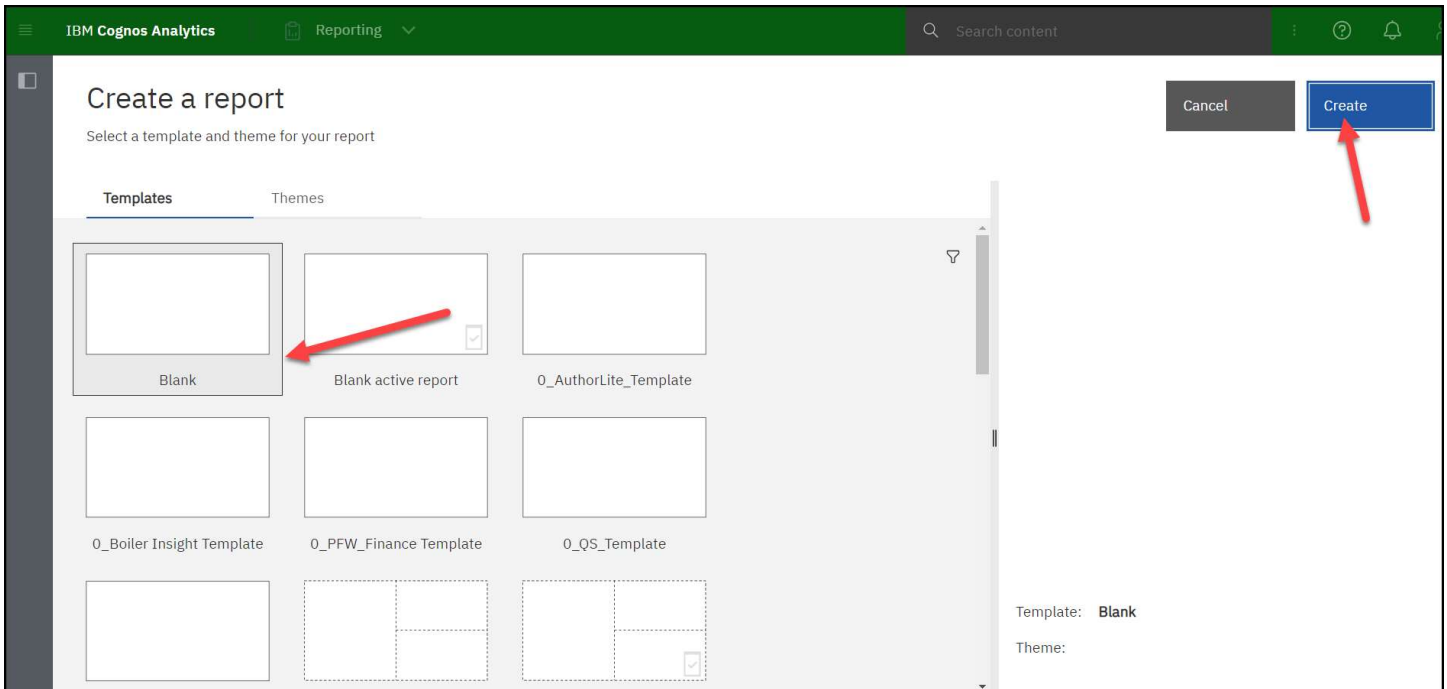


After selecting Report from the New menu, next is the template section. This is asking when you are writing a new report, what template would you like to use. For training we will begin with a blank template.

*However, standard templates were developed by the student and business areas to give reports a standard look and feel. These templates are used for all standard report content. Authors can also use the templates for departmental reporting.*

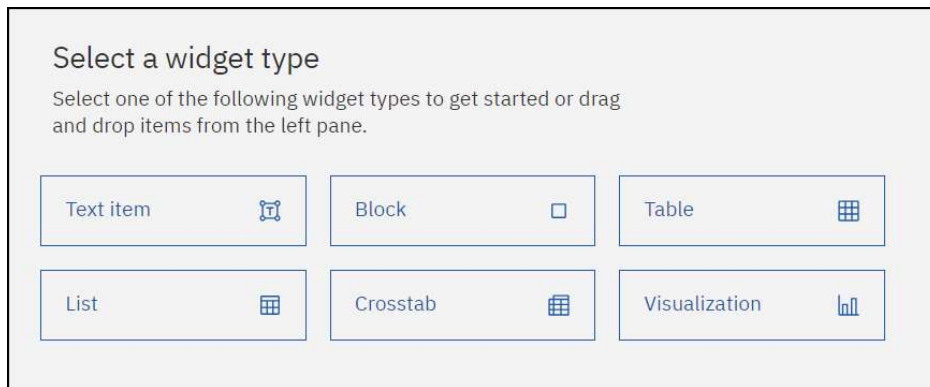
*The student standard template is titled “Student Template”. The business standard template is titled “Boiler Insight Template”. Both templates are located under the Template tab when launching a new report.*

4. Select **Blank** for this training.
5. Click the blue **Create** box.
6. You are now in the Authoring Tool

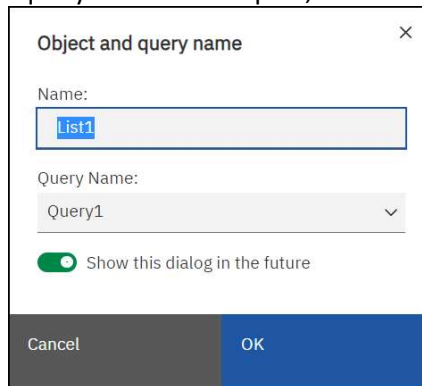


### Select type of new report (Widget)

1. Hover over the different report (widget) types to see the description of the various widgets and determine the new report to create.
  - **List** reports are useful for presenting tabular list information.
  - **Crosstab** reports are useful for comparative analysis.
  - **Visualization** (Chart) reports are useful for graphically showing comparisons, relationships, and trends.
  - **Text items** are useful for labeling report objects.
  - **Blocks** are useful for extending the layout.
  - **Tables** are useful for formatting data.
2. Click on the **List** widget type.



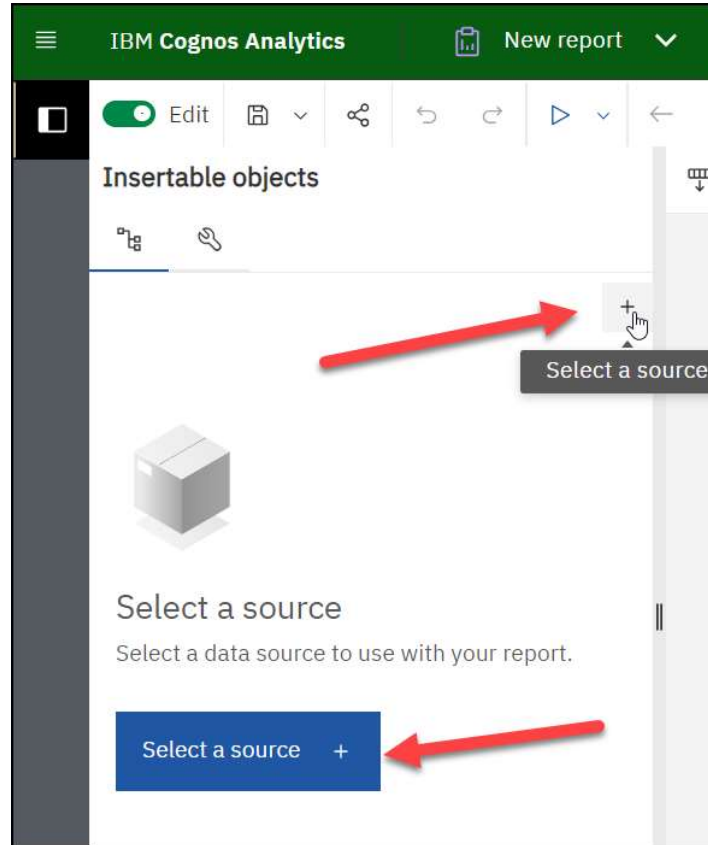
3. Cognos will automatically attach a new query to the new report, therefore click the blue **OK** button.



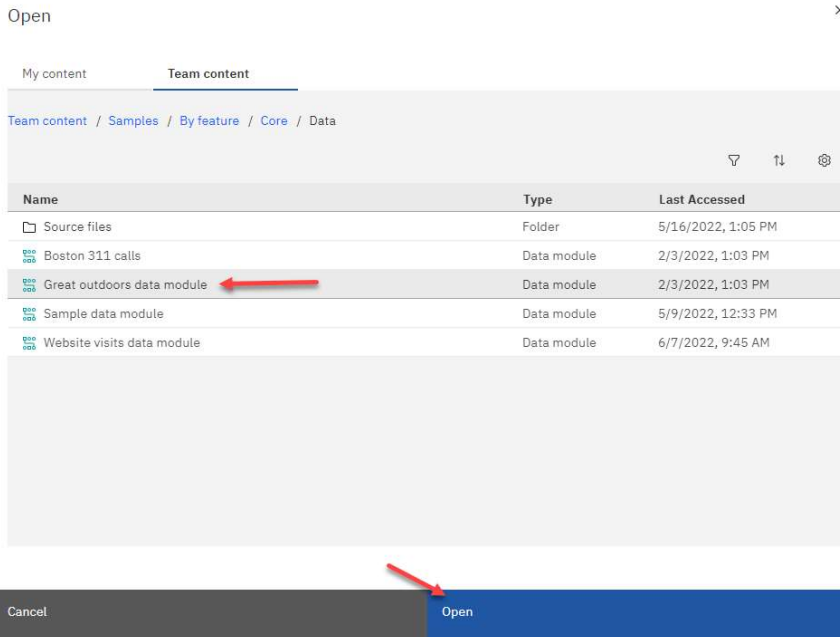


## Select a source (data)

1. Click on the blue **Select a source** button at the bottom of the screen or the **small plus sign** towards the top



2. **Navigate to *Team Content > Samples > By feature > Core > Data > Great outdoors data module.***
3. Once ***Great outdoors data module*** is highlighted, select **Open**.

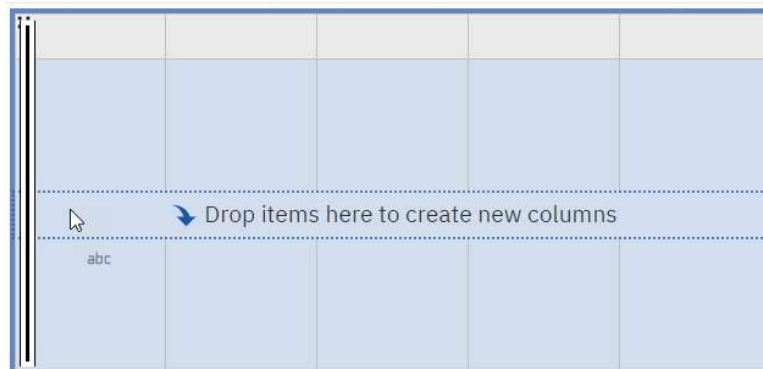


- This loads the **Great outdoors data module package** to the new report content panel.
  - A **package** contains tables/views which contain data items that can be used in the new report.
- Go to Sources on the far left of the screen, expand Products, then drag Product Line over until you see a black line flashing between two skinny lines and drop (release the mouse button) Product Line into the list. *-OR- double click on Product line to add it to the new report.*

Insertable objects

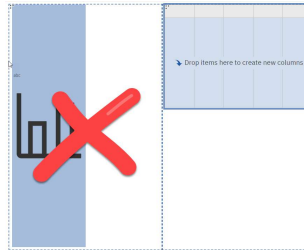
Find

- Great outdoors data module
  - Sales
  - Branch
  - Order
  - Order method
  - Products
    - Product line code
    - Product line
    - Product type code
    - Product type
    - Product number
    - Product
    - Introduction date
    - Product size
    - Product brand
    - Product color
    - Product description
  - Retailers
  - Retailer type
  - Returned items
  - Sales rep
  - Time
  - Time (shipped date)
  - Time (close date)





**NOTE:** If there is a long blue box in front of the list, that will put that data item in front of the list and not in list. *This is not correct.*



6. Continue to drag and drop additional data items as desired.

### Saving the new report

1. Click the down arrow next to the **disk** in the upper left corner.
2. Select **Save As**.

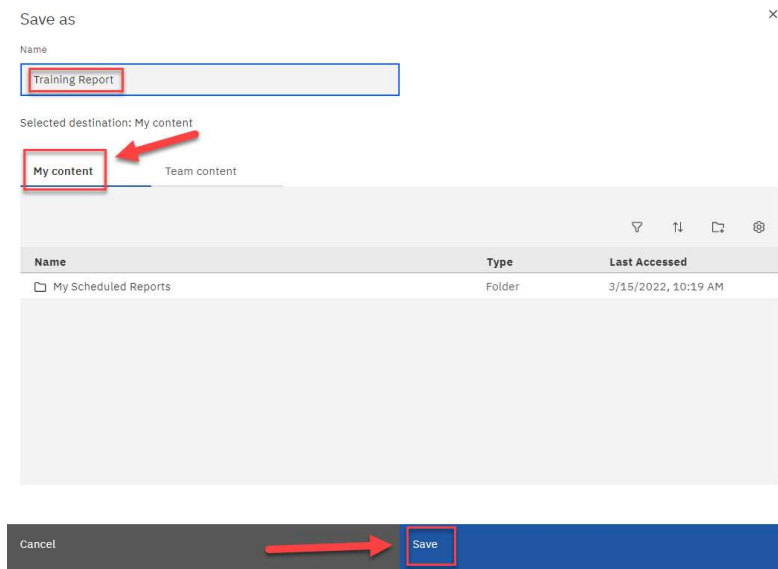
**Note:** If you would like to go to revert to an older version of a report, you can revert back to a previous version using MotioCI. Information on recovering an older version of a report can be found at:

[Recovering an Older Version of a Cognos Report](#)

3. Name your report.
4. Select **My content**.

**Note:** As explained in Cog 101, other users will not have access to any reports saved in My content.

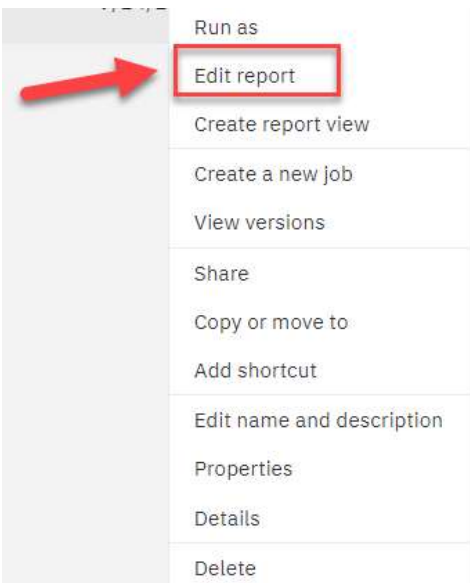
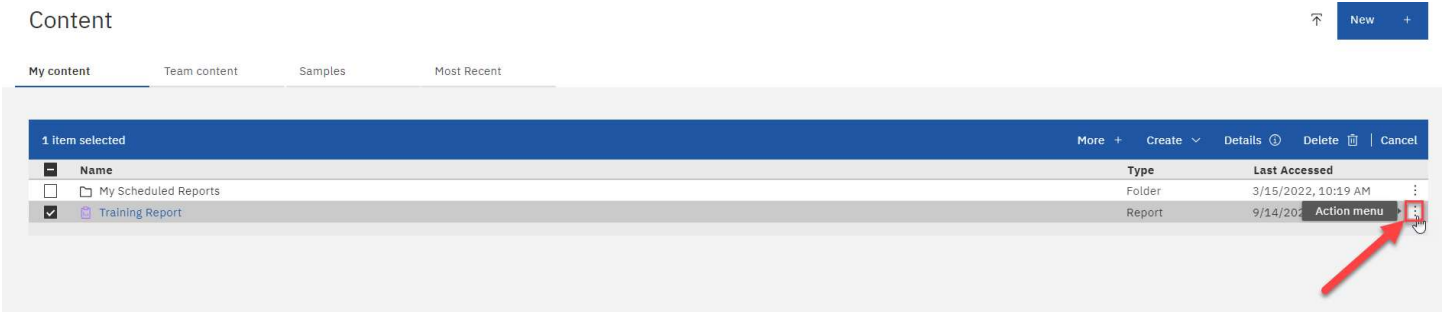
5. Click the **blue Save box**.



