

# IOWA STATE UNIVERSITY

University Library

## Extending Alma Analytics Analysis with Tableau Vizzes

ELUNA - Spokane  
May 4, 2018



[Google Images](#)

# Today's presentation

Many Ex Libris customers use [Tableau Software](#) for business intelligence. Tableau provides a way to visualize data from various sources. In April of 2017 Ex Libris announced the availability of an open source [Web Data Connector](#) (WDC), which provides a mechanism to connect Tableau to Alma data via the Alma Analytics API.

# Today's presentation

This session will describe and demonstrate the process for connecting Tableau to the Alma Analytics API using the ExLibris WDC, and provide examples of Tableau visualizations (vizzes) that are based on data obtained through the WDC connection. Participants will leave the session with a basic understanding of the requirements for moving their Alma Analytics data into Tableau visualizations.

# Background

- In order to facilitate creating the connection from Tableau to Alma Analytics, Ex Libris has built a Web Page which can be “plugged in” to the Tableau Web Data Connector.
- Resources – ExLibris Knowledge Center

[Home >> Alma >> Training >> Extended Training >> Presentations and Documents – Analytics](#)

- [Analytics - Using Alma Analytics with the Tableau Web Data Connector.pptx](#)
- [Tableau Web Data Connector Ex Libris Developers Network Blog](#)
- [Alma Analytics and Tableau Web Data Connector Integration - Youtube video for Igelu SIWG](#)

Note: Excerpts from the ExLibris Knowledge Center materials used throughout this presentation

# Tableau options

## 1. Tableau Server

- Enterprise (\$\$\$\$)
- Online (\$\$\$)
- **Public (Free)**

## 2. Tableau Desktop

- Enterprise (\$\$\$)
- **Public (Free)**

Tableau Desktop Download: <https://www.tableau.com/support/releases>

Tableau Public Download: <https://public.tableau.com/en-us/s/download>

Current Version: 2018.1

# WDC requirements -Three necessary elements

1. The URL of the ExLibris Tableau WDC web page
2. The API key which allows accessing Alma (or Primo) Analytics reports for your institution
3. The path and name of the Alma (Or Primo) Analytics report

# The three necessary elements - #1

- The first necessary element is the URL of the Tableau WDC web page:

Example:

```
https://eu-st01.ext.exlibrisgroup.com/delivery/wdc/exl.html
```

# The three necessary elements - #2

- The second necessary element is the API key for your institution which allows access to analytics reports.

The screenshot displays two panels of a web-based application management interface.

**Top Panel:** A table showing application details.

Application	API Key	Status	Platform
Analytics	17x [REDACTED] e84304be9 [REDACTED] e9f	Active	Integration

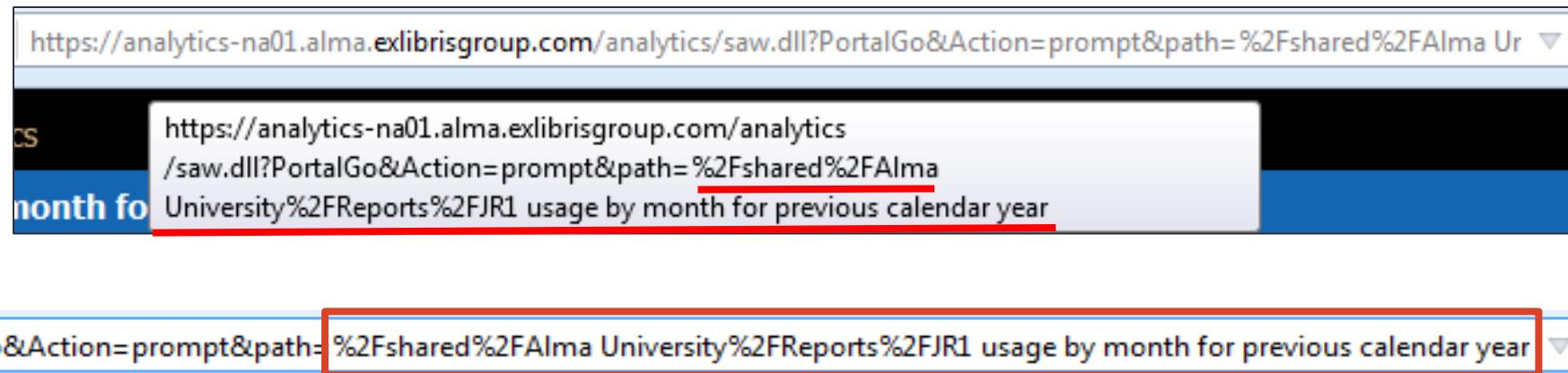
**Bottom Panel:** Application Information and API Management settings.

