

# Using Drill Down within Alma Analytics Reports

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# Assumptions

- This presentation assumes you are familiar with creating reports/analyses in Alma/Primo Analytics.

# About us

- William Paterson University
  - public mid-size (9,000+ students)  
four-year university in northern  
New Jersey, USA
- We were a Voyager (Endeavor/Ex Libris) site since 2003
- In the summer of 2019, we went live with Alma and Primo (Ex Libris)



# Where we are using drill down.

...at the moment, where we are using some drill down functionality:

- Current inventory counts
- Monthly addition / deletion counts
- Targeted monthly collection development report for liaison librarians (selectors)

# Contents

- Reporting before Alma
- Creating a drill down report
- Link a drill down report to the source report
- Adding links to Primo

# Reporting before Alma

- With Voyager, we had full SQL access to the data.
- We wrote numerous web pages/scripts in Cold Fusion and/or Perl to query Voyager's Oracle database management system.
- Data was sent through either:
  - scheduled email reports
  - on-demand web forms
- Reports were either in HTML or Excel.

## Circulation by Location and Item Type - MONTHLY Report from Jul 01, 2018 to Jul 31, 2018 - 663

Item Perm Location || (MFHD Location / Item Temp Location / Item Type) || Number of Charges

2ndFloor

ResDesk / [/ T- Book](#) 1  
 2ndFloor / [ResDesk / T- Book](#) 6  
 2ndFloor / [/ T- Book](#) 206  
 2ndFloor / [/ T- BookDisk](#) 7  
 2ndFloor / [/ T- Score](#) 6

226

CMC

CMC / [/ T- Juvenile](#) 90  
 CMC / [/ T- TeachAid](#) 17  
 CMC / [/ T- Textbook](#) 7

114

HobartHall

HobartHall / [/ E- HobartEquipment](#) 207  
 HobartHall / [/ E- Laptop](#) 1  
 HobartHall / [/ T- Book](#) 1

209

ILLBook

ILLBook / [/ T- ILL-Book](#) 31

31

LendServ

47 / [/ M- AudioCD](#) 1  
 47 / [ResDesk / M- DVD](#) 3  
 47 / [/ M- DVD](#) 10

14

McNaughton

McNaughton / [/ T- Book-McNaughton](#) 6

6

## What we mean by 'drill down'

The ability to click on a particular result in a source report to retrieve more specific results in a target report (drilled down).

# What we mean by 'drill down'

- Using drill-downs, one report can feed into another
- One way to make large reports into more manageable chunks
- Involves two or more reports that are linked together

Demo

# Two Steps

1. First, create the target (drill down) report.
2. Second, link the drill down report to the source report.

# 1. Steps to create a drill down report

- a) Create a report that takes same columns from the report you wish to drill down from.
- b) Add columns you wish to see in the drill down report.
- c) Use “is prompted” in the filters for the columns duplicated from the source report.

# Comparing the filters between the original and the drill down report

**Electronic Serials Monthly**

Criteria Results Prompts Advanced

Subject Area: E-Inventory

**Selected Columns**

Portfolio	Portfolio Activation Date
No. of Portfolio (In Repository)	Portfolio Activation Fiscal Year

**Filters**

- "Bibliographic Details"."Bibliographic Level" IN ('i', 's')
- AND Suppressed From Discovery is equal to / is in No
- AND Bibliographic Lifecycle is equal to / is in In Repository
- AND Availability is not equal to / is not in Not Available
- AND Portfolio Activation Fiscal Year is greater than or equal to FY-2022
- AND Lifecycle is equal to / is in In Repository

**Electronic Serials Drill Down**

Criteria Results Prompts Advanced

Subject Area: E-Inventory

**Selected Columns**

Portfolio	Portfolio - Material Type
No. of Portfolio (In Repository)	Portfolio - Material Type

**Filters**

- "Bibliographic Details"."Bibliographic Level" IN ('i', 's')
- AND Suppressed From Discovery is equal to / is in No
- AND Bibliographic Lifecycle is equal to / is in In Repository
- AND Availability is equal to / is in Available
- AND Resource Type is prompted
- AND Material Type is prompted
- AND Material Type is prompted
- AND Is Free is prompted
- AND Portfolio Activation Fiscal Year is prompted
- AND Portfolio Activation Month is prompted
- AND Lifecycle is prompted
- AND Electronic Collection Public Name is prompted

Catalog: List All

# How “is prompted” works

Electronic Serials Monthly																
				Title Count MMS Id												
				FY-2022												FY-2022 Total
Bibliographic Details - Resource Type	Bibliographic Details - Material Type	Portfolio - Material Type	Is Free	July	August	September	October	November	December	January	February	March	April	May	June	
Journal (Ceased publication) - Electronic	Journal	Journal	No	2	1	3	26	25	4	2	1	24	7	12	2	100
			Yes		6	3	4	4	57	99	13	1	6	193	7	388
	Newspaper	No												2		2

- If one clicks on the number '26' under the 1<sup>st</sup> October column, one will retrieve a report of 26 records.
- The report of 26 titles is limited by the fiscal year, the month, the 'Is Free' is 'no', material types are 'Journal', and the resource type is 'Journal (Ceased publication)'.

## Electronic Serials Monthly

				Title Count MMS Id													
				FY-2022													
Bibliographic Details - Resource Type	Bibliographic Details - Material Type	Portfolio Material Type	Is Free	July	August	September	October	November	December	January	February	March	April	May	June	FY-2022 Total	
Journal (Ceased publication) - Electronic	Journal	Journal	No	2	1	3	26	25	4	2	1	24	7	12	2	100	
		Journal	Yes		6	3	4	4	57	99	13	1	6	193	7	388	
		Newspaper	No												2		2
		Newspaper	Yes							18							18
		Unknown	Yes						1								1
		Wire	Yes							10							10
Journal -	Journal	Book	No	7			1	1	2					1		12	

- If one clicks on the word 'Journal' in the 3<sup>rd</sup> column, one will retrieve a list of 488 records
- The report of 488 titles is limited by the two material types 'Journal', and the resource type is 'Journal (Ceased publication)'.

