



**BIC**

**Business Intelligence Channel**

# **BIC Cognos Reporting System**

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*An Intermediate Guide to Accessing and Using the  
BIC Cognos Reporting System*

**A Workforce System Training Program  
For all Partners and Staff**

REV 08/2018



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## **BIC Cognos Overview**

### **What is BIC Cognos?**

The Business Intelligence Channel (BIC) Cognos is a reporting tool that is used to extract data from the Ohio Workforce Case Management System (OWCMS).

### **Who can access BIC Cognos?**

Anyone who has a valid OWCMS logon and password has access to BIC Cognos. It is important to remember that the information contained within OWCMS is 'Confidential and Personal Information' (CPI) in nature and can only be viewed or shared as required to perform your official duties. Viewing or sharing of information for other purposes could result in a violation of agency rules and policy concerning the handling of CPI.

### **How does BIC Cognos work?**

Every night an OWCMS batch is run to update the reporting database with all the newly added changes and/or deletions in OWCMS. The database is always (1) one day behind the current date. When BIC Cognos searches for information from the reporting database, this is called a 'QUERY'. A 'QUERY' is done by selecting data fields that are desired from the BIC Cognos 'FOLDERS'. BIC Cognos accesses a system of OWCMS data tables that are connected by 'JOINS'. When the 'QUERIES' are created and ran, BIC Cognos searches for the information and returns it in the form of a usable report.

### **What data can I extract utilizing BIC Cognos?**

BIC Cognos can retrieve data items that have been added to OWCMS. There are some 'QUERIES' or 'REPORTS' that have been set up by Cognos Administrators for public use. These are called 'CANNED REPORTS'. BIC Cognos can also be used to create new reports. This is known as 'AD-HOC REPORTING' (creating your own).

### **Is the information from BIC Cognos accurate?**

BIC Cognos extracts the information that was input into OWCMS. As with any reporting system, the information is only as accurate as the information that was entered. If the data entered into OWCMS is accurate, then the reports from BIC Cognos will be reliable and accurate.

### **Is the information received from BIC Cognos real time?**

All information extracted from BIC Cognos will always be from the previous business day. Every night an OWCMS batch is run to update the reporting database with all the newly added changes and/or deletions in OWCMS.

### **What is the direct link to access BIC Cognos?**

The following URL will directly link to the BIC Cognos reporting tool:

<https://bic.jfs.ohio.gov/>



This symbol may be used throughout this guide. This is a directive used during in-person training sessions to remind the user how a training scenario in this guide may apply in a real-life scenario.



## Introduction to Authoring Mode

**IBM Cognos Authoring Mode** is a web-based report authoring tool that report authors and developers use to build sophisticated, multiple-page, multiple-query reports against multiple databases.

WIA Staff Office	WIA Staff	First Name	Last Name	SSN	WIA Program	Program Start Date	Program End Date	Close Reason	Exit Outcome	Enrolled in Education Flag	Youth School Status at Exit
<Office Name>	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cd>
<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cd>	
<Office Name>	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cd>
<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cd>	

**Explorer Bar:** Hover the pointer over the following the icons on the **Explorer Bar** to work with different parts of the report:

**Home:**  The **Home** icon takes the user back to the **IBM Cognos Analytics** dashboard.

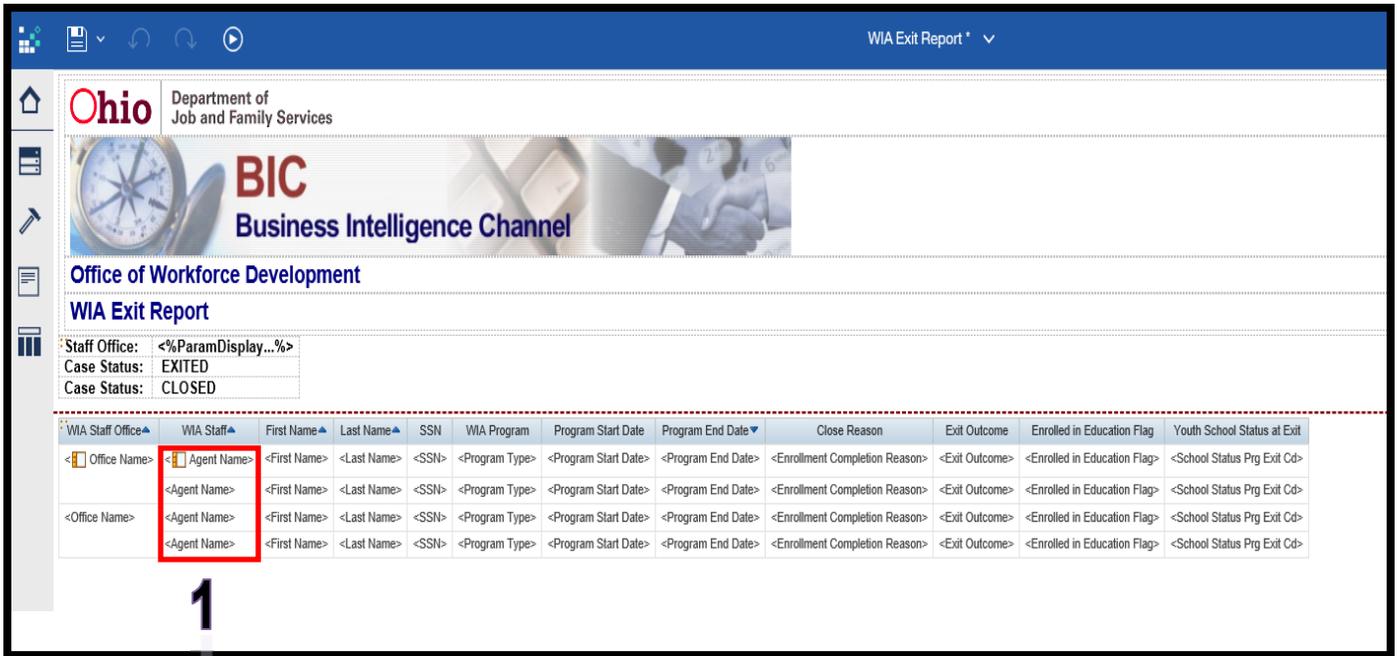
**Data Explorer:**  The **Data Explorer** contains objects that the user can add to a report. Objects can be added to a report by dragging them to the work area. The **Data Explorer** contains the following tabs: **Source** and **Data items**. The **Source** tab contains items from the package (OWCMS) selected for the report, such as data items and calculations. The **Data items** describes the queries created in the report.

**Toolbox Explorer:**  The **Toolbox Explorer** contains a variety of objects that the user can add to the report, such as text items, tables, and graphics.

**Pages Explorer:**  The **Pages Explorer** is utilized to view or create new report pages and prompt pages or to create and modify classes.

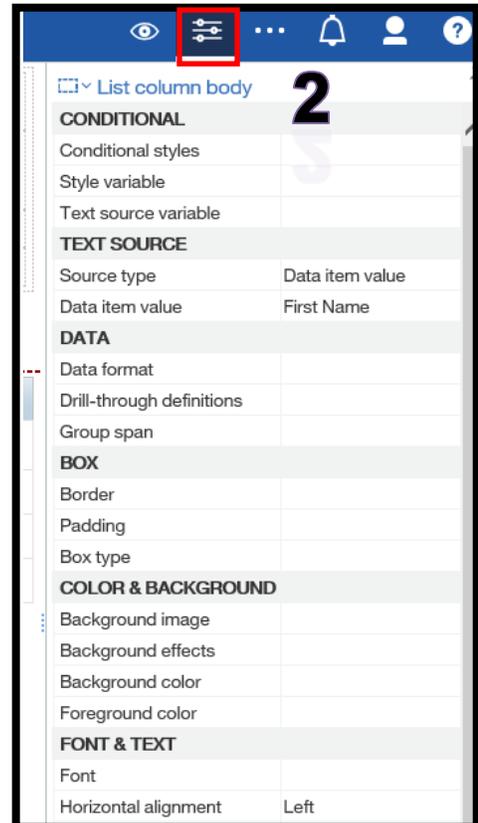
**Query Explorer:**  The **Query Explorer** is utilized to create or modify queries in relational reporting or multidimensional reporting and to perform complex tasks, such as defining union joins and writing SQL statements.

# Introduction to Authoring Mode



1) **Work Area**– the work area contains the objects that are utilized for the report when ran.

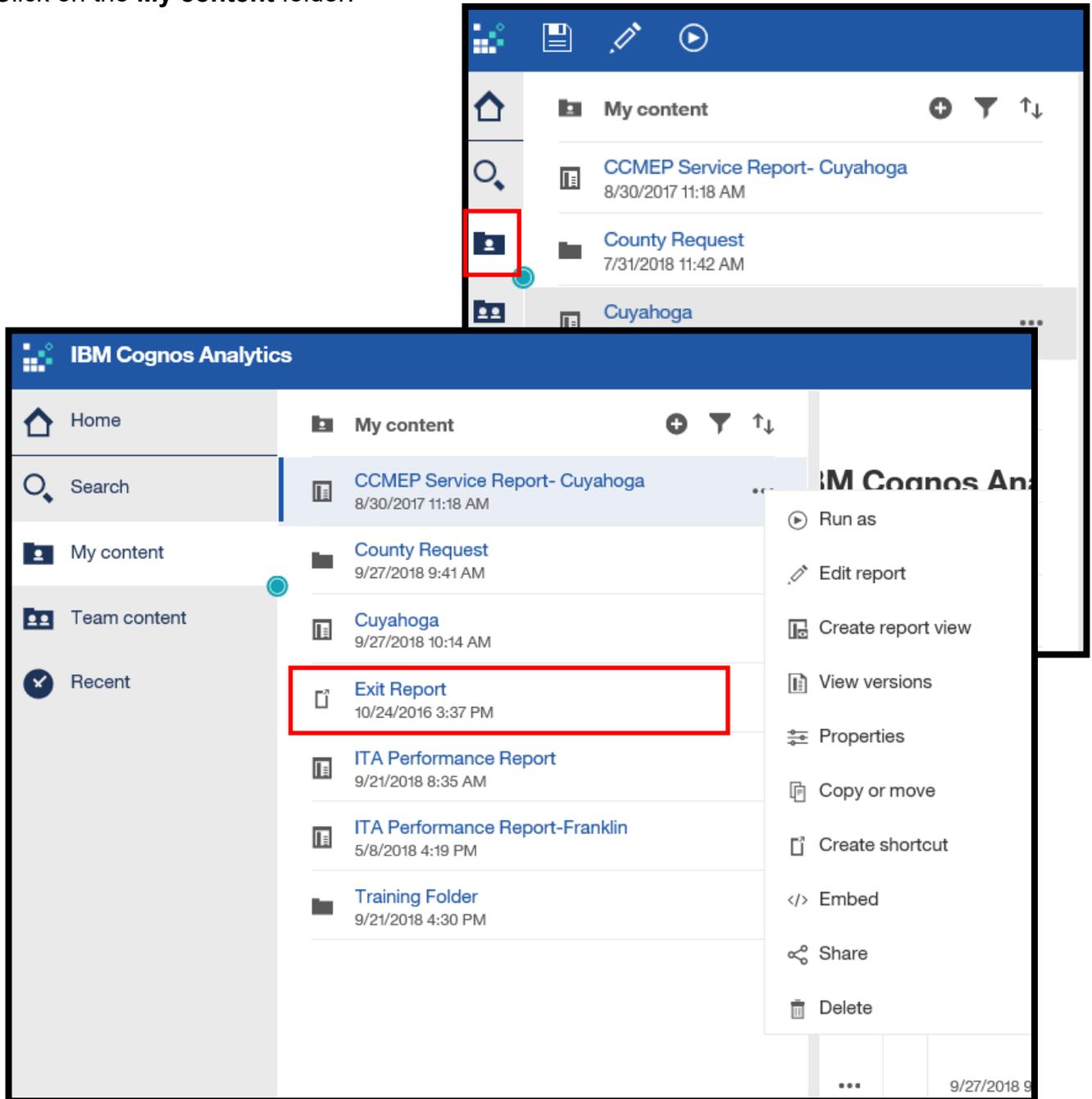
2) **Properties Pane**– The **Properties** pane lists the properties that the user can set for an object in a report.



## Open a Report in Authoring Mode

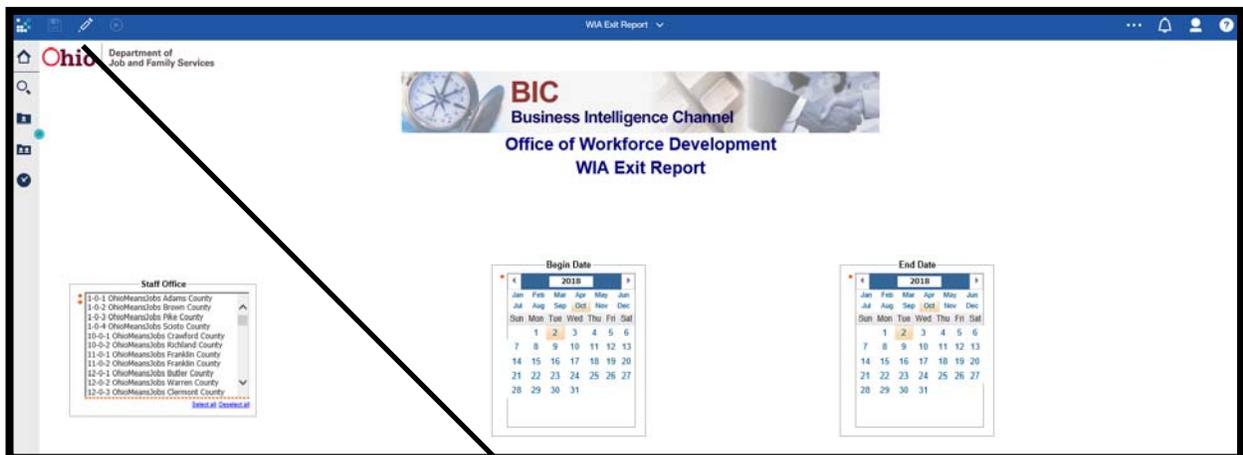
From My content/Team content

5) Click on the **My content** folder.



2) Click on the blue text of the report you would like to edit in **Authoring Mode**. For this scenario, click on the **Exit Report**.

3) When the **Prompt** page displays, instead of completing the prompts, click on the **Pencil** icon in the left corner of the screen.



3) The **Prompt** page will display. Complete the required prompts and click the **OK** button to ensure that the updated reporting package is available within the report.

*\*The information you select here has no real bearing on the report you will create. This is just to ensure the reporting tool is valid.*

New report - Internet Explorer

### Prompt

Provide values for the report you are about to run.

Program End Date (Begin Date)

Program End Date (End Date)

Office Name

- 1-0-1 OhioMeansJobs Adar
- 1-0-2 OhioMeansJobs Brov
- 1-0-3 OhioMeansJobs Pike
- 1-0-4 OhioMeansJobs Scio
- 10-0-1 OhioMeansJobs Cra
- 10-0-2 OhioMeansJobs Ric
- 11-0-1 OhioMeansJobs Fra
- 11-0-2 OhioMeansJobs Fra

[Select all](#) [Deselect all](#)

OK Cancel

IBM Cognos Analytics - Reporting

**i** The package has been updated. The report was updated and validated successfully based on the updated package.

OK

4) Click **OK** when the Package Updated and Validated notification box appears.

5) The report will now open in **Authoring Mode**, which allows the user to modify the report.

Ohio Department of Job and Family Services  
**BIC**  
 Business Intelligence Channel  
 Office of Workforce Development  
**WIA Exit Report**

Staff Office: <%ParamDisplay...%>  
 Case Status: EXITED  
 Case Status: CLOSED

WIA Staff Office	WIA Staff	First Name	Last Name	SSN	WIA Program	Program Start Date	Program End Date	Close Reason	Exit Outcome	Enrolled in Education Flag	Youth School Status at Exit
<Office Name>	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cd>
<Office Name>	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cd>
<Office Name>	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cd>
<Office Name>	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cd>

6) Click on the drop-down arrow next to the report name **WIA Exit Report** to close the report.

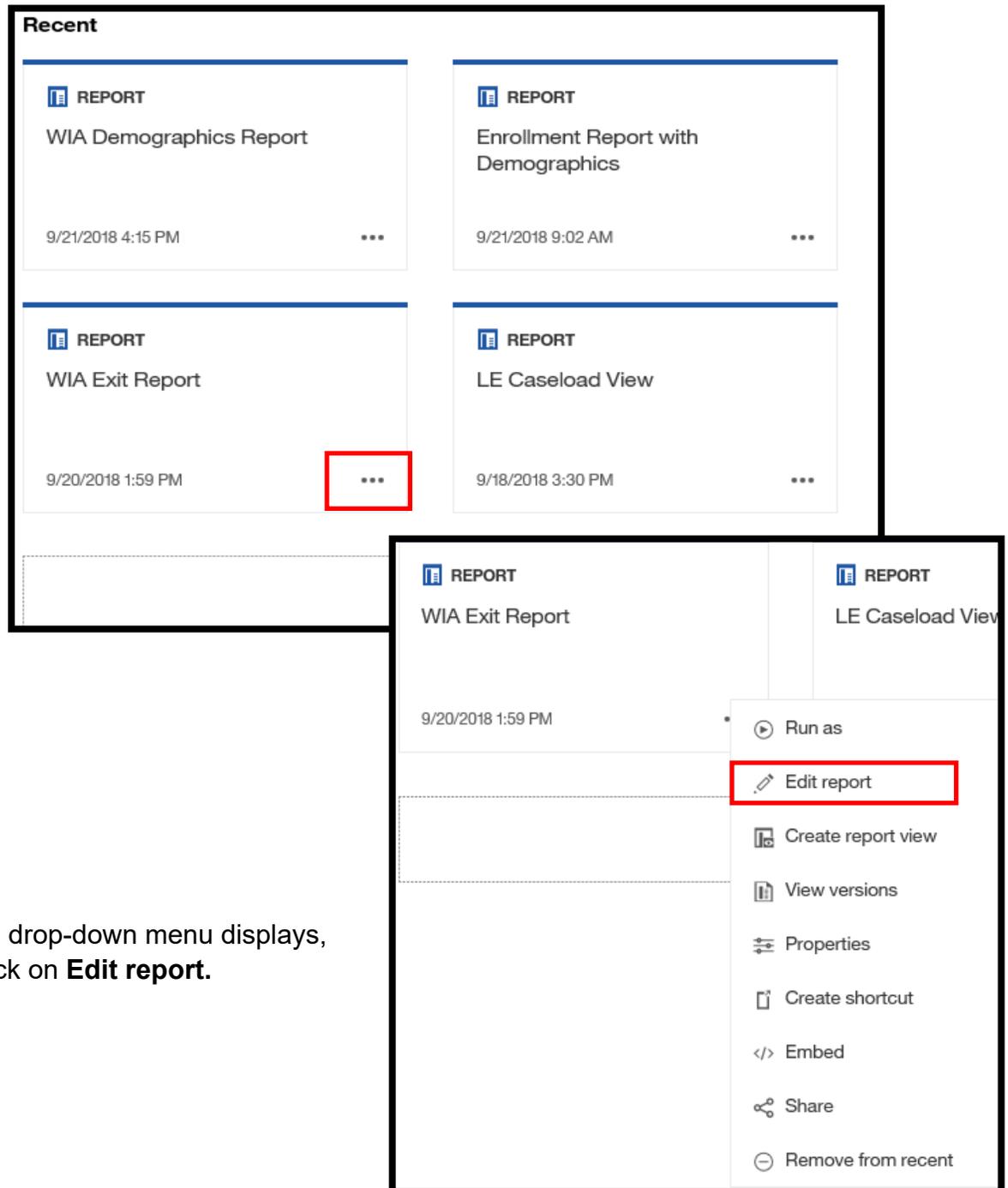


*An asterisk next to the report name in the **Cognos Connection Toolbar** indicates that the report contains unsaved changes.*

## Open a Report in Authoring Mode

### From Recent

- 1) Click on the **three dot icon** of the **WIA Exit Report** on the **Recent** section of the **IBM Cognos Analytics Dashboard**.