Application Information		API Management
Current APIs *		
API	Current Plan	
Analytics	Unlimited Hits ⓘ	Prod read/write

In the bottom panel, the "API Management" tab is highlighted with a red box, and the "Analytics" API entry is also highlighted with a red box.

# The three necessary elements - #3

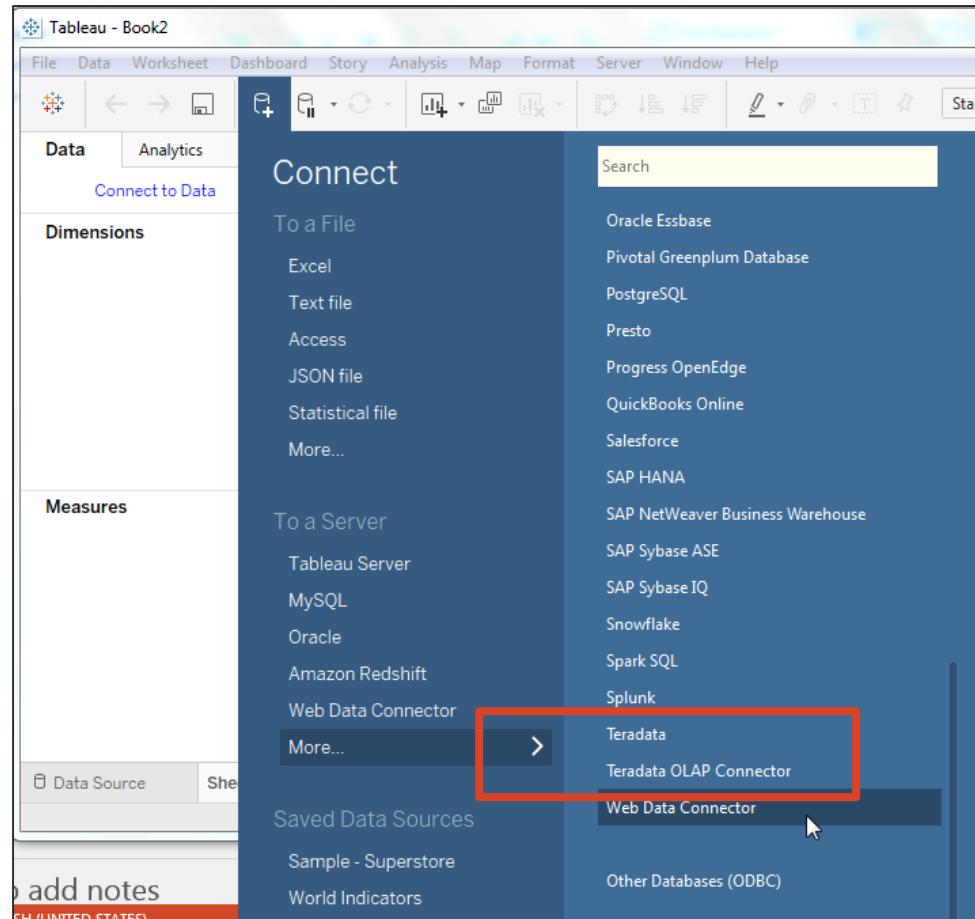
- The third necessary element is the path of the report.



The path is (and it can be with or without the escape characters, either / or %2F)

