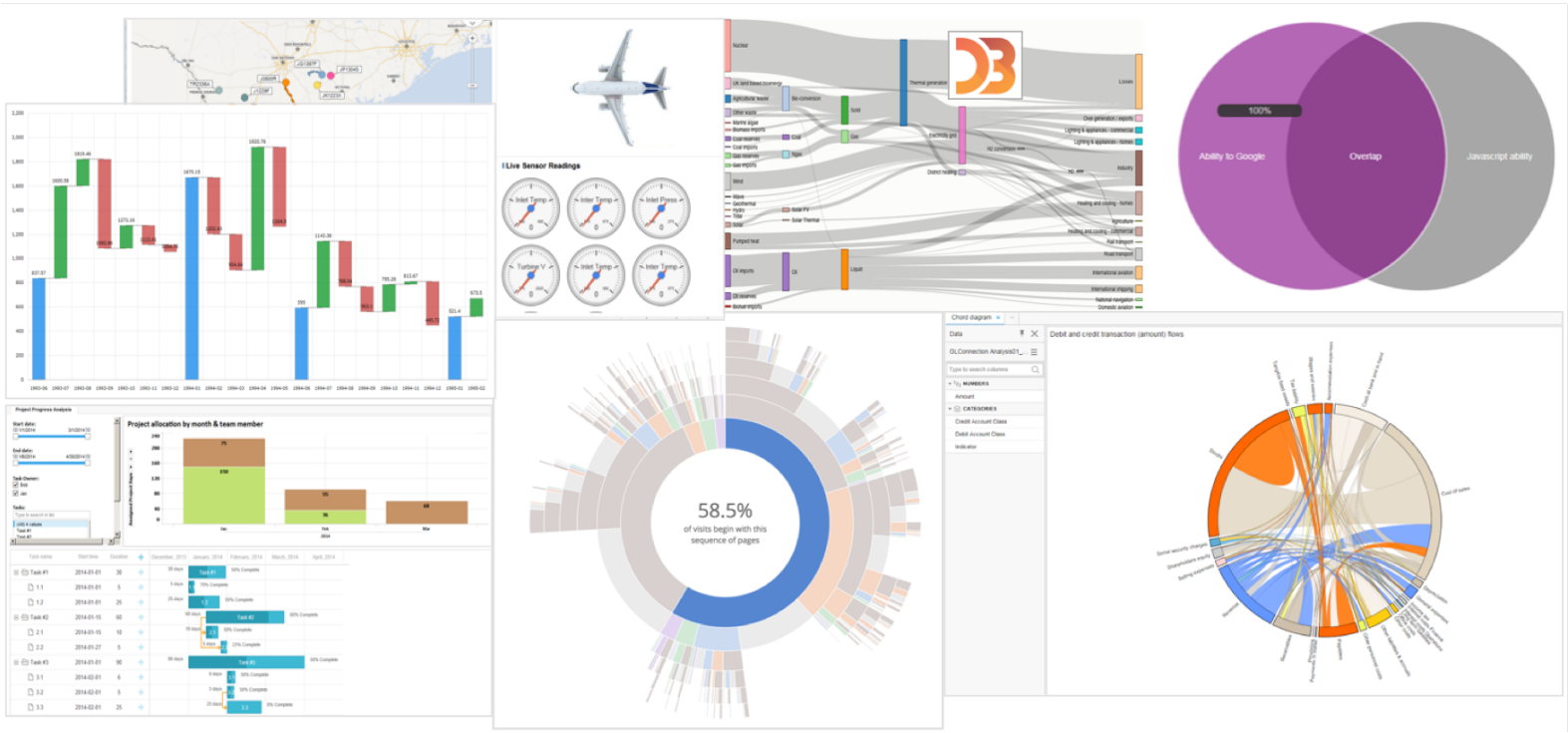
JavaScript Visualization Framework - JSViz