## Electronic Serials Monthly

				Title Count MMS Id													
				FY-2022												FY-2022 Total	
Bibliographic Details - Resource Type	Bibliographic Details - Material Type	Portfolio - Material Type	Is Free	July	August	September	October	November	December	January	February	March	April	May	June		
Journal (Ceased publication) - Electronic	Journal	Journal	No	2	1	3	26	25	4	2	1	24	7	12	2	100	
			Yes		6	3	4	4	57	99	13	1	6	193	7	388	
	Newspaper	No													2	2	
		Yes								18							18
	Unknown	Yes							1								1
	Wire	Yes								10							10
Journal - Electronic	Journal	Book	No	7			1	1	2					1		12	
		Document	No						2								2

- If one clicks on the word 'Journal' in the 2<sup>nd</sup> column, one will retrieve a list of 519 records.
- The report of 519 titles is limited by the bibliographic material type 'Journal' and the resource type 'Journal (Ceased publication)'.

## c. How to filter a column to “is prompted”

- i. Determine which columns need to be prompted.
- ii. For each column, open the drop down menu and select filter.

The screenshot displays the 'Electronic Serials Drill Down' application interface. The main window is titled 'Electronic Serials Drill Down' and has tabs for 'Criteria', 'Results', 'Prompts', and 'Advanced'. On the left, there is a tree view under 'Subject Area' with 'E-Inventory' expanded, showing various portfolio-related folders. The main area is divided into 'Selected Columns' and 'Filters'. In the 'Selected Columns' section, a context menu is open over the 'Portfolio - Material Type' column, with the 'Filter' option highlighted. The 'Filters' section shows a list of active filters, including 'Bibliographic Details'. Bibliographic Level IN ('i', 's')', 'Suppressed From Discovery is equal to / is in No', 'Bibliographic Lifecycle is equal to / is in In Repository', 'Availability is equal to / is in Available', and 'Resource Type is prompted'.

**Electronic Serials Drill Down**

Criteria Results Prompts Advanced

Subject Area... 🔍 ↑↓ ▾ >>

E-Inventory

- Portfolio-----
- Portfolio
- Portfolio Activation Date
- Portfolio Creation Date
- Portfolio Modification Dat
- Portfolio Library Unit
- Portfolio License
- Portfolio PO Line
- Portfolio PO Line Approv
- Portfolio PO Line Creatio
- Portfolio URL Information

**Selected Columns**

Portfolio	Bibliographic Details
No. of Portfolio (In Repository) ⚙️	Portfolio - Material Type ⚙️
Title ⚙️	MMS Id ⚙️

↑↓ Sort

fx Edit formula

xyz Column Properties

**Filters**

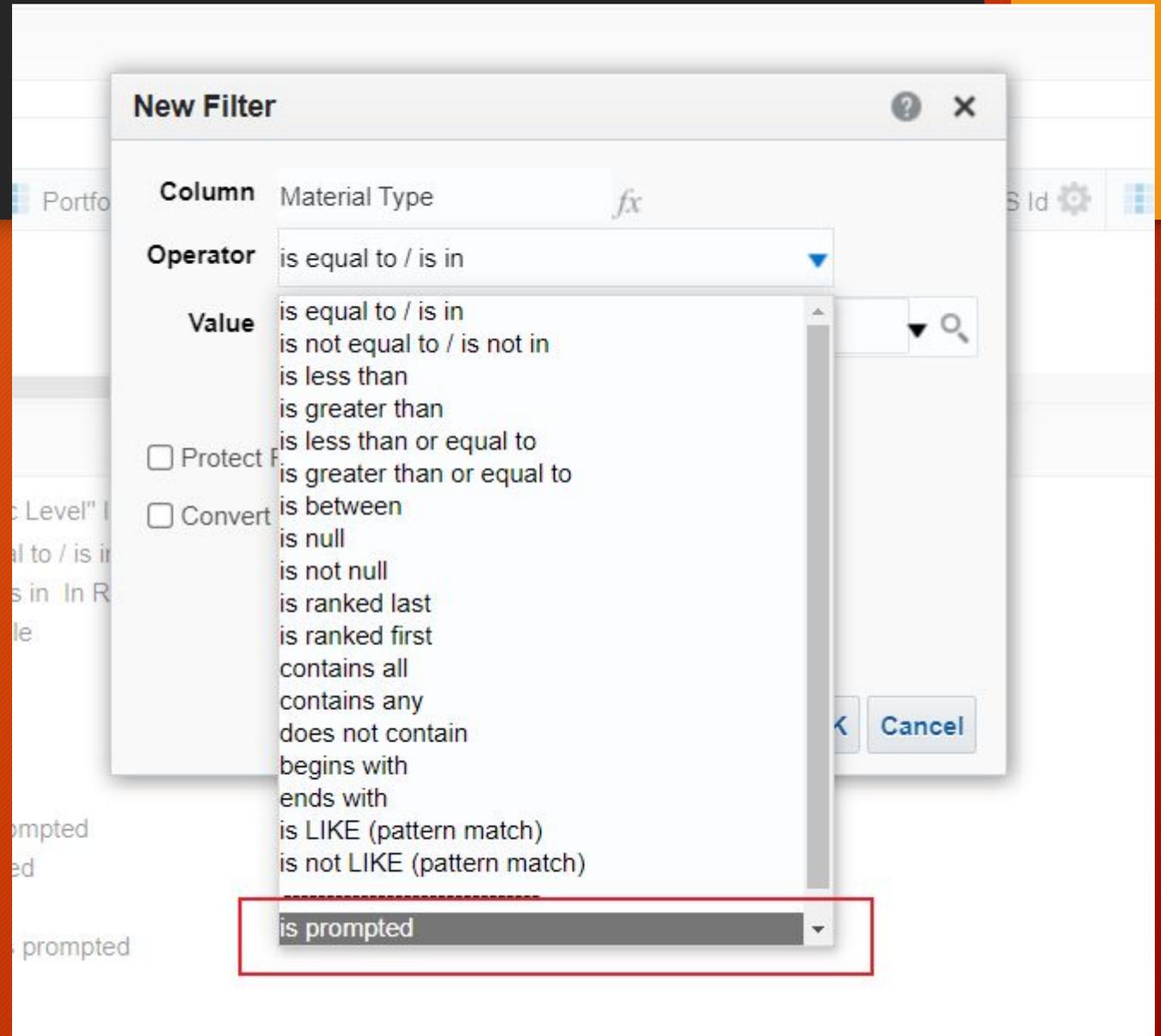
- 🔍 "Bibliographic Details"."Bibliographic Level" IN ('i', 's')
- AND 🔍 Suppressed From Discovery is equal to / is in No
- AND 🔍 Bibliographic Lifecycle is equal to / is in In Repository
- AND 🔍 Availability is equal to / is in Available
- AND 🔍 Resource Type is prompted