# Using the Tableau Web Data Connector (WDC)

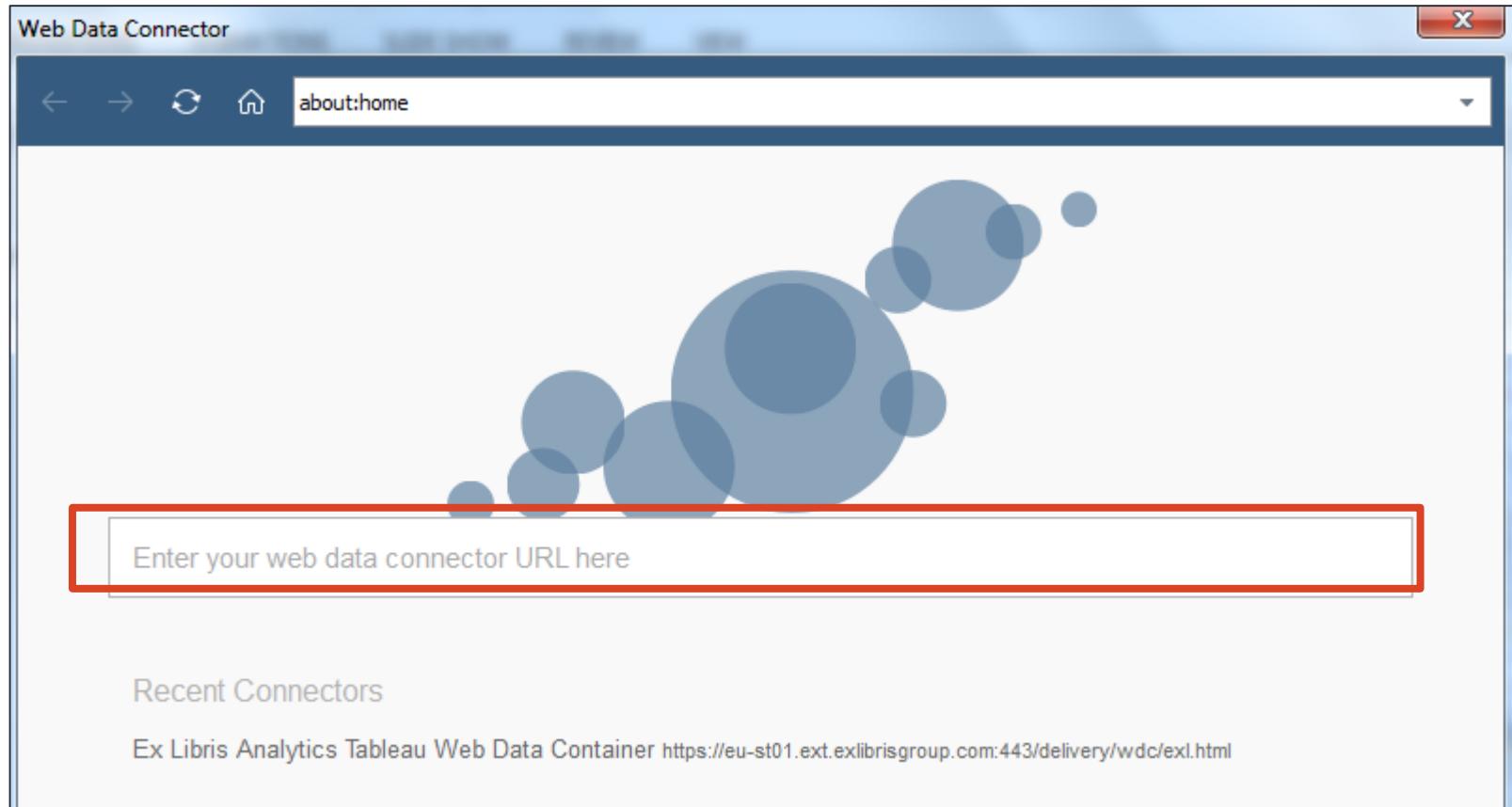
- Start Tableau. In right hand column choose “Web Data Connector”



# The Tableau Web Data Connector

- Enter the URL which we already mentioned and hit enter:

<https://eu-st01.ext.exlibrisgroup.com/delivery/wdc/exl.html>



# The Tableau Web Data Connector

- Fill in the API Key, choose Alma or Primo, fill in path, choose your region, and click “Get data”

Ex Libris Analytics Tableau Web Data Container

<https://eu-st01.ext.exlibrisgroup.com/delivery/wdc/exl.html>

## Ex Libris Tableau Web Data Connector

**API Key** 17xx [REDACTED]

Remember key

**Application**  Alma  Primo

**Report Path** %2Fshared%2FPrimo%2FUsage%2FReports%2FSession%20example#resultsTab1629

The path (including the report name) of the Analytics report. Click on the search icon to search your report library. Alternatively, see this [blog post](#) for how to retrieve the path manually.