- 2) When the drop-down menu displays, click on **Edit report**.

3) The **Prompt** page will display. Complete the required prompts and click the **OK** button to ensure that the updated reporting package is available within the report.

*\*The information you select here has no real bearing on the report you will create. This is just to ensure the reporting tool is valid.*

New report - Internet Explorer

### Prompt

Provide values for the report you are about to run.

Program End Date (Begin Date)

2018

Jan	Feb	Mar	Apr	May	Jun	
Jul	Aug	Sep	Oct	Nov	Dec	
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

12 : 00 AM

Program End Date (End Date)

2018

Jan	Feb	Mar	Apr	May	Jun	
Jul	Aug	Sep	Oct	Nov	Dec	
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

12 : 00 AM

Office Name

- 1-0-1 OhioMeansJobs Adar
- 1-0-2 OhioMeansJobs Brov
- 1-0-3 OhioMeansJobs Pike
- 1-0-4 OhioMeansJobs Scio
- 10-0-1 OhioMeansJobs Cra
- 10-0-2 OhioMeansJobs Ric
- 11-0-1 OhioMeansJobs Fra
- 11-0-2 OhioMeansJobs Fra

Select all Deselect all

OK Cancel

IBM Cognos Analytics - Reporting

*i* The package has been updated. The report was updated and validated successfully based on the updated package.

OK

4) Click **OK** when the Package Updated and Validated notification box appears.

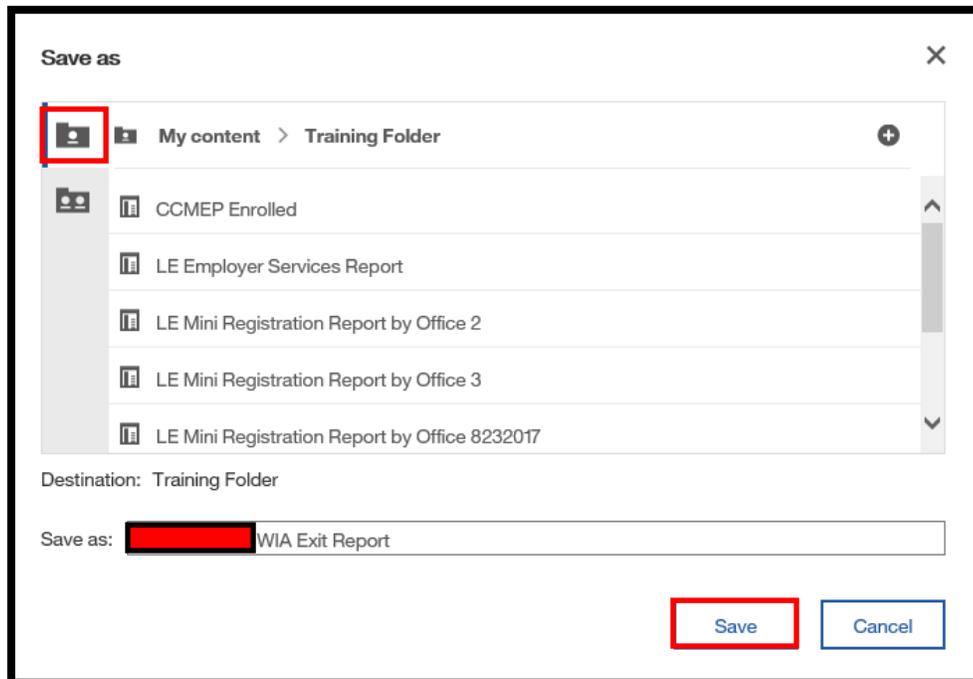
5) The report will now open in **Authoring Mode**, which allows the user to modify the report.

WIA Staff Office	WIA Staff	First Name	Last Name	SSN	WIA Program	Program Start Date	Program End Date	Close Reason	Exit Outcome	Enrolled in Education Flag	Youth School Status at Exit
<Office Name>	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cd>
<Office Name>	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cd>
<Office Name>	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cd>
<Office Name>	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cd>

## Save a Report

1) To **Save** the report, click the small arrow by the **Floppy Disk** icon in the left-corner of the screen to drop-down a menu. When the menu displays, select **Save as** from the menu.

2) A pop-up box displays prompting the user to **Save as**. Select the **My content** folder and click on **Training Folder**. (Or, select the destination where you intend to save the report)



3) Click the **Save** button.

The report is now saved in the **My content** folder.



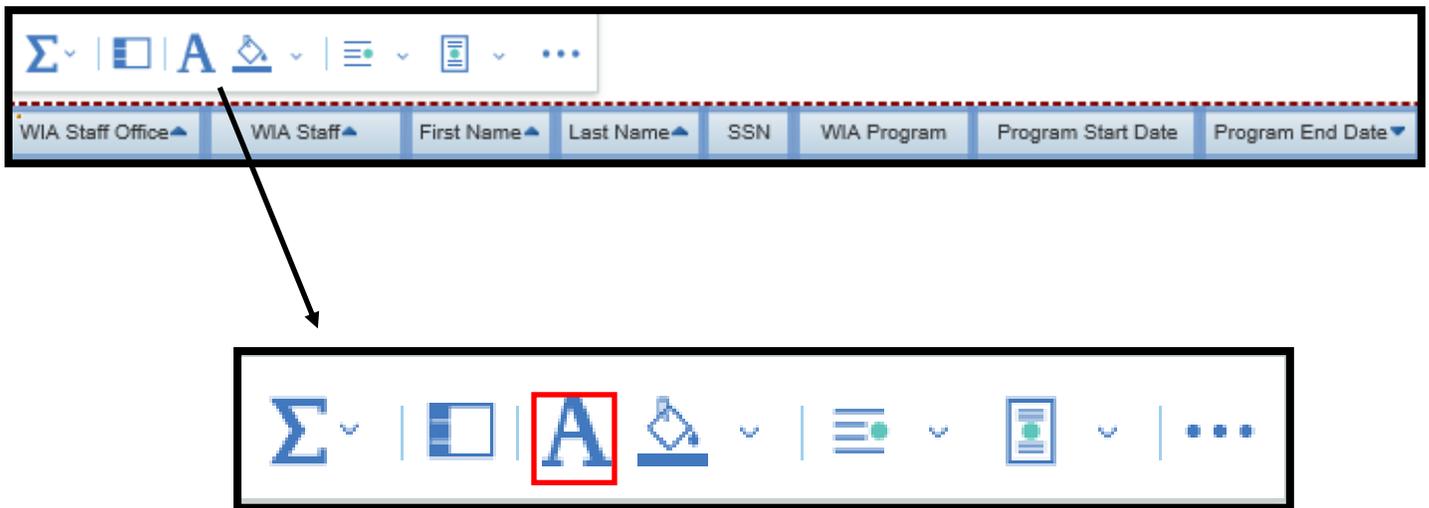
*Note- an asterisk next to the report name as indicated above on the **Cognos Connection Toolbar** indicates that the report contains unsaved changes.*

## Format a Report

There are several formatting options in Cognos that allow the user to edit the fields in a report.

### Change the Heading Format

1) With the **WIA Exit Report** still open in **Authoring Mode**, click on the report heading **WIA Staff Office** and press the **Ctrl** key on the keyboard. Click all of the other report heading titles.



2) A box appears (either above or below the headings). Select the **A** icon to open the font options menu.

3) As the **Font** options box displays, the user can select the desired font.

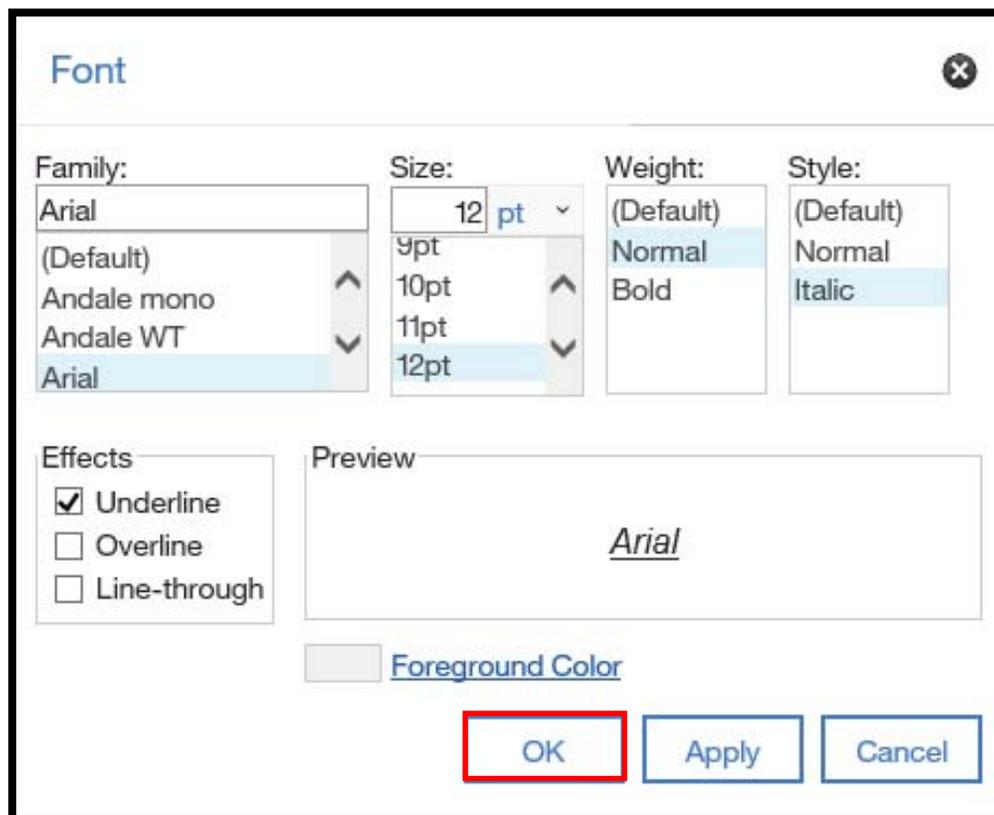
**Family:** Refers to the various typefaces the user is able to select.

**Size:** The size of the text can be changed.

**Weight:** The user has the option to bold the text.

**Style:** The user can italicize the text.

**Effects:** An **Underline**, **Overline**, or **Line-Through** can be added to the text.



7) Click **OK**.

*As the user makes selections in the **Font** options box, their selections will display in the **Preview** pane.*

## Change the Body Format

- 1) Highlight each report item in the Report body clicking on the **Office Name** report body item and then holding down the **Ctrl** key on the keyboard and clicking each report body item.

WIA Staff Office	WIA Staff	First Name	Last Name	SSN	WIA Program	Program Start Date	Program End Date	Close Reason
<Office Name>	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>
	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>
<Office Name>	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>
	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>

- 2) A pop-up box will display. Select the “**Font**” icon.



- 3) Select the **Font: Family, Size, Weight, and Style.**

- 4) Click **OK.**

## Edit the Report Title

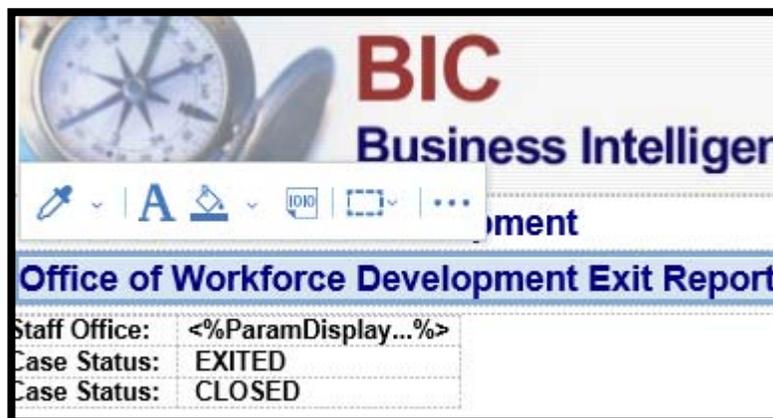


- 1) Select the report title **WIA Exit Report** and right click.



- 2) A pop-up box will display. Click on the **three dot icon** and select **Edit Text**.

- 3) The **Title Text** dialogue box displays. Change the name of the report to: **OWD Exit Report**.



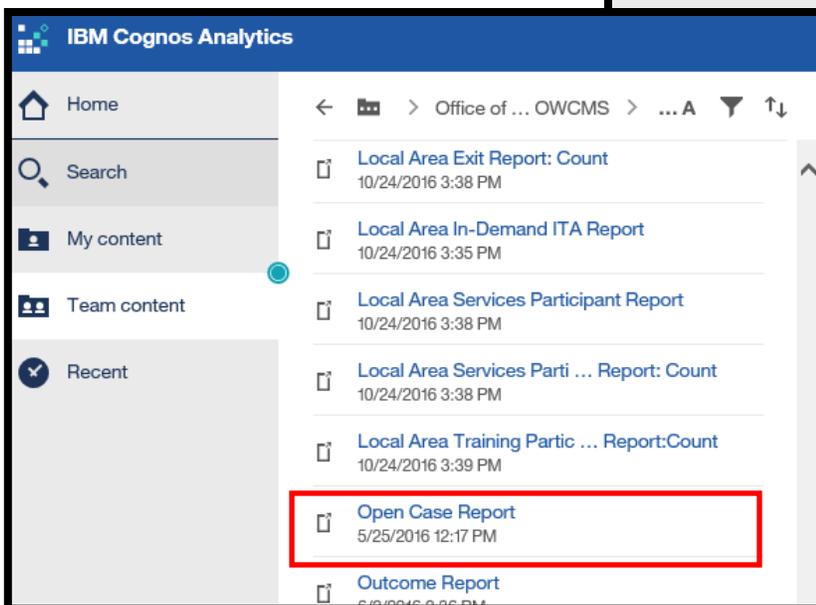
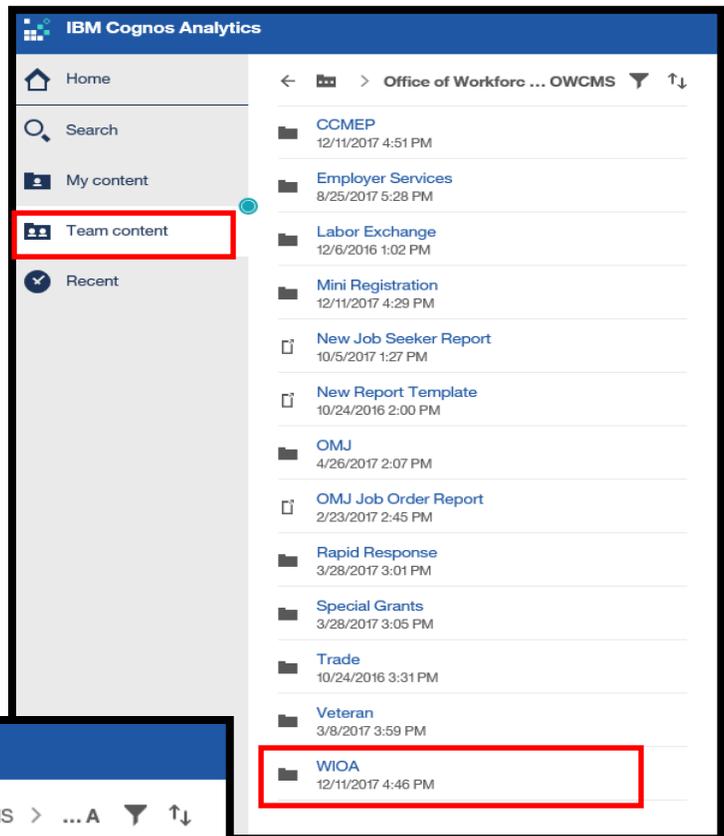
- 4) Click **OK**. The new report title displays.

## Add a Report Item

\*Scenario Description– In this scenario, we are going to imagine that there is a canned report that meets most of our needs, but it is missing one data item that would be very helpful in our reporting needs.

The canned report we use is the **Open Case Report**. This report is useful, but our administrator has requested that we add the **Date of Birth** field to this report.

- 1) Click on the **Team Content** folder and then click on the **Office of Workforce Development: OWCMS** folder.
- 2) When that folder opens, locate and click on the **WIOA** folder.