Filter

Delete

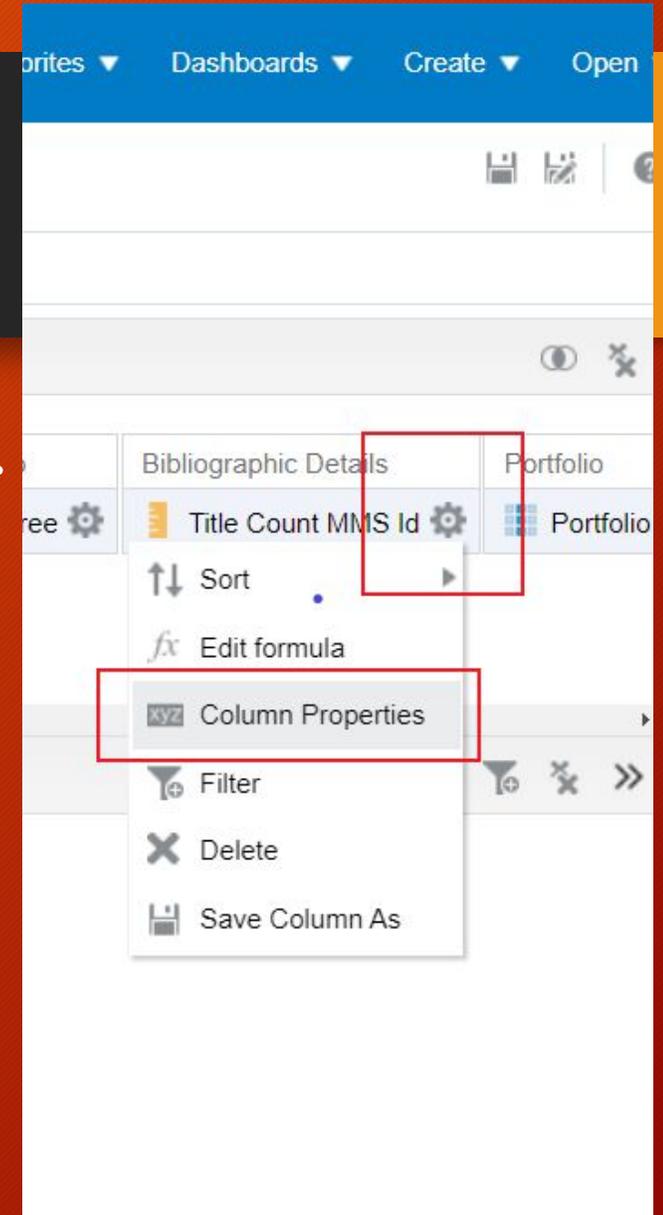
Save Column As

- iii. Scoll down to the bottom to select “is prompted” under the Operator row.
- iv. Save your work and repeat for the remaining columns.