### Editing your new report

1. Go to **My content**.
2. Find the report that you would like to edit.
3. Click the 3 vertical dots (**Action Menu**) to the far right.

4. Select **Edit report**.

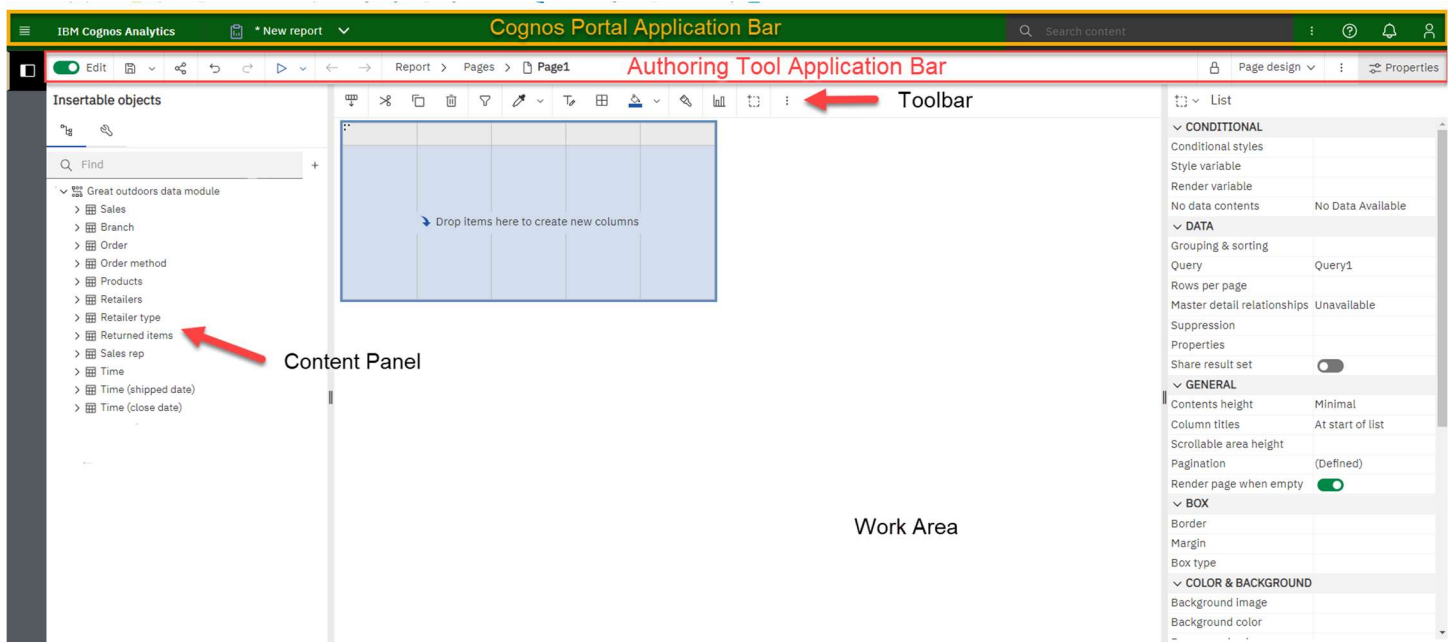


## Explore the Authoring Environment

Authoring has a variety of tools and objects to help produce a highly formatted report. Authoring opens in the Cognos Analytics portal.

The user interface has:

- Cognos Portal Application Bar
- Authoring Tool Application Bar
- Content Panel
- Toolbar
- Work Area



**Cognos Portal Application Bar:** As discussed in the Cognos 101 Navigation Training, this application bar contains the Hamburger Icon to open the Navigation Menu, link to the Home Page by clicking 'IBM Cognos Analytics', switcher that allows you to toggle between open items, Search Menu, Notifications and Personal Menu.

**Authoring Tool Application Bar:** Provides functionality as it relates specifically to the Authoring Tool.

**Content Panel:** Displays the data source and query data items. The Data Item tab allows you to insert data items into your report that already exist in your query.

**Toolbar:** Provides access to functionality for report formatting.


**Work Area:** Provides the area to build reports by adding objects and data items from the Content Panel.

## Content Panel




### Insertable objects



The Content Panel contains the insertable objects that provides the tables and fields (query items) used to build the report. Insertable objects has three tabs called “Source”, “Data Items” and “Toolbox”.

- A. **Sources**  – This is the data source for your report. Lists the tables/data items contained in the package. The tables can be expanded or collapsed. Once expanded, it lists the data items contained in the tables. The data items will have different icons next to them that describe what kind of data item they are.



- B. **Data Items**  – Lists the query items in your report.
- C. **Toolbox**  – Contains different sections that can be expanded or collapsed. The toolbox contains various objects that can be added to the report. Ex: text, layout objects, prompts, etc.
  - i. **Search**  Find – Allows the user to search for either a data item or toolbox feature. When searching in the sources, the user would type the data item that they are looking for and hover over the results to see all the tables that contain the data item that was searched so the user can decide which table to use in the report.
  - ii. Another feature in the Toolbox is “pinning” your favorite toolbox objects to the PINNED section. To pin an object, right click on the object and select **Add to Pinned Toolbox Items**.
  - iii. To unpin the object from the PINNED section, right click on the object and select **Remove from Pinned Toolbox Items**.

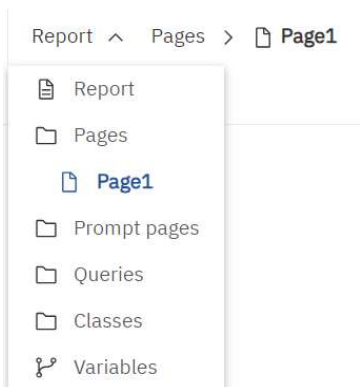
## Authoring Tool Application Bar



- **Edit:** Opens the report in Authoring Edit mode. This allows you to toggle between editing the report and viewing the report.
- **Save/Save as:** Allows you to save your report.
- **Share:** Allows you to share the new report with others via email or by providing a link after the new report has been saved.
- **Undo:** Undo the last step taken, if that last step was something other than save.
- **Redo:** Allows you to re-insert a change that was removed via undo.
- **Run Options:** Allows you to run the report in the default format or you can select a different format by using the dropdown arrow.
- **Back:** Returns you back to the **first page** of the new report.
- **Forward:** Moves you forward to the **next page** of the new report.
- **Report Explorer:** Shows you where you are in the new report and allows you to navigate to pages and queries in your report.
- **Page Editor:** Provides 3 different page views (Page Design, Page Preview, Page Structure).
- **More:** Provides additional report options.
- **Properties:** Lists the properties or attributes that you can set for an object in a report.

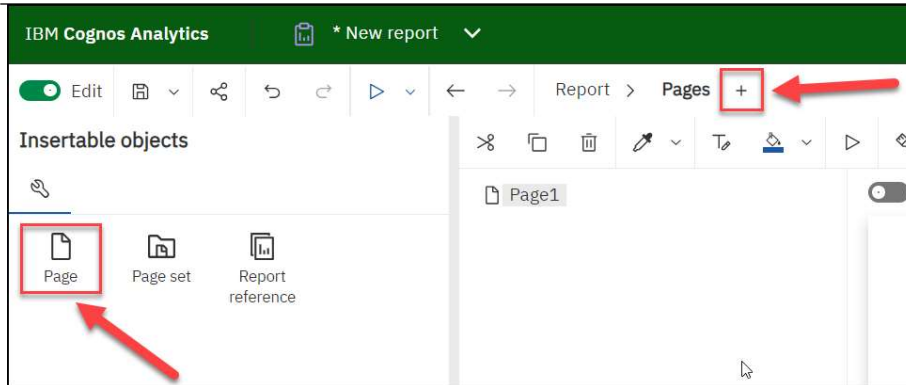
## Report Explorer

Report Explorer allows you to navigate between report pages, prompt pages and queries in your report. This example is showing you are on Page1 of the new report. When the arrow next to Report is selected, it displays the new report's **components** such as pages, queries, etc.



## Adding a New Page or Prompt Page

1. Click the arrow next to Report to select either the **Pages folder** or **Prompt pages folder**
2. Click on the **plus sign (+)** next to **Pages/Prompt pages** or **drag the page icon** from the left content panel and **drop** into the report working area.



## Deleting a Report or Prompt Page

1. Click the arrow next to Report to select either the **Pages folder** or **Prompt pages folder**, depending on what you want to delete.
2. Right click on the **desired page** or **prompt page**.
3. Select **Delete**.

## Query Explorer

Query Explorer allows you to create, manage or modify queries to perform complex tasks, such as defining unions and/or joins.

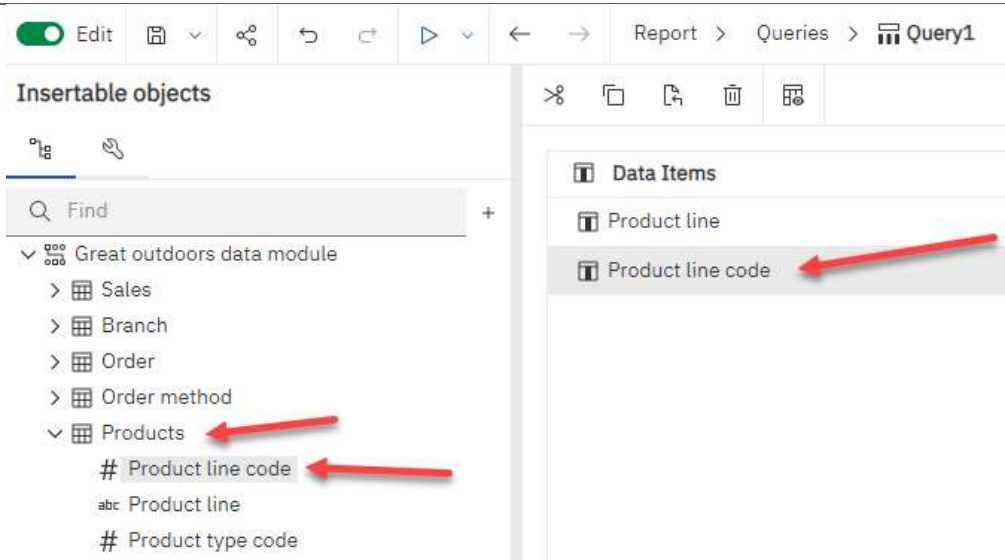
The Query screen has 3 main sections. The Sources and Tools section is on the far left. The Query Components (data included on the report and report filters) are in the middle. The Properties section is on the far right.

## Adding Additional Data Items

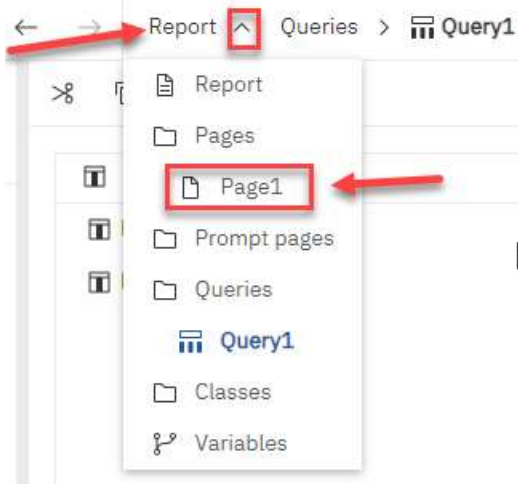
Currently, Product line is already included on the report. Next, bring another data item into the query.

1. Go to the **sources** tab.
2. Open the **Products** table to see all data contained in the Products table
3. Drag **Product line code** over to the data items section.
  - a. If you have multiple data items that you want to bring in at one time, you can hold down **Ctrl** to select multiple items. You can also hold down **Shift**, and all of them will be selected. Then you can just drag them all over at once. I actually don't want all of those in there.



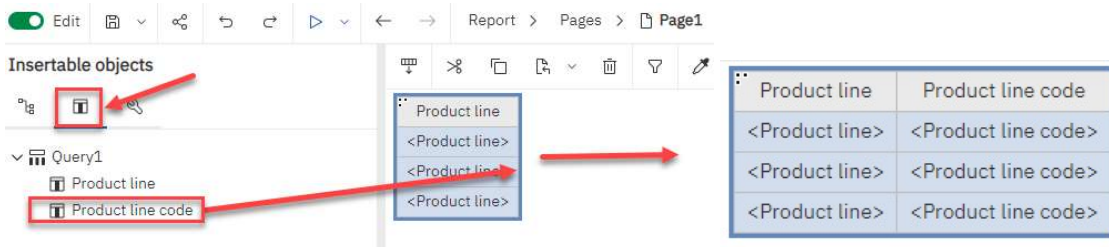


4. Navigate back to our report **page** so that we can add **product line code** into our list.
  - a. Click the **drop down** next to the **Report**.
  - b. Choose **Page1** because that is where the list is located.



5. Grab **Product line code** from the query and bring that next to **Product line** in my list.
  - a. In the content panel, select the **Data items** tab.
  - b. Click on the **Product line code** data item and drag it over into the list.

-OR- double click on Product line code to add it to the list



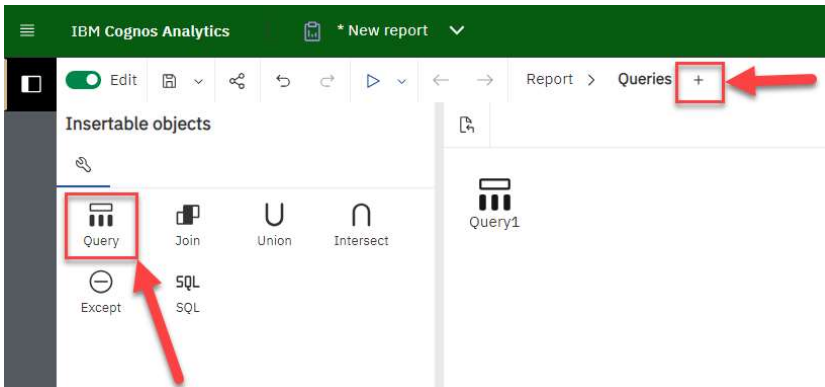
6. After adding in a data item, the report name now has an asterisk (\*). That asterisk lets you know changes have been made; therefore, save your changes.
  - a. Click the down arrow next to the disk in the upper left corner.

- b. Select Save or Save As.

If you build your report by pulling data items directly from the source to the report page, those data items will appear on the report and will be added to the query. If you add additional data items to the Query then you determine what will show up on the report. Adding additional data items to the query is best when you do NOT want all the data items in the query to be displayed on the report.

