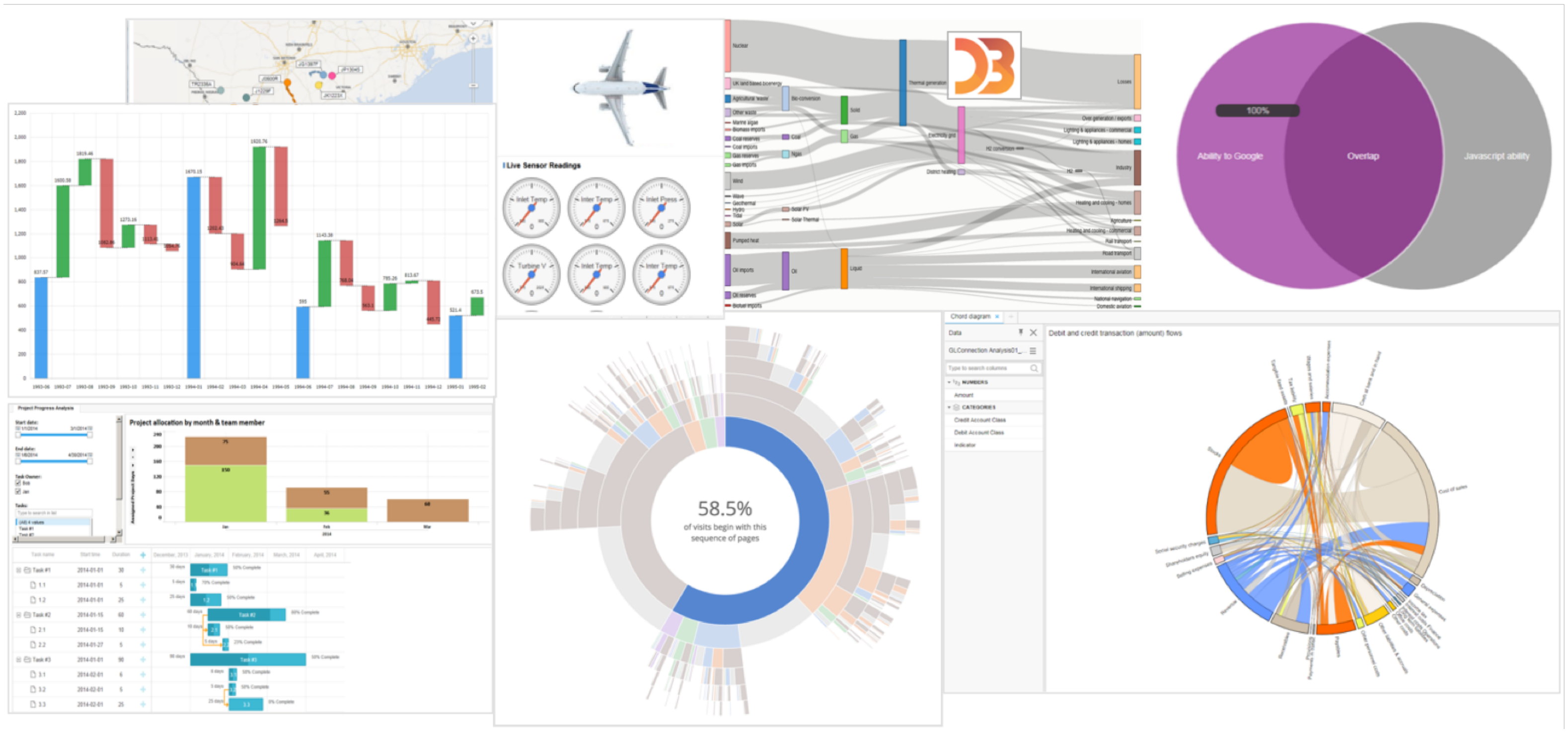
JavaScript Visualization Framework – JSViz V3.4

