

Installing the JavaScript Visualization Framework - JSViz - into Spotfire Desktop

Introduction

The JavaScript Visualization Custom Extension, or JSViz, is a plugin for TIBCO Spotfire that allows users to create their own visualizations using JavaScript libraries such as D3. Usually this extension would be deployed on a Spotfire Server and Spotfire Analyst would pick up the extension from the Spotfire Server when starting up.

However, Spotfire Desktop does not connect to a Spotfire Server so we have to find a different way to deploy the extension.

Pre-Requisites

You will need to download and install Spotfire Desktop 6.5 or 7.0.

You will also need to download the JSViz v2.4.0.x package from TIBCO Community:

<https://community.tibco.com/wiki/javascript-visualization-framework-jsviz>

No additional software is required other than a Text Editor.

NOTE: If Internet Explorer is used to download the JSViz zip file, the zip file must be “unblocked” before continuing with the installation. To do this, right-click on the zip file, check the “unblock” option and click OK.

This step is not required if Chrome or some other browser was used to download the file.

Spotfire Desktop

By default, Spotfire Desktop installs into the following folder:

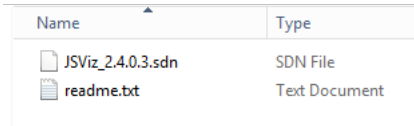
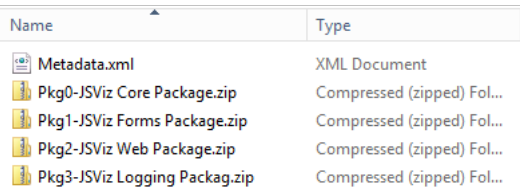
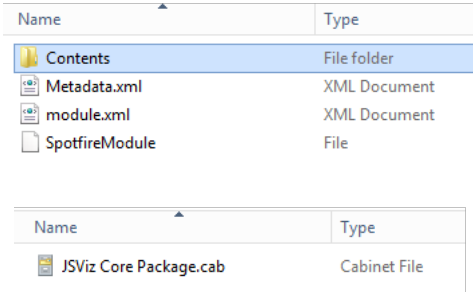
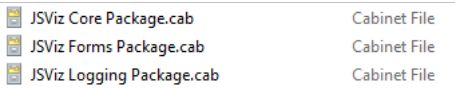
C:\Users\<user>\AppData\Local\TIBCO\Spotfire Desktop\7.0.0

Where <user> is the name of the Windows User that performed the installation. If multiple users have installed Spotfire Desktop then these steps will need to be performed **FOR EACH USER**.

Step #1 - Extracting the JSViz Files

These instructions assume that you have downloaded the zip file containing the JavaScript Visualization Framework into your Downloads folder.

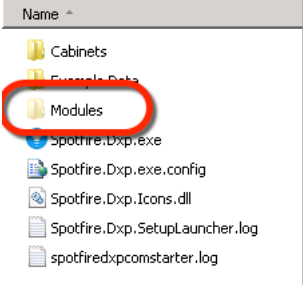
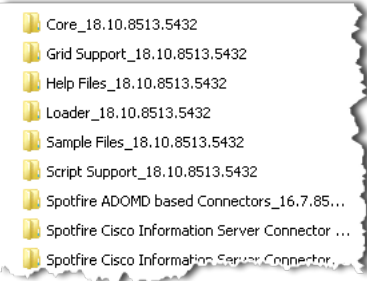
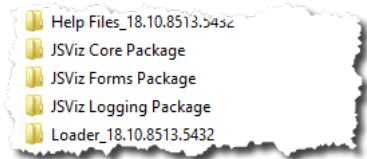
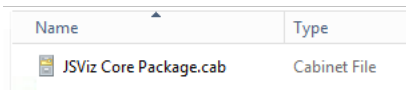
NOTE: You may need to change your Windows Explorer view settings to see the extension of the files.