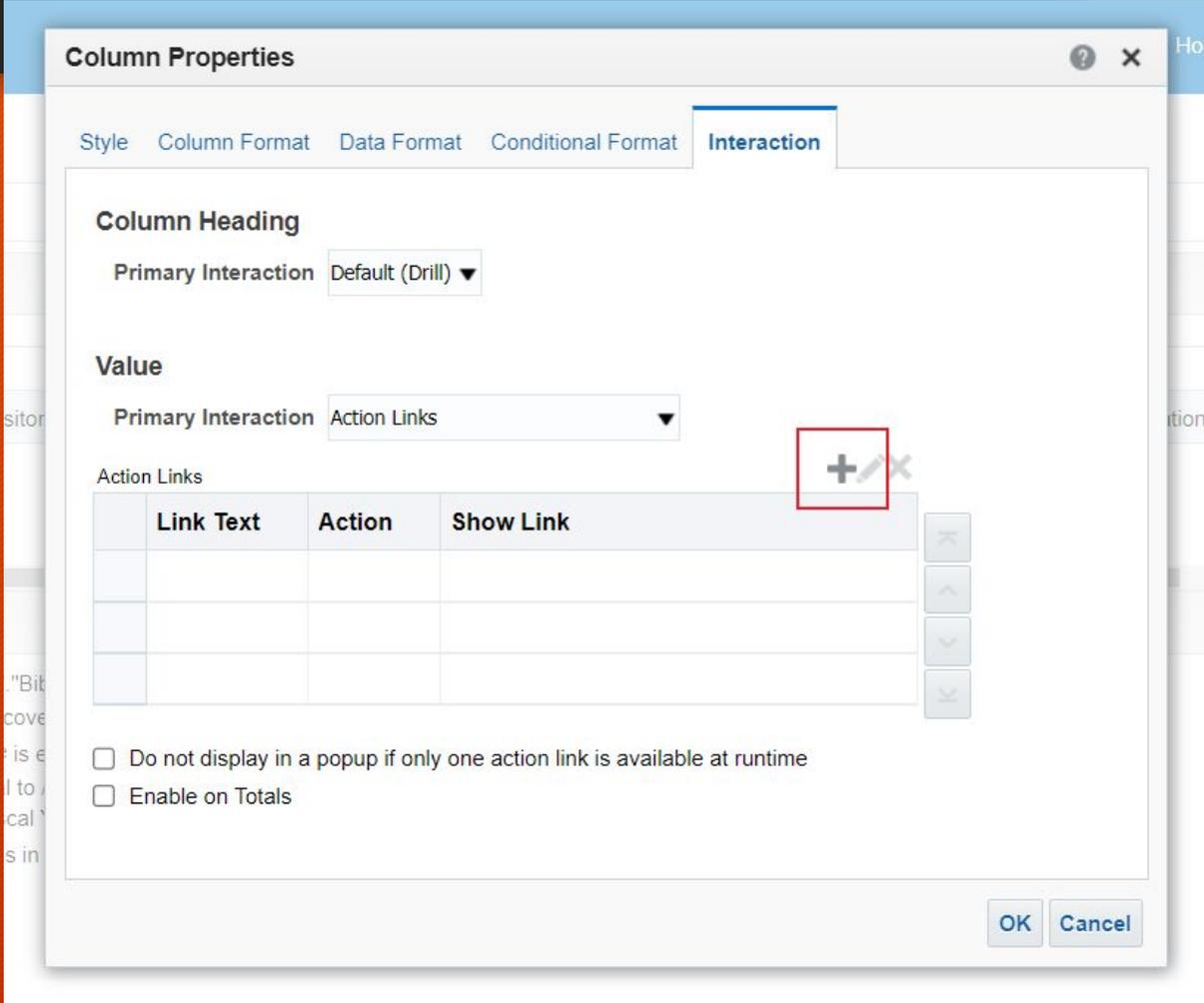


## 2. How to link the drill down report to the source report

- a) Pick the column you wish to have linked to the target.
- b) Click on the gear to open up the drop down menu.
- c) Select column properties.



## 2d. Add an action link by clicking on the '+' sign



**Column Properties**

Style Column Format Data Format Conditional Format **Interaction**

**Column Heading**

Primary Interaction Default (Drill) ▼

**Value**

Primary Interaction Action Links ▼

Action Links

Link Text	Action	Show Link

Do not display in a popup if only one action link is available at runtime

Enable on Totals

OK Cancel

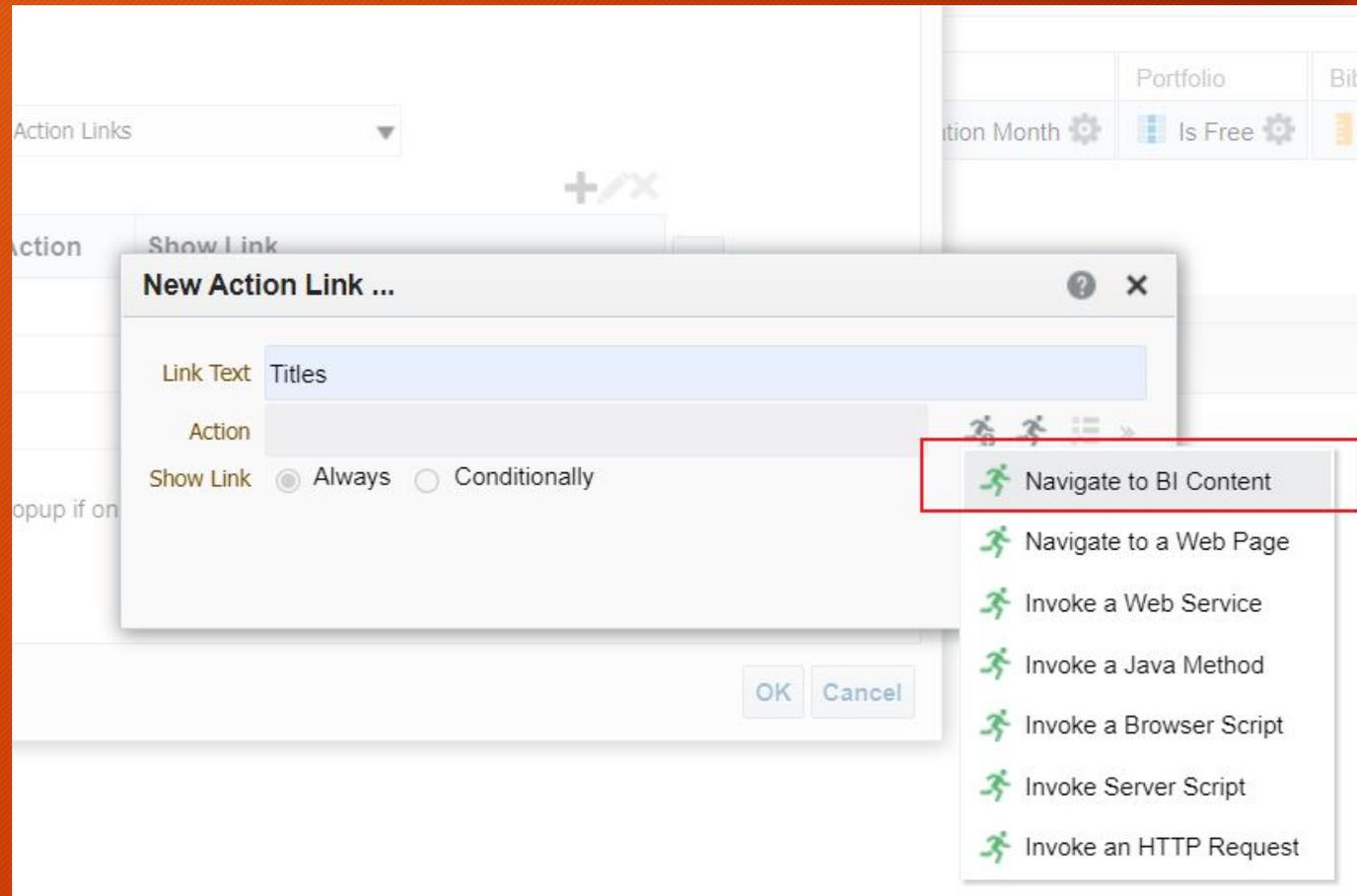
2e. Add a link text. Click on the first icon in the Action row to open up the drop down menu.