Samples



TIBCO® Analytics

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1. Introduction

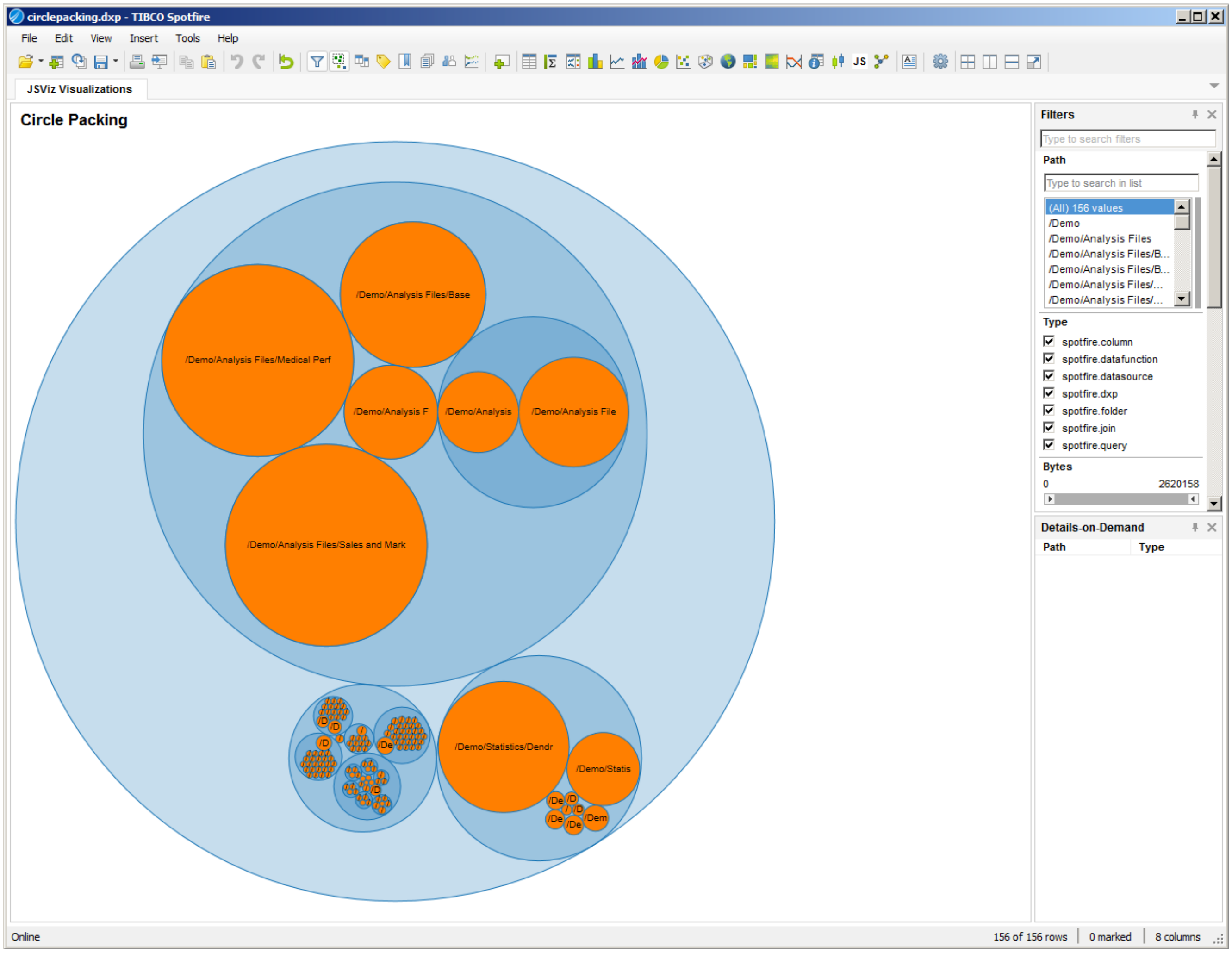
The JavaScript Visualization Framework – JSViz – ships with a number of samples that demonstrate various aspects of creating custom visualizations.

Each sample is depicted along with the following information:

- Description – a brief overview of the visualization
- Status – what visualization features are implemented
- Data – the data file used to build the visualization
- Files – the JavaScript and CSS files used to build the visualization

All samples were originally built using Linked Content items which were then converted to embedded. The original web server used to setup the Linked Content items was `https://s3-us-west-2.amazonaws.com/jsviz/3.4/`.

2. Circle Packing



Description

This sample shows how to use parent-child table data to draw a hierarchical structure where data values (in this case the size of items in the Spotfire Library) control the nesting and size of items.

This sample demonstrates:

- Converting a parent-child data table into a hierarchical tree
- Rendering using D3 circle-packing layout
- d3 Tooltips

Status

Only initial rendering and resizing are implemented (no marking or filtering).

Data

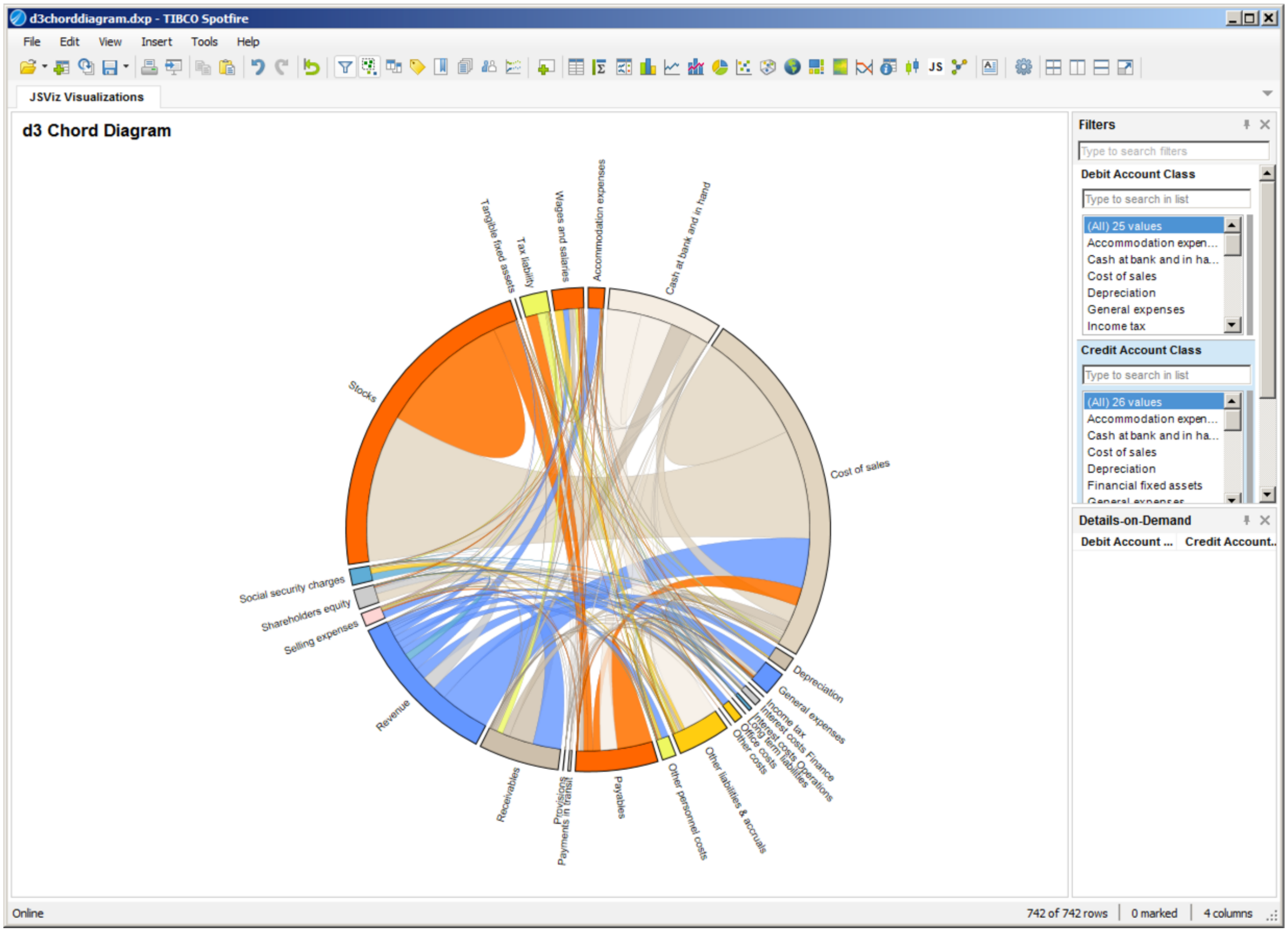
The sample is based on a data set containing information on the Spotfire Demo Library contents. The data was extracted via a .NET program using the Spotfire Server Web Service API. It is shipped with JSViz as "`TSSLibrarySize.sbdf`".