### Adding a New Query

1. Click the arrow next to Report to select the **Queries folder**
2. Click on the **plus sign (+)** next to **Queries** or **drag the Query icon** from the left content panel and **drop** into the report working area.



### Deleting a Query

1. Click the arrow next to Report to select the **Queries folder**.
2. Right click on the **desired Query**.
3. Select **Cut**.

## Page Editor (Views)

**Page Design** mode only displays column and row labels. You will not see actual data values in the report.

Product line	Product line code
<Product line>	<Product line code>
<Product line>	<Product line code>
<Product line>	<Product line code>

**Page Preview** mode displays sample data as you are creating the report. However, to see the final report results, you must run the report.

Product line	Product line code
Golf Equipment	995
Camping Equipment	991
Outdoor Protection	994
Personal Accessories	993
Mountaineering Equipment	992

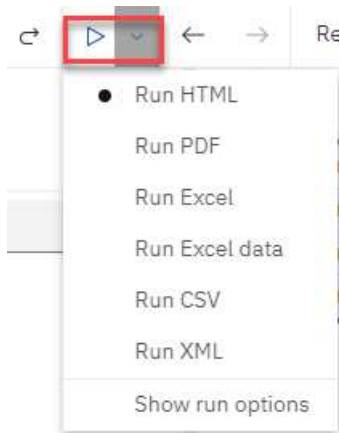
**Page Structure** mode displays the structure of the report page.

- ✓ Page - Page1
  - ✓ Page body
    - ✓ List
      - ✓ No Data Handler
        - >  Block
      - ✓ List columns
        - > | | <Product line>
        - > | | <Product line code>
      - List columns body style
      - T List columns title style

## Running a Report

Running a report allows you to see the final results of the data items that you have included on your report.


1. Click the **drop-down arrow** next to the **Run** on the Authoring Tool Application Bar
2. Select to run to **HTML**

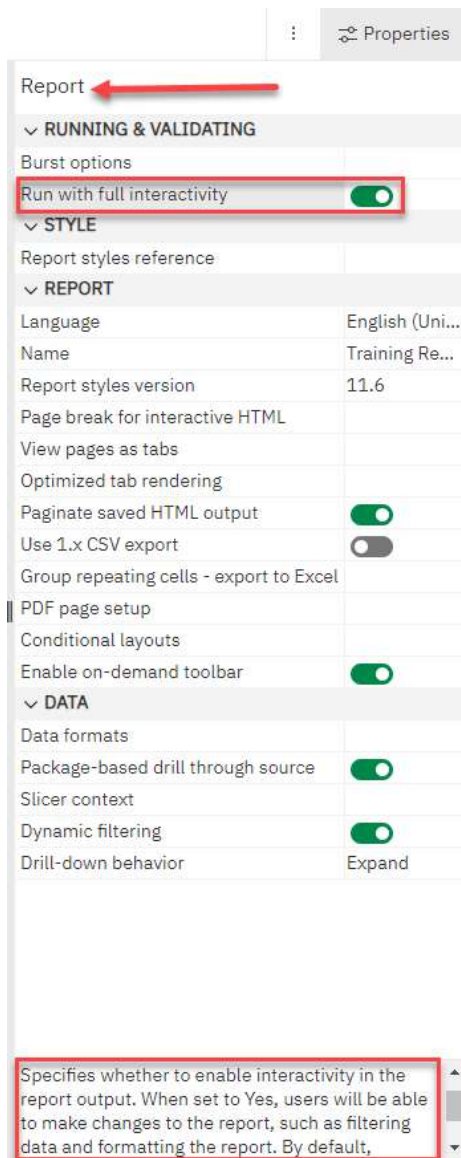


3. The report will run from the authoring tool and will cause a new browser window to open. Therefore, when you are done running and reviewing the report, you will want to close that window so that you are back to where you were originally in the authoring tool.

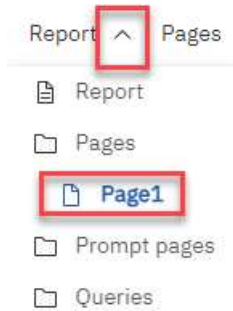
## Properties

The Properties pane lets you view and change the properties of an item or object in your work area. Using the Properties pane, you can change the font type, size, background color, rename the query item, etc. The way to affect change to the item is to make sure to click in the cell, and then view the Properties pane to locate the item to change the properties.

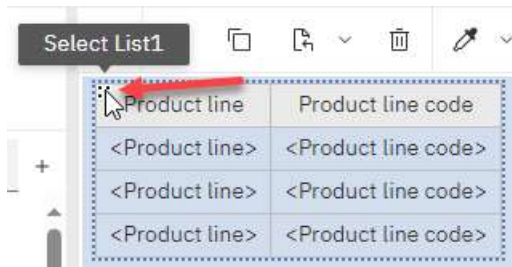
To activate or deactivate the properties pane, click on the Properties icon . Screenshot below displays a section of the Report properties. One property of the Report is to run with full interactivity or not. When it is green, that means you can edit the report. If it is turned off, you will not be able to edit the report.



- 1. Go to Page1 of your report.
  - a. Select the arrow next to Report
  - b. Select Page 1



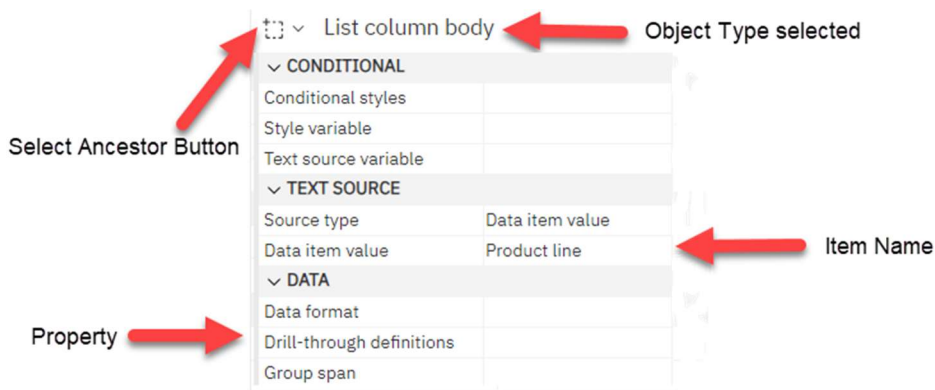
- 2. Highlight the list, that contains Product line and Product line code.
  - a. Click on the three little dots in the top left of the list that are in the shape of a triangle (triangular ellipsis).
  - b. Once you click the triangular ellipsis, the entire list will be highlighted.



- 3. Review the properties panel for more information regarding what is highlighted.
- 4. Next select only the Product Line

Product line	Product line code
<Product line>	<Product line code>
<Product line>	<Product line code>
<Product line>	<Product line code>

To verify the object type selected, the object name is displayed at the top of the Properties pane. It is best practice to verify the object type selected before making any modifications to it.



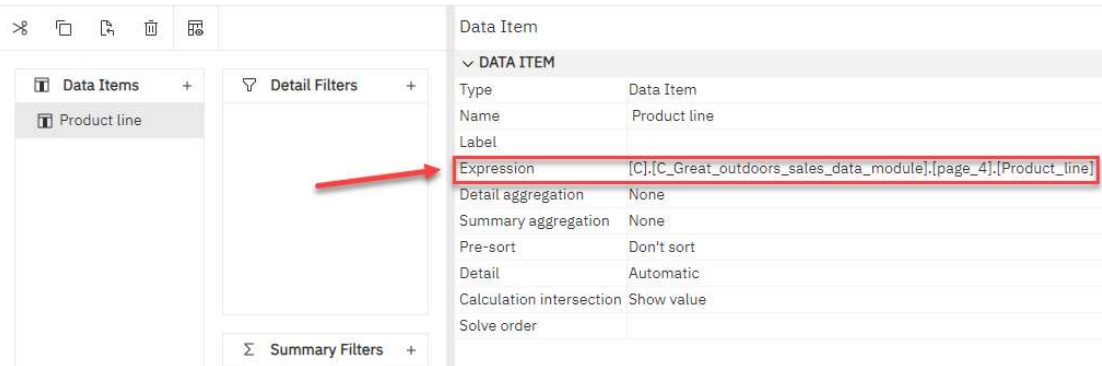
There are different ways to change a property setting. If there are only two options for a certain property, double-click the setting to toggle to the other option. If there are multiple options, you can click the setting and then click the ellipsis and choose the desired setting from the dialog box that appears, or choose a selection from a dropdown list.

### Data Item Properties

If you are looking through a report that has a lot of data items and a lot of queries, you can quickly notice where they are located in the package and the tables the data is coming from.

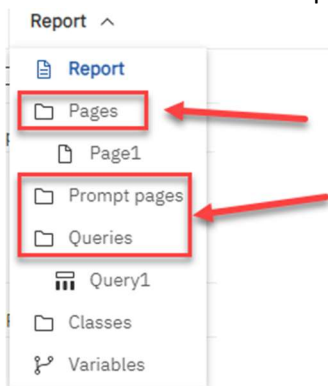
1. Click the arrow next to Report to select the **Queries folder**.
2. Select the **desired Query** (Query 1 in the example).
3. Click on the data item you would like to review (Product line in the example).
4. To the far right, under Properties, in the properties panel, you can see the different properties of this data item.
5. Expand the properties panel, and view the row called Expression.
  - a. This shows you is the location of where this data item is located in the package. Reading the Expression from right to left, I can see the name of this data item is Product line. It is in the page\_4 table. And it is in the Great outdoors sales data module package.

*Note: If you double click on a data item, you can also see that same information. But it's easier to take a look at the properties panel if you're looking through many data items.*



### Renaming a Report Page, Prompt Page or Query

1. Click the arrow next to Report to select the desired Pages Folder, Prompt Page Folder or Query Folder.



2. After selecting the folder that contains what you would like to rename, then select the page, prompt page or query that you would like to rename.

3. Activate **Properties**  Properties and under **Miscellaneous > Name** type in the desired name for the page or query.

*When you have multiple queries or pages in your report it is best to name them something that is meaningful. For example, if you are writing a report with student data with multiple queries. You could name one query/report page, Applicants. Then you could name another query/report page, Admits.*

## Ancestor Button

In the Authoring Tool, objects are organized hierarchically. This is referred to as an Ancestor. For example, Page is the highest level, a Page contains a Page Body which contains a report type such as a List report, etc. The lower levels are children to the parent. You can select an ancestor (or parent object) of the object previously selected in your work area by clicking the Select Ancestor button.

The ancestor button is also helpful for navigating between the different objects that are in your report. As you hover over the different objects in the ancestor button, you can see the different parts of your report. After selecting an object using the ancestor button, the properties panel will change to the object that was selected.



## Filters

### Detail Filter vs Summary Filter

Summary and detail filters both apply to the report to change the focus of the report. The difference between a detail filter and a summary filter is when the filter is applied.

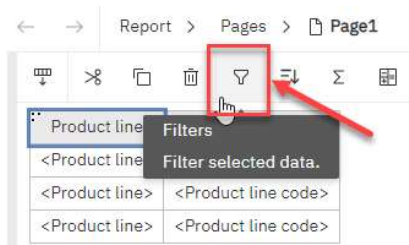
A Detail filter applies to individual rows, none of the rows are summarized. Detail filters applies the specified condition to each row of data. If the condition is true for a row, the row is retrieved and appears in the report. If the condition is not true, the row is not retrieved and does not appear in the report.

A Summary filter is used to filter summary data items in a report. Before you create a summary filter, you must calculate the summary data items you want to use in the filter. Summary filters are applied on summary values in the report.

### Create Filters

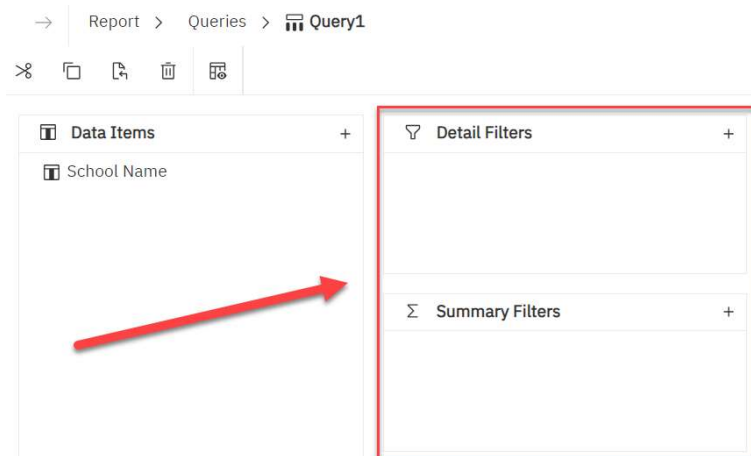
Filters are used to narrow the focus and amount of data returned in a report. When utilizing a filter, you define conditions around fields to display a specific subset of data. A filter can be created from the report page or the query.

You can create a filter from the **toolbar** on the **Report Page**



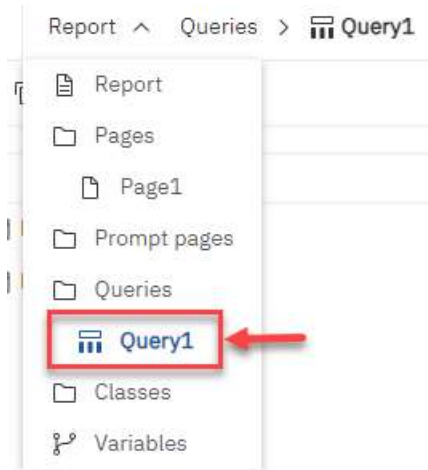
OR

Create filters in the **Filter Sections** in the **Query**



### Creating a Filter from Query

1. Click the arrow next to Report to select the desired Query.



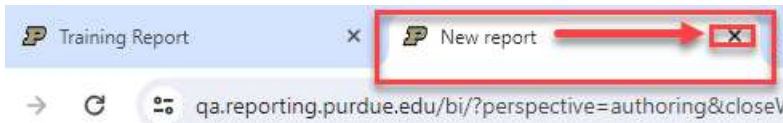
- a. Run the report, by clicking the run button in the Authoring Tool Application Bar, to see what data is available for Product line.