*\*Refer to this scenario when you want to add a data item to an existing report.*



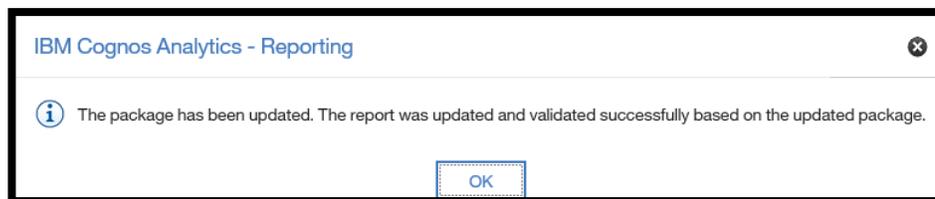
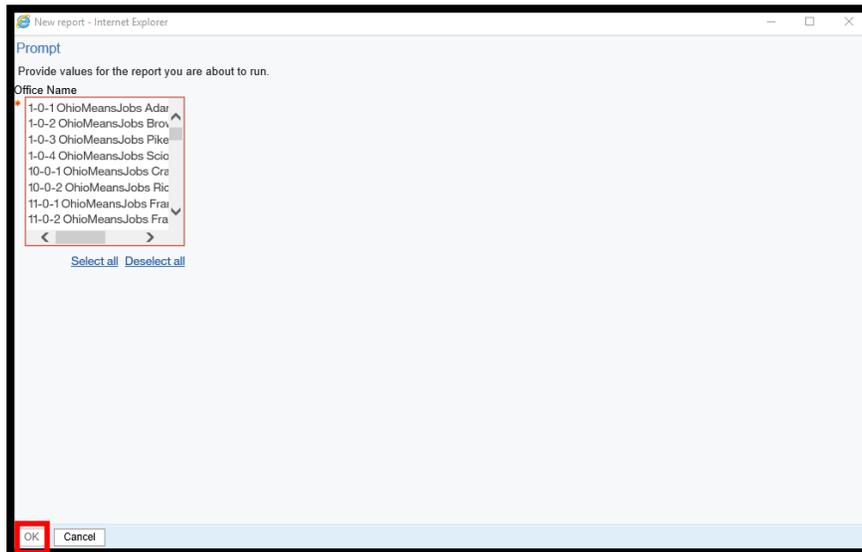
- 3) Locate the **Open Case Report** and click on the blue text.

3) When the **Prompt** page displays, instead of completing the prompts, click on the **Pencil** icon in the left corner of the screen.



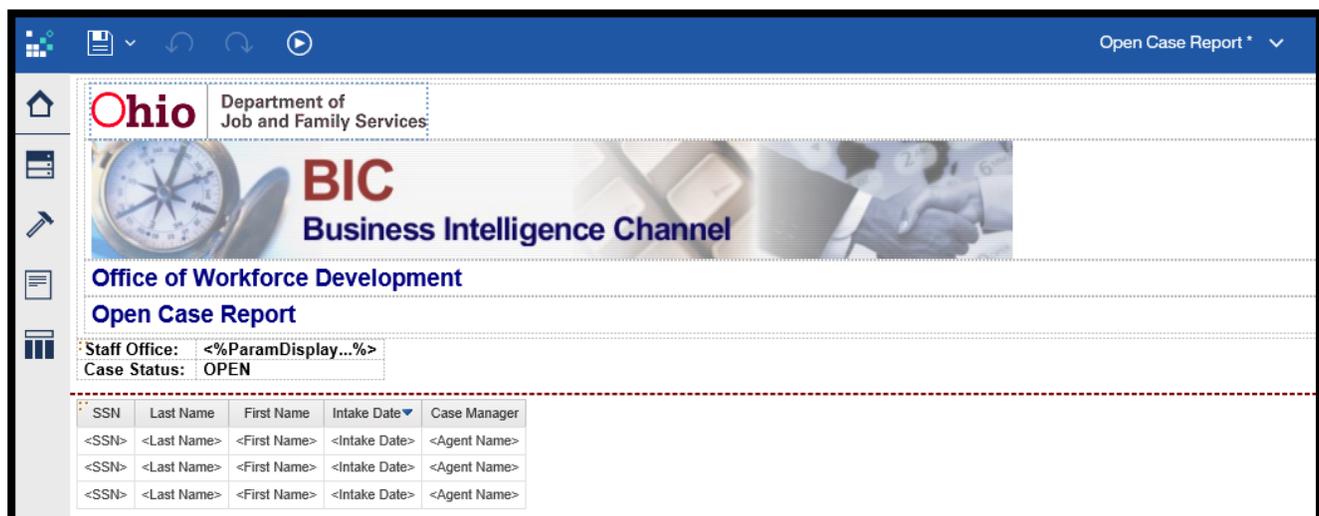
3) When the **Prompt** page displays, click on the desired criteria and click **OK**.

*Remember, this is a prompt to ensure the report criteria is valid.*



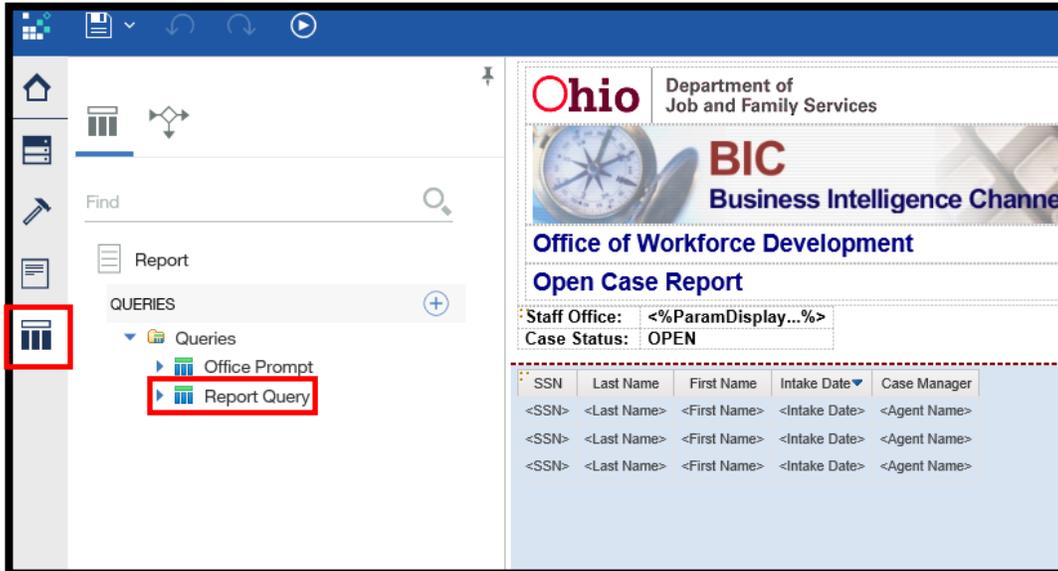
4) The Update and Validate Success notification box will display. Click **OK**.

5) The **Open Case Report** opens in **Authoring Mode**



6) Click on the **Queries Explorer** on the **Explorer Bar**. The **Query Explorer** lists all of the queries for the specific report.

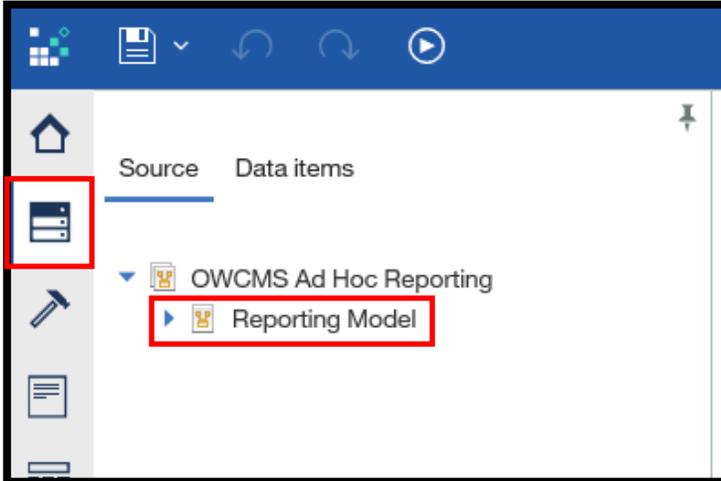
7) Click on the **Report Query** link.



The **Data Items** pane contains the defined fields that can be utilized as report items.

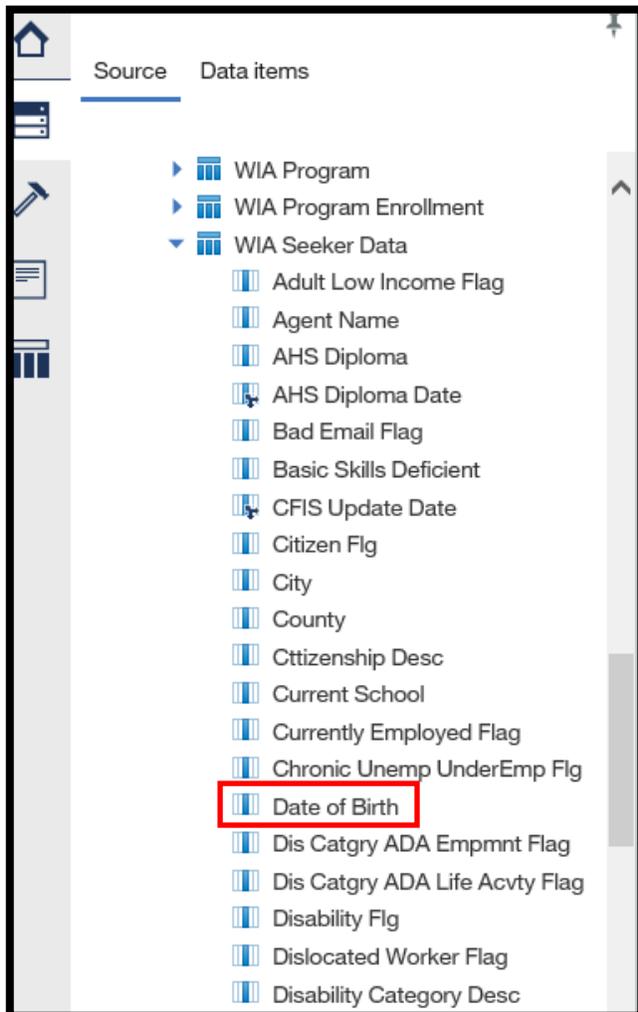
This report contains items from the **WIA Seeker Data** table. This information is important to ensure that you locate the data item you would like to add from the appropriate table. Each table is located within the **Reporting Model** in the **Data Explorer**.

*To find which table the **Data Item** is located in, double-click on each field in the **Data Item** pane.*



8) Click on the **Data Explorer** tab to access the **Reporting Model**.

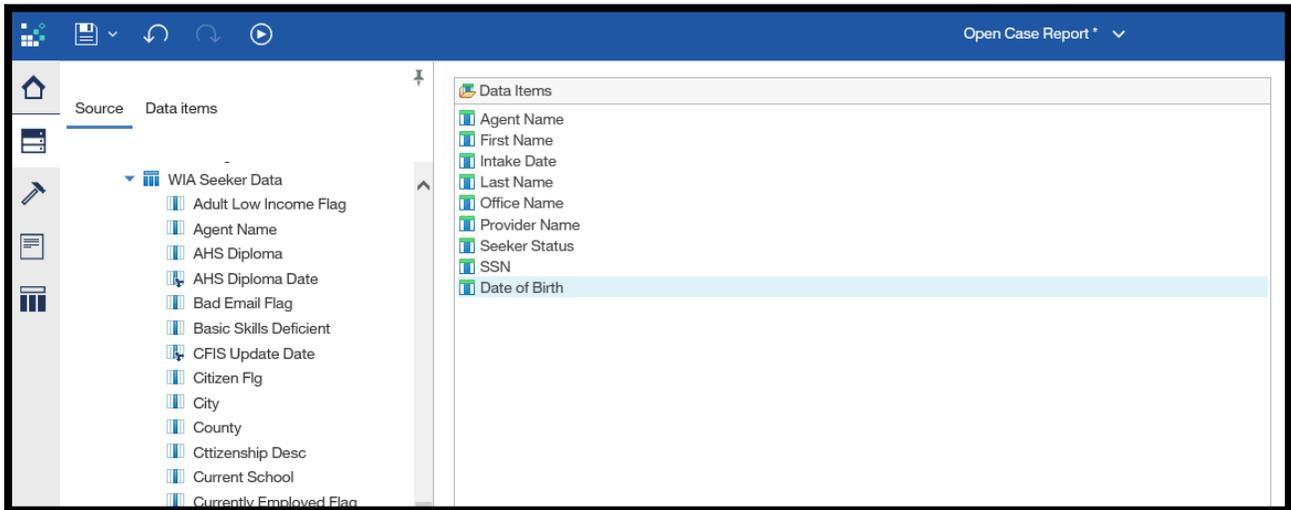
9) Click the down arrow to expand the **Reporting Model** selection for locating the appropriate folder.



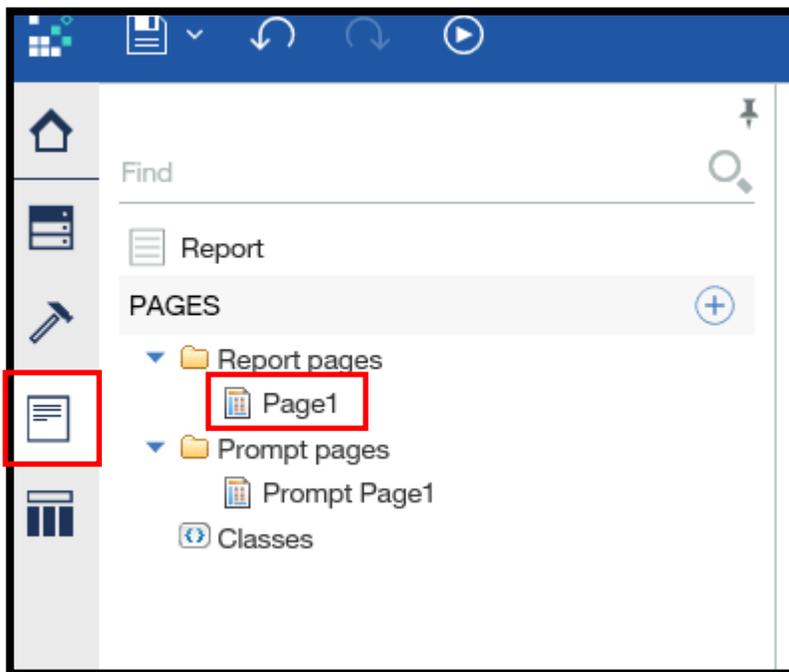
10) Scroll down and click on the **WIA Seeker Data** arrow in the **Content Pane** to expand the folder to display the contained data items.

11) Locate the data item **Date of Birth** and drag and drop the item into the **Data Items Pane**.

The report item **Date of Birth** is now displayed in the **Data Items Pane**.



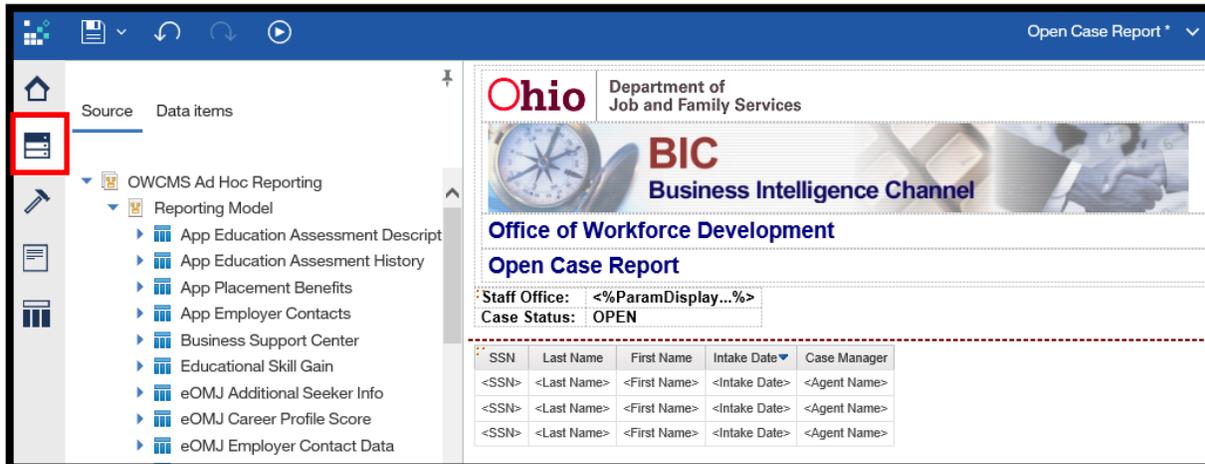
*Now that we have added the data item to our query, we must also add it to the **Report Page** to include the field within the report.*



12) Click on the **Page Explorer**.

13) Click on **Page1**.

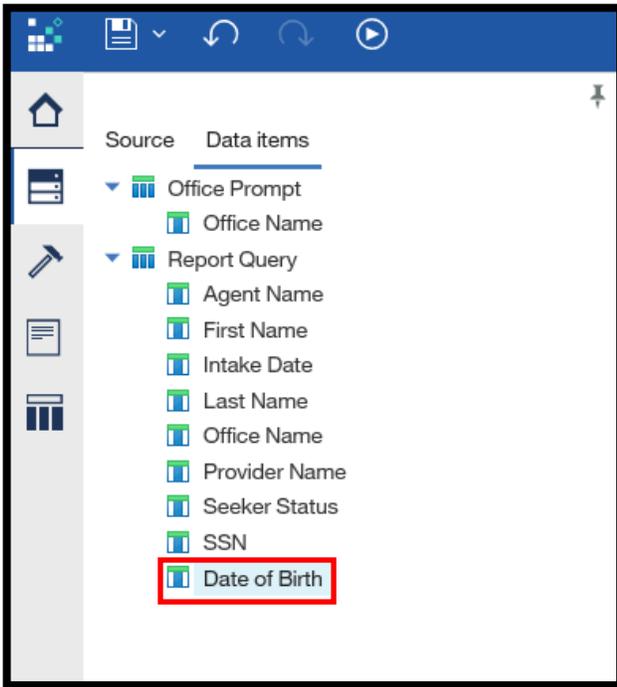
14) When the **Report Page** displays, click on the **Data Explorer** tab to display the **Source** and **Data Items**.



Remember, the **Source (Reporting Model)** is the data fields in OWCMS. We need to add the data item (query) to our report that we have already told the “Source” to look for in the **Query Explorer**. So, when we need to add the data item to the **Report Page**, we must change the tab from **Source** to **Data Items**.



15) Click on **Data Items**.



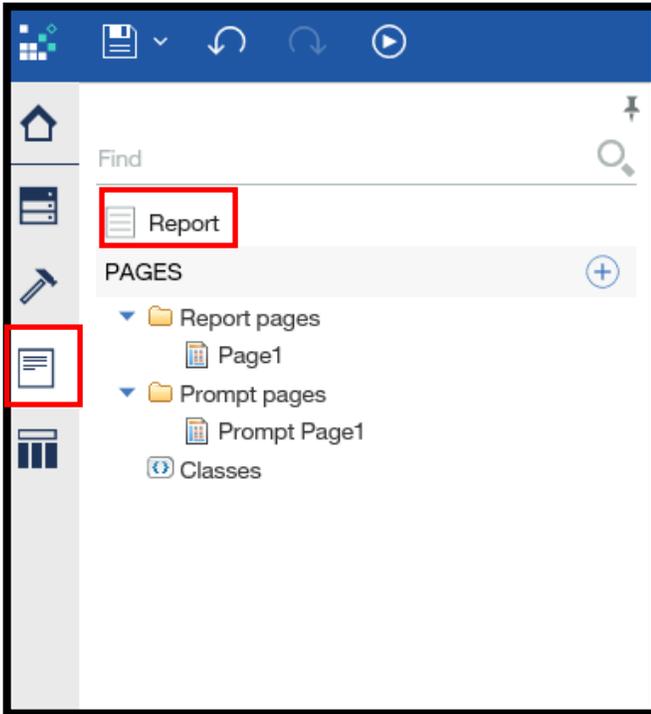
16) Locate the data item **Date of Birth** within the **Data Items** in the **Content Pane**.