Files

DXP File:	`circlepacking.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	`/src/css/CirclePacking.css`
JS File:	`/src/js/CirclePacking.js`

Includes:	`/lib/jQuery/jQuery.js`
	`/lib/d3/d3.v3.min.js`
	`/src/js/base.js`
	`/src/js/DataStructures.Tree.librarysize.js`

3. d3 Chord Diagram



Description

This sample shows how to use the d3 libraries to create a Chord Diagram.

This sample demonstrates:

- Using the Spotfire Engine to deliver un-aggregated data values
- Using d3 API's
- Support for printing and exporting using the Export Timing option

Status

This is a very basic sample with fixed sizing. It does use the d3 capabilities to change the diagram through mouse movements.

Data

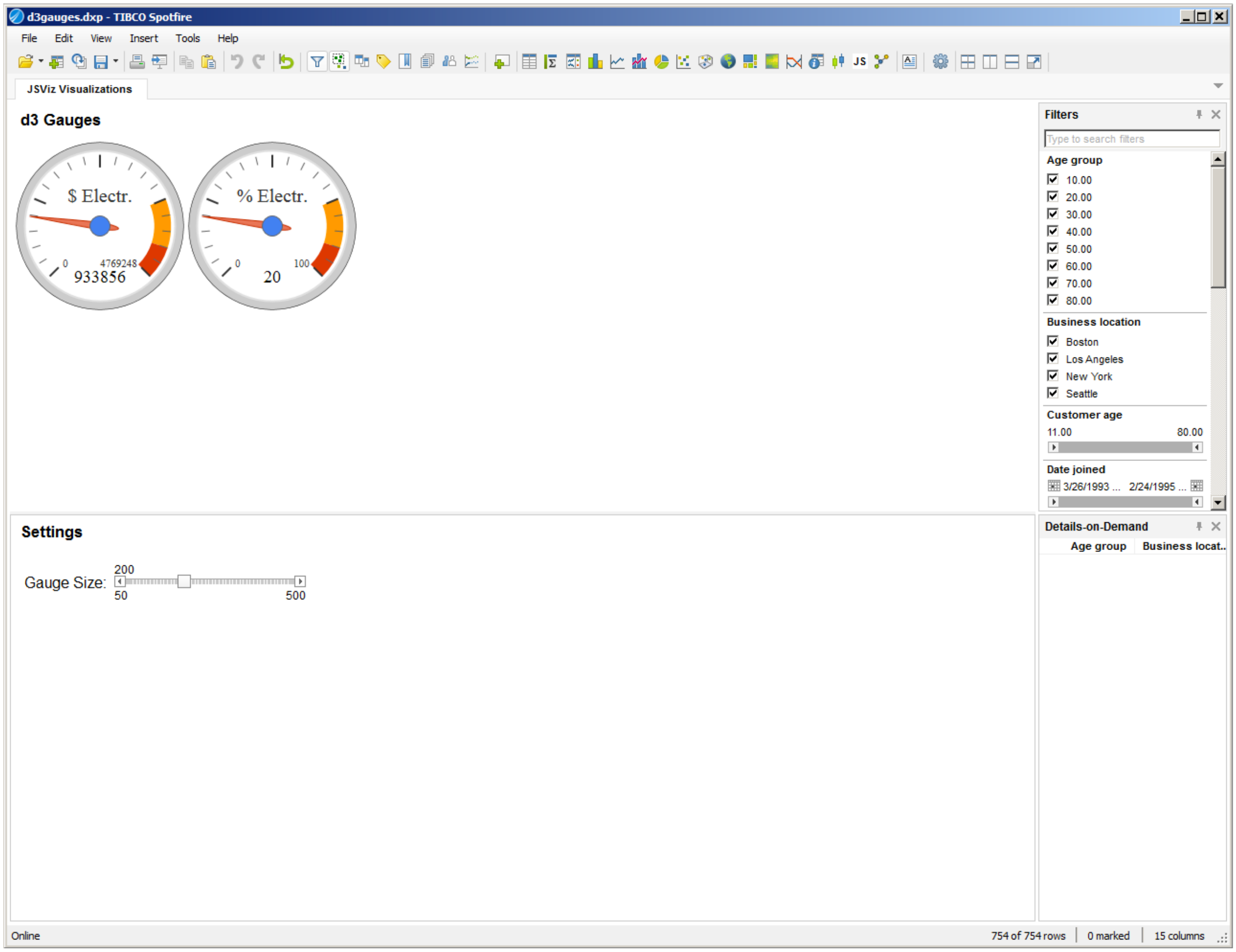
The sample data is based on a custom data set “`ChordDiagram.sbdf`”, which is shipped with JSViz.