Open the zip file containing the JavaScript Visualization Framework and locate the SDN file in the "For Spotfire Server" folder.	
Extract the SDN file into your Downloads folder. Change the extension to .zip and open the zip file.	
Ignoring the Web Package, open each of the remaining zip files, go to the Contents folder and copy the cab file to your Downloads folder.	
At this point you should have 3 cab files in your Downloads folder	

Step #2 – Installing the Files

These instructions assume that you have completed Step #1 and have the 3 cab files in your Downloads folder.

NOTE: You may need to change your Windows Explorer view settings to be able to see the Modules Folder.

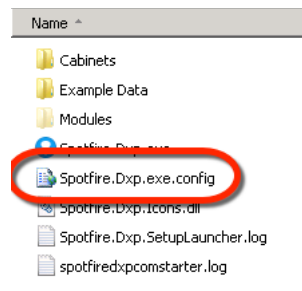
Open Windows Explorer and navigate to the directory where Spotfire Desktop is installed (see above for default location).	
Navigate into the Modules Folder.	
Inside the Modules Folder, create 3 new folders: JSViz Core Package JSViz Forms Package JSViz Logging Package	
Copy each of the CAB files into the folder of the same name. E.g. JSViz Core Package.spk goes in JSViz Core Package Etc	

<p>Navigate into the first folder:</p> <p>JSViz Core Package</p> <p>Open the CAB file and copy the contents into the folder.</p>	<table> <thead> <tr> <th>Name</th><th>Type</th></tr> </thead> <tbody> <tr> <td>JSViz Core Package.cab</td><td>Cabinet File</td></tr> <tr> <td>module.xml</td><td>XML Document</td></tr> <tr> <td>Newtonsoft.Json.dll</td><td>Application extens...</td></tr> <tr> <td>SpotfirePS.Framework.JSVis...</td><td>Application extens...</td></tr> </tbody> </table>	Name	Type	JSViz Core Package.cab	Cabinet File	module.xml	XML Document	Newtonsoft.Json.dll	Application extens...	SpotfirePS.Framework.JSVis...	Application extens...						
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Step #3 – Editing the Spotfire Desktop Configuration Files

Now that we have the files installed, we just need to tell Spotfire Desktop where to find them.

Open Windows Explorer and navigate to the directory where Spotfire Desktop is installed (see above for default location). Locate the file, “Spotfire.Dxp.Exe.config” and open it for editing.



Add the sections highlighted below. Remember to replace the “Administrator” user with whatever username is already present in the file. Put another way, the first part of the pathnames should be identical.

```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <configSections>
    <section name="Spotfire.Dxp" type="Spotfire.Dxp.Starter.DxpStarterSettings, Spotfire.Dxp"/>
  </configSections>
  <Spotfire.Dxp>
    <modules>
      <folder path="C:\Users\Administrator\AppData\Local\TIBCO\Spotfire Desktop\7.0.0\Modules"/>
      <folder path="C:\Users\Administrator\AppData\Local\TIBCO\Spotfire Desktop\7.0.0\Modules\JSViz Core Package"/>
      <folder path="C:\Users\Administrator\AppData\Local\TIBCO\Spotfire Desktop\7.0.0\Modules\JSViz Forms Package"/>
      <folder path="C:\Users\Administrator\AppData\Local\TIBCO\Spotfire Desktop\7.0.0\Modules\JSViz Logging Package"/>
    </modules>
    <arguments>
      <argument name="loadAllModules" />
    </arguments>
    <defaultLanguage value="en-US"/>
  </Spotfire.Dxp>
  <startup useLegacyV2RuntimeActivationPolicy="true">
    <!-- Prefer .Net framework v4.0, fallback to v2.0. -->
    <supportedRuntime version="v4.0" sku=".NETFramework,Version=v4.0"/>
    <supportedRuntime version="v2.0.50727"/>
  </startup>
</configuration>
```

Save the file.

Step #4 – Validation

After you have completed all the above steps, open Spotfire Desktop and you should see the JSViz Icon on the Visualizations Toolbar:



Now you should be able to open the sample visualizations supplied with JSViz.