17) Drag and drop the data item into the report work area.



## Validate a Report

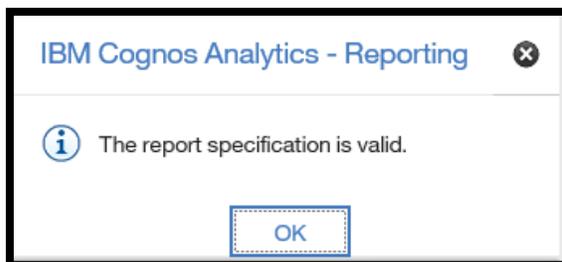
It is always a good idea to validate the report you are with following every major action you take—creating a detail filter, adding a data item, etc. The report validation tool checks the report’s queries for errors.



- 1) Click on the **Pages Explorer** icon.
- 2) Click **Report**.



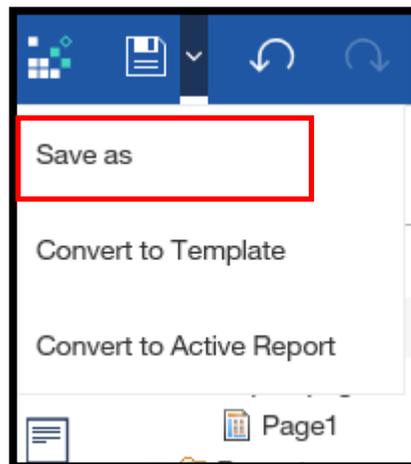
- 3) The **Report overview** page displays. 4) Click on **Validate Now**.



*The report validation will run against the report’s queries. The results will be shown in a pop-up window. If an error is displayed, review the changes you have made and repair the erroneous portion of the query.*

- 5) Click **OK** on the Validation pop-up message.

After validating, **Save as** the report into the **My content** folders.



## Create a Detail Filter

**Detail Filters** can be added to the report query in order to focus a report and minimize processing time by excluding unwanted data. For example, you can filter data to display only customers who have a status of “Open”. When you run the report, you will only see the filtered data.

\*Scenario Description– In this scenario, we are going to imagine that we are using the **LE Services Report**, which shows us all Labor Exchange services received by participants.

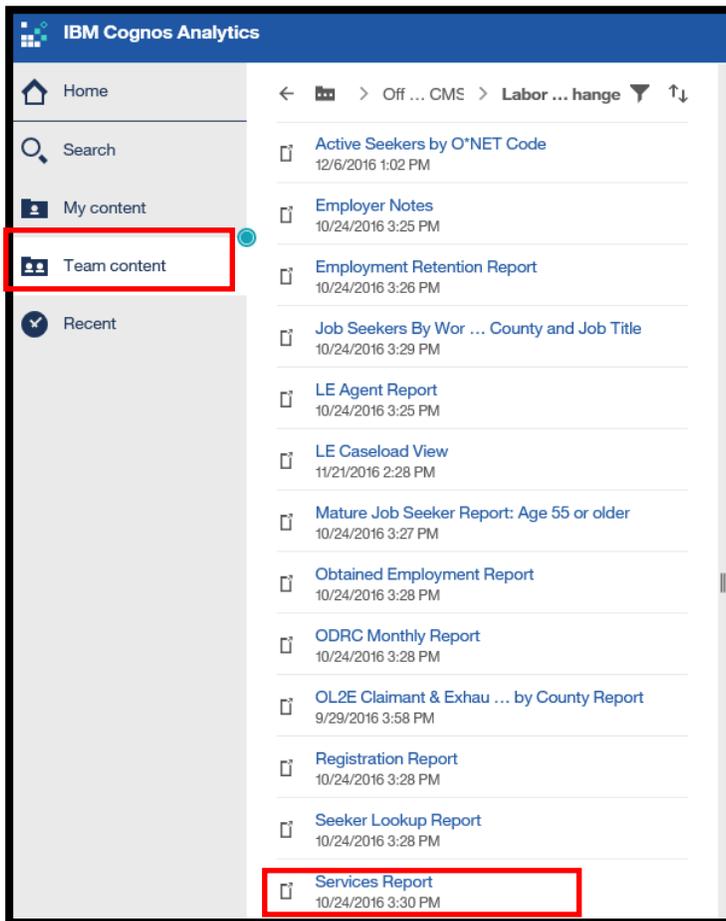
Our supervisor has asked for a report that only displays participants who received the service **Attended Job Search Workshop**.

We will create a **Detail Filter** on the **LE Services Report** to only display participants who received the service **Attended Job Search Workshop**.

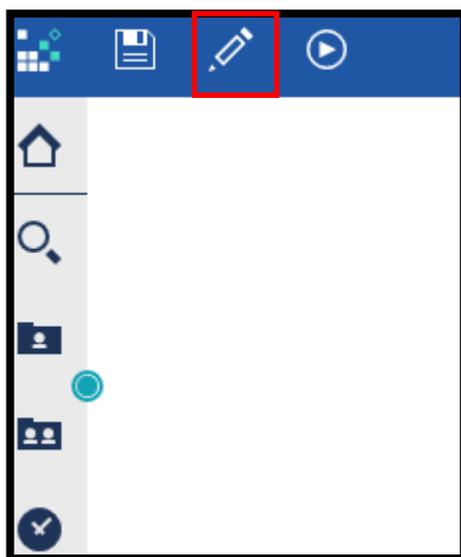
*\*Refer to this scenario when you want to filter unwanted information out of your report and only have your report display specific information. This will save you time filtering the unwanted information out in Microsoft Excel.*



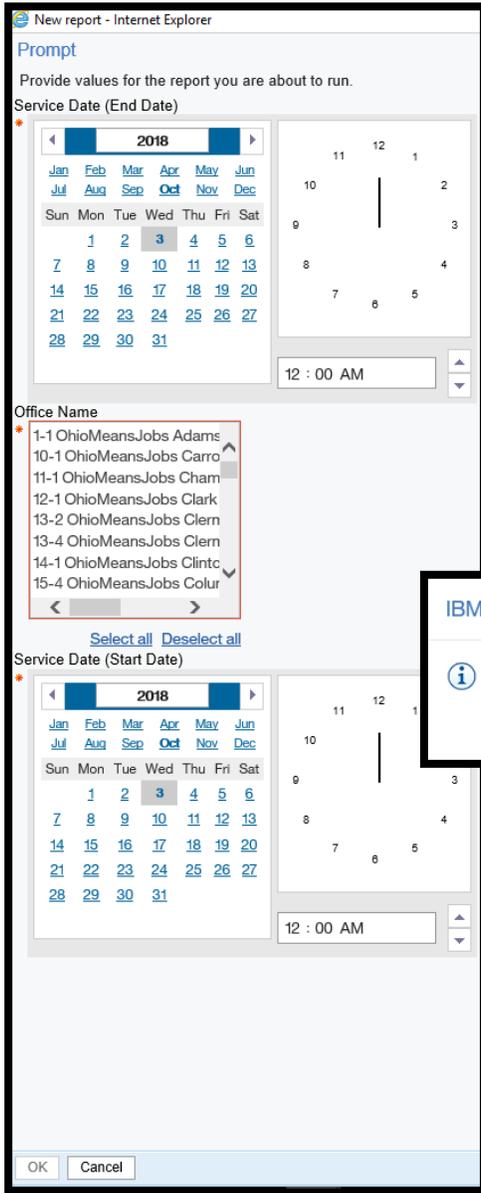
1) Locate the **Services Report** in the **Labor Exchange** folder.



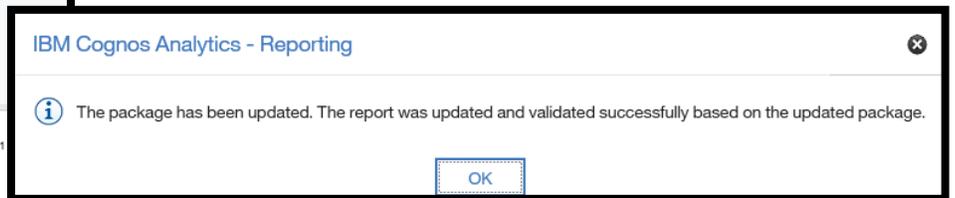
2) Click on the blue text of the **Services Report**.



3) Click on the **Pencil** icon to edit in **Authoring Mode**.

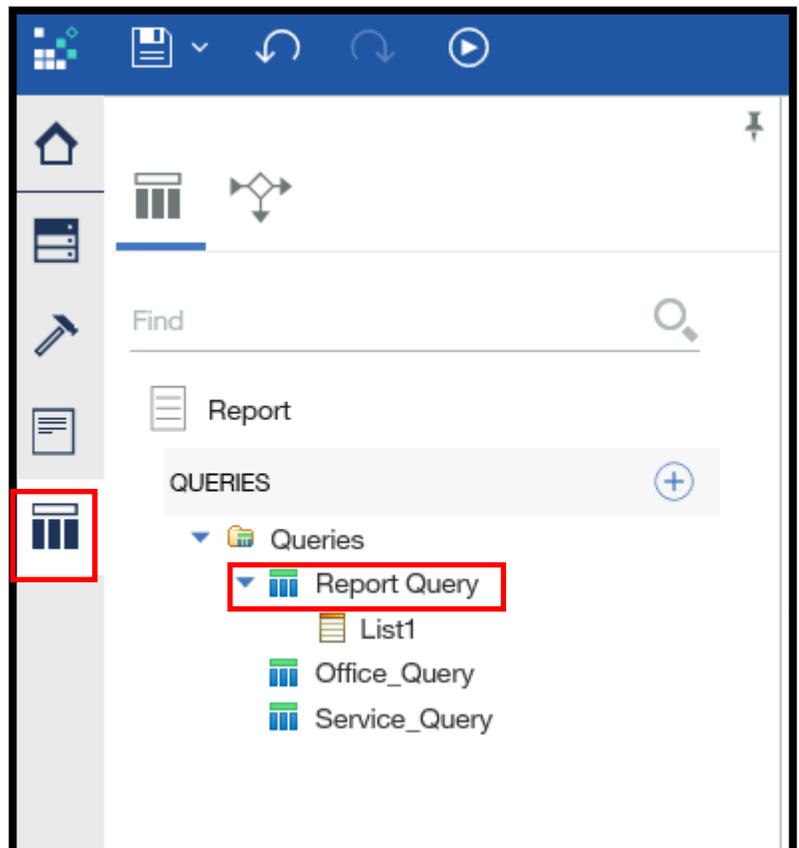


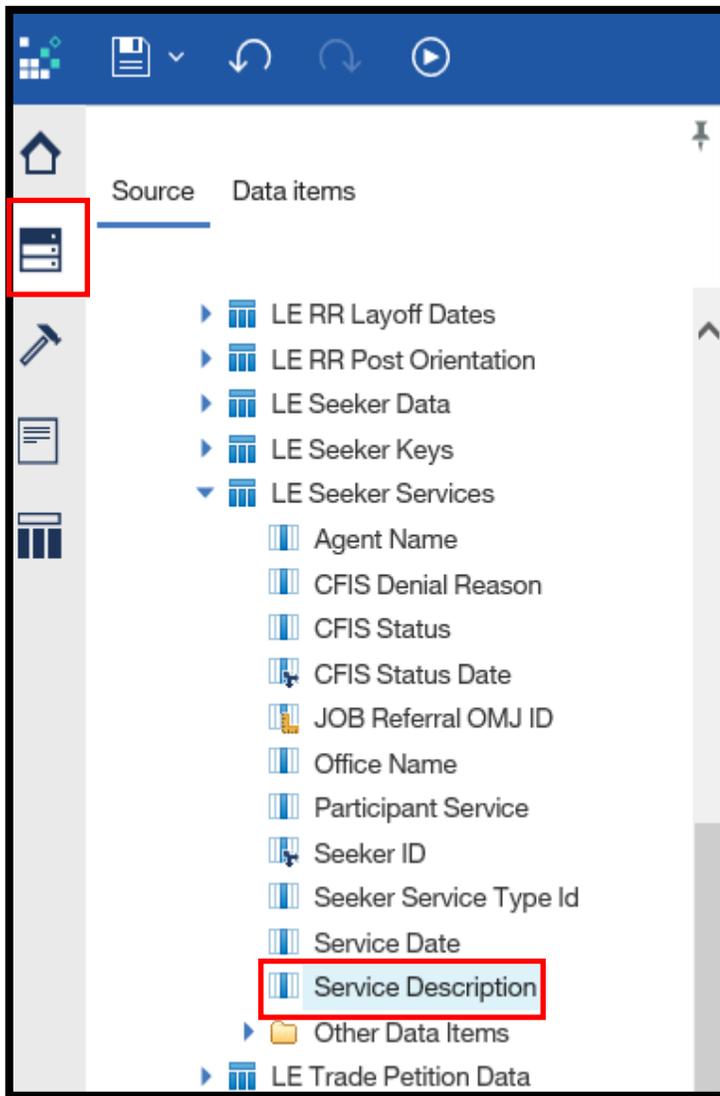
4) Complete the required **Prompts** to **Validate** the report.



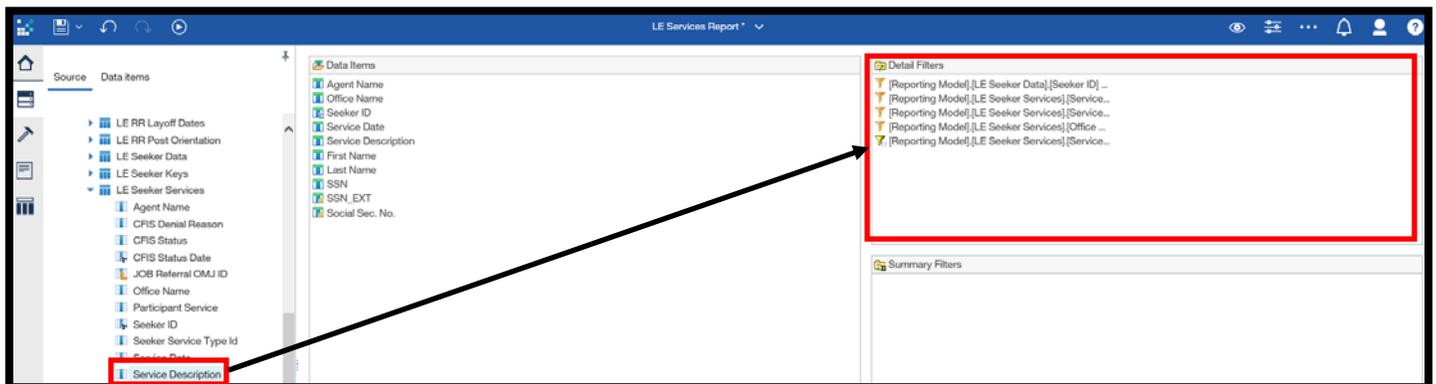
5) Click **OK** on the Update and Validate pop-up.

6) Click on the **Queries Explorer** and click on **Report Query**.



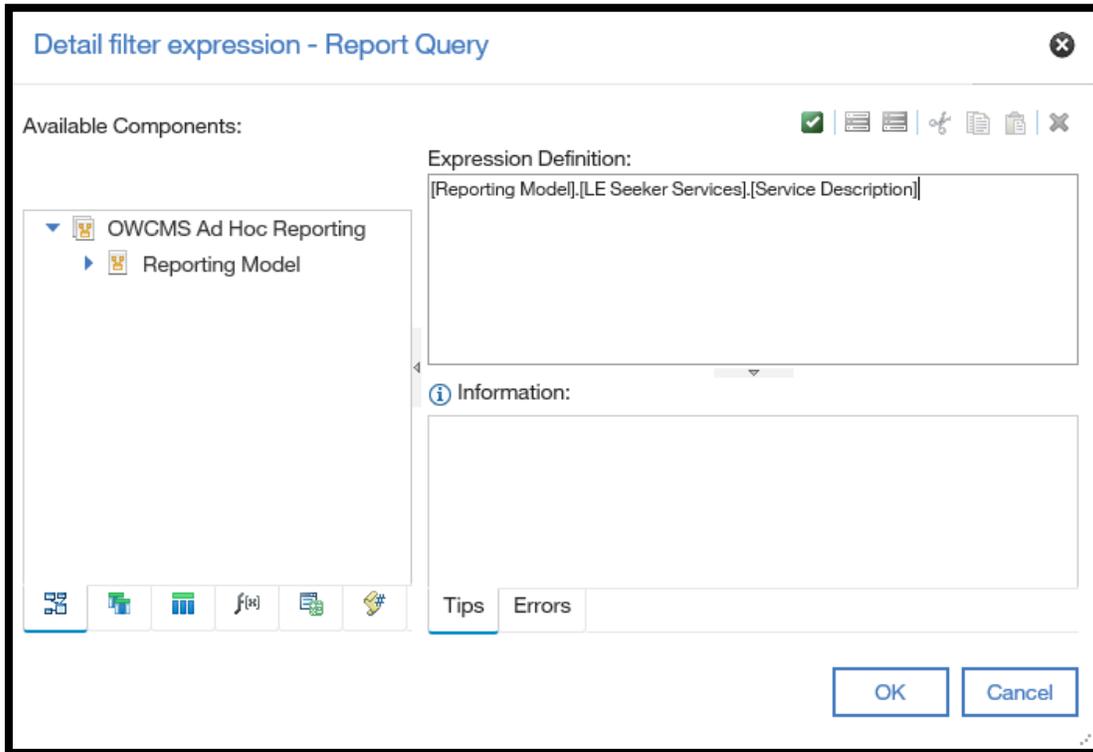


7) Click on the **Data Explorer** and find the **LE Seeker Services** folder in the **Source** pane. Click on the down arrow to open the **LE Seeker Services** folder and locate the data item **Service Description**.



8) Drag and drop the data item **Service Description** into the pane **Detail Filters**.