Files

DXP File:	`d3chorddiagram.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	`/src/css/D3ChordDiagram.css`
JS File:	`/src/js/D3ChordDiagram.js`

Includes:	`/lib/jQuery/jQuery.js`
	`/lib/d3/d3.v3.min.js`
	`/lib/d3/d3.chord.mapper.js`
	`/lib/underscore/underscore.js`

4. d3 Gauges



Age group: ☑ 10.00 ☑ 20.00 ☑ 30.00 ☑ 40.00 ☑ 50.00 ☑ 60.00 ☑ 70.00 ☑ 80.00

Business location: ☑ Boston ☑ Los Angeles ☑ New York ☑ Seattle

Customer age: 11.00 – 80.00

Date joined: 3/26/1993 ... 2/24/1995 ...

Gauge Size: 200 (50 – 500)

Description

This sample shows how to use the d3 libraries to create Gauge Controls.

This sample demonstrates:

- Using the Spotfire Engine to calculate aggregated data values
- Using custom expressions in the data configuration
- Using document properties in the configuration parameters
- Using d3 API's
- Support for printing and exporting using the Export Timing option

Status

Initial rendering and resizing are implemented (no marking or filtering). Additionally, changing the value of the "`GaugeSize`" Document Property will change the size of the gauges.

Data

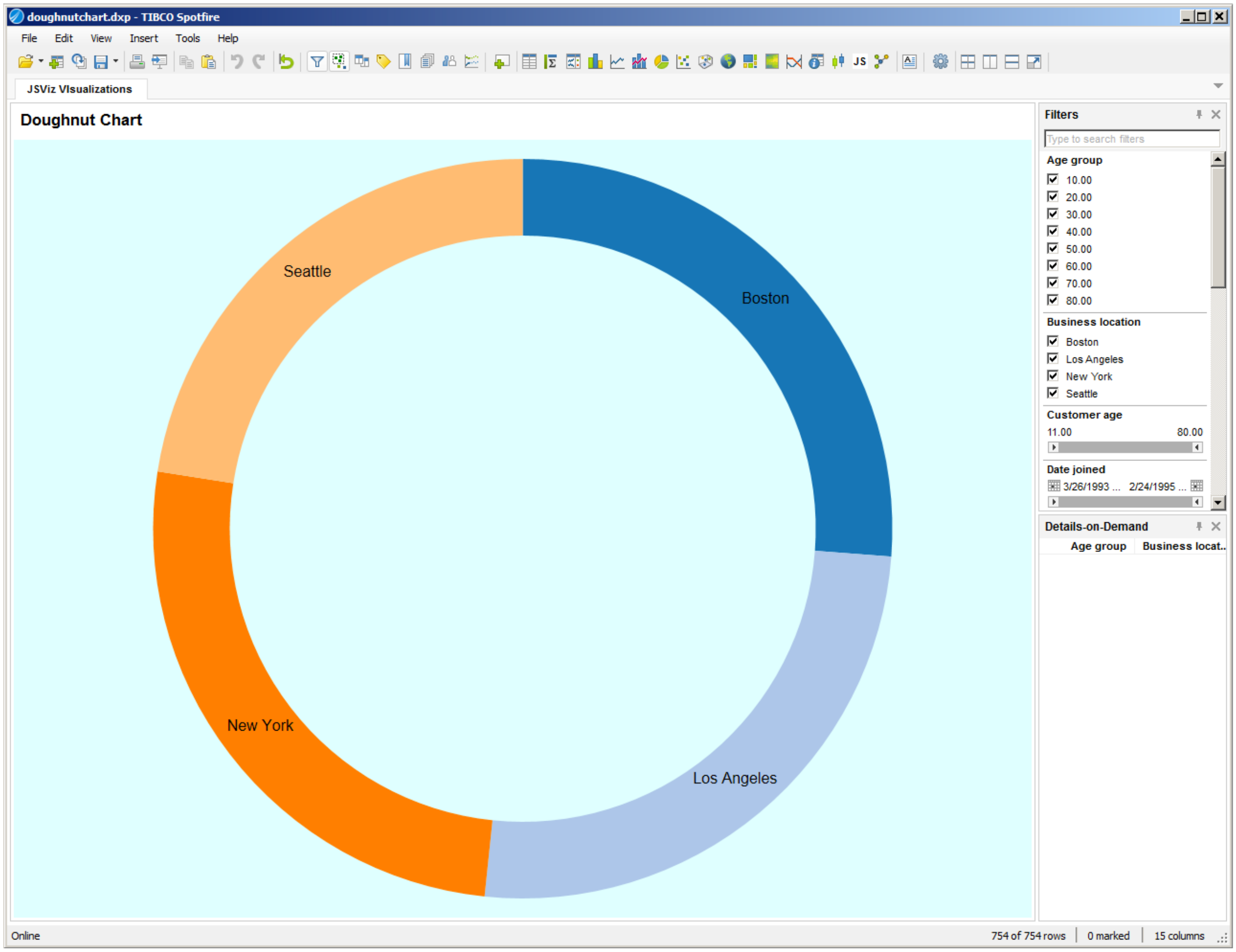
Store Sales data that comes with Spotfire Analyst. It is shipped with JSViz as "`StoreSales.sbdf`".

Files

DXP File:	`d3gauges.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	N/A
JS File:	`/src/js/D3Gauges.js`

Includes:	`/lib/jQuery/jQuery.js`
	`/lib/d3/d3.v3.min.js`
	`/lib/d3/d3.gaugecontrol.js`

5. Doughnut Chart



Age group
☑ 10.00
☑ 20.00
☑ 30.00
☑ 40.00
☑ 50.00
☑ 60.00
☑ 70.00
☑ 80.00

Business location
☑ Boston
☑ Los Angeles
☑ New York
☑ Seattle

Customer age
11.00 80.00

Date joined
3/26/1993 ... 2/24/1995 ...