Tutorial #1 – Default Visualization using the JSViz Template



TIBCO® Analytics

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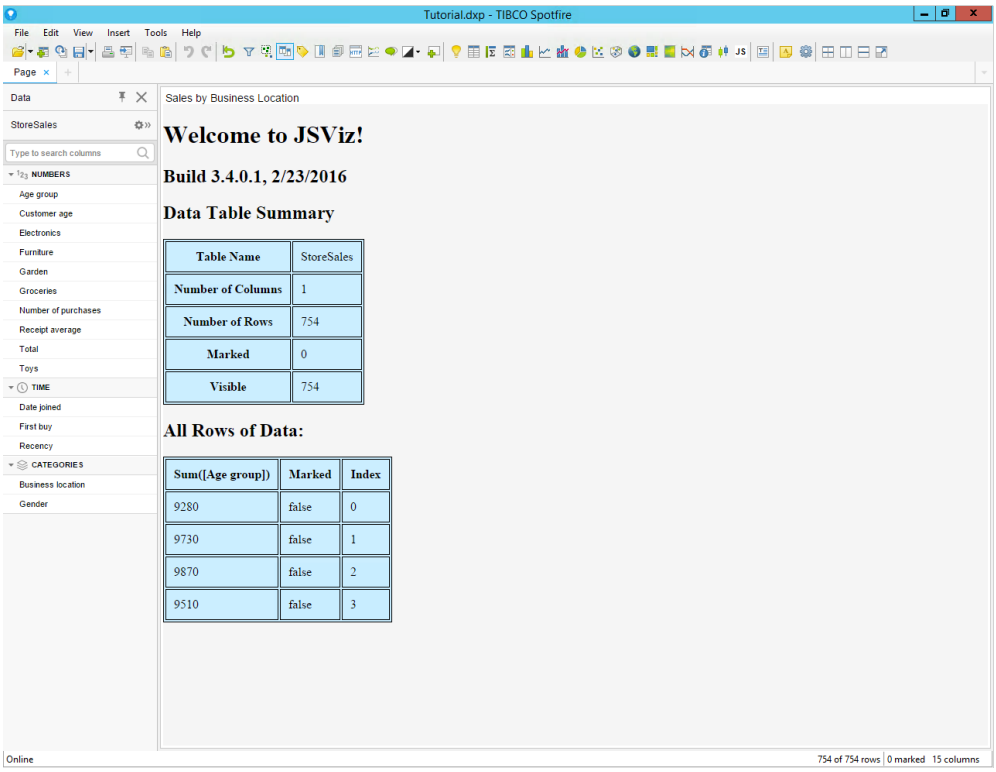
1. Introduction

In this set of tutorials we will walk through the process of recreating the Doughnut Chart visualization, which is one of the sample visualizations supplied with JSViz.

During this tutorial we will assume that you are working with the sample files installed on a Web Server. If you do not have access to a Web Server you can follow the tutorial by embedding the files directly into JSViz and skip the section on setting up the Tester.html file.

This first tutorial will walk through the process of creating a default visualization using the template files supplied with JSViz. This will serve as the starting point for creating our Doughnut Chart visualization. Here are the steps:

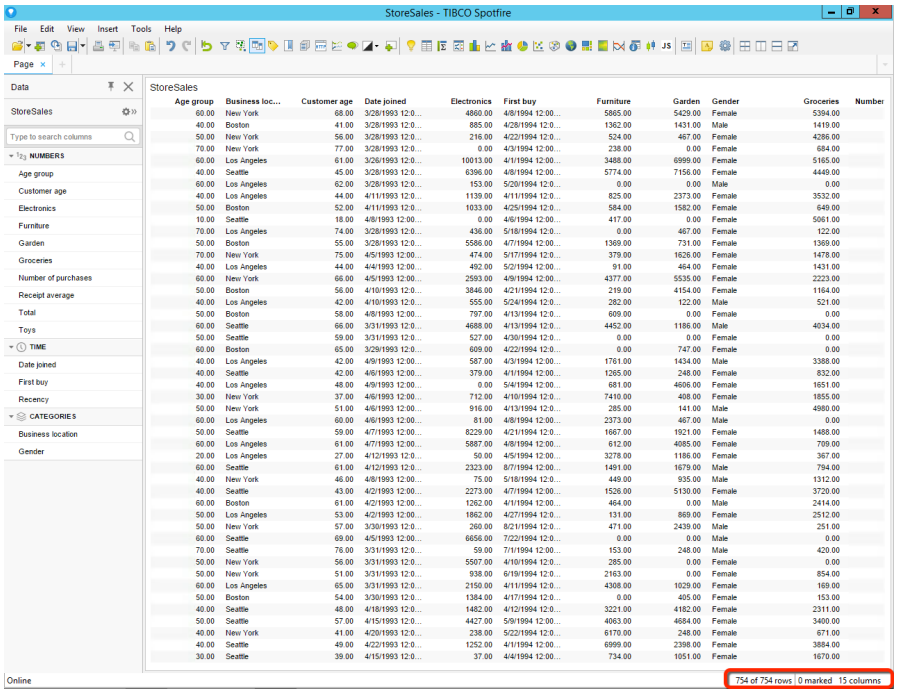
- Create a DXP file from our test data
- Insert a JSViz visualization
- Create our JavaScript and CSS files from the JSViz template files
- Create a default visualization using these files along with the JSViz.js library file



2. Opening the Starting Data File

As the basis for our visualization we will use the data file "`StoreSales.sbdf`". The data contained in this file is included in the demo data installed with Spotfire Professional but for convenience a copy is also included with the extension in the "`Documentation/Tutorials`" folder.

Open this file in Spotfire Analyst and confirm that the data table "`StoreSales`" contains 754 rows. In the screenshot below we have created a Table visualization in Spotfire 7.5:



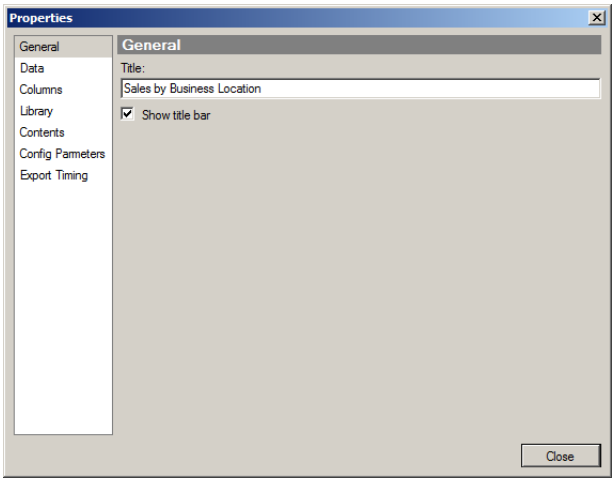
3. Adding a JSViz Visualization

Remove any existing visualizations so you have a blank page.

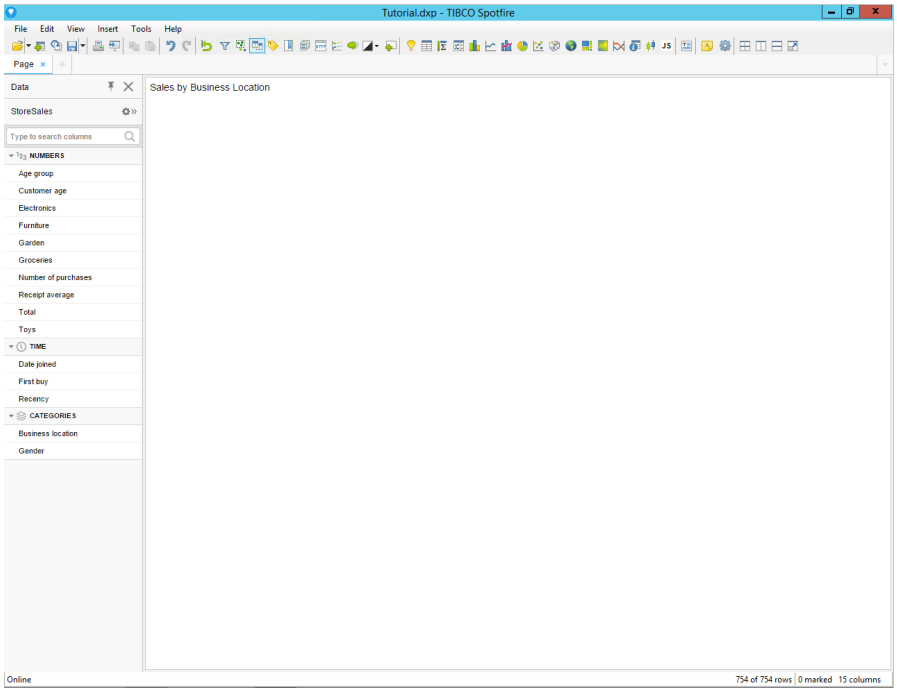
Insert a new JSViz visualization by clicking on the JSViz icon in the toolbar.