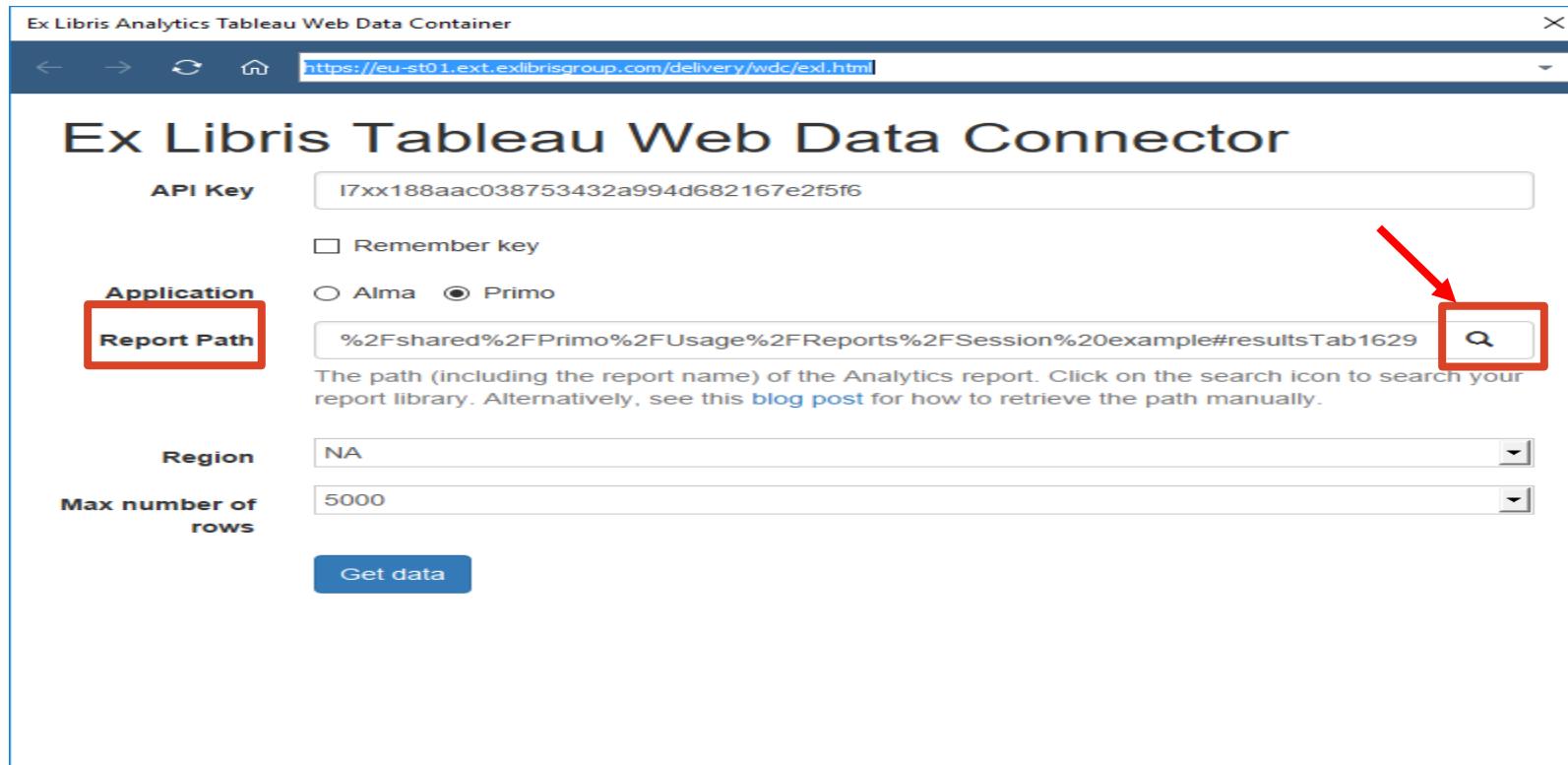
**Region** NA

**Max number of rows** 5000

**Get data**

# The Tableau Web Data Connector

- For Alma Analytics --- Instead of manually filling in the report path you can also click the magnifying glass at the end of the field



# Example 1 – Tableau dashboard using Alma benchmark data

The screenshot shows a software interface with a top navigation bar containing tabs: Criteria, Results (which is highlighted in blue), Prompts, and Advanced. Below the navigation bar is a sidebar titled "Subject Areas". The sidebar lists categories under "Benchmark": "KPI Measures" (indicated by a folder icon) contains "Inventory KPIs", "Acquisitions KPIs – POLs", "Fulfillment KPIs – Requests", "Fulfillment KPIs – Loans", "Resource Sharing KPIs - Borrowing Requests", "Resource Sharing KPIs - Lending Requests", "Usage KPIs - COUNTER Reports (previous calendar year)", "Institution Profile", and "KPI Date". To the right of the sidebar are several small icons: a magnifying glass, up and down arrows, a plus sign, and a refresh symbol.

# Example 1 – Tableau dashboard using Alma benchmark data

The screenshot shows the Oracle BI Answers interface. The URL in the address bar is <analytics-na01.alma.exlibrisgroup.com/analytics/saw.dll?Answers&path=%2Fshared%2Flowa%20state%20University%20Library%2FBenchmark%2FReports%2FAll%20KPIs%20exclude%20consortium#criteriaTab16307972f28>. The main pane displays the configuration of a dashboard titled "All KPIs exclude consortium". The "Selected Columns" pane lists various KPI measures such as "Num of physical items in repository (total)", "Num of bibliographic records in repository (total)", "Num of electronic portfolios in repository (total)", "Num of electronic collections in repository (total)", and "Num of bibliographic records in repository added (by month)". The "Filters" pane shows a single filter applied: "Is Consortium Member Institution is equal to / is in No". The left sidebar includes sections for "Subject Areas" (with categories like Benchmark, KPI Measures, Institution Profile, and KPI Date), "Criteria", "Results", "Prompts", and "Advanced". The bottom left corner shows a "Catalog" pane with "My Folders" and "Shared Folders".