Description

The sample shows how to create a doughnut chart using d3. This is the most complete sample and forms the basis for the tutorial set that ships with JSViz.

This sample demonstrates:

- Using the Spotfire Data Engine to calculate aggregated data values
- Using marking to control the display of the JS visualization
- Using the JS visualization to control marking within Spotfire
- Resizing
- Using iPad gestures for marking

Status

This is the most complete sample. It does not currently demonstrate script execution or runtime state.

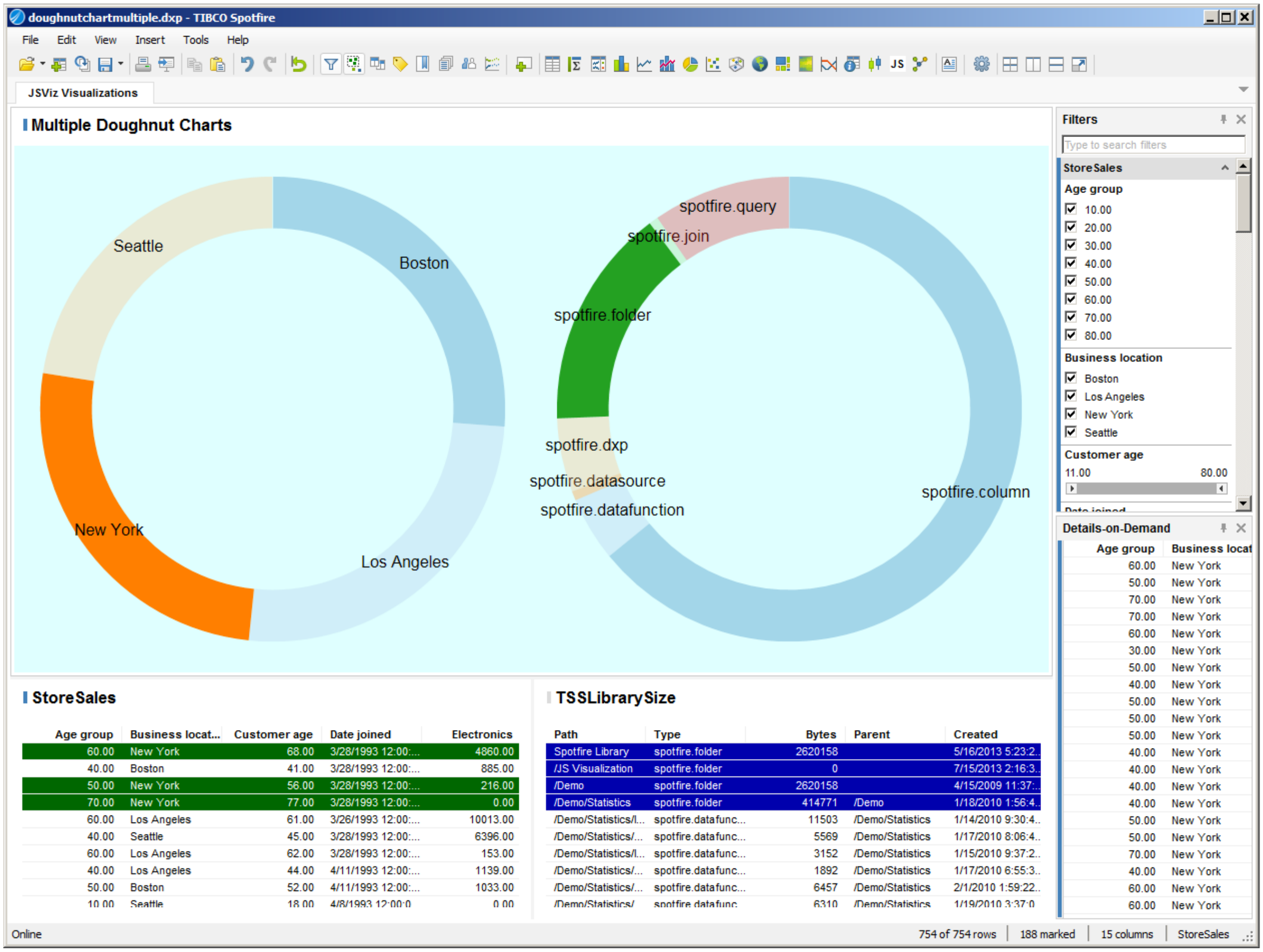
Data

Store Sales data that comes with Spotfire Analyst. It is shipped with JSViz as "`StoreSales.sbdf`".

Files

DXP File:	`doughnutchart.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	`/src/css/DoughnutChart.css`
JS File:	`/src/js/DoughnutChart.js`
Includes:	`/lib/jQuery/jQuery.js` `/lib/d3/d3.v3.min.js`

6. Doughnut Chart Multiple



StoreSales

Age group	Business locat...	Customer age	Date joined	Electronics
60.00	New York	68.00	3/28/1993 12:00:...	4860.00
40.00	Boston	41.00	3/28/1993 12:00:...	885.00
50.00	New York	56.00	3/28/1993 12:00:...	216.00
70.00	New York	77.00	3/28/1993 12:00:...	0.00
60.00	Los Angeles	61.00	3/26/1993 12:00:...	10013.00
40.00	Seattle	45.00	3/28/1993 12:00:...	6396.00
60.00	Los Angeles	62.00	3/28/1993 12:00:...	153.00
40.00	Los Angeles	44.00	4/11/1993 12:00:...	1139.00
50.00	Boston	52.00	4/11/1993 12:00:...	1033.00
10.00	Seattle	18.00	4/8/1993 12:00:0	0.00