Click on the configuration cog.

Set the visualization title to be `"Sales by Business Location"`.



Save the DXP file as "`Tutorial.dxp`".



4. Creating the JavaScript and CSS Files

Navigate to the folder on your Web Server where you installed the JSViz sample files.

Within the "`src/js`" folder, make a copy of the "`Template.js`" file and call it "`MyDoughnutChart.js`".

Within the "`src/css`" folder make a copy of the "`Template.css`" file and call it "`MyDoughnutChart.css`".

5. Add the JS and CSS Files to the JSViz Library

Here we will bring the files we just created, along with jQuery and the JSViz.js helper file, into the JSViz Library and tell JSViz to use these files to draw a visualization.

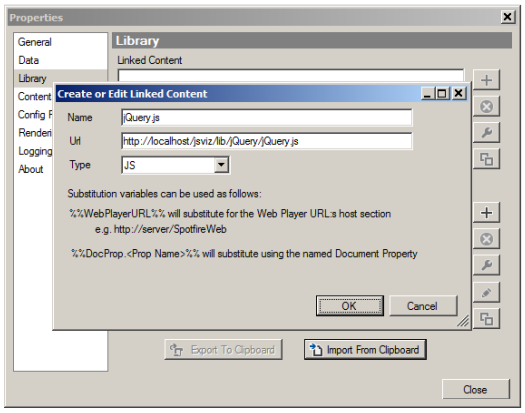
Note: we will use localhost as the address of our Web Server. Make sure to use the actual address of your Web Server.

Start by opening the JSViz Configuration by clicking on the configuration cog.

Switch to the "Library" Property Page.

Add a "Linked Content" item by clicking on the "+" button next to the Linked Content list. Enter the details as follows:

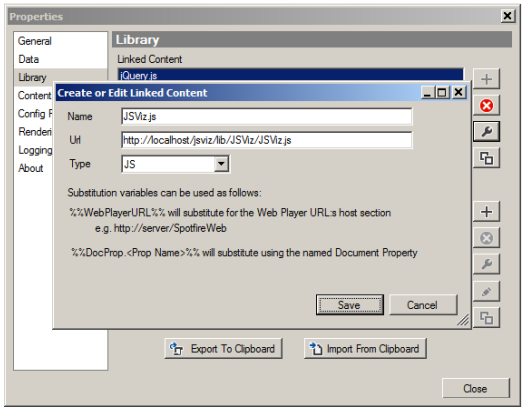
Name: `jQuery.js`
URL: `http://localhost/jsviz/lib/jQuery/jQuery.js`
Type: `JS`



Click OK when done

Repeat the above steps to add JSViz.js to the Linked Content list. Enter the details as follows:

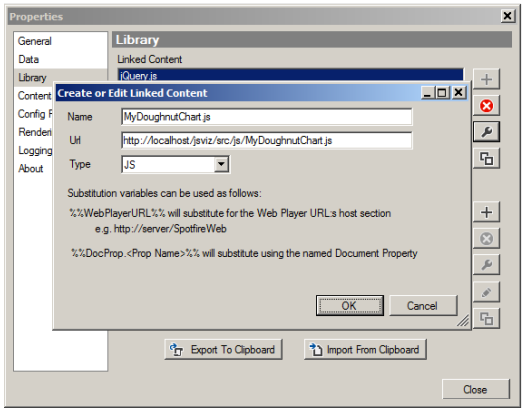
Name: `JSViz.js`
URL: `http://localhost/jsviz/lib/JSViz/JSViz.js`
Type: `JS`



Click OK when done

Repeat the above steps to add MyDoughnutChart.js to the Linked Content list. Enter the details as follows:

Name: `MyDoughnutChart.js`
URL: `http://localhost/jsviz/src/js/MyDoughnutChart.js`
Type: `JS`

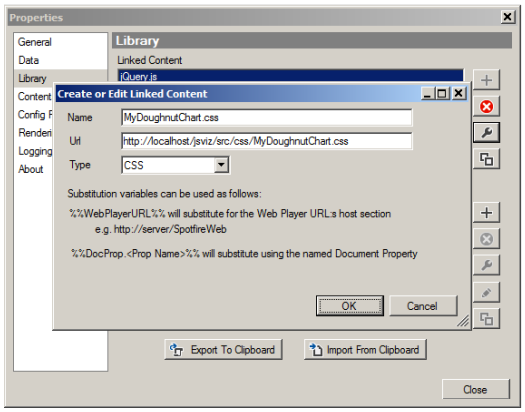


Click OK when done

Repeat the above steps to add MyDoughnutChart.css to the Linked Content list. Enter the details as follows:

Name: `MyDoughnutChart.css`
URL: `http://localhost/jsviz/src/css/MyDoughnutChart.css`
Type: `CS`

Click OK when done



Save your changes.

Notice at this point that nothing changes. The JSViz visualization is still blank. This is because the above steps only add the JavaScript and CSS files to the JSViz library.

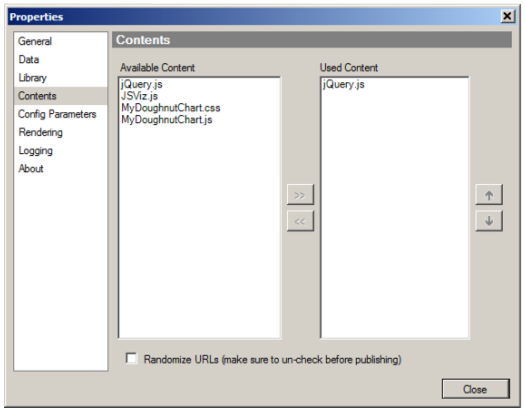
The next step is to tell the JSViz visualization to use these files to draw our visualization.

6. Add the Library Files to the Visualization

In this step we will tell the JSViz visualization which Library items to use and in which order.

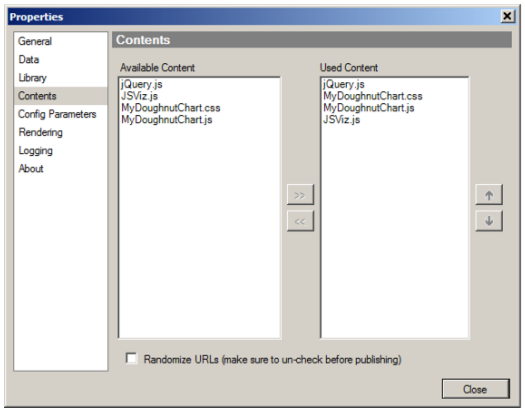
Switch to the "Contents" Property Page.

Select the `jQuery.js` item from the "Available Content" list and click the ">>" button to add it to the "Used Content" list.



Repeat the above process for the remaining items in the following order:

- `MyDoughnutChart.css`
- `MyDoughnutChart.js`
- `JSViz.js`



Notice that as you added the MyDoughnutChart.js file, the visualization updated to show the Default Visualization.