The screenshot shows a software interface with a 'New Action Link' dialog box. The dialog box has the following fields and options:

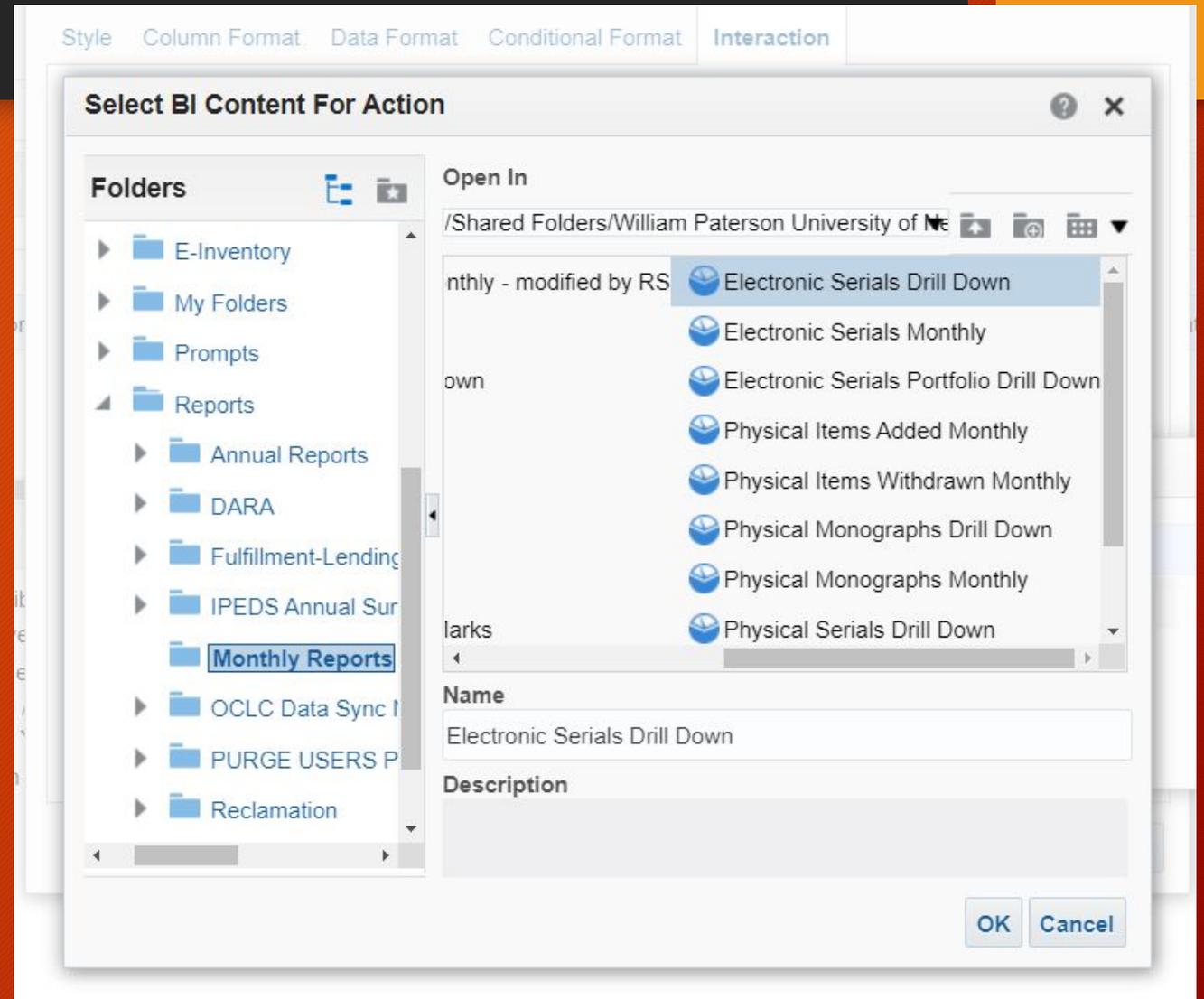
- Link Text:** A text input field containing the word 'Titles'.
- Action:** A dropdown menu with several icons. The first icon, which appears to be a bicycle, is highlighted with a red rectangular box.
- Show Link:** Two radio buttons labeled 'Always' (selected) and 'Conditionally'.
- Buttons:** 'OK' and 'Cancel' buttons at the bottom right of the dialog.

In the background, there is a table with columns for 'Column Heading', 'Primary Interaction', and 'Value'. The 'Primary Interaction' for the 'Value' column is set to 'Action Links'. Below this, there is a table with columns 'Link Text', 'Action', and 'Show Link'.

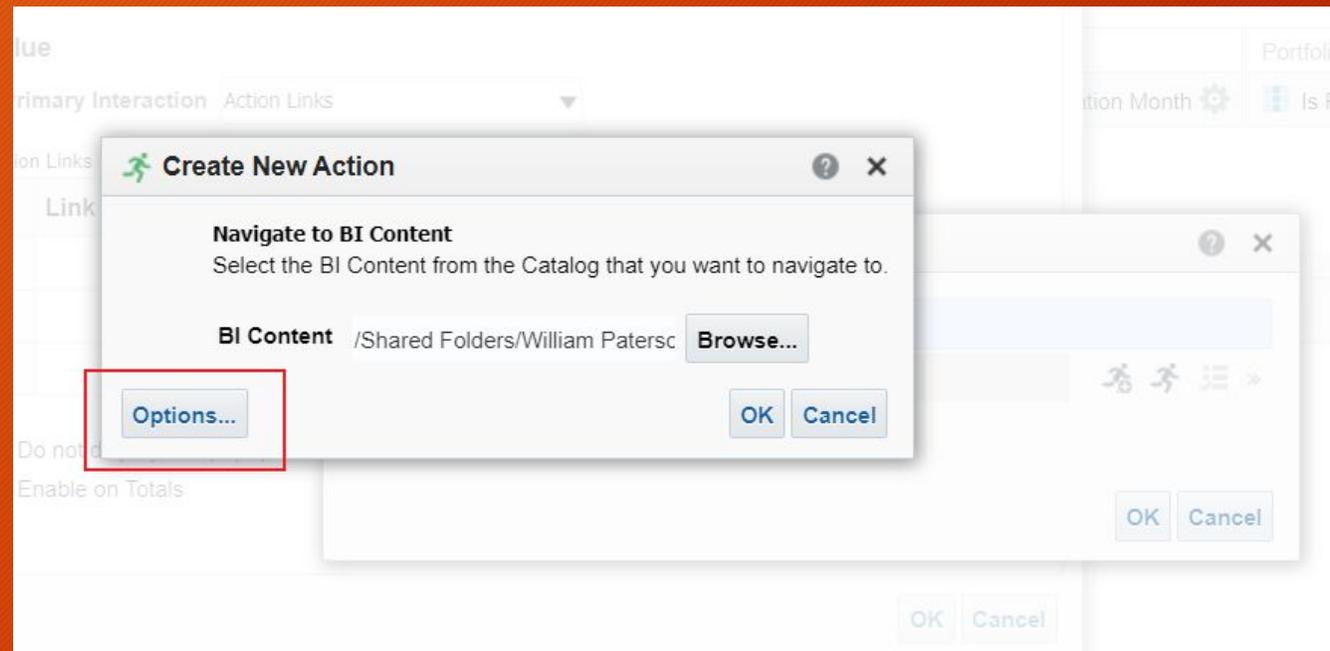
## 2f. Select Navigate to BI Content.