TSSLibrarySize

Path	Type	Bytes	Parent	Created
Spotfire Library	spotfire.folder	2620158		5/16/2013 5:23:2..
/JS Visualization	spotfire.folder	0		7/15/2013 2:16:3..
/Demo	spotfire.folder	2620158		4/15/2009 11:37:..
/Demo/Statistics	spotfire.folder	414771	/Demo	1/18/2010 1:56:4..
/Demo/Statistics/l...	spotfire.datafunc...	11503	/Demo/Statistics	1/14/2010 9:30:4..
/Demo/Statistics/...	spotfire.datafunc...	5569	/Demo/Statistics	1/17/2010 8:06:4..
/Demo/Statistics/l...	spotfire.datafunc...	3152	/Demo/Statistics	1/15/2010 9:37:2..
/Demo/Statistics/...	spotfire.datafunc...	1892	/Demo/Statistics	1/17/2010 6:55:3..
/Demo/Statistics/...	spotfire.datafunc...	6457	/Demo/Statistics	2/1/2010 1:59:22..
/Demo/Statistics/	spotfire.datafunc	6310	/Demo/Statistics	1/19/2010 3:37:0

Filters

StoreSales

Age group

☑ 10.00
☑ 20.00
☑ 30.00
☑ 40.00
☑ 50.00
☑ 60.00
☑ 70.00
☑ 80.00

Business location

☑ Boston
☑ Los Angeles
☑ New York
☑ Seattle

Customer age

11.00 80.00

Details-on-Demand

Age group	Business locat
60.00	New York
50.00	New York
70.00	New York
70.00	New York
60.00	New York
30.00	New York
50.00	New York
40.00	New York
50.00	New York
50.00	New York
50.00	New York
40.00	New York
40.00	New York
40.00	New York
40.00	New York
50.00	New York
50.00	New York
70.00	New York
40.00	New York
60.00	New York
60.00	New York

Online | 754 of 754 rows | 188 marked | 15 columns | StoreSales

Description

The sample builds on the Doughnut Chart sample to demonstrate using multiple data tables to create a single visualization. In this instance, the two doughnut charts are drawn from different data tables with different marking sets.

This sample demonstrates:

- Using the Spotfire Data Engine to calculate aggregated data values
- Using multiple data tables within the same JSViz visualization
- Using marking to control the display of the JS visualization
- Using the JS visualization to control marking within Spotfire

- Resizing

Status

This sample demonstrates initial drawing, resizing and marking across multiple data tables.

Data

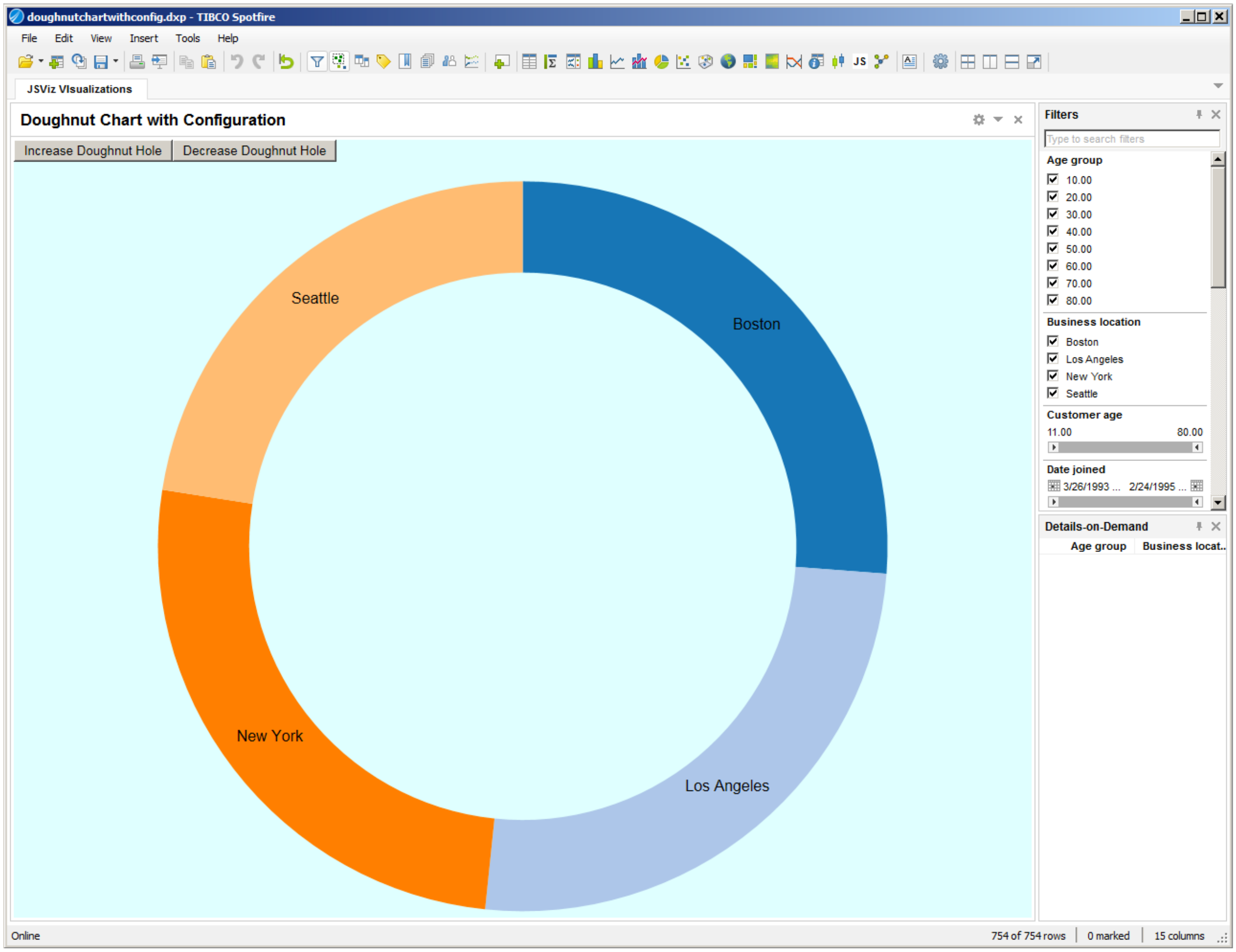
This sample uses two data sets that ship with JSViz:

- Store Sales data that comes with Spotfire Analyst - “`StoreSales.sbdf`”.
- a data set containing information on the Spotfire Demo Library contents - “`TSSLibrarySize.sbdf`”.