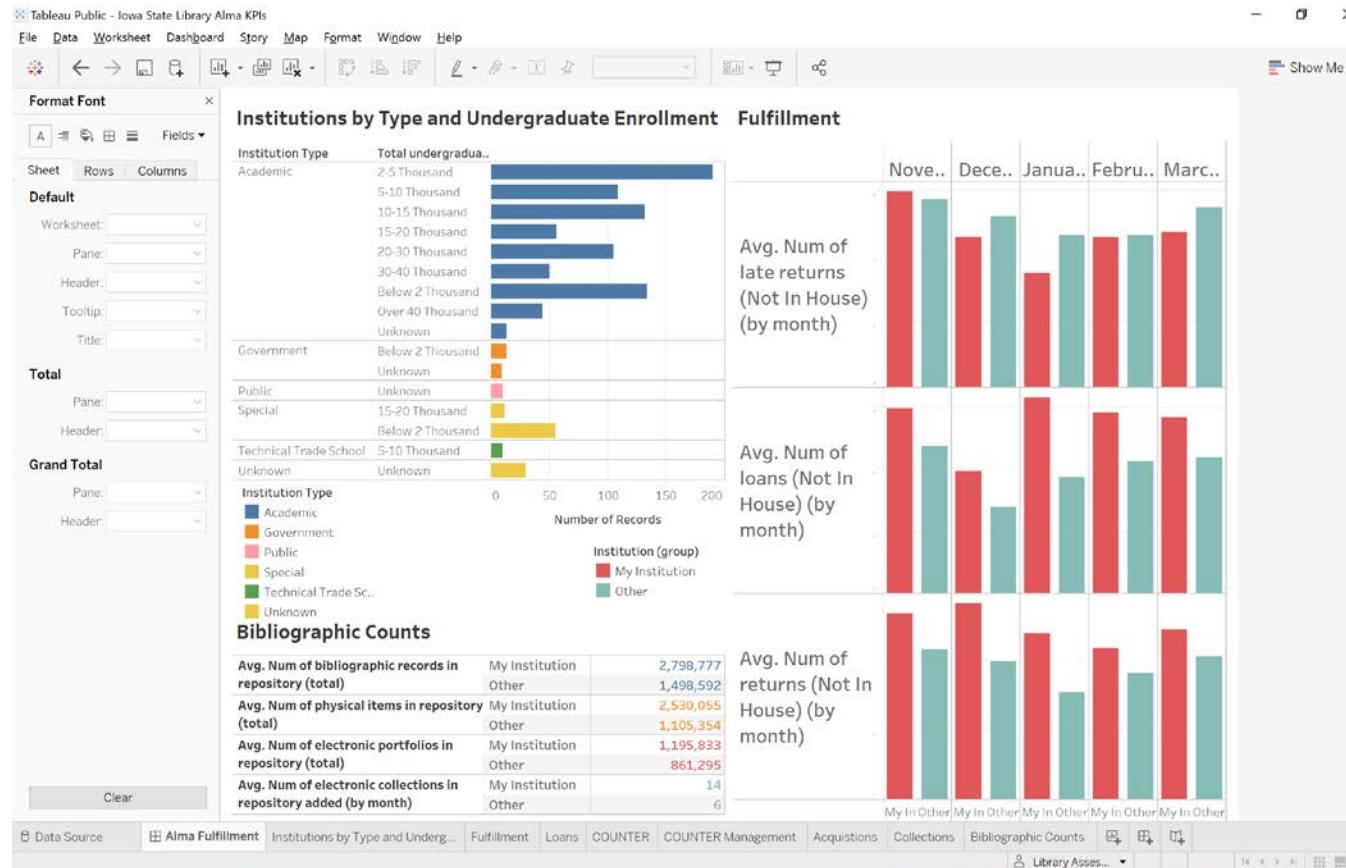
# Example 1 – Tableau dashboard using Alma benchmark data

The screenshot shows the 'Filters' pane of a Tableau dashboard. The pane has a light blue header with the word 'Filters'. Below the header, there is descriptive text and a single filter entry. The text reads: 'Add filters to the analysis criteria by clicking on Filter option for the specific column filter by clicking on add button after selecting its name in the catalog pane.' Below this text is a filter entry consisting of a small blue funnel icon followed by the text 'Is Consortia Member Institution is equal to / is in No'.