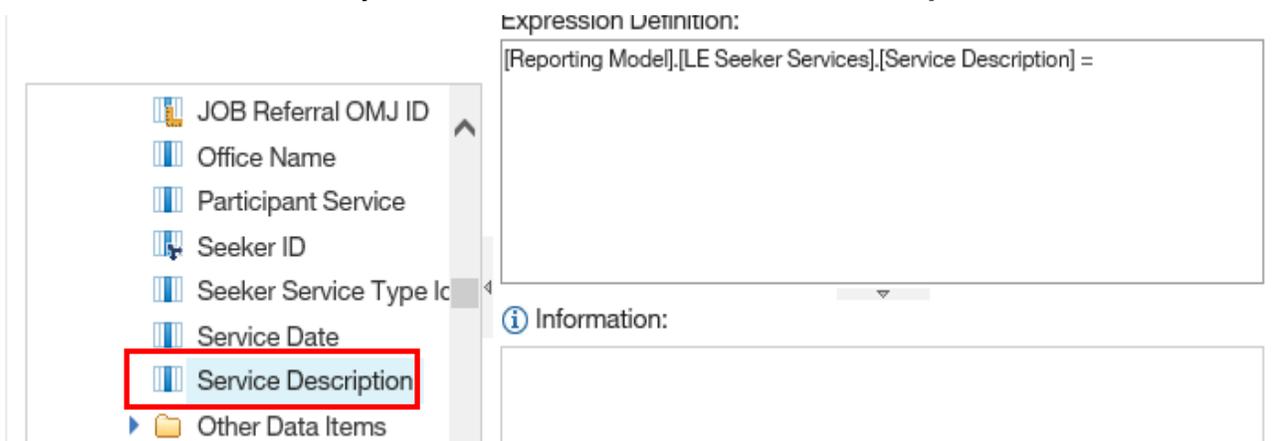
A pop-up box appears prompting the user to create an expression for the **Detail Filter**. Once the user is familiar with various expressions, formulas can be typed directly into the **Expression Definition** box. This scenario walks through the process of going into the **Reporting Model** to find the expression needed to complete the formula.



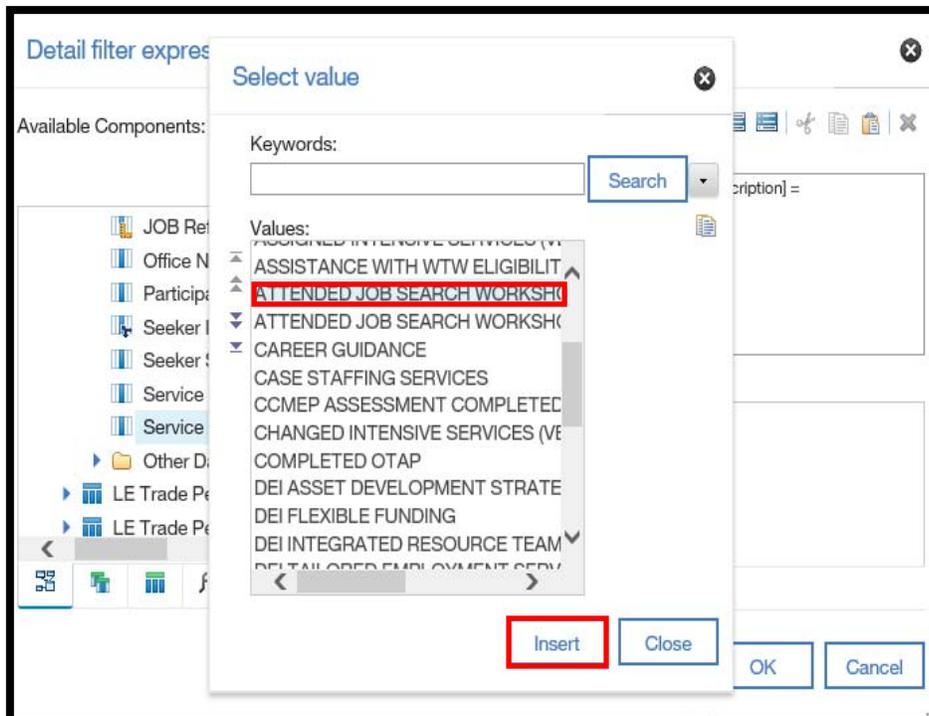
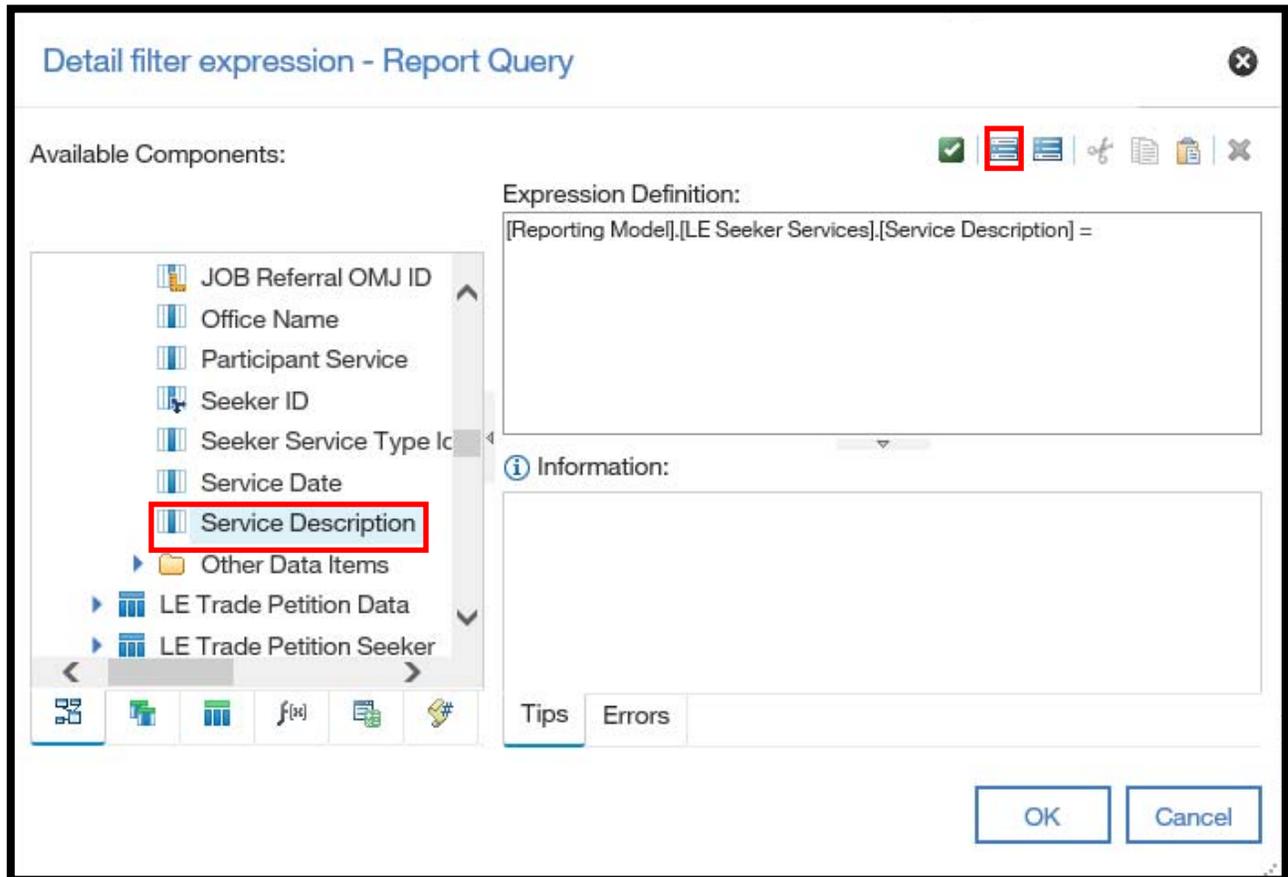
1) Type an = (equal sign) in the **Expression Definition** box at the end of the formula.



2) Click the down-arrow to expand the **Reporting Model**. Locate and expand the **LE Seeker Services** folder. When you locate the data item **Service Description**, click on the data item.

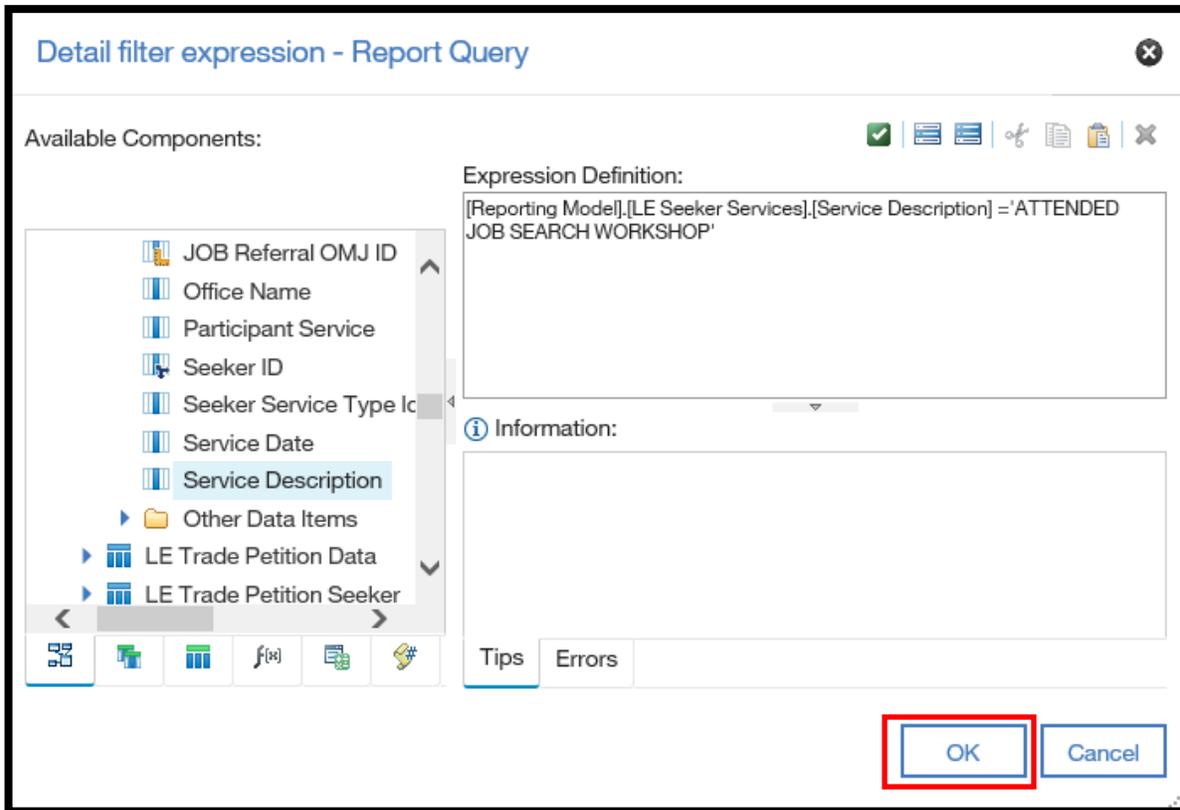


3) With the **Service Date** data item highlighted, click on the **Select Value** button.

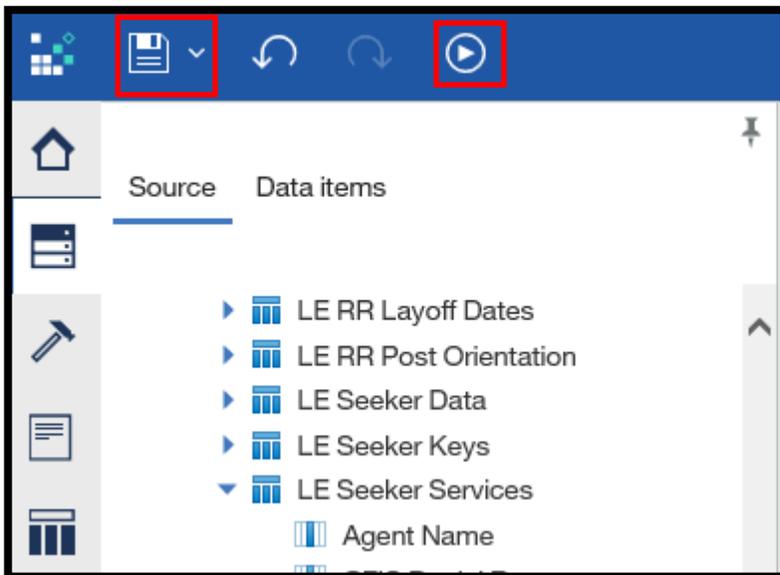


4) When the **Select value** box appears, locate the **ATTENDED JOB SEARCH WORKSHOP** data item and click on the selection. When the selection is highlighted, click **Insert**.

5) The data item **ATTENDED JOB SEARCH WORKSHOP** should be inserted in the end of the formula in the **Expression Definition** pane. Click **OK**.



The new **Detail Filter** has been added to the **Detail Filter** pane. Our report will now filter to only show participants who are receiving the service **Attended Job Search Workshop**.



- 1) **Save as** the report into the **My content** folder.
- 2) Run **Excel**.
- 3) Complete the desired/required **Prompts**.
- 4) The **LE Services** Report with the **Detail Filter** displays.

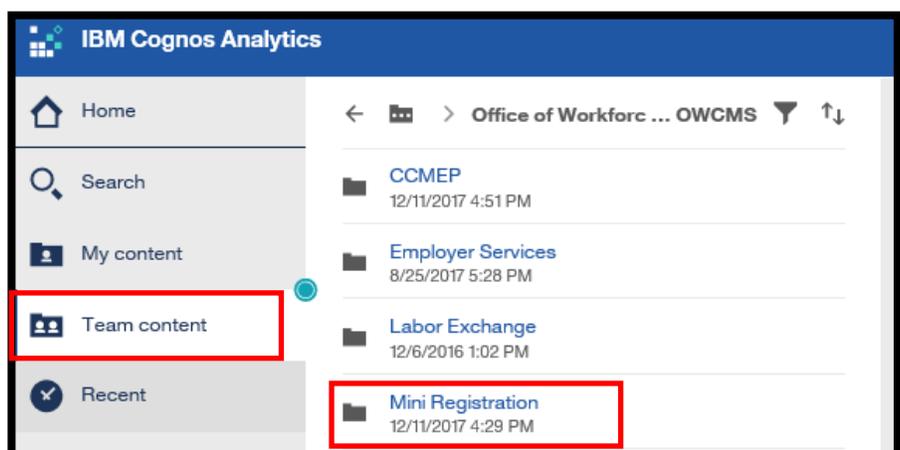
## Create a Prompt

**Prompts** are used when you want to use different criteria for the same report item each time the report runs. The report does not run until you choose the values. Using **prompts** is faster and easier than repeatedly changing the **detail filter**.

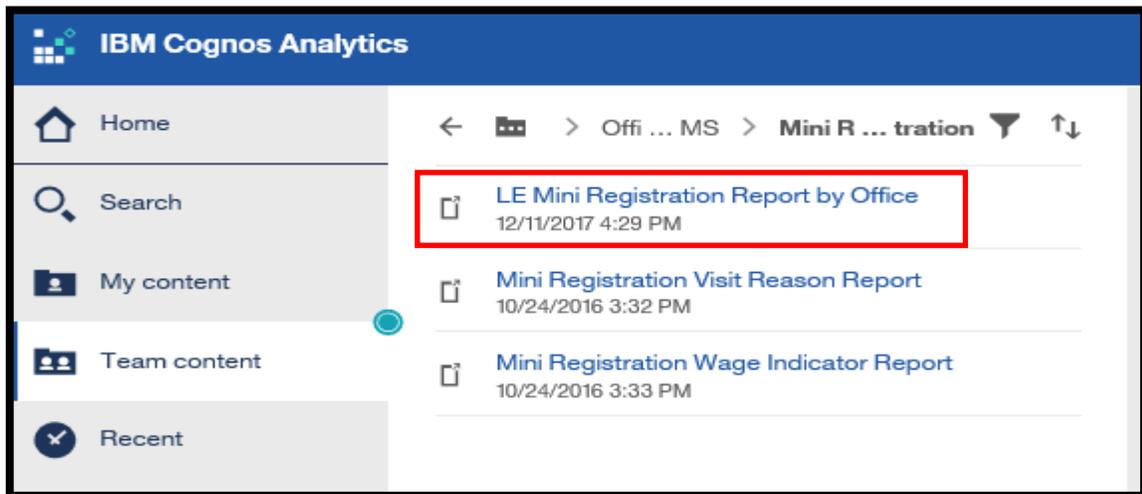
\*Scenario Description– In this scenario, we are going to imagine that there is a canned report that meets most of our needs, but we would like to add an element to the **prompt** page that would help to filter our report.

The canned report that we typically use is the **LE Mini-Registration Report by Office**. This report is useful, but we would like to add the **Mini Service Description** field to the prompt page. This will allow us to select which services we want to run a report for.

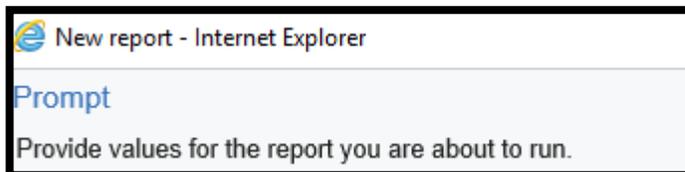
- 1) Open the **Team content** > **Office of Workforce Development OWCMS** folder and click on the **Mini Registration** folder.



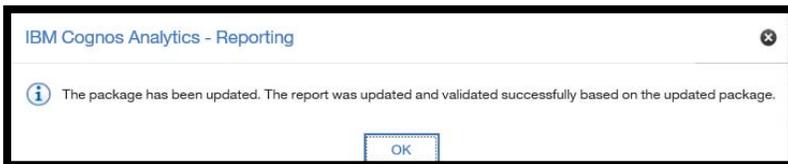
2) Click on the **LE Mini Registration Report by Office**.



3) Click on the **pencil** icon to edit in **Authoring mode**.



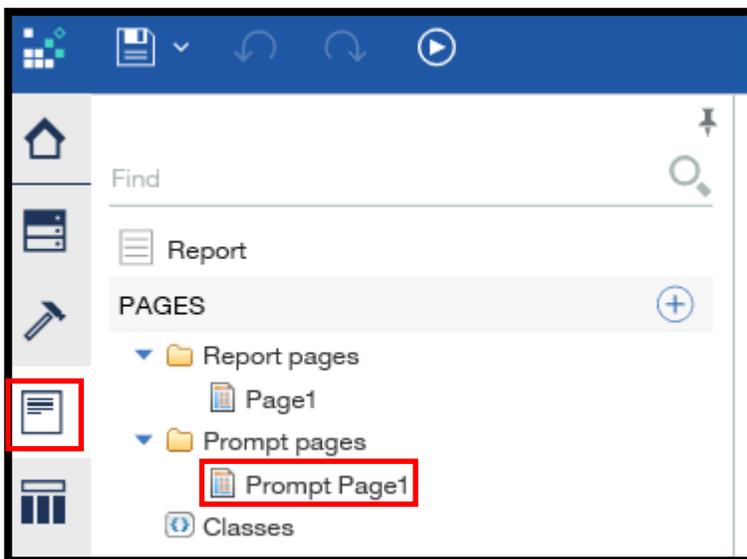
4) Complete the validation prompts.