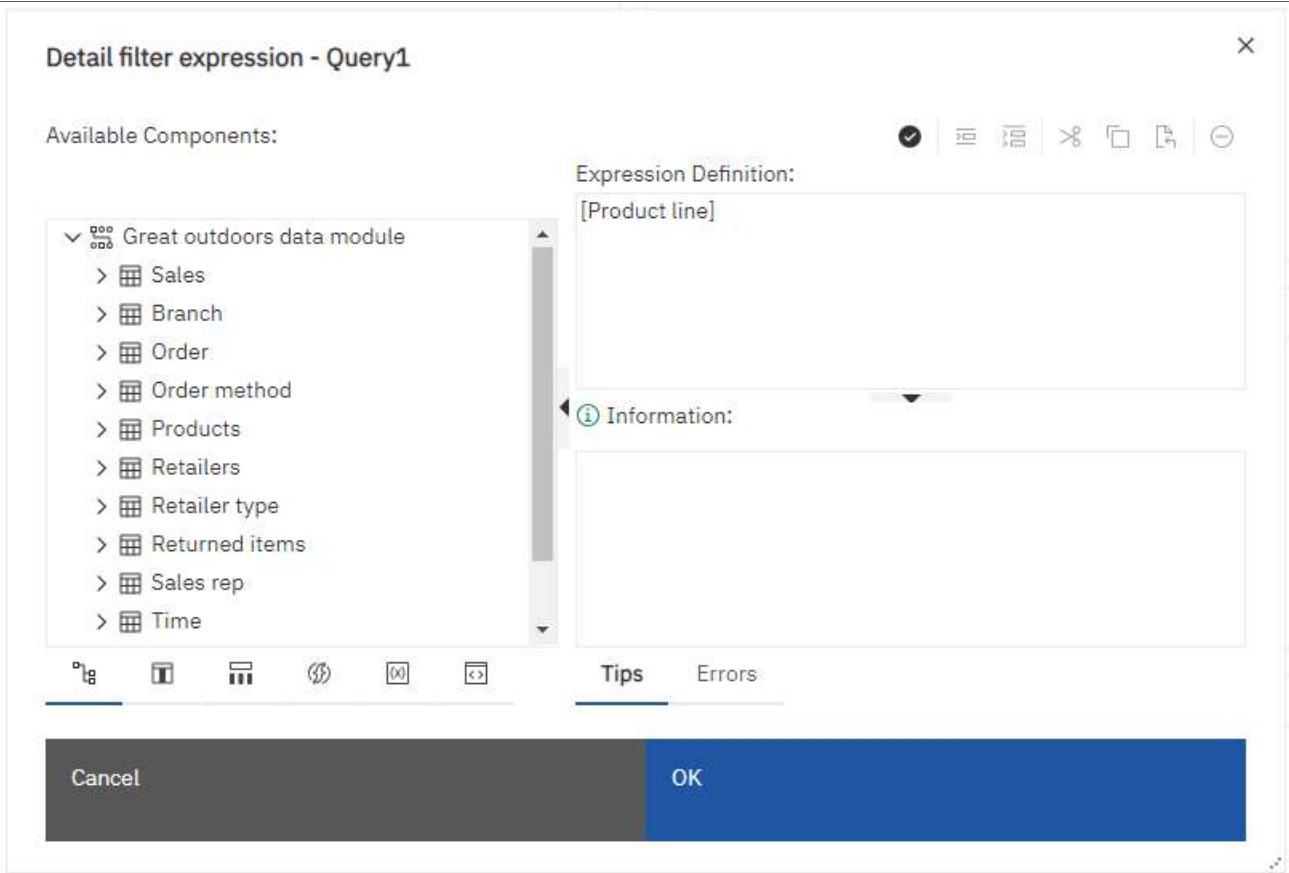
- b. The following should display for Product line.

Product line	Product line code
Golf Equipment	995
Camping Equipment	991
Outdoor Protection	994
Personal Accessories	993
Mountaineering Equipment	992

- c. Close the 'New report' browser tab that opened with Product line information.



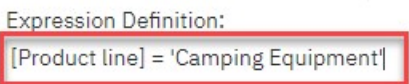
2. Drag the 'Product Line' data item over to the detail filter section and then release the mouse key to drop it in the detail filters box.
3. Since we created a filter from the query, a Detail Filter Expression window appears.



Icons at the bottom of the Expression window

- a. **Source:** Data models and query objects that can be used in the report.
- b. **Data Items:** Displays query objects used in the current query.
- c. **Queries:** Displays all queries currently being used in the report definition.
- d. **Functions:** Displays features and operators available for use in the report.
- e. **Parameters:** Displays variables that must be given a value during the execution of the prompt.
- f. **Macros:** Displays macro functions available for the current data model.

- 4. Narrow (filter) the Product line to only Camping Equipment. Since Product line is already in the Expression Definition box, next type a space = 'Camping Equipment'



- Before you finalize the filter, validate **Validate** to check the expression does not have errors. If the expression is written correctly, No Errors will appear in the Information window. If there is an error, an error code and description will appear.

- 5. Click the **OK** to save the filter in the report.

6. Run the report to make sure the filter is working by clicking the run button in the Authoring Tool Application Bar.



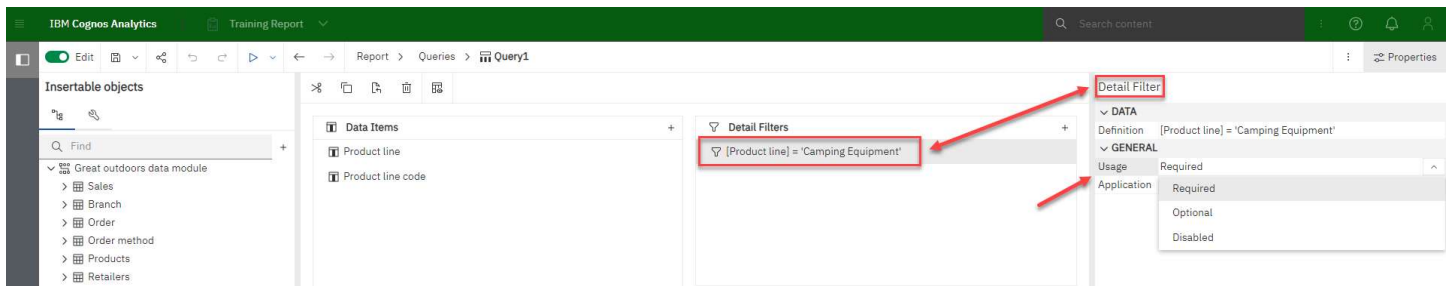
a. After adding the filter, the only thing that should display for Product line is Camping Equipment.

Product line	Product line code
Camping Equipment	991

b. Close the 'New report' browser tab that opened with filtered Product line information.

### Filter Properties

The properties, under General>Usage, of the Detail and Summary filters provides the ability to make the filter Optional, Required, or Disabled.

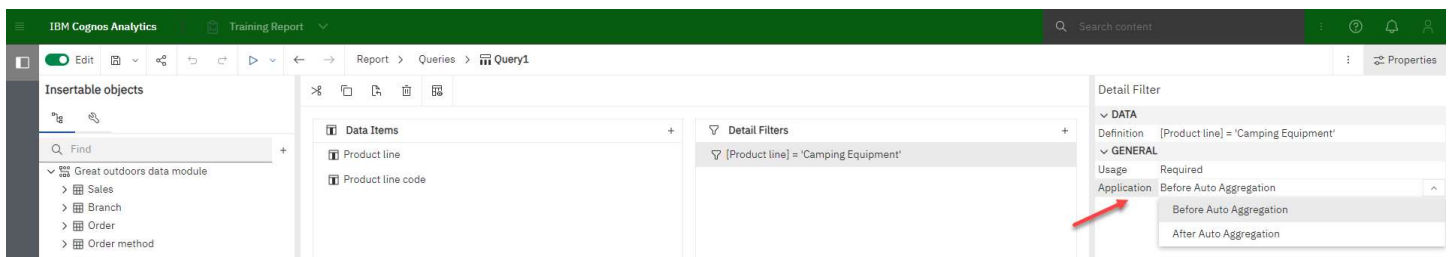


- Required – Cognos will use the filter when running the report
- Optional – Cognos will only use the filter if the filter is chosen as a parameter in a prompt
- Disabled – Cognos will NOT use the filter when running the report

For the Detail filter, the Application property provides options on how to apply the filter: Before Auto Aggregation or After Auto Aggregation.

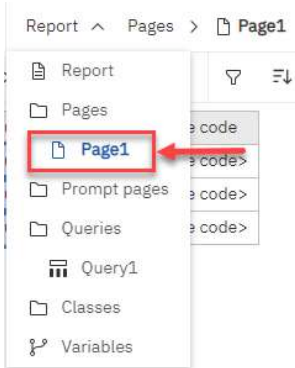
Before Auto Aggregation – applies the filter to each data row; filter applied before summarization.

After Auto Aggregation – applies the filter to aggregated data rows; filter applied after summarization.

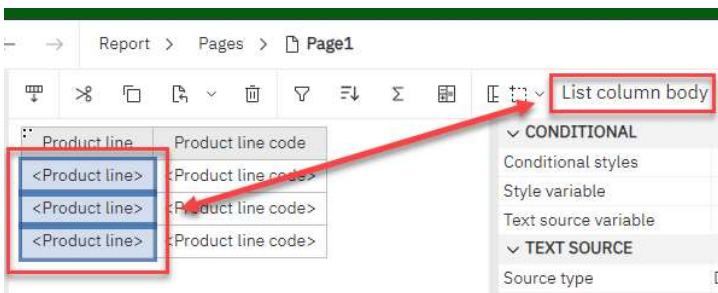


## Creating a Filter on the Report Page

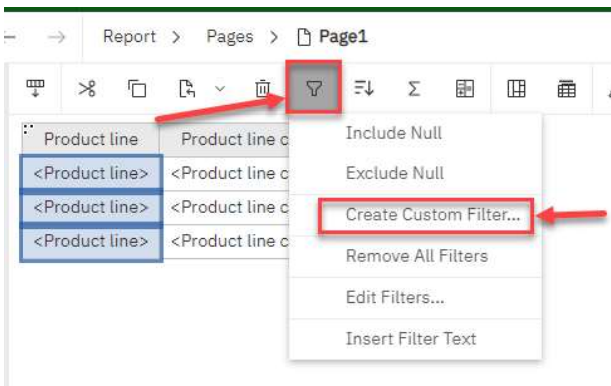
1. Click the arrow next to Report to select the desired Page



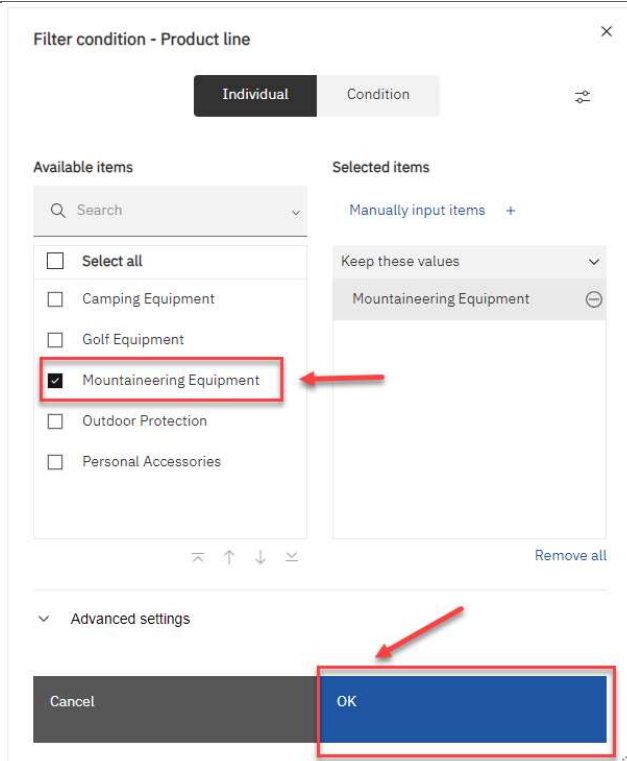
2. Click on the Product line column body. You will know when you have selected the correct information when List column body shows up in the Properties pane.



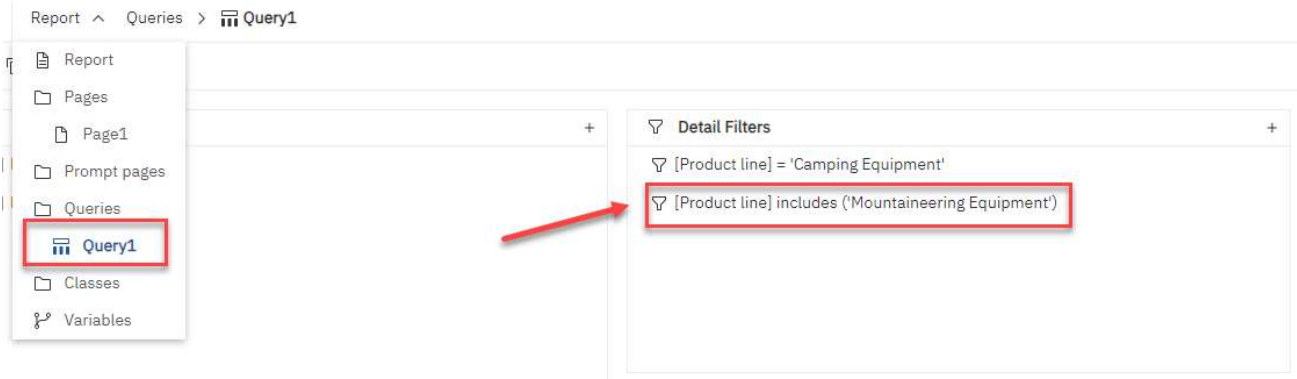
3. Click on the filter icon on the toolbar and select **Create Custom Filter**.



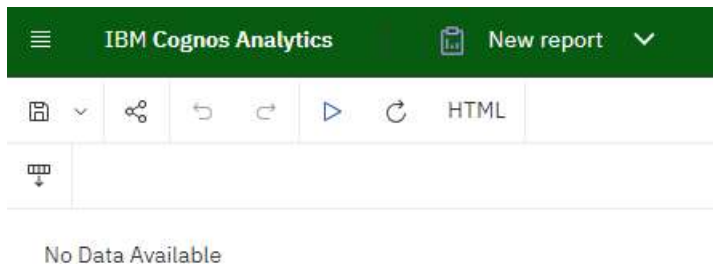
4. Select **Mountaineering Equipment** from the Available items then click **OK**.



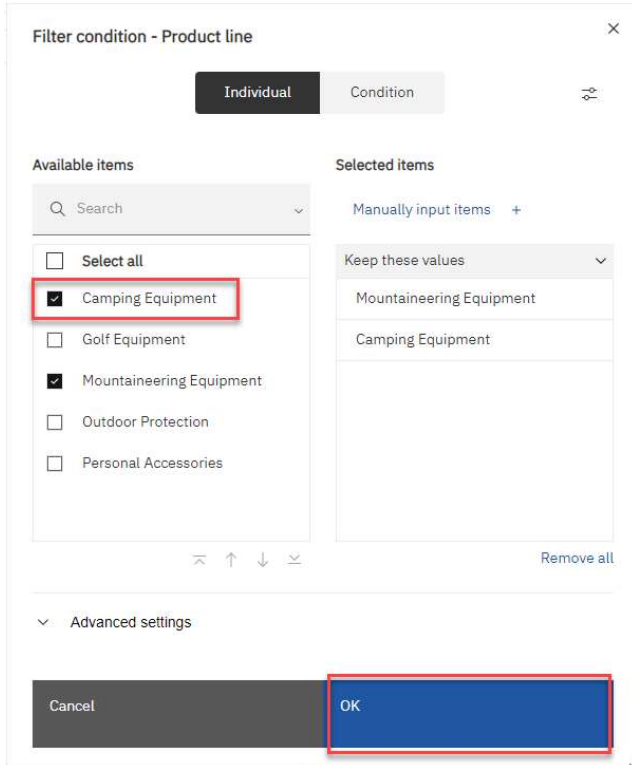
- 5. Go back to the **Query** and you will see the Mountaineering Equipment as a new filter.
  - a. Click the arrow next to Report to select the desired Query.
  - b. When a new data item or filter is placed onto the report page, it automatically populates in the query.



- 6. Run the report, using the **Run button** on the toolbar, to see how the new Mountaineering Equipment filter impacts the report.
- 7. The new report indicates there is **no data available**. Close the new report browser tab.