Add filters to the analysis criteria by clicking on Filter option for the specific column filter by clicking on add button after selecting its name in the catalog pane.

 Is Consortia Member Institution is equal to / is in No

# Example 1 – Tableau dashboard using Alma benchmark data



# Example 2 – Tableau dashboard using Primo trend data

The screenshot shows the 'Subject Areas' interface for Primo Facet Usage. At the top, there is a search bar and several icons. Below the search bar, the tree structure is displayed:

- Primo Facet Usage
  - Facet Usage
    - Facets Selected
    - Facets set as persistent
    - Facets used as persistent
    - Sessions
    - Facet Value
    - Primo View
    - Active Tab
    - Search Scope Type
    - New UI
    - User Group
  - Dates
  - Facet Types
  - Institutions

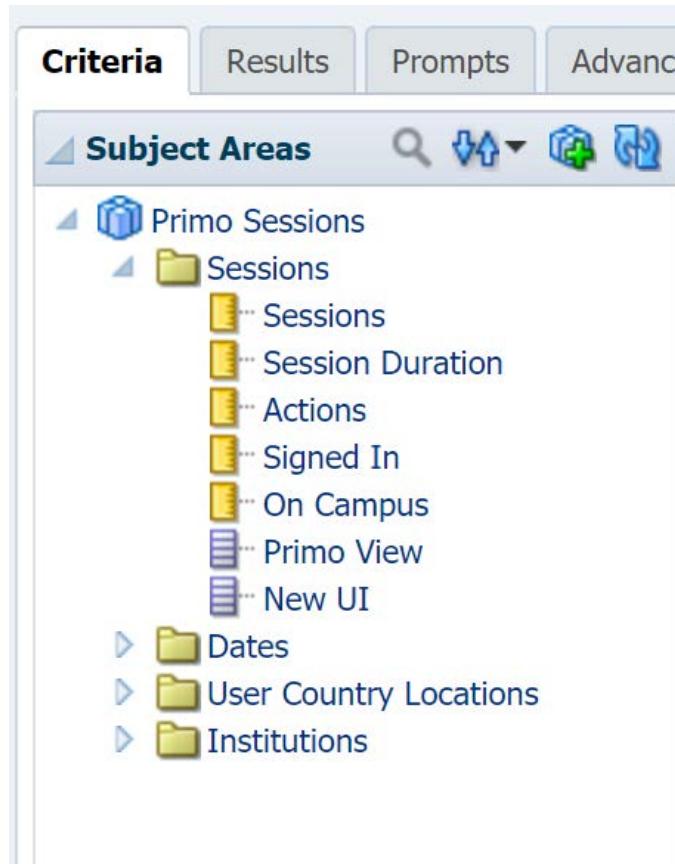
`TIMESTAMPADD(SQL_TSI_MONTH, -  
16, CURRENT_DATE)`

# Example 2 – Tableau dashboard using Primo trend data

The screenshot shows the EXLIBRIS Analytics interface with the following details:

- Header:** Welcome to Primo Back, Oracle BI Answers, Secure, URL: https://analytics-na01.alma.exlibrisgroup.com/analytics/saw.dll?Answers&path=%2fshared%2fPrimo%2001IASU%20-%20Iowa%20State%20University%2FReports%2FTableau%20WDC%2FFacet%20Usage%20Last%2012%20Months#criteriaTab16...
- Toolbar:** Advanced, Help, Sign Out.
- Panels:**
  - Subject Areas:** Primo Facet Usage, Facet Usage, Dates, Facet Types, Institutions.
  - Selected Columns:** Dates, Month (date), Facet Type, Facet Usage, Sessions, Facets Selected, Total Facets Selected per Facet.
  - Filters:** A filter for Month (date) is set to be greater than or equal to TIMESTAMPADD(SQL\_TSI\_MONTH, -16, ...).
  - Catalog:** List: All, My Folders, Shared Folders.