Files

DXP File:	`doughnutchartmultiple.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	`/src/css/DoughnutChart.css`
JS File:	`/src/js/DoughnutChartMultiple.js`
Includes:	`/lib/jQuery/jQuery.js` `/lib/d3/d3.v3.min.js`

7. Doughnut Chart with Configuration



Age group
☑ 10.00
☑ 20.00
☑ 30.00
☑ 40.00
☑ 50.00
☑ 60.00
☑ 70.00
☑ 80.00

Business location
☑ Boston
☑ Los Angeles
☑ New York
☑ Seattle

Customer age
11.00 80.00

Date joined
3/26/1993 ... 2/24/1995 ...

Description

This sample expands the basic doughnut chart sample to demonstrate:

- Chart configuration write back – the configuration data in the JSViz plugin is updated from the visualization using the `setConfig()` method.
- Logging – sample logging statements have been added to the JS code. Enable logging in the JSViz configuration to see these written to a logfile in Spotfire Analyst.

Status

This is the most complete sample. It does not currently demonstrate script execution or runtime state.

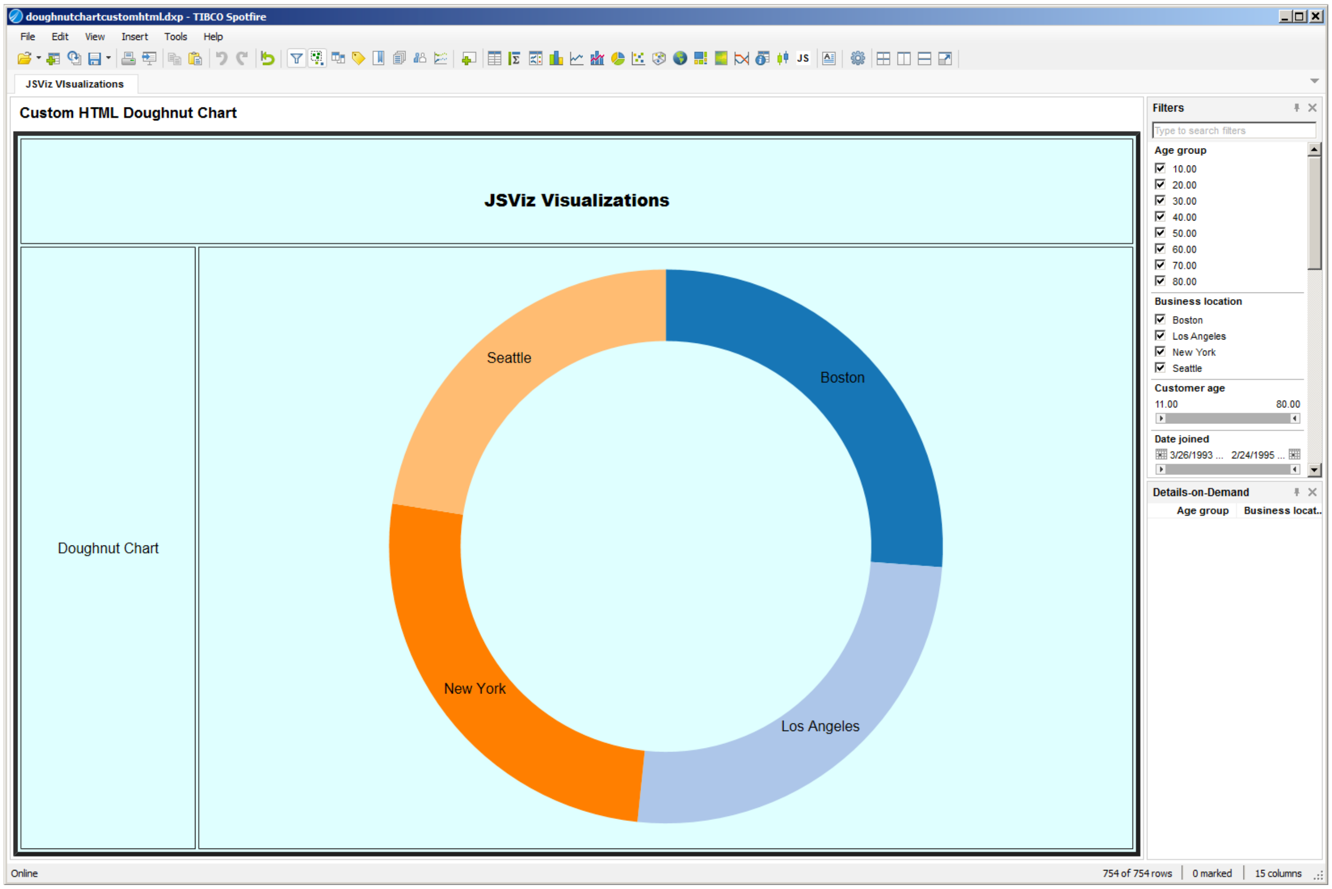
Data

Store Sales data that comes with Spotfire Analyst. It is shipped with JSViz as “`StoreSales.sbdf`”.