5) Click **OK** to complete the validate/update prompt.



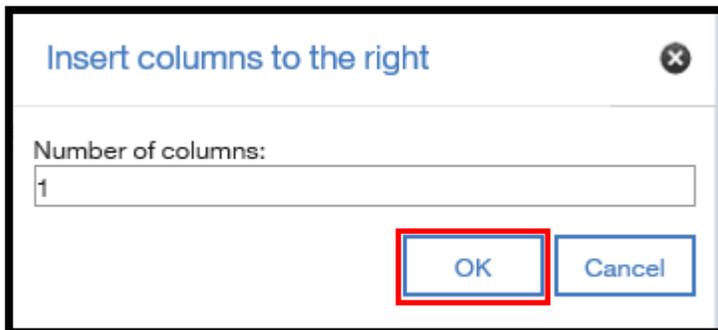
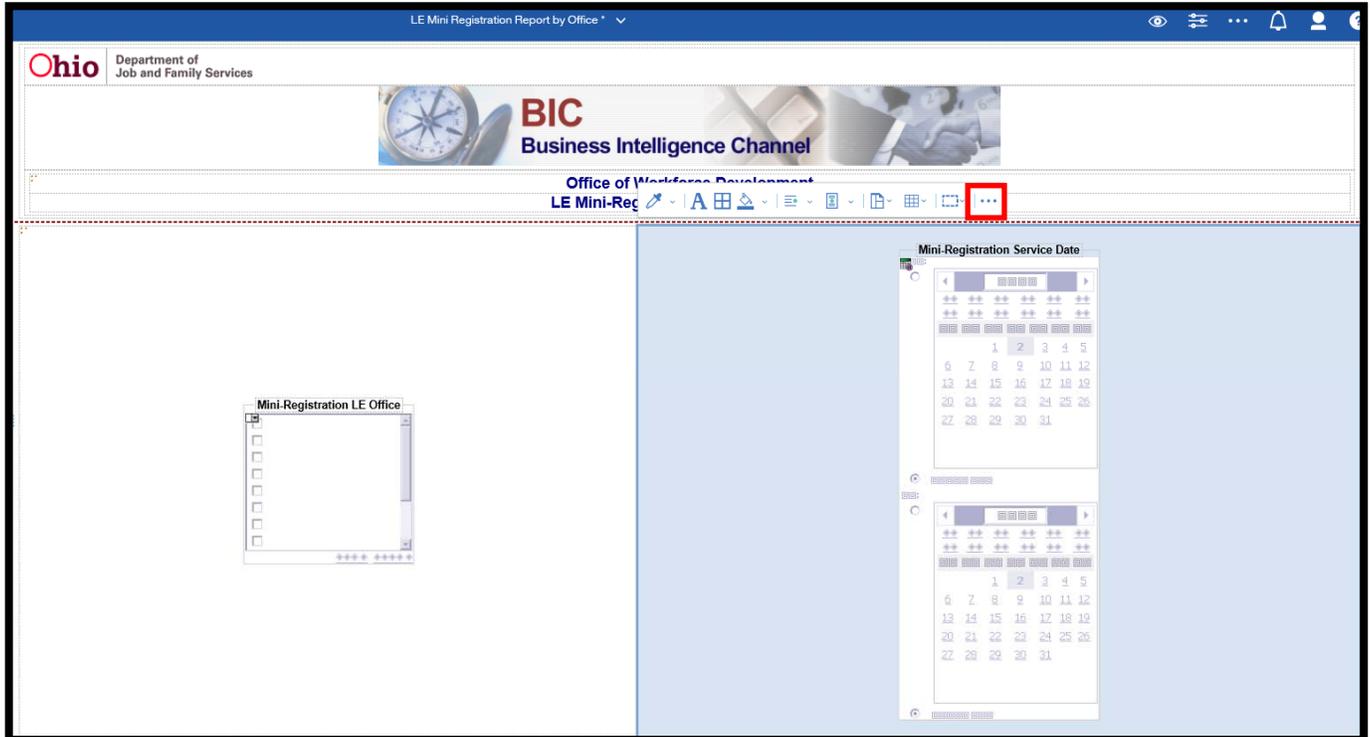
6) Click on the arrow next to the **Save** icon and follow the prompts to **Save as** the report in the **Training Folder**.



7) Click on the **Pages Explorer** and click **Prompt Page 1**.

8) The report's **prompt** page will display.

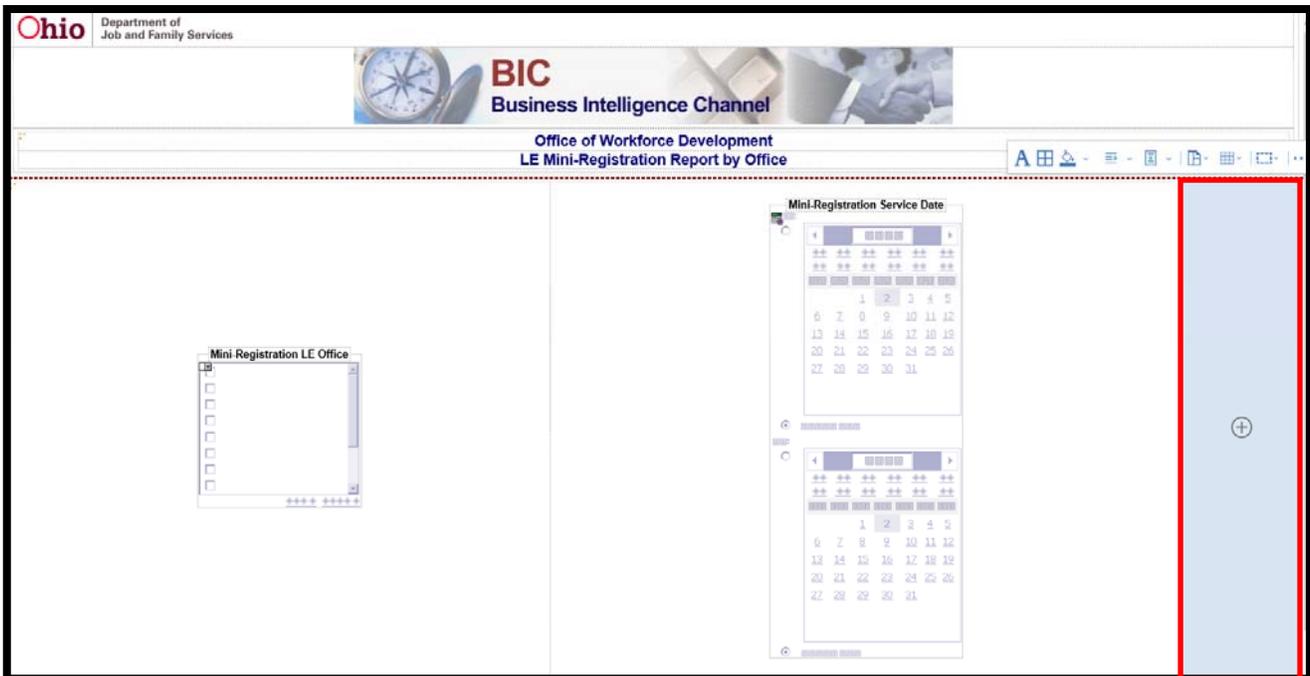
9) Highlight the cell on the far-right by a single right-click and click on the **three dot icon**. A drop-down menu will display. Hover over **Insert** and click on the **Columns to the right...** option.



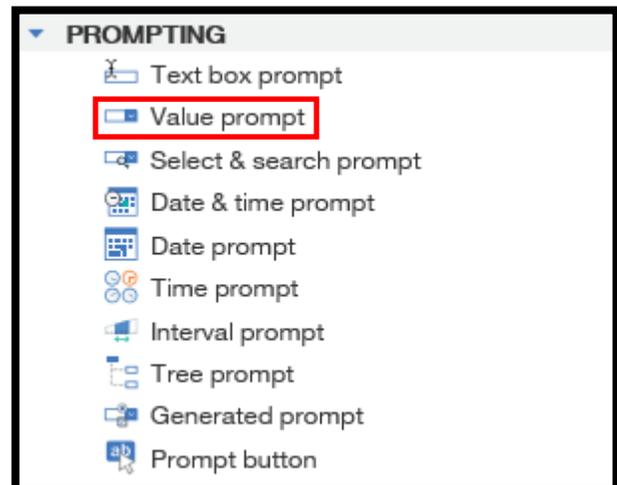
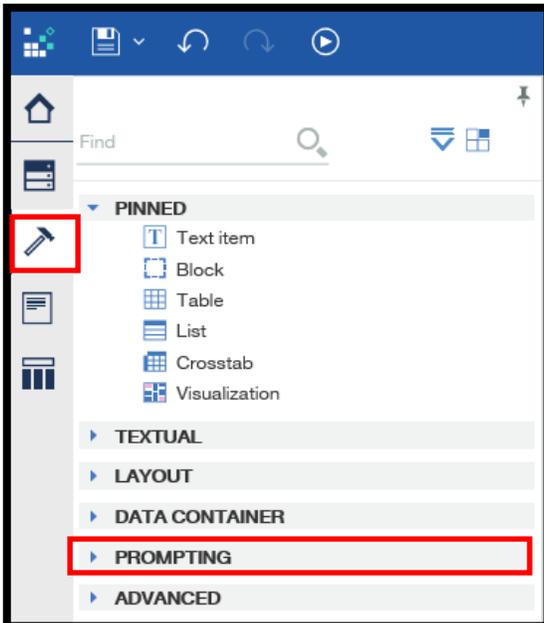
10) A pop-up box displays. Ensure that a "1" is entered in the **Number of columns** field and click the **OK** button.

11) A column has been added to the **prompt** page on the right side of the **Mini-Registration Service Date** column.

1) Click on the newly created column to highlight the cell.



2) Click on the **Toolbox Explorer** and expand the **Prompting** section.



3) Locate the **Value Prompt** option. Drag and drop the **Value Prompt** option into the newly created column.

The **Prompt Wizard** displays to guide the user through creating the **prompt**.

4) Leave the **Create a new parameter** button selected and type **“Mini Service Description Parameter”** into the text box.

5) Click the **Next >** button.

**Prompt Wizard - Value prompt**

**Choose Parameter**  
Create a new parameter or use an existing parameter from a previously authored expression.

Create a new parameter  
Parameter1

Use existing parameter

Use global parameter

Cancel < Back **Next >** Finish

**Prompt Wizard - Value prompt**

**Create Filter**  
Choose the package item that will be used to filter the report.

Create a parameterized filter

Package item:  ...

Operator: =

Parameter: Mini Service Description

Make the filter optional

Cancel < Back **Next >** Finish

6) Click the **three dot icon** next to the **Package item** field. The **Choose package item** pop-up box will display.

7) Expand the **Reporting Model** and locate the **WIA Mini Seeker Services** table. Locate the **Mini Service Desc** data item and highlight it with a single-click. Click the **OK** button.

**Choose package item**

- Mini LE Agent Name
- Mini LE Office Name
- Mini Seeker ID
- Mini Seeker Service ID
- Mini Service Desc**
- Mini WIA Agent Name
- Mini Wia Office Name
- Office ID
- Seeker Service Type ID

**OK** Cancel

- 8) Click the **Operator** down-arrow and select **in** from the list.

Prompt Wizard - Value prompt

Create Filter

Choose the package item that will be used to filter the report.

Create a parameterized filter

Package item: [Reporting Model].[WIA Mini Seeker] ...

Operator: =

Parameter: =

Make the filter optional

in

not in

in\_range

Cancel < Back Next > Finish

\*The **Operator** “In” allows the user to select multiple data items. The **Operator** “=” only allows for selection of one data item. For this scenario, this means that selecting the “In” **Operator** will allow report users to select more than one service when they run the report.

Prompt Wizard - Value prompt

Create Filter

Choose the package item that will be used to filter the report.

Create a parameterized filter

Package item: [Reporting Model].[WIA Mini Seeker] ...

Operator: in

Parameter: Mini Service Description

Make the filter optional

Cancel < Back Next > Finish

- 9) Check the **Make the filter optional** box.

**Prompt Wizard - Value prompt**

**Apply filter**  
Which queries do you want to filter?

Queries:

- Report Query
- Office Query

Buttons: Cancel, < Back, Next >, Finish

10) Ensure that the **Report Query** box is checked. Click the **Next >** button.

**Prompt Wizard - Value prompt**

**Populate control**  
What values do you want to pick from? Use values are the retrieved data, and Display values are the selectable values that the user sees.

Create new query

Name: Mini Service Description Query X

Values to use: [Reporting Model],[WIA Mini Seeke ...

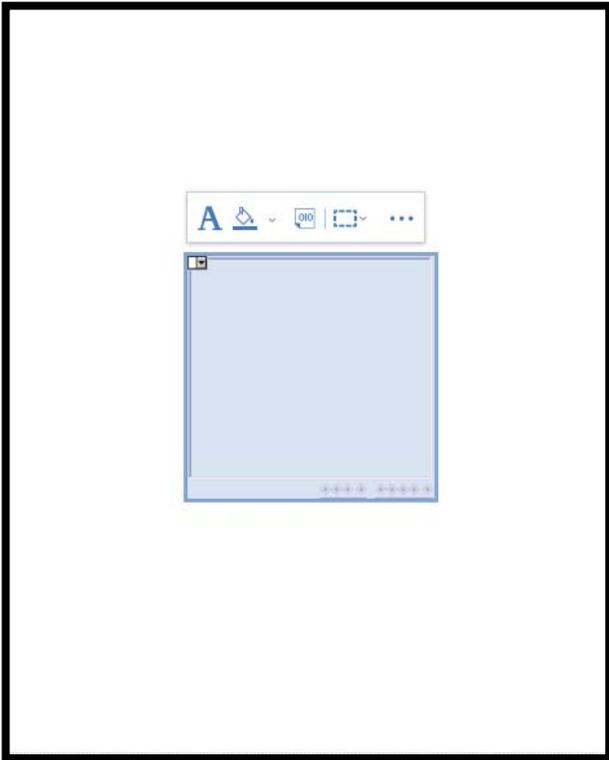
Values to display: ...

Cascading source: [dropdown]

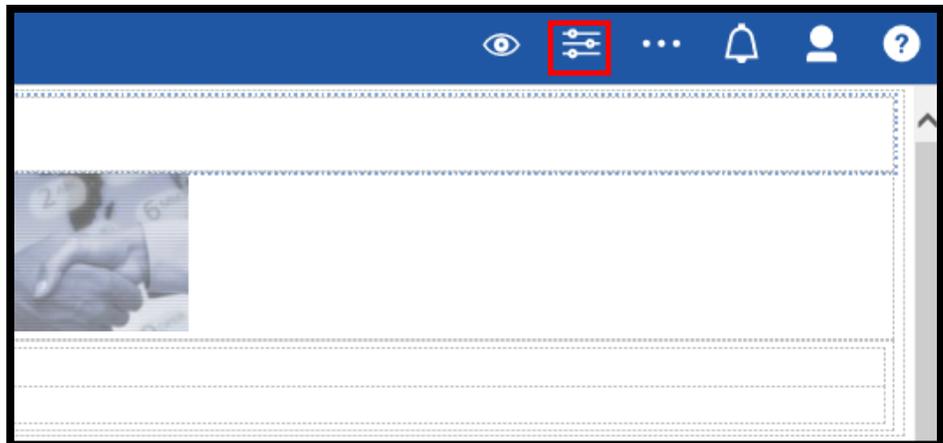
Buttons: Cancel, < Back, Next >, Finish

11) Ensure that the **Create new query** box is selected. Type "**Mini Service Description Query**" into the **Name** field.

12) Click the **Finish** button.



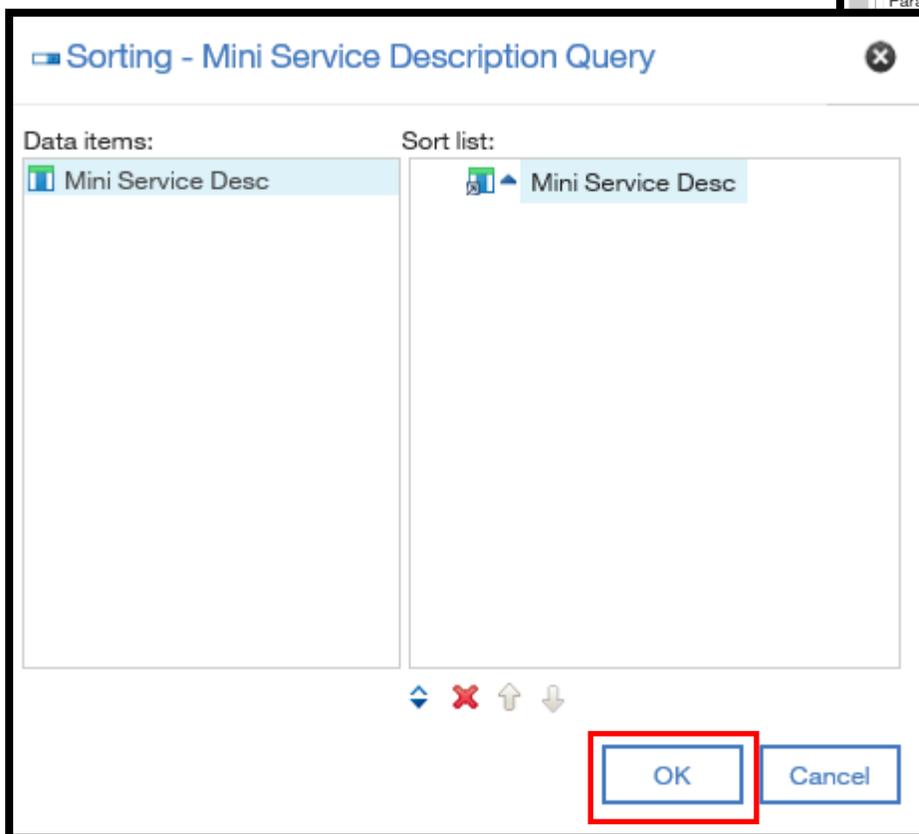
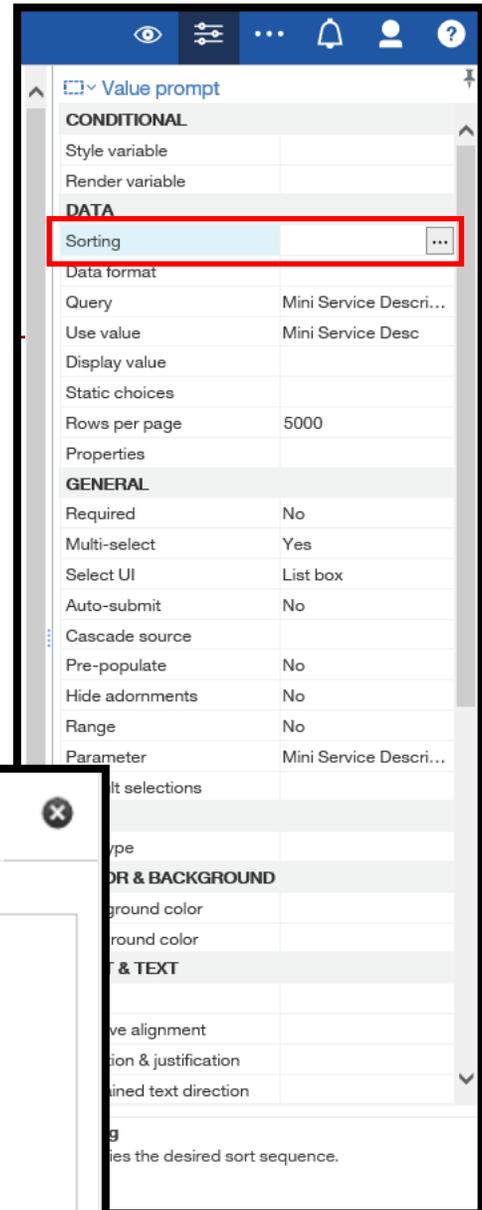
13) Highlight the newly created **Value Prompt**.