- a. The reason the report indicates No Data Available is because the Training Report has conflicting filters.
    - i. The first filter we created through the query says to only pull Camping Equipment.
    - ii. The new filter created through the report page says to pull Mountaineering Equipment.
  - b. Since those are not the same thing, they are conflicting filters, and Cognos couldn't pull anything. Therefore, when creating filters, make sure the filters are not conflicting.
8. Double click on the new filter (Mountaineering Equipment) and add 'Camping Equipment' then OK.



- 9. Run the report again using the Run button on the toolbar.
- 10. The new report now contains Camping Equipment because that is the Product line contained on both filters.

Product line	Product line code
Camping Equipment	991

- 11. If you really need Mountaineering Equipment in the report, you can:
  - a. Disable the first filter using properties
  - Or-
  - b. Add Mountaineering Equipment to the first filter so the filter reads [Product line] in ('Camping Equipment', 'Mountaineering Equipment')

12. Run the report again using the Run button on the toolbar.

13. The new report now contains both Camping Equipment and Mountaineering Equipment because both Product lines are contained on both filters.

Product line	Product line code
Camping Equipment	991
Mountaineering Equipment	992

14. Save the changes made to the Training Report by selecting the **Save Button** on the toolbar.

## Prompts

You can add prompts to a report to allow users to filter on their own value(s). Prompts act as questions helping staff to customize the information in a report to suit their own needs. By limiting the values to return, the report will run more efficiently.

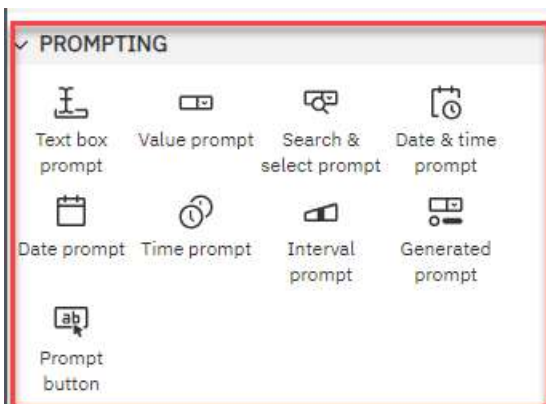
### Prompt Components

Prompts are composed of three interrelated components:

- Parameters form the questions you want to ask users.
- Prompt controls provide the user interface in which the questions are asked.
- Parameter values provide the answers to the questions – Parameters filter the query attached to the report.

### Prompt Types

Authoring offers nine different prompt types in the Toolbox > Prompting section.

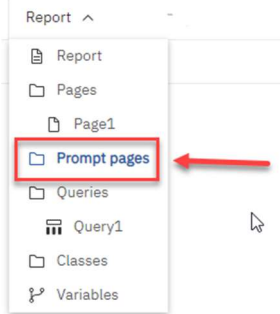


- **Text Box Prompt:** Retrieves data based on a value that you type.
- **Value Prompt:** Retrieves data based on values you select from a list.
- **Select & Search Prompt:** Retrieves values based on search criteria that you specify. Data is then retrieved based on values you select from the search results.
- **Date & Time Prompt:** Retrieves data based on a date and time you select.
- **Date Prompt:** Retrieves data based on a date you select.
- **Time Prompt:** Retrieves data based on a time you select.
- **Interval Prompt:** Retrieves data based on a time interval you specify.
- **Generated Prompt:** Selects a prompt control based on the data type of the query item. This option has fewer properties to change.
- **Prompt Button:** Its usage changes according to its Type property, which can be set to Cancel, Back, Next, Finish, or Reprompt. This can be added to a report page.



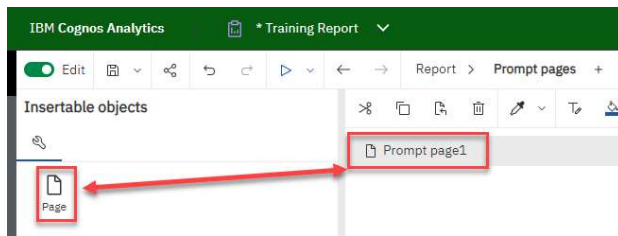
## Create a Prompt Page and Add a Prompt

1. Click the arrow next to Report to select **Prompt pages**



2. A prompt page can be added to the report in two different ways.

- a. Drag Page from the left under Insertable objects then release the mouse key to drop it in the work area.

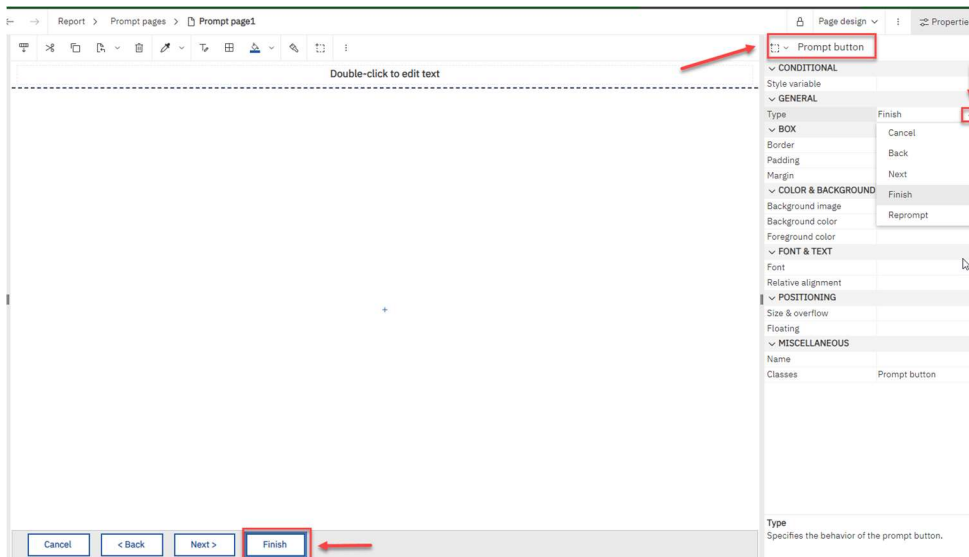


-or-

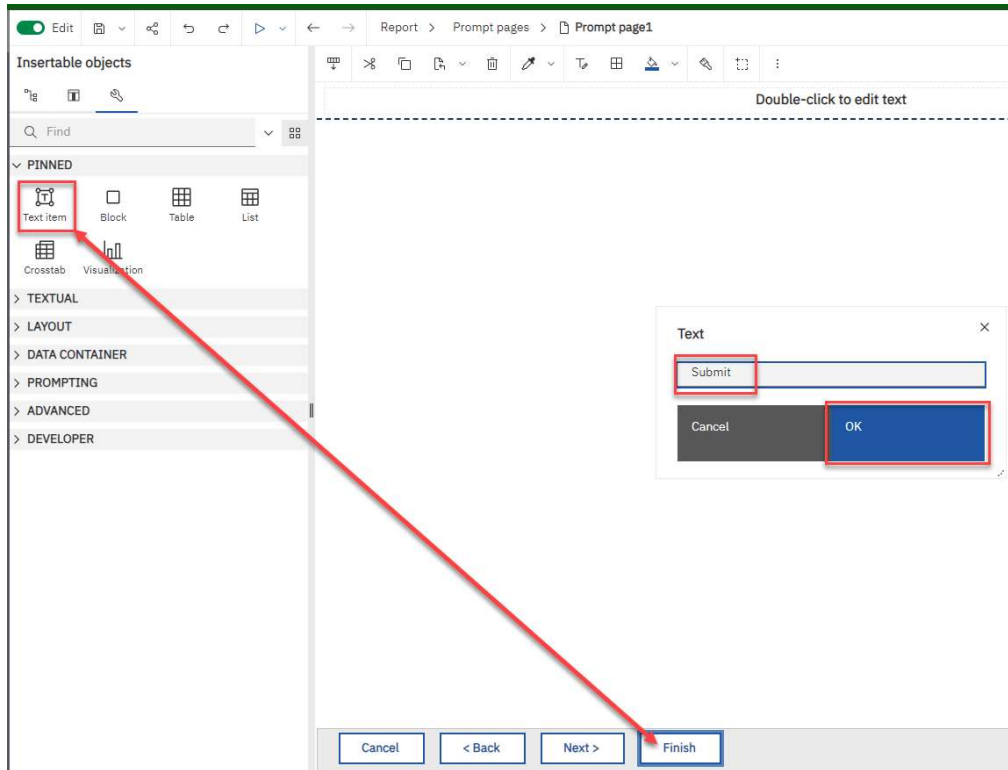
- b. Click the plus sign (+) to the right of Prompt pages on the Authoring Tool Application Bar.



3. Double click on the **Prompt page 1** that was created.
4. You can edit the name of the Prompt page 1 by going to Miscellaneous > Name.
5. You can edit the name of the Prompt buttons at the bottom of the page.
  - a. Select the **Finish** prompt button and you know you are on the prompt button by looking at the Properties panel
  - b. Click the down arrow next to Finish to change the name



- c. If the name that you want isn't in the list you can change the name by dragging a **Text item** from the left **toolbox** over the Finish button until you see a black vertical bar, then release the mouse key.
- d. Type the word **Submit** in the new text box and select **OK**.



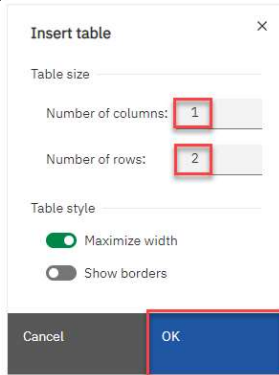
- e. The Finish prompt button is now named **Submit**.



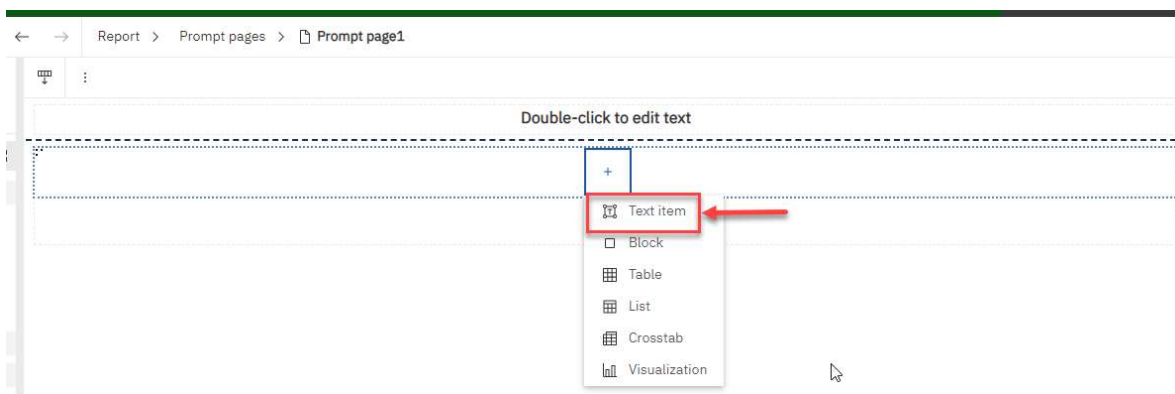
- 6. Click the **plus sign (+)** in the middle of the work area to add a prompt to the prompt page.
- 7. Select **Table** from the options.



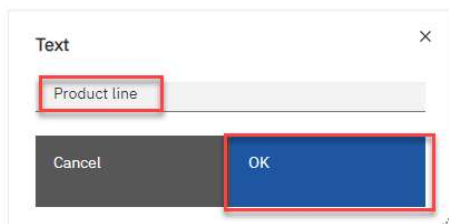
- 8. The new prompt will have a column header and prompt selection box; therefore, type **1** for the **Number of columns** and **2** for the **Number of rows** then click **OK**.



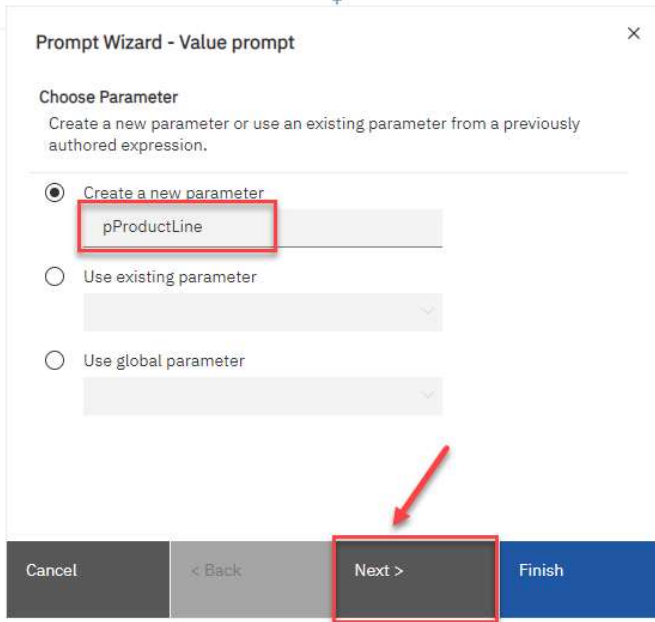
9. There are now two rows present on the prompt page. Click the **plus sign (+)** on the top row and select **Text item**.



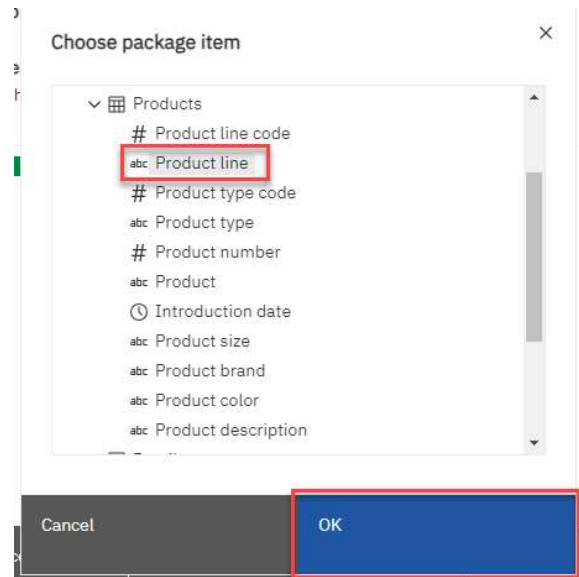
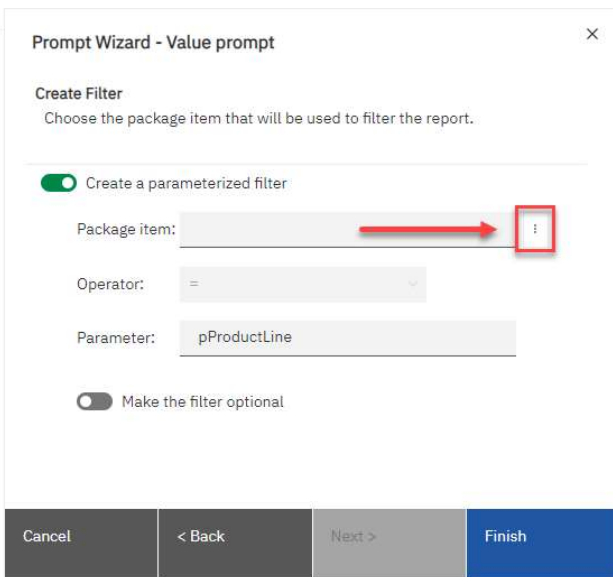
10. Type **Product line** in the Text box and click **OK**.