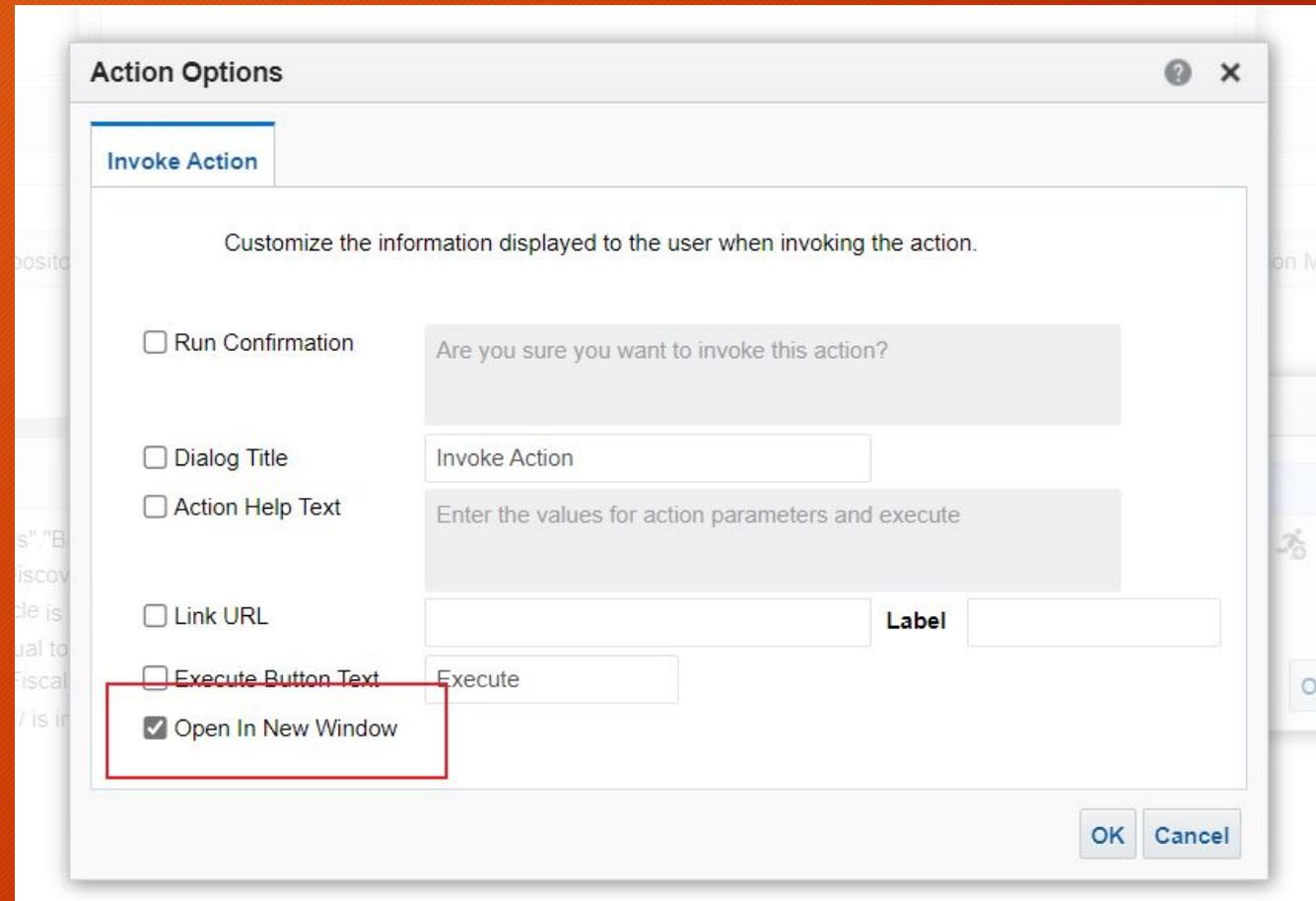
## 2g. Select the desired drill down report.



2h. You can click OK to complete. But I prefer to use Options.



## 2i. Selecting 'Open in New Window', spares having to use the back button.



The image shows a screenshot of a software dialog box titled "Action Options". The dialog has a tab labeled "Invoke Action" and a close button (X) in the top right corner. Below the tab, there is a heading: "Customize the information displayed to the user when invoking the action." The dialog contains several options, each with a checkbox and a corresponding text input field:

- Run Confirmation: The text field contains "Are you sure you want to invoke this action?".
- Dialog Title: The text field contains "Invoke Action".
- Action Help Text: The text field contains "Enter the values for action parameters and execute".
- Link URL: The text field is empty, followed by a "Label" label and another empty text field.
- Execute Button Text: The text field contains "Execute".
- Open In New Window: This option is checked and is highlighted with a red rectangular box.

At the bottom right of the dialog, there are two buttons: "OK" and "Cancel".