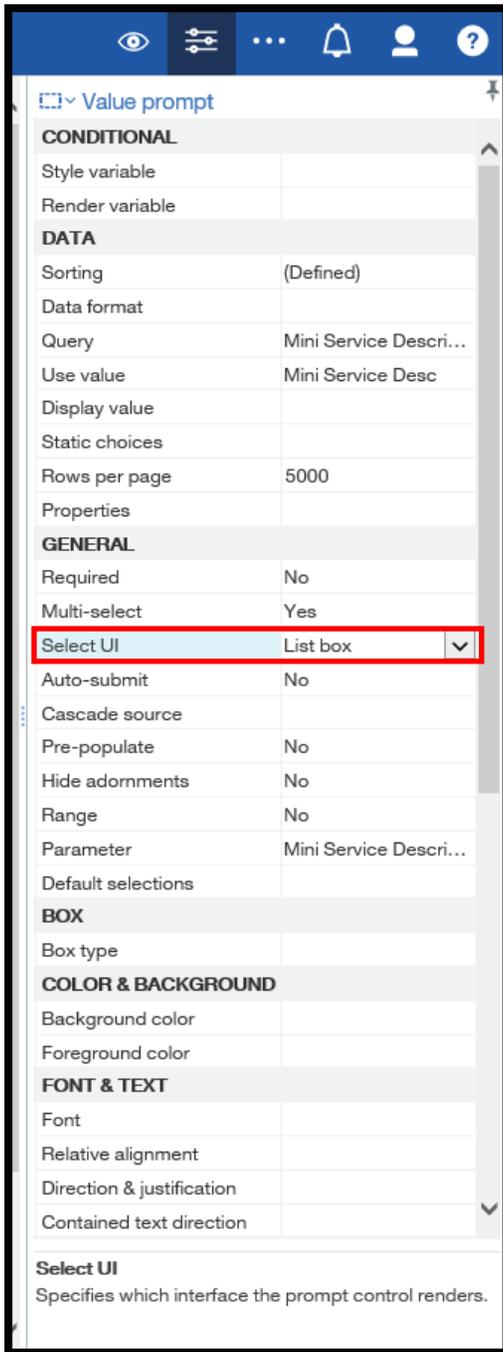
14) Click on the **Show properties** icon in the **Cognos Connection Toolbar** to drop-down an information pane.

15) Click on the **three dot icon** in the **Sorting** section of the **Properties** pane.

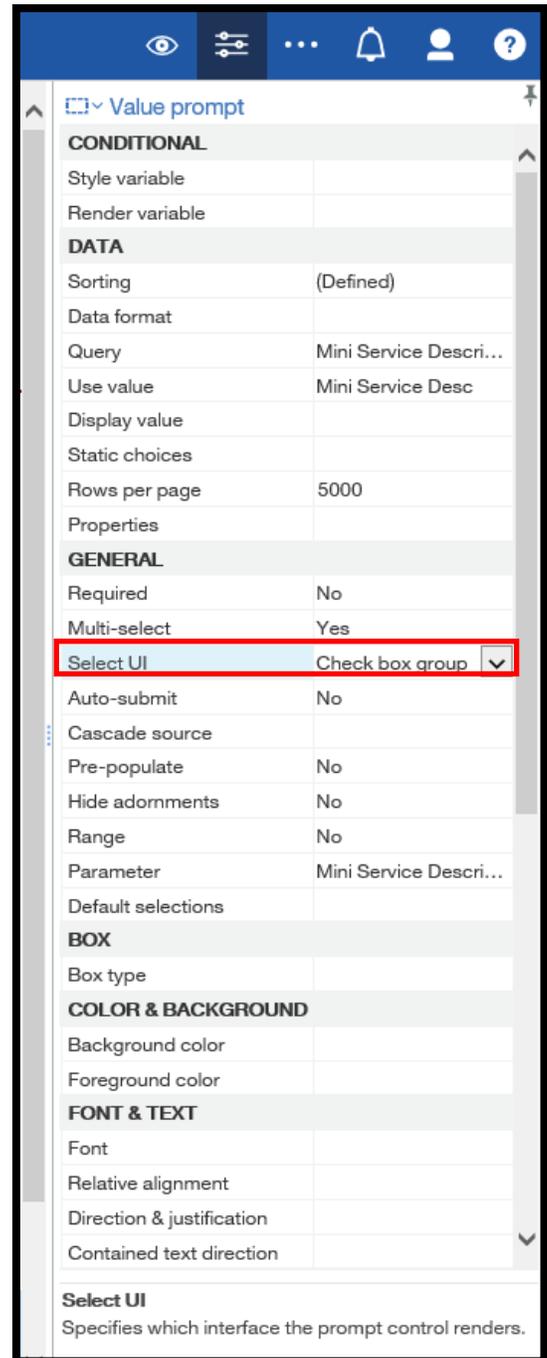
*\*The upwards arrow on the **Sort list** means that the items will sort ascending on the report. To change to a descending sort, double-click the data item and the arrow will flip downwards or click the **arrow icons** next to the red X.*



16) The **Sorting** Dialogue box displays. Drag and drop **Mini Service Desc** from the **Data items** to the **Sort list**. Click **OK**.



17) In the Properties pane, change the **Select UI** from **List box** to **Check box group**.

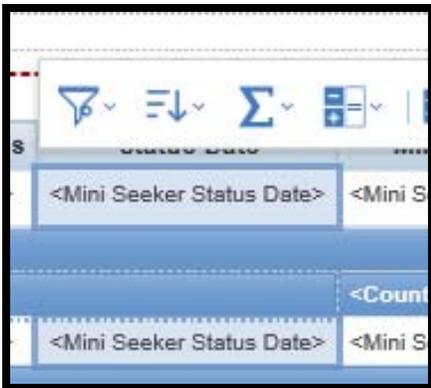
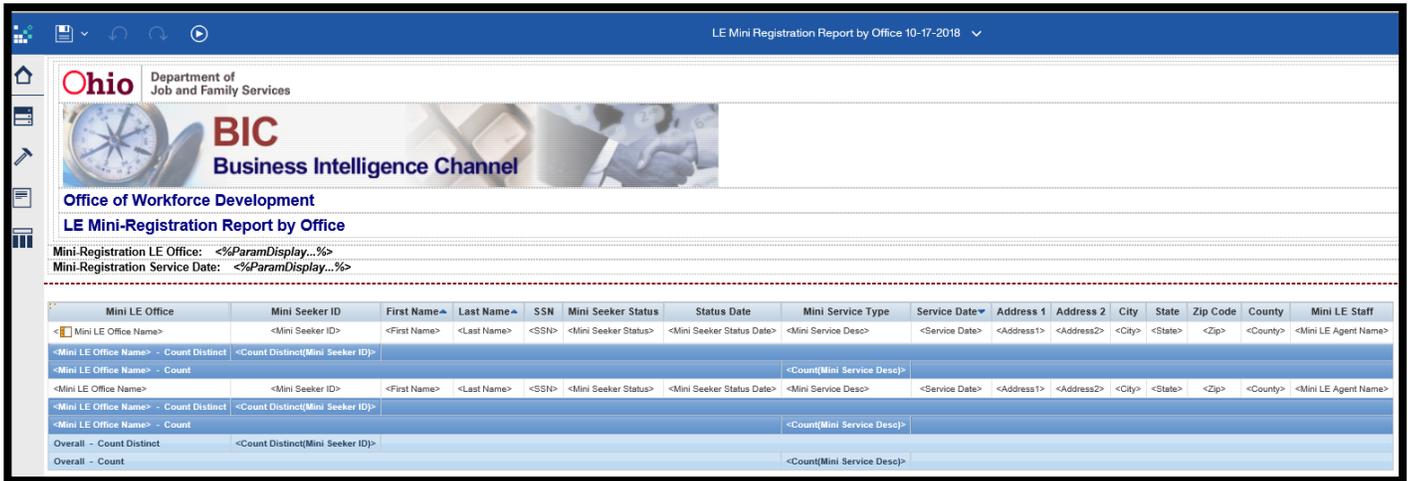


18) **Validate** and **Save** the report.

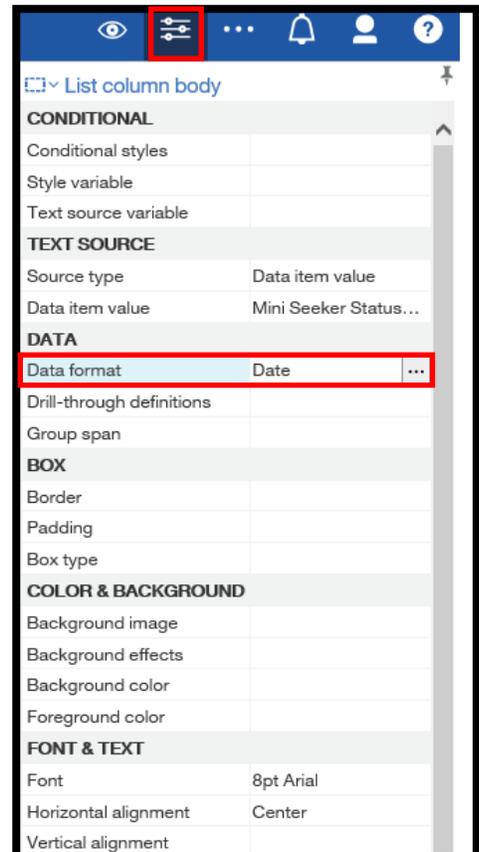
It is highly recommended to utilize **Check box group** when using a prompt where a user may make multiple selections. It is much easier to select multiple options by clicking the boxes than holding down the **Ctrl key** and clicking on each selection, which is how multiple selections are made if **List box** is selected.

# Format a Date Field

1) Open the **LE Mini Registration Report by Office** in **Authoring Mode**.



2) Highlight the **Status Date** report item in the report body.



3) Expand the **Properties pane** and click the **three dot icon** in the **Data format** section.

**Data format**

Format type: **Date**

Properties:

Date style	
Date separator	-
Date ordering	Year, Month, Day
Display eras	
Display years	Show century
Display months	Short name
Display weekdays	
Display days	Two digits
Calendar type	
Missing value characters	

**OK** **Cancel** **Reset**

4) Ensure that **Date** is selected in the **Format type** drop-down. Use these fields to change the way that the date displays. This is a matter of preference.

Suggested date set-up:

**Date separator: /**

**Date ordering: Month, Day, Year**

**Display years: Show century**

**Display months: Two digits**

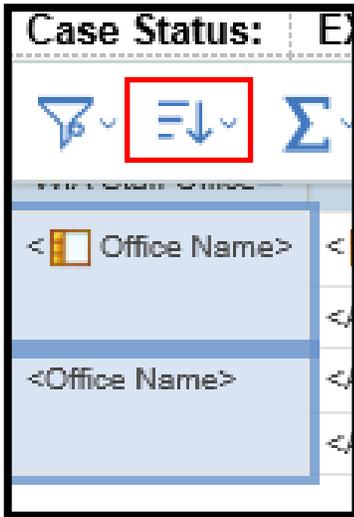
**Display days: Two digits**

5) Click **OK**.

## Sort a Report

The sort order of a report is important to the readability and usability of a report.

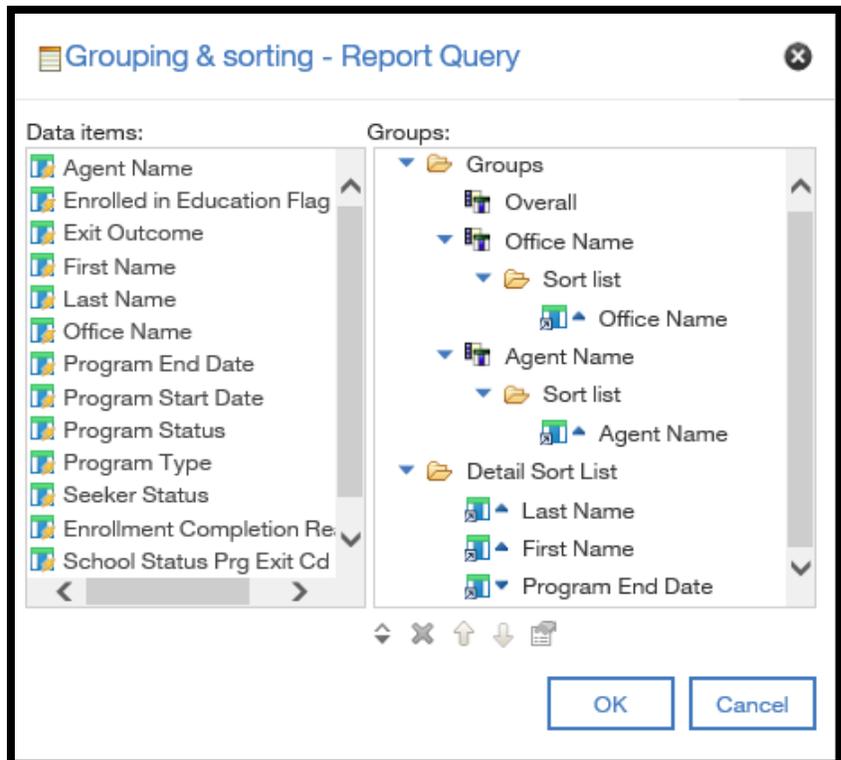
1) Open the **WIA Exit Report** in **Authoring Mode**.



2) Highlight the body of the report item **Office Name** and click on the **Sort** icon. Click on **Edit layout sorting** from the drop-down menu.

3) The **Grouping and sorting** dialogue box displays. The report is already grouped by **Office Name** and **Agent Name**. It is sorted by **Last Name** and **First Name**— ascending and **Program End Date**— descending.

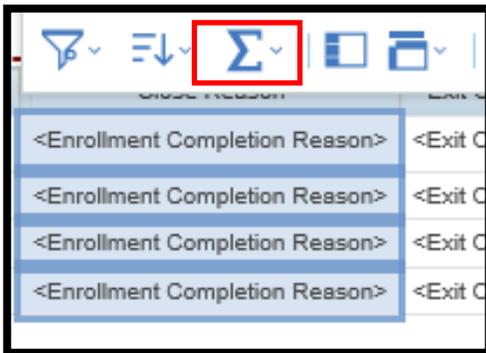
If the report was missing a data item that we wanted to sort by, the user would drag the data item from the **Data items** pane into the **Detail Sort List**.



## Summarize a Report– Count Function

Summarization can be very useful to be able to quickly manipulate and analyze the data on a report. Cognos contains numerous statistical summarizations such as: **Average** and **Standard Deviation**. Cognos also allows the user to create custom calculations and base report items on these calculations.

1) Open the **WIA Exit Report** in **Authoring Mode**.



2) Highlight the body of the **Close Reason** data item and click on the **Summarize** icon. When the drop-down menu displays, click on **Count**.

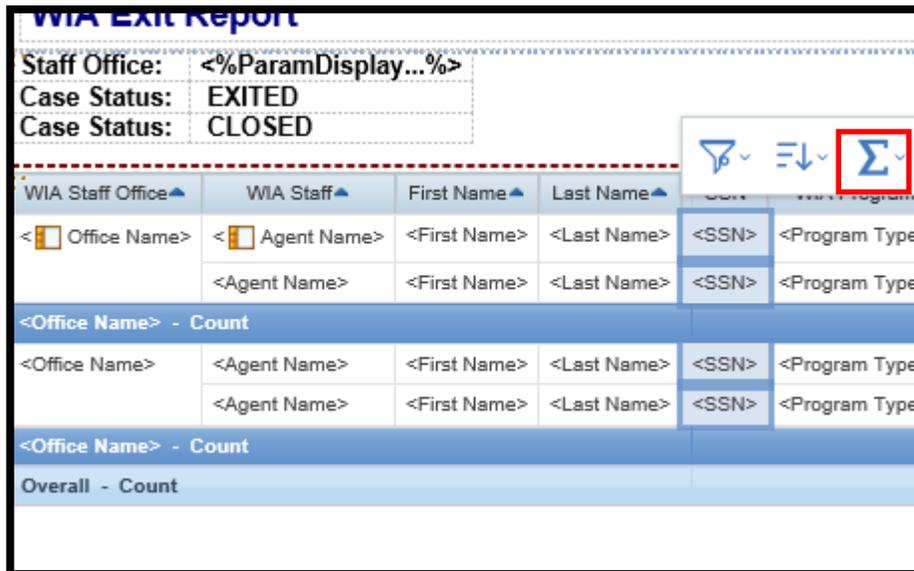
WIA Staff Office	WIA Staff	First Name	Last Name	SSN	WIA Program	Program Start Date	Program End Date	Close Reason	Exit Outcome	Enrolled in Education Flag	Youth School Status at Exit
<Office Name>	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cd>
<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cd>	
Office Name - Count								<Count(Enrollment Completion Reason)>			
Office Name	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cd>
<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cd>	
Office Name - Count								<Count(Enrollment Completion Reason)>			
Overall - Count								<Count(Enrollment Completion Reason)>			

The count is automatically placed within the report. The **Count** function is two-part on this report due to the **Office Name** also being grouped. The **Count** function will count all the close reasons provided for every county selected within the report and provide an overall total count at the end of the report.