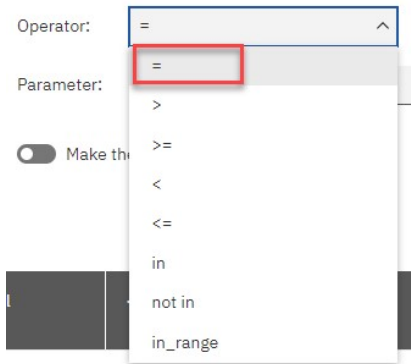
11. Drag **Value prompt** from the **Prompting section** of the **Toolbox** and drop into the **bottom row** of the prompt table. You will release the mouse key when you see a blinking vertical line.
12. By using the Prompting section of the Toolbox, you now have a Prompt Wizard box.
13. Select **Create a new parameter** and name the new parameter **pProductLine** and click **Next**.



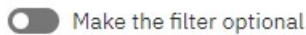
14. Click the **ellipsis** to the far right on the **Package item** line, select Product line from the Products package and click **OK**.



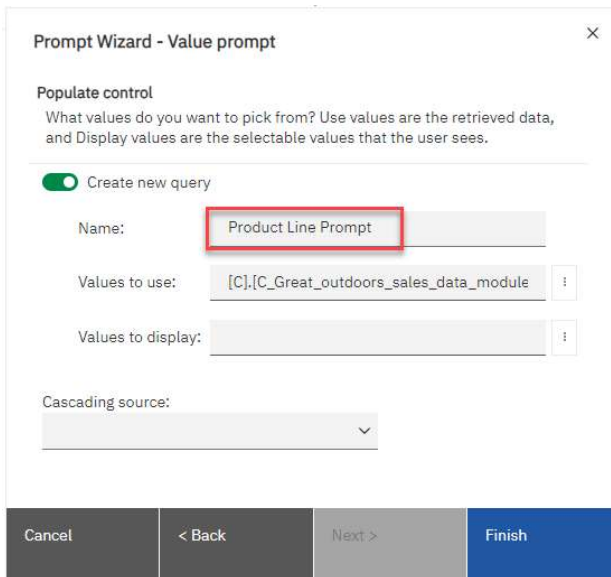
15. Select the **equal sign (=)** for the **Operator** and click **Next**. Note, this can be changed depending on your report by clicking the dropdown arrow.



16. When enabled, **Make the filter optional** means the user doesn't need to select a filter in order to run your report. We will leave it disabled for our Training Report. Click **Next**.

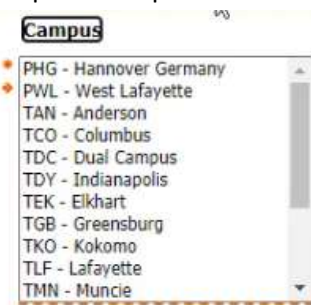


17. On this section, the first thing that it's asking is do you want to **create a new query** just specifically for this prompt. This is automatically enabled and it is best practice to have a query for each of your prompts; therefore, **leave it enabled** and rename it to **Product Line Prompt**.

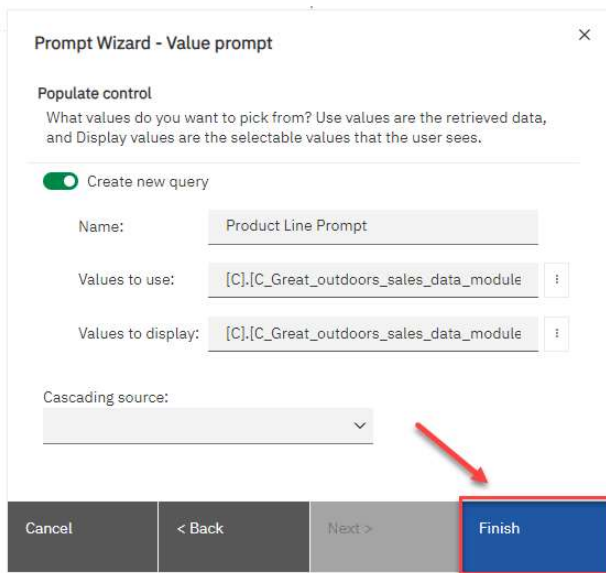


18. **Values to use** is already prepopulated with Product line; therefore, **leave it as is**.

19. Click the **ellipsis** to the far right on the **Values to display** line, select Product line from the package and click **OK**.
  - a. There may be times when the Values to use and Values to display may be different.
  - b. For example, Purdue campus information on a report. Users may not be familiar with the 3-letter abbreviation for the various campuses; therefore, you may use campus code as the Values to use but campus description for the Values to display.

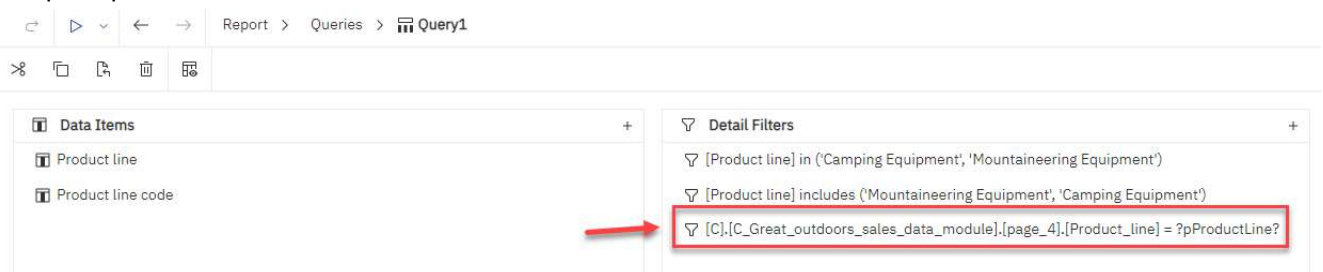


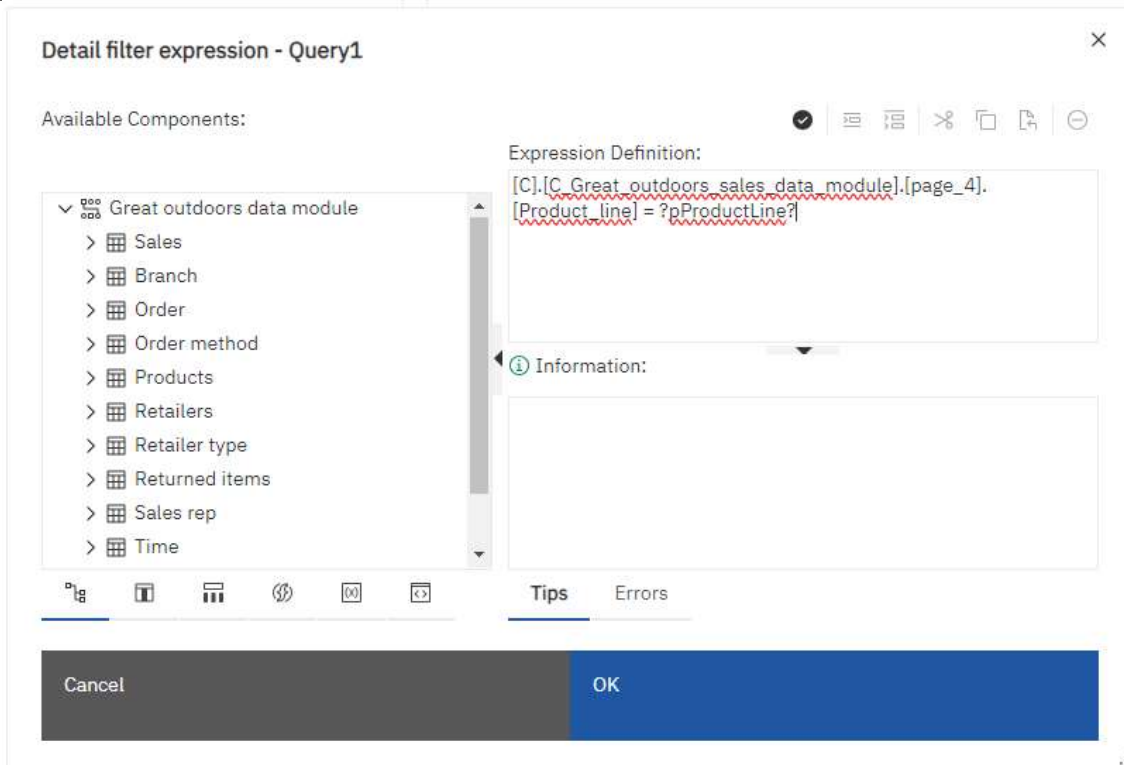
20. Click **Finish** to create the prompt.



21. Look in the query now to see the parameter that this prompt wizard created while building the prompt.
  - a. Click the **arrow next to Report** to select the desired Query (**Query1**).
  - b. Notice there is a second query in the report called Product Line Prompt that was created during the prompt wizard process as well.

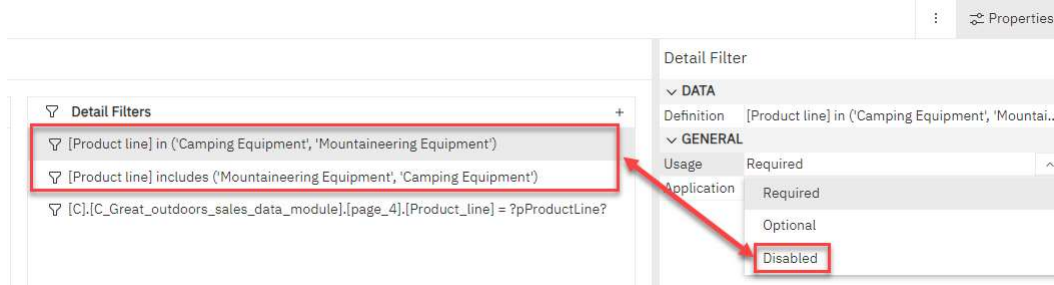
22. Now there is a third filter. **Double click on the third filter**, this is the parameter that was created while making the prompt.





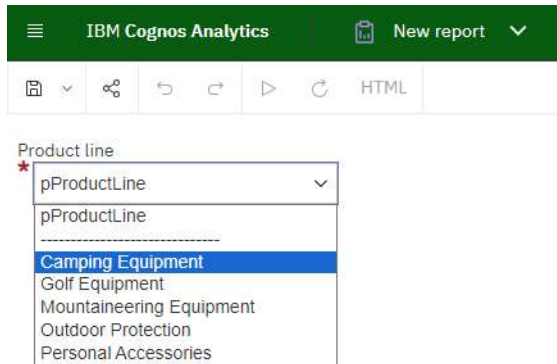
Notice the question marks (?), that indicates a parameter filter. Click **Cancel**.

23. **Disable** the **first two filters** using the Properties panel so the only active filter is the parameter filter.

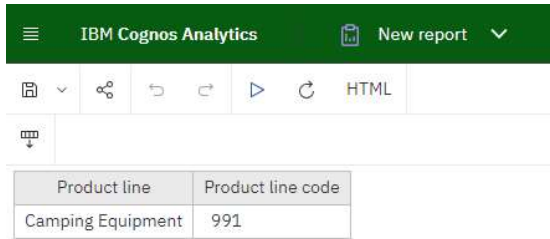


24. **Run** the report, using the **Run** button, on the **toolbar**.

25. Select **Camping Equipment** from the available prompts and click **Submit** at the bottom of the page.

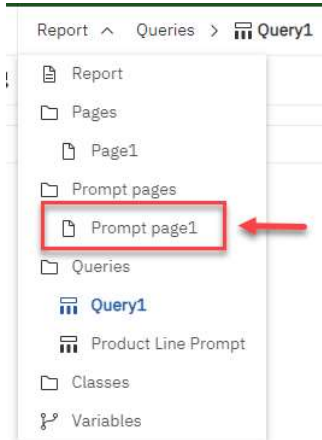


26. After submitting the Camping Equipment prompt, the report is generated.

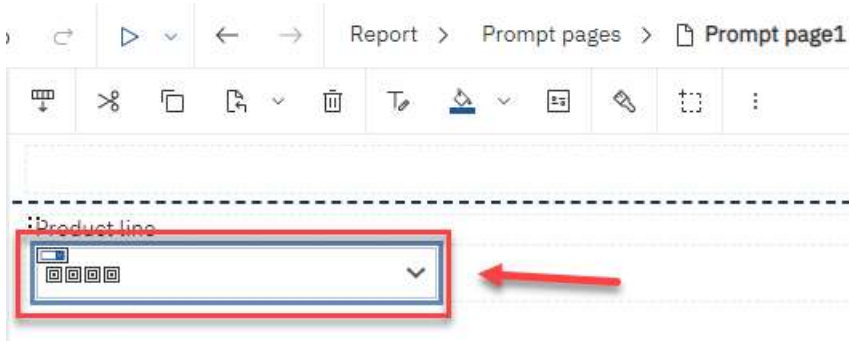


27. Close the New report browser window.

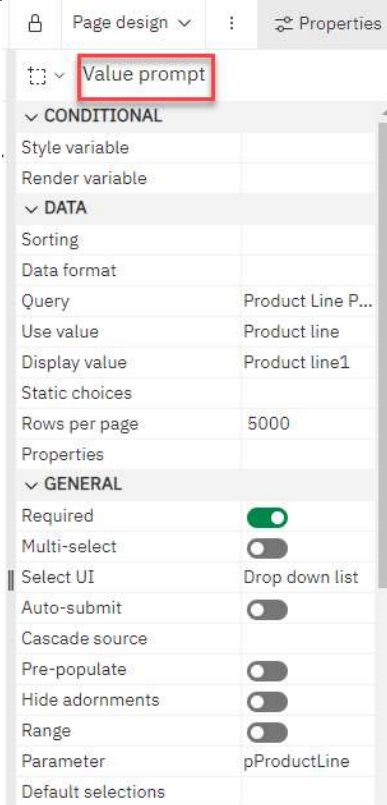
28. Go back to the prompt by clicking the arrow next to Report then selecting **Prompt page1**.