# A completed Action Link

Column Properties

Style Column Format Data Format Conditional Format Interaction

**Column Heading**

Primary Interaction Default (Drill) ▼

**Value**

Primary Interaction Action Links ▼

Action Links + / - / X

Link Text	Action	Show Link
Titles	Electronic Serials Drill Down	Always Enabled

Do not display in a popup if only one action link is available at runtime

Enable on Totals

OK Cancel

# One can add more than one Action Link to a link on a report.



### Column Properties

Style Column Format Data Format Conditional Format **Interaction**

**Column Heading**  
Primary Interaction: Default (Drill) ▼

**Value**  
Primary Interaction: Action Links ▼

Action Links + / -

	Link Text	Action	Show Link	
	Titles	Electronic Serials Drill Down	Always Enabled	✕
	Collections	Electronic Collections Serials Drill Down	Always Enabled	<
				>
				✕

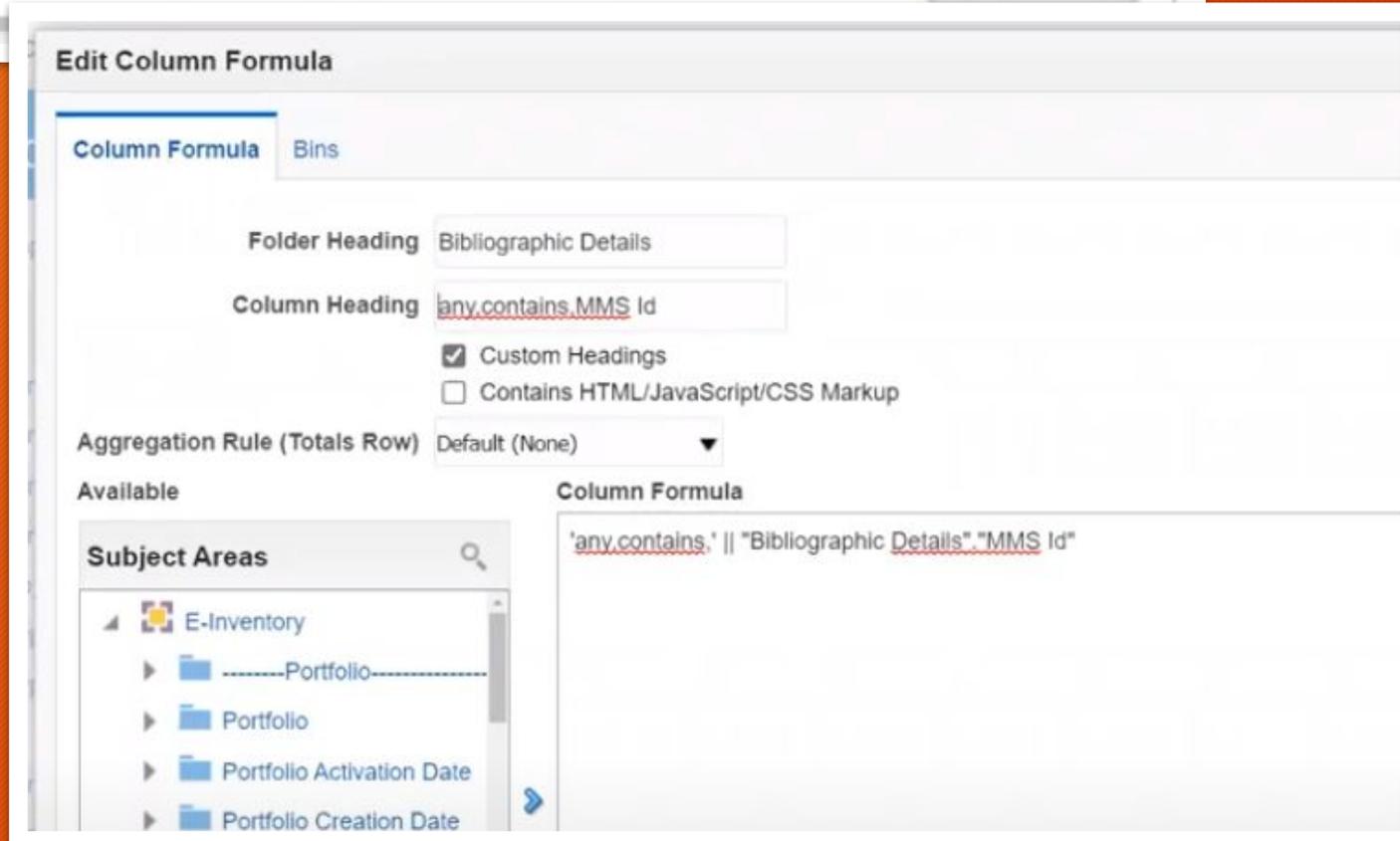
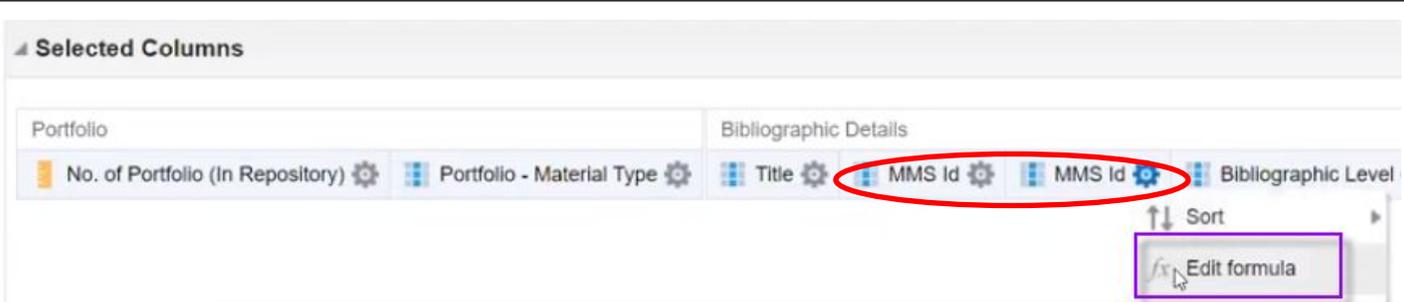
Do not display in a popup if only one action link is available at runtime  
 Enable on Totals

OK Cancel

# Adding links to Primo

- Column Formula Customization
- Column properties
- Creating the link

# Column Formula Customization



**Column Heading:**  
any.contains.MMS Id

**Column Formula:**  
'any.contains,' || "Bibliographic Details"."MMS Id"

# Column Properties

**Selected Columns**

Portfolio

Bibliographic Details

- No. of Portfolio (In Repository)
- Portfolio - Material Type
- Title**
- MMS Id

Sort

Edit formula

**Column Properties**

Filter

**Column Properties**

Style Column Format Data Format Conditional Format **Interaction**

Column Heading

Primary Interaction Default (Drill)

**Value**

Primary Interaction Action Links

Action Links

Link Text

Add Menu Action Links

**New Action Link ...**

Link Text **Primo**

Action

Show Link  Always  Conditionally

Do not display in a popup if on

Enable on Totals

**Navigate to a Web Page**

Navigate to BI Content

Invoke a Web Service

Invoke a Java Method

Invoke a Browser Script

Invoke Server Script

Invoke an HTTP Request

OK Cancel

**Create New Action**

**Navigate to a Web Page**

Enter the URL you want this action to display.