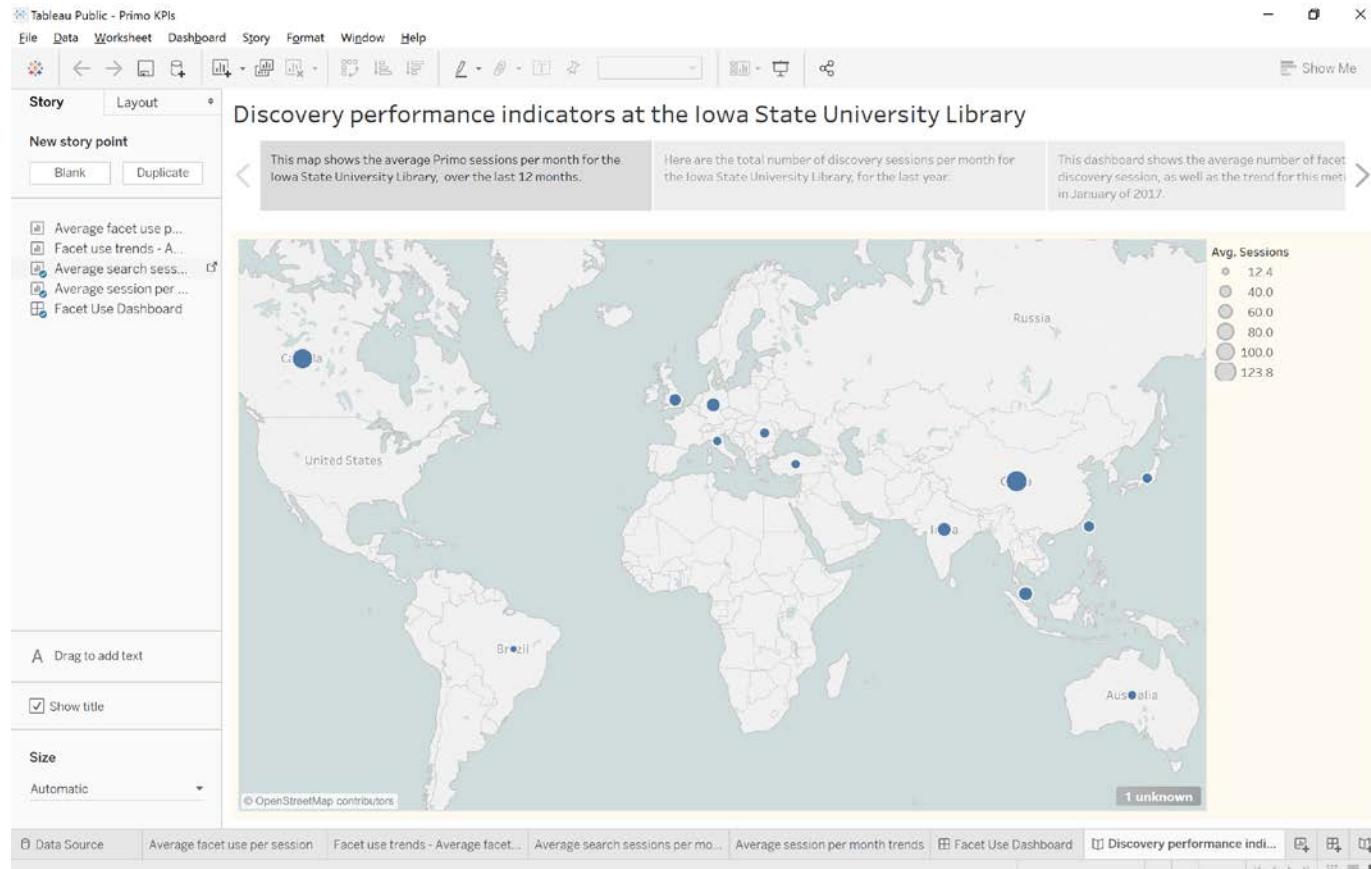
# Example 2 – Tableau dashboard using Primo trend data