29. Select the **prompt** and review the **Properties panel**.







- a. Under General you can decide if the prompt will be Required or not. Whatever you decide, the selection must match the options (Required, Optional) on the Query properties panel.
- b. Under General you can also decide if the prompt will be multi-select or not. If Multi-select is green that means the user can select multiple responses for the prompt. If Multi-select is gray that means the user can only select one response for the prompt.
  - i. In order for the Multi-select functionality to work, you must change the “=” in the filter to “in”.
  - ii. Therefore the new query would be

Expression Definition:

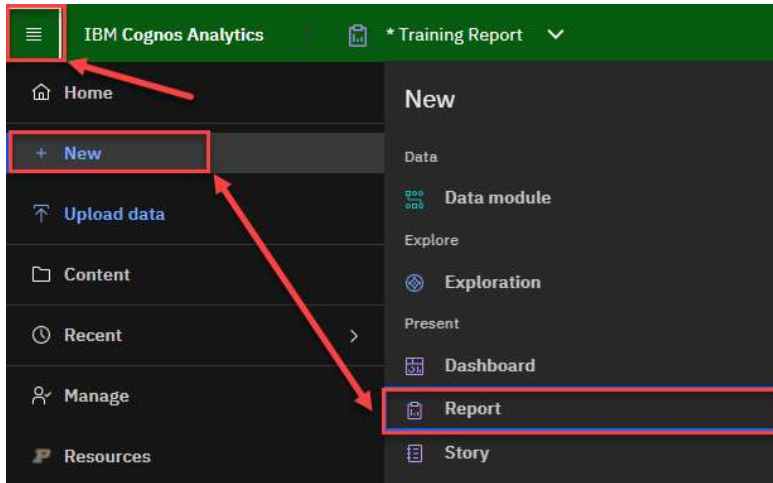
```
[C].[C_Great_outdoors_sales_data_module].[page_4].[Product_line] in (?pProductLine?)
```

30. Save the changes made to the Training Report by selecting the **Save Button** on the **toolbar**.

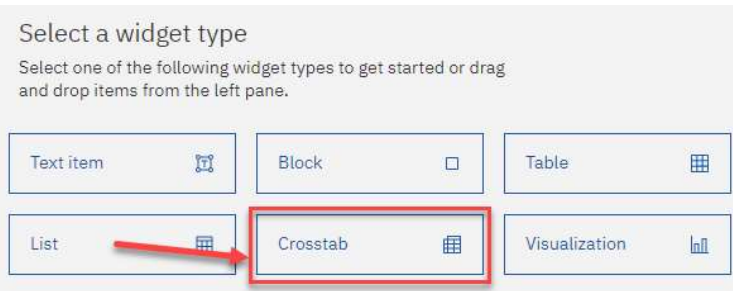


## Create a Crosstab Report

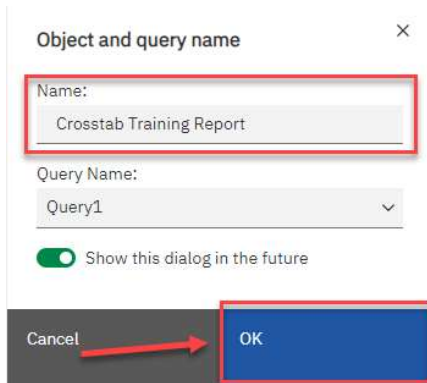
1. Click on the **Hamburger (Open Menu)** in the upper left corner.
2. Click on **+ New**.
3. Click on **Report**.



4. Double click on **Blank**.
5. Select **Crosstab**. Crosstab reports are good for summarizing data like a pivot table.

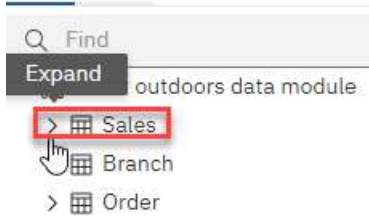


6. Update the Name of the new report to **Crosstab Training Report** and click **OK**.

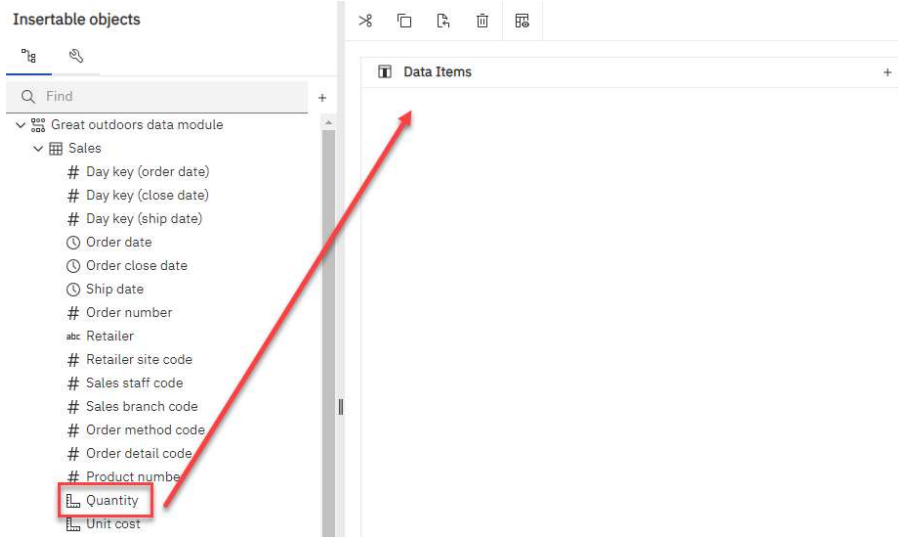


7. Select the package by clicking on the blue **Select a source** button at the bottom of the screen or the **small plus sign** towards the top.
8. Navigate to **Team Content > Samples > By feature > Core > Data > Great outdoors data module**.
9. Once **Great outdoors data module** is highlighted, select **Open**.
10. Go to Query1 by clicking the **arrow next to Report** in the Authoring Tool Application Bar then selecting **Query1**.
11. Bring Data Items into the new crosstab report.

12. **Expand Sales** by clicking the arrow to the left of Sales.

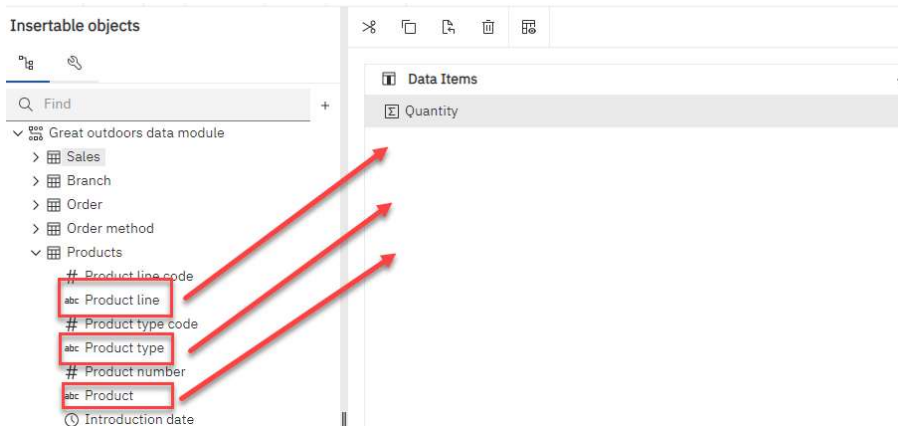


13. Drag **Quantity** from Sales and drop under **Data Items**. Close Sales back up.



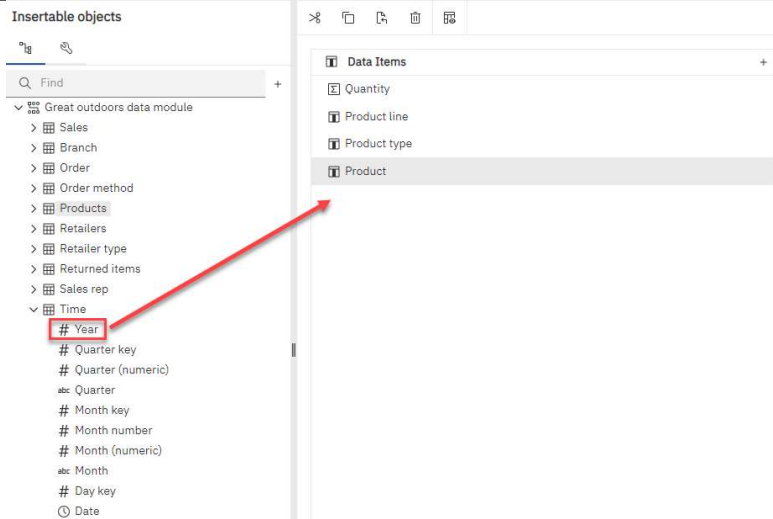
14. **Expand Products** by clicking the arrow to the left of Products.

15. Drag **Product line**, **Product type** and **Product** from Products and drop under **Quantity** under **Data Items**. Close Products.



16. **Expand Time** by clicking the arrow to the left of Time.

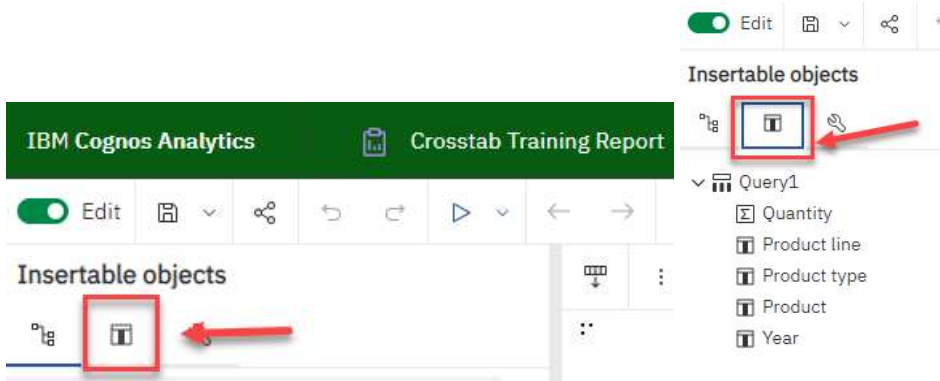
17. Drag **Year** from Time and drop under **Product** under **Data Items**. Close Products.



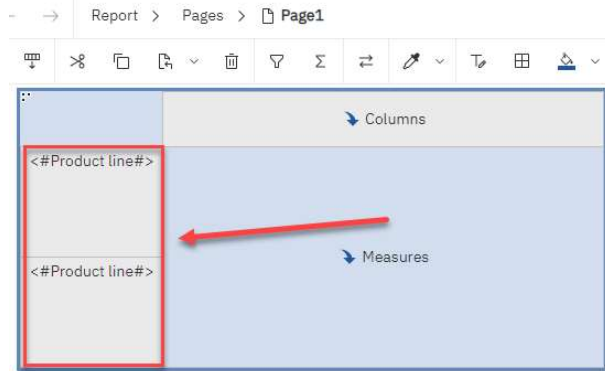
- 18. The Data Items are in the Query, now they need to be on the Report page in the crosstab.
- 19. Go to Page1 by clicking the **arrow next to Report** in the Authoring Tool Application Bar then selecting **Report1**.



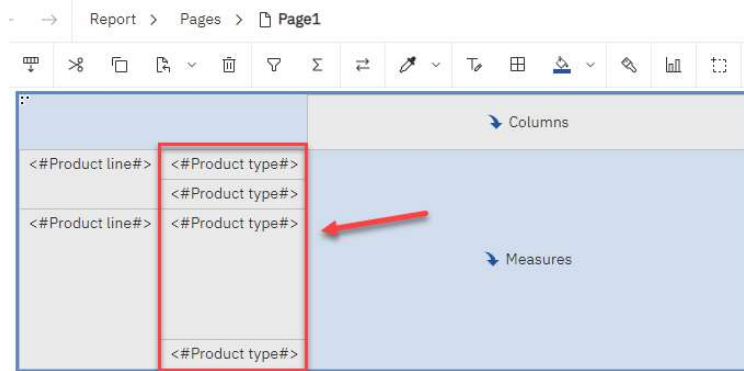
- 20. Now that you are on the report page, the package is listed with the data items but don't pull what you need from the Source tab, instead click on the **Data Items tab** under **Insertable objects** since those are the data items in the query.



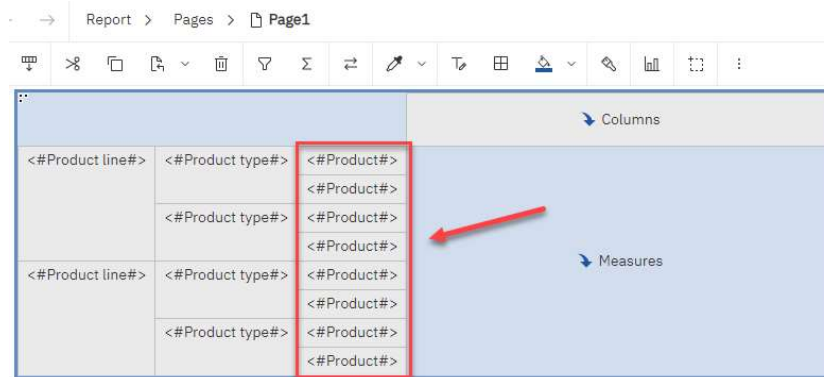
- 21. Drag **Product line** from Query1 under Data items under Insertable objects and drop in **Rows** in the crosstab.



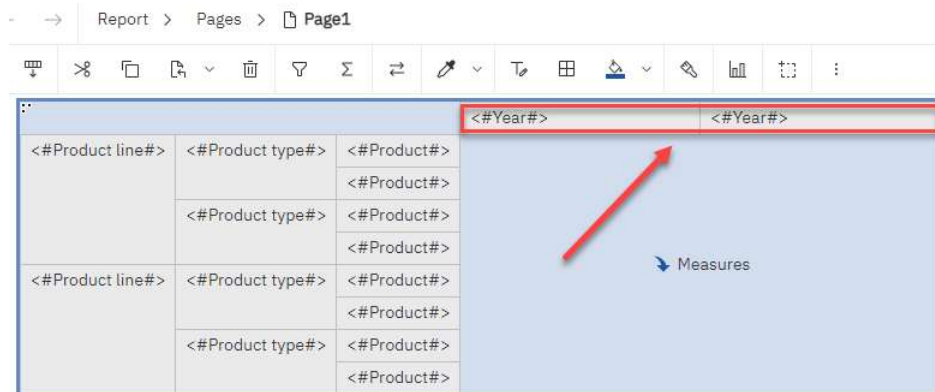
22. Drag **Product type** and drop in **Rows** to the **right of Product line**. You will release the mouse key to drop when you see the blinking black vertical line like you saw when you created the list report.



23. Drag **Product** and drop in **Rows** to the **right of Product type**.



24. Drag **Year** and drop in **Columns**.

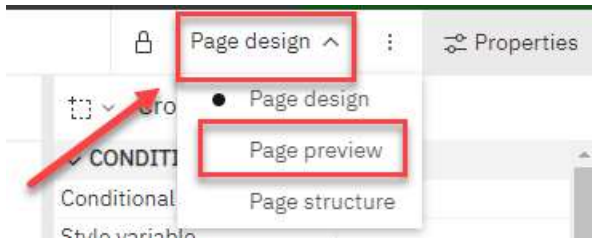


25. Drag **Quantity** and drop in **Measures**.

Report > Pages > Page1

Quantity			<#Year#>	<#Year#>
<#Product line#>	<#Product type#>	<#Product#>	<#1234#>	<#1234#>
		<#Product#>	<#1234#>	<#1234#>
	<#Product type#>	<#Product#>	<#1234#>	<#1234#>
		<#Product#>	<#1234#>	<#1234#>
<#Product line#>	<#Product type#>	<#Product#>	<#1234#>	<#1234#>
		<#Product#>	<#1234#>	<#1234#>
	<#Product type#>	<#Product#>	<#1234#>	<#1234#>
		<#Product#>	<#1234#>	<#1234#>

26. To take a sneak peek at the report before actually running it, go to the **Page explorer**, in the upper right corner, and change Page design to **Page preview**.



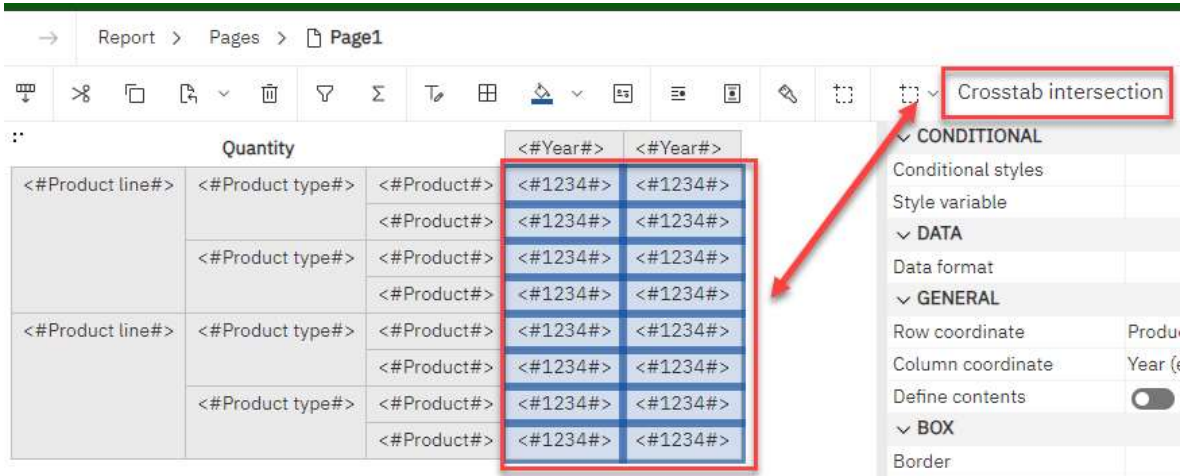
After switching to Page preview the report will show up on the screen with data.