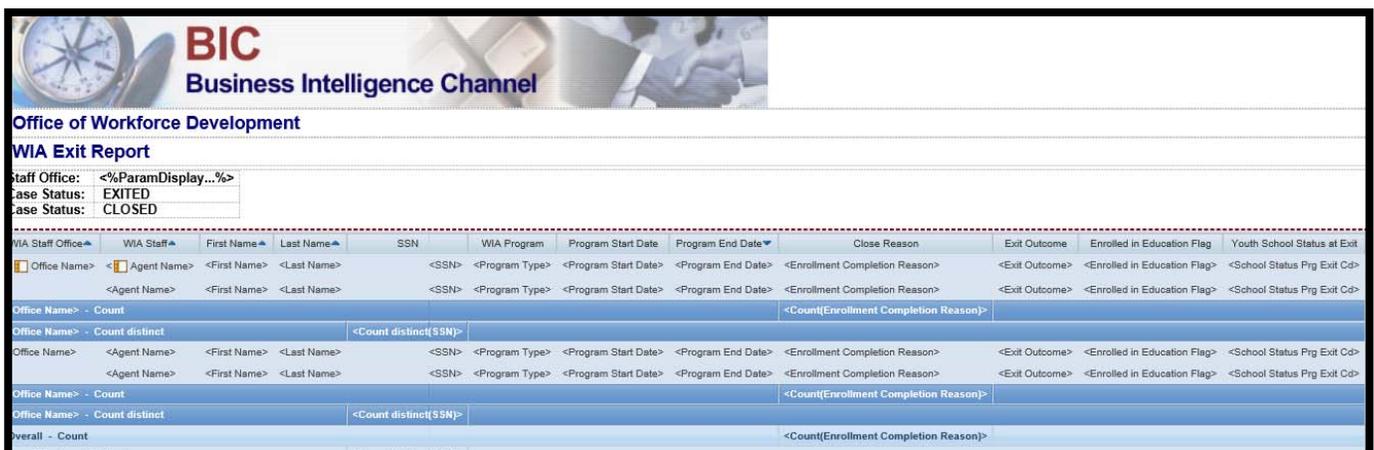
## Summarize a Report– Count Distinct Function

**Count distinct** is used to return the total number of unique non-null records. For example, the total number of non-duplicate customers who have received at least one service.

- 1) Beginning on the report page in **Authoring Mode** of the **WIA Exit Report**, highlight the body of the report item **SSN**.



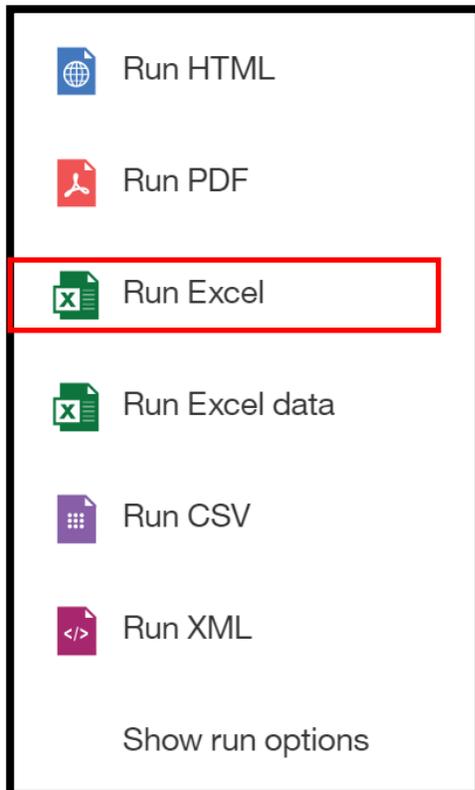
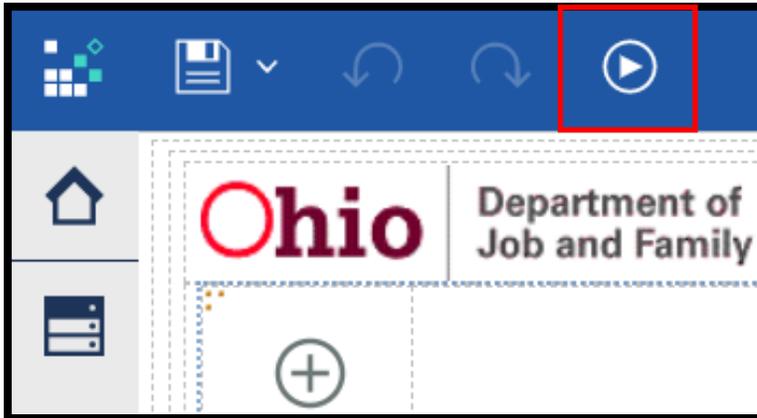
- 2) Click on the **Summarize** icon. When the drop-down menu displays, click on **Count Distinct**.



The **Count Distinct** function is automatically placed within the report. The **Count Distinct** function is two-part on this report because the **Office Name** field is also grouped. The **Count Distinct** function will count all unique customers via the **SSN** column and provide an overall total count for unique customers at the end of the report.

## Run A Report From Authoring Mode

- 1) Once the report has been formatted, click on the button on the left side on the blue **Cognos Connection Toolbar**, the button resembles a “play” button.



- 2) The list of run options displays. Click on **Run Excel**.

- 3) Complete the required/desired prompts. Click the **Finish** button to **Run** the report.

## Share a Modified Report

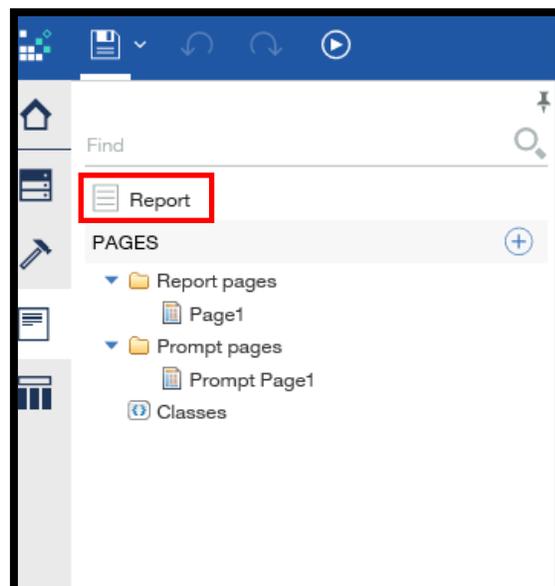
Users can share reports that they have modified with other Cognos users. This provides the ability for teams to ensure that they are all running the same report if the public canned report does not satisfy all their requirements.

- 1) Open a new, blank **Notepad** from the Windows Start menu.



- 2) Navigate back to the **WIA Exit Report** in **Authoring Mode**.

- 3) Click on the **Pages Explorer** and right-click on **Report**. From the drop-down menu, select **Copy report to clipboard**.



4) Navigate back to the blank **Notepad**. **Paste** the XML Code into the **Notepad** page.

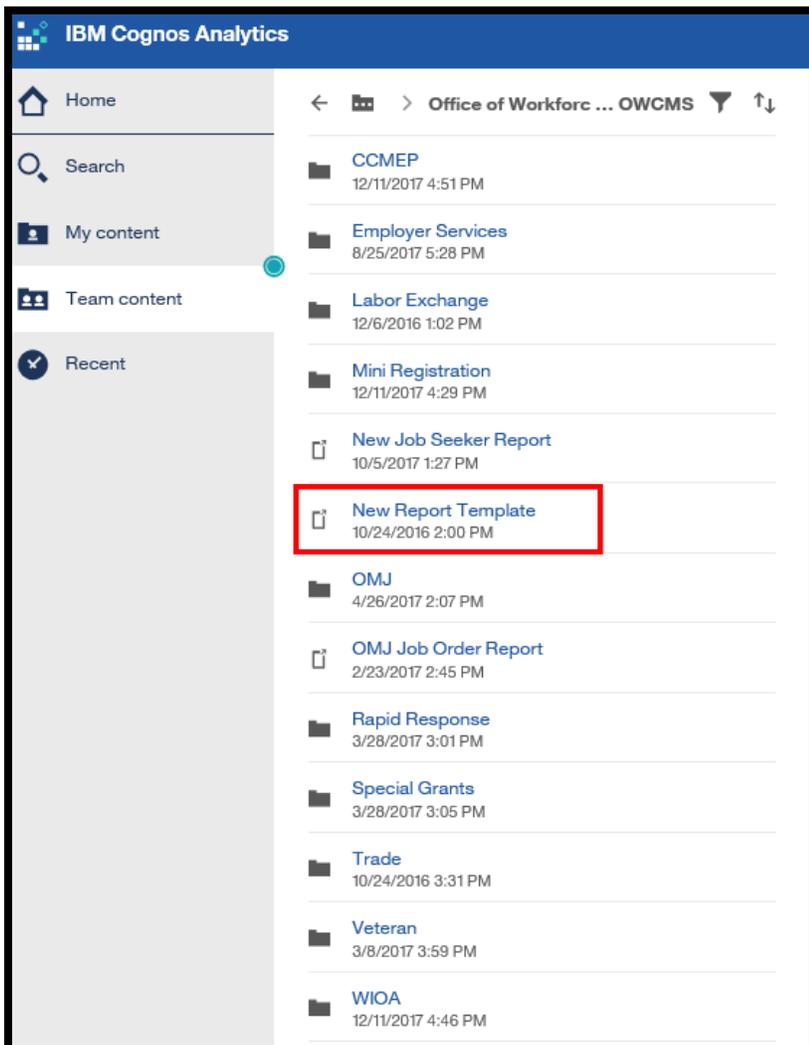


```
Unsaved - Notepad
File Edit Format View Help
<report xmlns="http://developer.cognos.com/schemas/report/14.2/" expressionLocale="en-us" useStyleVersion="10"><!--RSU-SPC-0093 The report specification was upgraded
<modelPath type="FM">/content/folder[@name='Content']/folder[@name='Packages']/package[@name='OWCMS Ad Hoc Reporting']/model[@name='model']</mo
<drillBehavior modelBasedDrillThru="true"/>
<queries>
  <query name="Office Prompt">
    <source>
      <model/>
    </source>
  </query>
  <query name="Base Query">
    <source>
      <model/>
      <selection><dataItem aggregate="none" name="Office Name" rollupAggregate="none"><expression>[Reporting Model].[WIA Seeker Data].[Office Name]</expressi
    </source>
  </query>
  <query name="Agent Name">
    <source>
      <model/>
      <selection><dataItem aggregate="none" name="Agent Name" rollupAggregate="none"><expression>[Reporting Model].[WIA Seeker Data].[Agent Name]</expression
Aggregate="none"><expression>[Reporting Model].[WIA Seeker Data].[First Name]</expression><XMLAttributes><XMLAttribute name="RS_dataType" output="no" value="3"/><XMLAttribute
Attributes><XMLAttribute name="RS_dataType" output="no" value="4"/><XMLAttribute name="RS_dataUsage" output="no" value="attribute"/></XMLAttributes></dataItem><dataItem aggreg
3"/><XMLAttribute name="RS_dataUsage" output="no" value="attribute"/></XMLAttributes></dataItem><dataItem aggregate="none" name="Seeker Status" rollupAggregate="none"><expres
ataUsage" output="no" value="attribute"/></XMLAttributes></dataItem><dataItem aggregate="none" name="SSN" rollupAggregate="none"><expression>{'xxx-xx-'}|SUBSTR([Reporting Mode
<detailFilters><detailFilter><filterExpression>[Reporting Model].[WIA Seeker Data].[Office Name] in ?Office?</filterExpression></detailFilter><detailFilter><fi
</source>
</model/>
</source>
<selection><dataItem aggregate="none" name="Lookup Value" rollupAggregate="none"><expression>[Reporting Model].[WIA Lookup Type Values].[Lookup Value]<
<detailFilters><detailFilter><filterExpression>[Reporting Model].[WIA Lookup Type Values].[Lookup Type] = 'WIACLOSE_REASON'</filterExpression></detailFilter></
</source>
</model/>
</source>
<joinOperation>
  <joinOperands>
    <joinOperand cardinality="1:N"><queryRef refQuery="Base Query"/></joinOperand>
    <joinOperand cardinality="1:N"><queryRef refQuery="Completion Reason Lookup"/></joinOperand>
  </joinOperands>
  <joinFilter>
    <filterExpression>[Base Query].[Enrollment Completion Reason] is NULL
OR
[Base Query].[Enrollment Completion Reason] = [Completion Reason Lookup].[Lookup Value]
</filterExpression>
</joinFilter>
</joinOperation>
</queries>
</report>
```

5) Select **Save as** from the **File** drop-down menu. Save the file into a location that is easily accessible. (The **Desktop** is recommended). Name the document **Training Share File** and click **Save**.

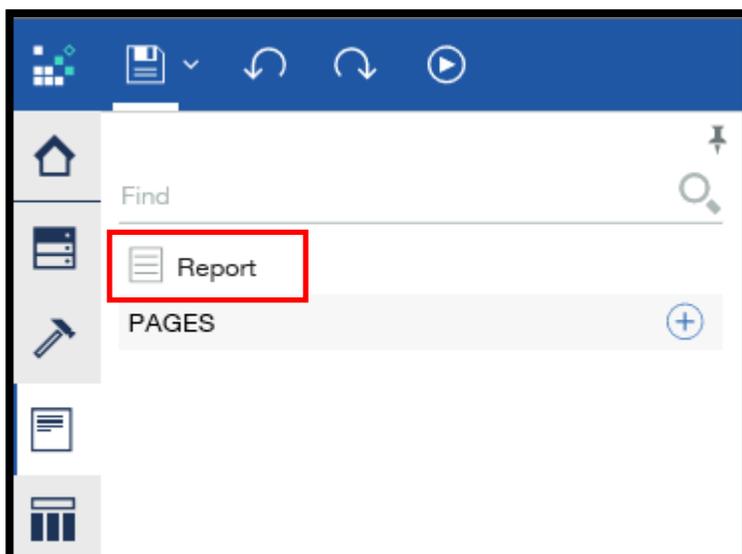
The report's XML code has been saved as .txt file and can be attached in an email to send to the desired Cognos users.

## Opening a Report from XML Code



1) Navigate to the **Team content Office of Workforce Development OWCMS** folder. Locate and click on the **New Report Template**.

2) Copy the XML code from the **Notepad .txt** file you have received or the file that was used in the previous scenario.



3) Click on the **Pages Explorer** and right-click on **Report**. From the drop-down menu, click on **Open report from clipboard**.

The report opens in **Authoring Mode**. Make sure to **Save** the report into the **My content** folders if it is a report that will be utilized again or changes need to be made.

The screenshot displays the report authoring interface. On the left is a navigation pane with a search bar and a tree view containing 'Report', 'Report pages', 'Page1', 'Prompt pages', 'Prompt Page1', and 'Classes'. The main content area features a header for the Ohio Department of Job and Family Services, the 'BIC Business Intelligence Channel', and the 'Office of Workforce Development'. Below this is the title 'WIA Exit Report' and two summary rows: 'Staff Office: <%ParamDisplay...%>' and 'Case Status: EXITED', followed by 'Case Status: CLOSED'. A data table is shown below with the following columns: WIA Staff Office, WIA Staff, First Name, Last Name, SSN, WIA Program, Program Start Date, Program End Date, Close Reason, Exit Outcome, Enrolled in Education Flag, and Youth School Status at Exit. The table contains three rows of data, each starting with a dropdown menu for 'Office Name' and 'Agent Name'.

WIA Staff Office	WIA Staff	First Name	Last Name	SSN	WIA Program	Program Start Date	Program End Date	Close Reason	Exit Outcome	Enrolled in Education Flag	Youth School Status at Exit
<Office Name>	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cst>
<Office Name>	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cst>
<Office Name>	<Agent Name>	<First Name>	<Last Name>	<SSN>	<Program Type>	<Program Start Date>	<Program End Date>	<Enrollment Completion Reason>	<Exit Outcome>	<Enrolled in Education Flag>	<School Status Prg Exit Cst>

Term	Definition
Cognos Connection	The portal interface of Cognos
Columns	In reports, a report item shows data in a vertical list.
CSV	Comma Separated Values (CSV), a file format that contains text data, where the fields in each record are separated by a character, such as a comma or a tab. In Cognos, each record is separated by a tab.
Data Source	A relational database, dimensional cube, file, or other physical data store that can be accessed through IBM Cognos.
Filter	Filters allow the user to control the data that is displayed in a report by including or excluding information.
Heading	The area that appears at the top of a column or before a section that contains the name of a report.
HTML	Hypertext Markup Language (HTML), a markup language used to structure text and multimedia documents, as well as to set up hypertext links between documents. HTML is used extensively on the World Wide Web.
PDF	Portable Document Format (PDF), a file format that maintains the formatting of the original document without the program and fonts that were used to create it. In Cognos, you can view and print reports using this format.
Portal	A website or page that provides a single presentation and a single starting point for a set of information— for example, IBM Cognos Connection.
Prompt	A report element that asks for parameter values before the report is run.
Query	A query determines what data items appear in the report. A report specification can contain one or more queries.
Query Item	A representation of a column of data in a data source. It contains a reference to a database column, a reference to another query item, or a calculation.
Report	Report is a generic term for the objects created or edited in Authoring Mode.
Report Item	A query item added to a report is known as a report item. Report items appear as columns in list reports and as rows and columns in crosstab reports. In charts, report items appear as data markers and axis labels.

Term	Definition
Report Output	Report output combines data at the point in time when the report was run with a report specification. It is a document that can be displayed or printed. IBM Cognos can produce report outputs in HTML, PDF, Excel or CSV formats.
Report View	A reference to another report that has its own properties, such as prompt values, schedules, and results. You use report views to share a report specification instead of making copies of it.
Schedule	A specification for a time and date for a report to be ran.
Session	The time during which an authenticated user is logged onto BIC Cognos.
Sort	Organizing data in a sequential order.
Summary	In reporting, summaries are aggregate values that are calculated for all the values of a particular level or dimension. Examples of summary types are: total, minimum, maximum, average, and count.
Tables	Structures in a database that contain data organized into rows and columns. In a model, query subjects represent tables.
Template	A reusable report layout or style that can be used to set the presentation of a report or query.
XML	A language that uses markup symbols or tags to create descriptions of the structure of data. Unlike HTML, XML is extensible because the tags aren't predefined or limited.

For additional information on BIC Cognos reports or to request training, please contact:

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