# Example 2 – Tableau dashboard using Primo trend data

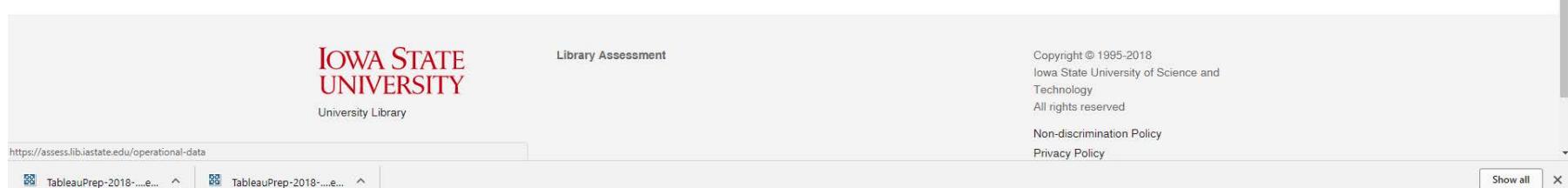
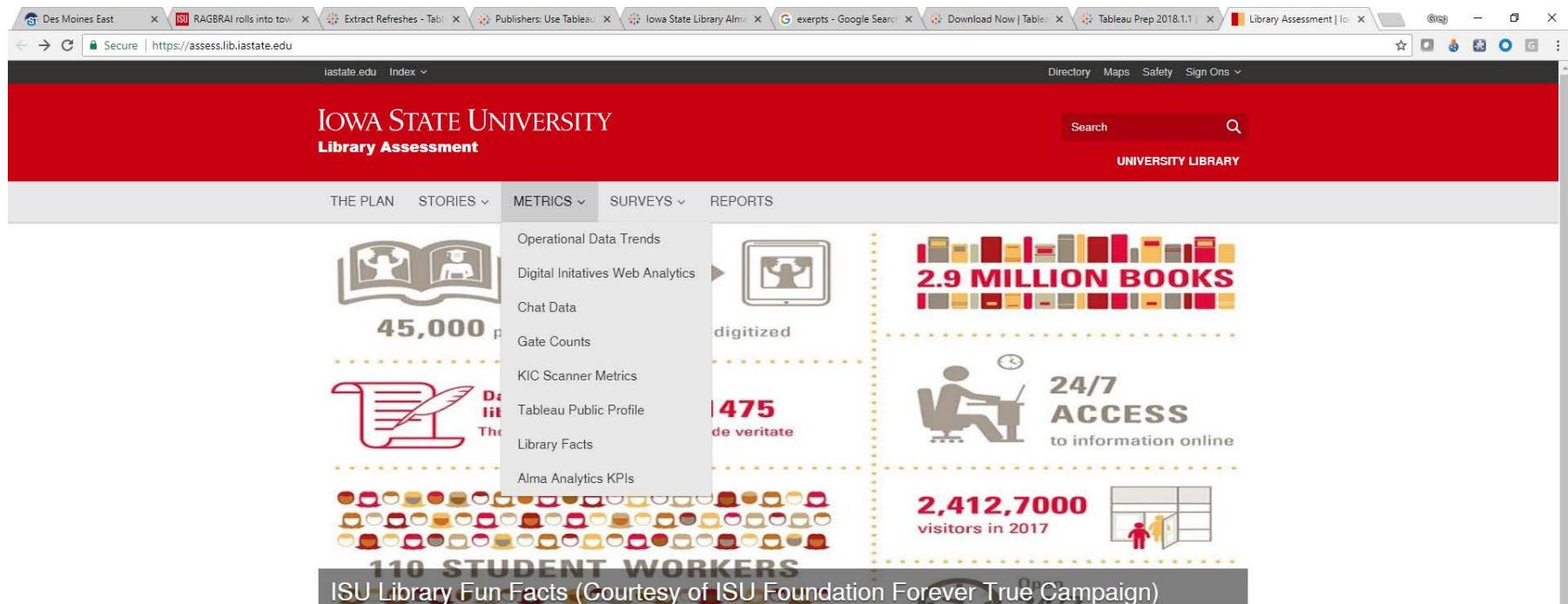
The screenshot shows the ExLibris Analytics interface for 'Session Metrics 12 month trends'. The browser address bar shows a secure connection to <https://analytics-na01.alma.exlibrisgroup.com/analytics/saw.dll?Answers&path=%2Fshared%2FPrimo%2001IASU%20-%20Iowa%20State%20University%2FReports%2FTableau%2WDC%2FSession%20Metrics%2012%20month%20trends#criteria...>. The main window displays a 'Selected Columns' pane with columns: Dates, Month (date), User Country Locations, Sessions, Actions, Session Duration, Signed In, and Total Sessions per Country. A 'Filters' pane shows a single filter: 'Month (date) is greater than or equal to TIMESTAMPADD(SQL\_TSI\_MONTH, -12, ...). The left sidebar includes 'Subject Areas' (Primo Sessions, Sessions, Dates, User Country Locations, Institutions), a 'Catalog' section with 'My Folders' and 'Shared Folders', and navigation links for Home, Catalog, Favorites, Dashboards, New, Open, and Sign Out.

# Example 2 – Tableau storyboard using Primo Analytics data



# More Iowa State University Library examples of Tableau use

- Iowa State University Library Assessment Website
- <http://assess.lib.iastate.edu>



# Live Demo



[Breaking the Prairie, Grant Wood \(1937\)](#)

# Questions?



Contact: Greg Davis, email: [davisgr@iastate.edu](mailto:davisgr@iastate.edu)

Presentation Materials:

<https://iastate.box.com/s/ib0qvz8p69pbmfl5ztglelzbvdxasxu>