Quantity			2010	2011	2012	2013
Personal Accessories	Eyewear	Polar Sports	23,230	20,483	97,009	88,869
		Zone	1,073,342	1,523,988	1,543,262	815,817
		Trendi	262,555	340,038	152,833	144,499
		Polar Extreme	7,678	3,769	6,881	4,881
		Maximus	185,037	270,126	388,132	293,091
		Inferno	231,556	336,352	550,068	456,724
		Fairway	688,737	690,325	1,004,133	435,643
		Polar Wave	10,735	6,717	7,311	7,366
		Cat Eye	692,329	711,966	628,338	815,887
		Polar Sun	21,942	133,178	158,539	116,551
		Polar Ice	21,760	29,102	30,113	30,342
		Dante	446,413	499,198	427,141	228,154
		Retro		113,508	489,863	357,386
		Capri	230,370	211,746	189,037	336,462
	Hawk Eye	122,298	205,044	554,823	442,029	
	Bella	48,428	84,867	126,775	136,620	
	Watches	Mountain Man Extreme	9,007	5,499	7,122	5,891
Venue		289,988	287,090	221,810	135,547	
Mountain Man Deluxe		34,706	26,453	63,573	58,805	
Mountain Man Analog		37,483	91,442	108,906	68,632	

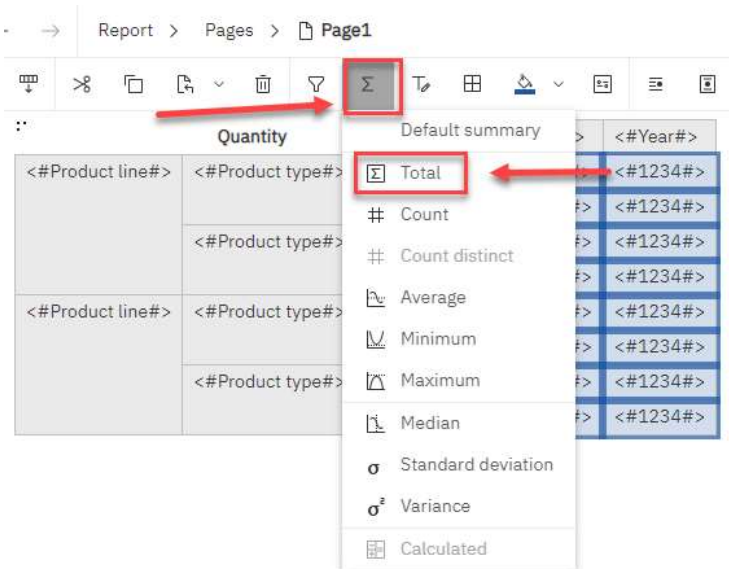


27. Change the **Page explorer** back to **Page design**.

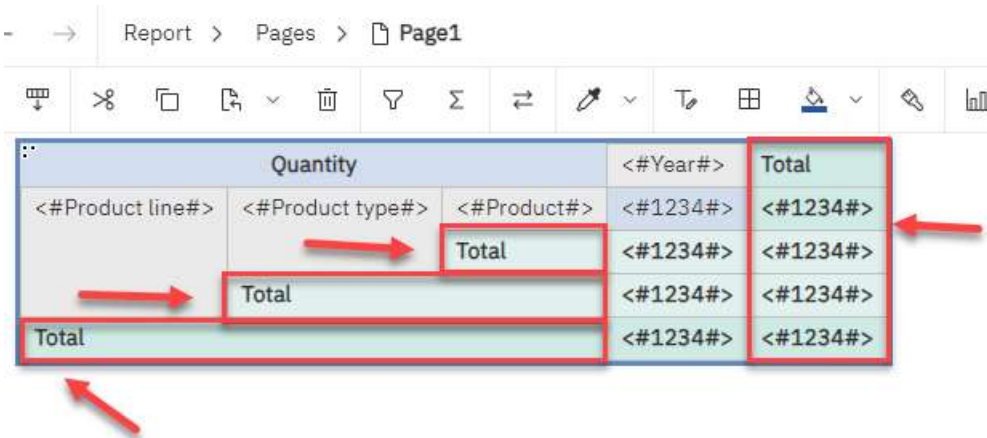
28. Select the **Quantity measure** on the crosstab, which is the Crosstab intersection.



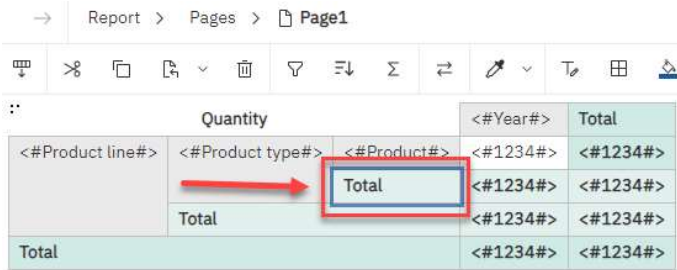
29. Select the **Summarize icon** from the toolbar, then choose **Total**.



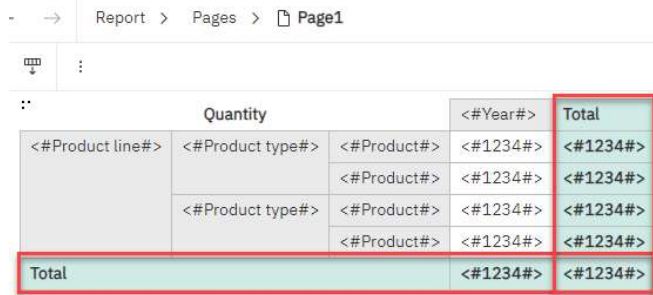
30. Now there are totals on all the data items.



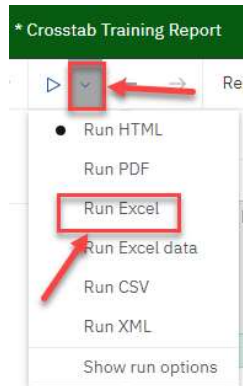
31. If you do not need totals on all the data items, delete them by **selecting the total to be deleted** then click the **delete key on the computer keyboard**.



32. For the training example, only leave the Total on the very bottom and far right.



33. Run the report to Excel, by clicking the **dropdown arrow** to the right of **Run button** on the Application Bar and selecting **Run Excel**.



34. The report will run and the spreadsheet will be downloaded to your computer. Therefore, check the **Downloads folder** on your computer for the file named **Crosstab Training Report**. Double click on 'Crosstab Training Report' to open the spreadsheet.



35. The Excel spreadsheet will contain all the data from the sneak peek and the totals that were kept on the report. There will be the Total on the far right of the spreadsheet. Also if you scroll to the bottom of the spreadsheet, you will see the Total at the bottom.



	Quantity		2010	2011	2012	2013	Total
Personal Accessories	Eyewear	Polar Sports	23,230	20,483	97,009	88,869	229,591
		Zone	1,073,342	1,523,988	1,543,262	815,817	4,956,409
		Trendi	262,555	340,038	152,833	144,499	899,925
		Polar Extreme	7,678	3,769	6,881	4,881	23,209
		Maximus	185,037	270,126	388,132	293,091	1,136,386
		Inferno	231,556	336,352	550,068	456,724	1,574,700
		Fairway	688,737	690,325	1,004,133	435,643	2,818,838
		Polar Wave	10,735	6,717	7,311	7,366	32,129
		Cat Eye	692,329	711,966	628,338	815,887	2,848,520
		Polar Sun	21,942	133,178	158,539	116,551	430,210
		Polar Ice	21,760	29,102	30,113	30,342	111,317
		Dante	446,413	499,198	427,141	228,154	1,600,906
		Retro		113,508	489,863	357,386	960,757
		Capri	230,370	211,746	189,037	336,462	967,615
		Hawk Eye	122,298	205,044	554,823	442,029	1,324,194
		Bella	48,428	84,867	126,775	136,620	396,690
		Watches	Mountain Man Extreme	9,007	5,499	7,122	5,891
Venue	289,988		287,090	221,810	135,547	934,435	
Mountain Man Deluxe	34,706		26,453	63,573	58,805	183,537	
Mountain Man Analog	37,483		91,442	108,906	68,632	306,463	
TX	158,529		171,976	170,547	95,542	596,594	
Mountain Man Combination	15,535		14,548	13,719	7,974	51,776	
Lux	35,754		55,864	62,810	40,345	194,773	
Mountain Man Digital	28,966		30,883	27,337	24,719	111,905	
Legend	105,375		95,064	84,073	46,241	330,753	
Infinity	33,285		107,331	167,667	105,161	413,444	
Kodiak	102,425		94,010	69,527	32,099	298,061	
Sam	189,843		73,591	195,932	245,741	705,107	

36. Save the changes made to the Crosstab Training Report by selecting the **Save Button** on the toolbar.

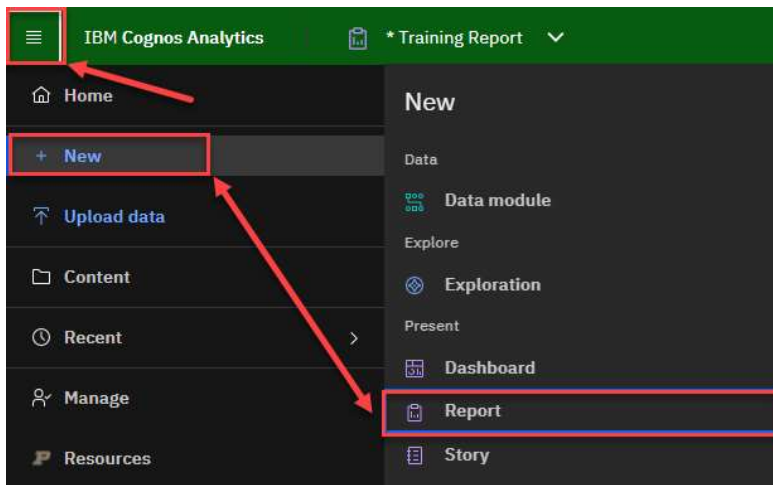


## Appendix: Standard Report Template

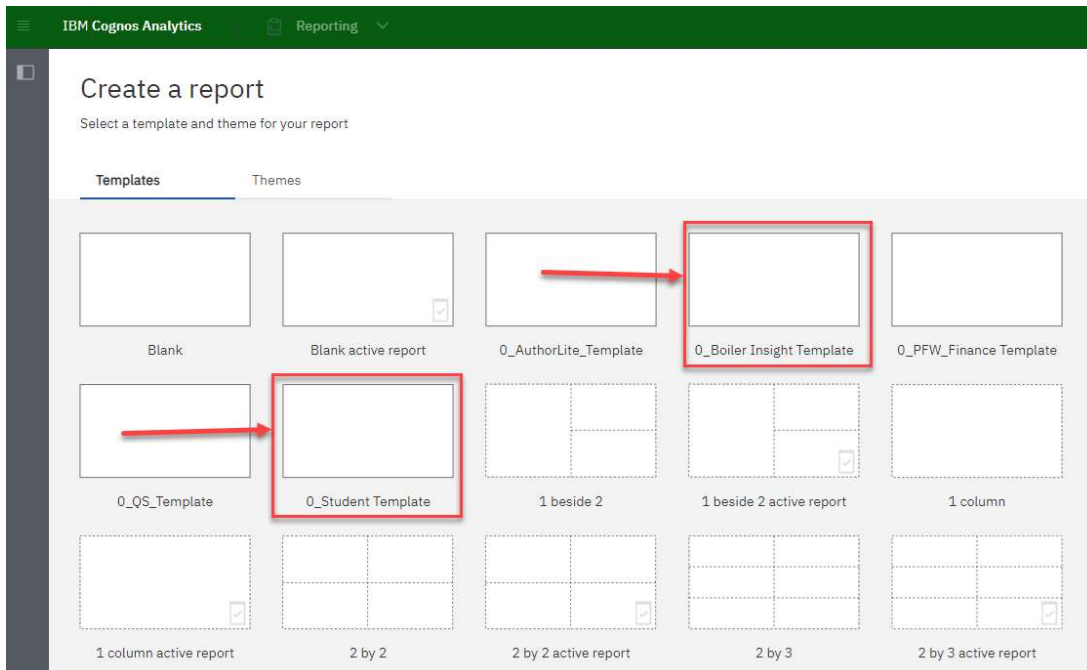
Standard templates were developed by the student and business areas to give reports a standard look and feel. These templates are used for all standard report content. Authors can also use the templates for departmental reporting.

The student standard template is titled “Student Template”. The business standard template is titled “Boiler Insight Template”. Both templates are located under the Template tab when launching a new report.

1. Click on the **Hamburger (Open Menu)** in the upper left corner.
2. Click on **+ New**.
3. Click on **Report**.



4. Make sure you are on the **Templates** tab.
5. Double click on either **0\_Boiler Insight Template** or **0\_Student Template** depending on the standard report to create.

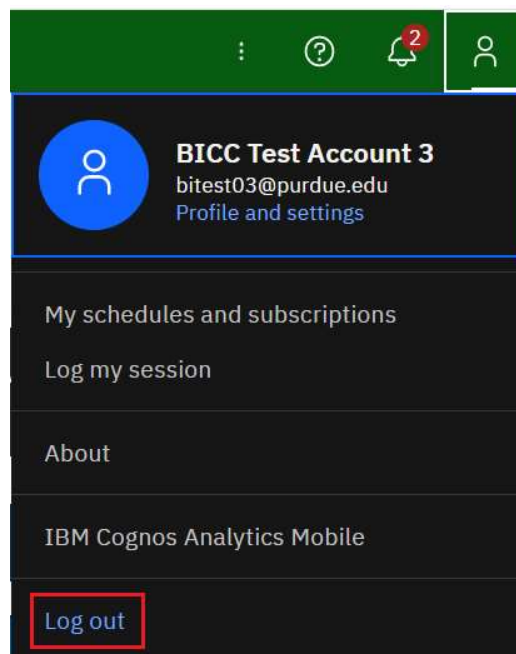


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## Resources

### Logging Off

1. Click the *Personal Menu* and *Log out* to log out of Cognos Analytics.
2. Close the browser to end the session.



### Cognos Authors Links and Resources

<https://www.purdue.edu/bicc/tools/cognos/authors.php>

### Troubleshooting

Users may contact BICC at [bicc@purdue.edu](mailto:bicc@purdue.edu) with questions specific to this manual or for any Cognos questions or issues.

### Feedback on this Document

Questions and feedback specific to this document are welcomed. Please email your comments to [bicc@purdue.edu](mailto:bicc@purdue.edu).