URL

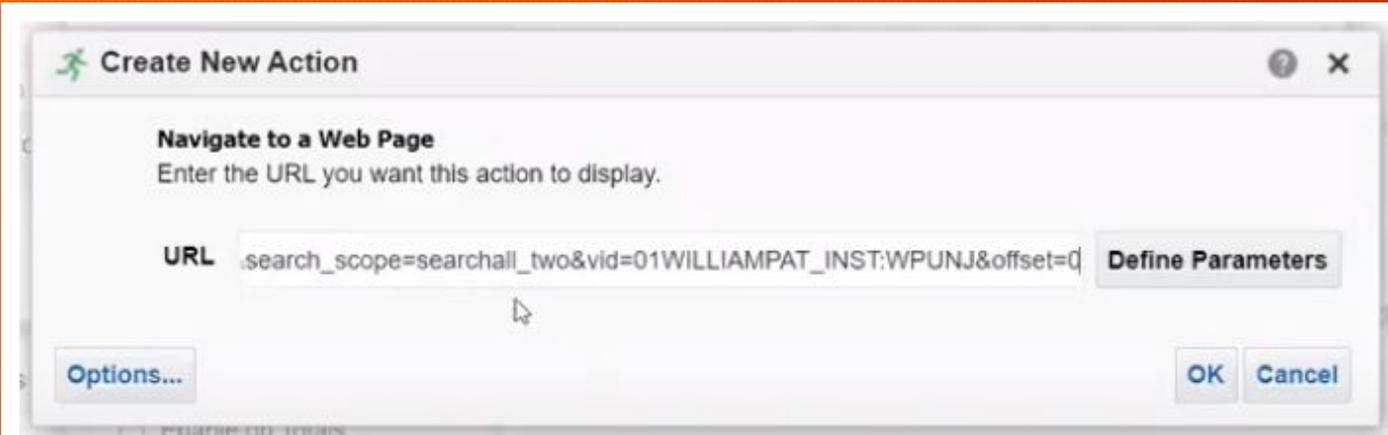
**Define Parameters**

Options...

OK Cancel

# Creating the link

1



The screenshot shows a dialog box titled "Create New Action" with a sub-header "Navigate to a Web Page". Below the sub-header is the instruction "Enter the URL you want this action to display." The "URL" field contains the text ".search\_scope=searchall\_two&vid=01WILLIAMPAT\_INST:WPUNJ&offset=0". To the right of the field is a "Define Parameters" button. At the bottom left is an "Options..." button, and at the bottom right are "OK" and "Cancel" buttons.

2



The screenshot shows the same "Create New Action" dialog box. The "URL" field now contains the text "https://primo.wpunj.edu/discovery/search?query=any,contains,{MMSID}&tal". The "Define Parameters" button is highlighted with a mouse cursor. The "Options...", "OK", and "Cancel" buttons are also visible.

## Steps:

1. Search Primo (for any MMS ID) and grab the search results URL
2. Replace the part of the URL that contains the MMS ID that you searched for with: {MMSID}

### 3. In "Define Parameters," check/uncheck boxes and choose the 'any,contains' option for the "Value"

**Create New Action**

**Navigate to a Web Page**  
Enter the URL you want this action to display.

URL  **Define Parameters**

**Define Parameters**  
To embed a parameter value anywhere within the URL, use the token @{Name} where 'Name' is the value specified in the Name column below. There is no limit to the number of parameters that can be embedded.

Name	Prompt	Value	Fixed	Hidden	Optional
1	query	any,contains,{MMSID}	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	tab	Everything	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	search_scope	searchall_two	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	vid	01WILLIAMPAT_INST:WPUNJ	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	offset	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**Options**

**Action Options**

**Invoke Action**

Customize the information displayed to the user when invoking this action.

- Run Confirmation
- Dialog Title
- Action Help Text
- Link URL
- Execute Button Text
- Open In New Window

In "Options," checkbox to have Primo link open in a new window

# Then you have the titles linked to Primo

## Compound Layout

Pivot Table

Rows 1 - 500

Bibliographic Details - Resource Type	Bibliographic Details - Material Type	Portfolio - Material Type	Is Free	Portfolio Access Type	PDA Name	License Status	License Name	Electronic Collection Public Name	Bibliographic Level	MMS Id	Title
Journal (Ceased publication) - Electronic	Journal	Book	No	None	None			EBSCOhost American Antiquarian Society Historical Periodicals Collection: Series 1	s	997377460005211	<a href="#">The Euterpeiad or, musical intelligencer : devoted to the diffusion of musical information and belles lettres</a>
										997377464105211	Musical journal for the piano forte
										997377469805211	The review
									s	997372715605211	The collegian
										997374912205211	The American museum of science, literature and the arts.

# References

## Ex Libris Documentation

- [ADVANCED ANALYTICS Technical Seminar 2018](#)
  - [Covers 'action links' aka 'drill down'](#)
- [How do I create a Pivot Table in Alma Analytics?](#)
- [How to create a link to Primo in an Alma Analytics report.pptx](#)
- [Analytics, Documentation](#)
- [Analytics, Best Practices and How-Tos](#)
- [Presentations and Documents - Analytics](#)

# Other documentation

## Oracle Business Intelligence Documentation

- [Oracle Business Intelligence Cloud Service](#)

## Harvard Wiki

- [Analytics & Reporting, Harvard Wiki](#)

# Thank you



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