Files

DXP File:	`doughnutchartwithconfig.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	`/src/css/DoughnutChart.css`
JS File:	`/src/js/DoughnutChartWithConfig.js`
Includes:	`/lib/jQuery/jQuery.js` `/lib/d3/d3.v3.min.js`

8. Doughnut Chart with Custom HTML



Description

This sample builds on the basic doughnut chart sample to demonstrate:

- Use of a Custom HTML Template
- Updated Marking, Sizing and Resizing code required when using Custom HTML

Status

This sample is complete as an introduction to using a Custom HTML template. It does not address all potential issues that could arise.

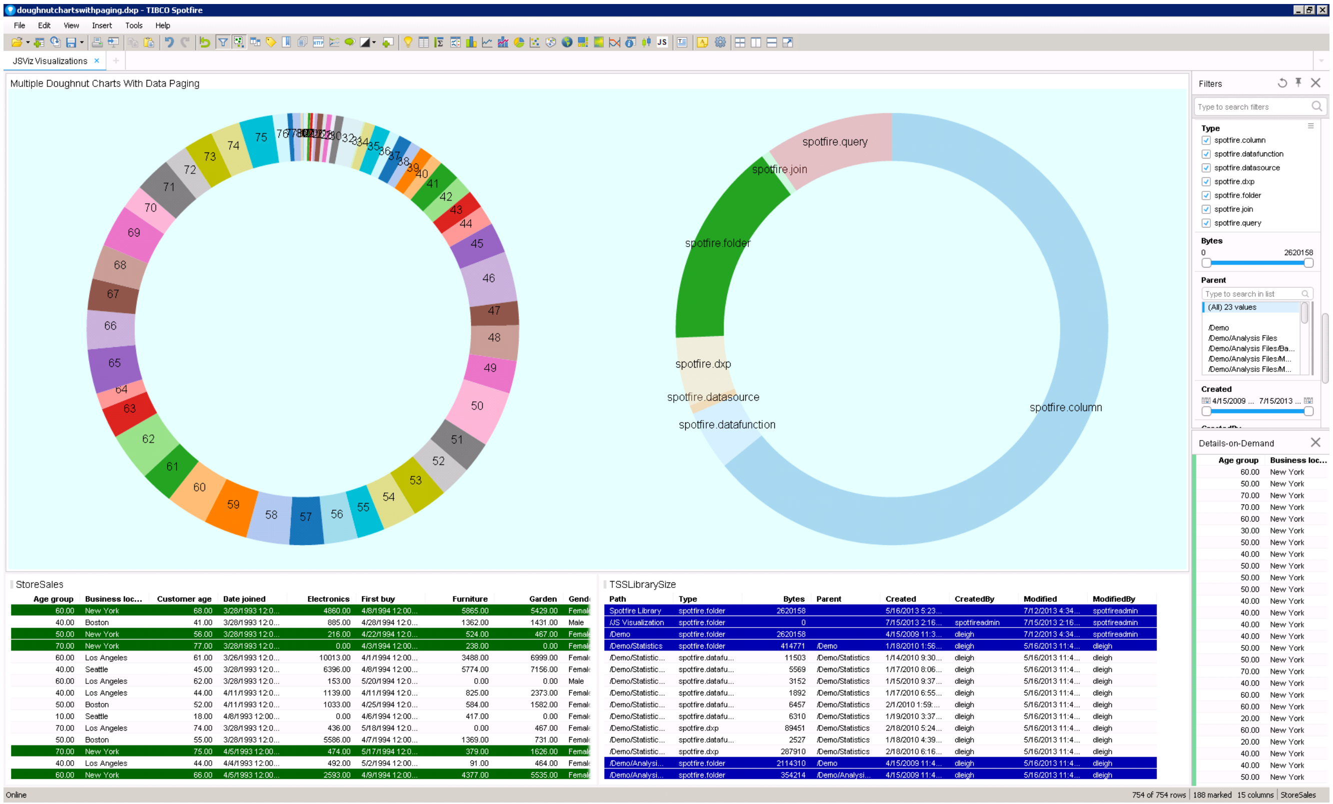
Data

Store Sales data that comes with Spotfire Analyst. It is shipped with JSViz as “`StoreSales.sbdf`”.

Files

DXP File:	`doughnutchartwithconfig.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	`/src/css/DoughnutChartCustomHTML.css`
JS File:	`/src/js/DoughnutChartCustomHTML.js`
HTML File:	`/src/js/DoughnutChartCustomHTML.html`
Includes:	`/lib/jQuery/jQuery.js` `/lib/d3/d3.v3.min.js`

9. Doughnut Chart with Data Paging



StoreSales

Age group	Business loc...	Customer age	Date joined	Electronics	First buy	Furniture	Garden	Gend
60.00	New York	68.00	3/28/1993 12:0...	4860.00	4/8/1994 12:00...	5865.00	5429.00	Femal
40.00	Boston	41.00	3/28/1993 12:0...	885.00	4/28/1994 12:0...	1362.00	1431.00	Male
50.00	New York	56.00	3/28/1993 12:0...	216.00	4/22/1994 12:0...	524.00	467.00	Femal
70.00	New York	77.00	3/28/1993 12:0...	0.00	4/3/1994 12:00...	238.00	0.00	Femal
60.00	Los Angeles	61.00	3/26/1993 12:0...	10013.00	4/1/1994 12:00...	3488.00	6999.00	Femal
40.00	Seattle	45.00	3/28/1993 12:0...	6396.00	4/8/1994 12:00...	5774.00	7156.00	Femal
60.00	Los Angeles	62.00	3/28/1993 12:0...	153.00	5/20/1994 12:0...	0.00	0.00	Male
40.00	Los Angeles	44.00	4/11/1993 12:0...	1139.00	4/11/1994 12:0...	825.00	2373.00	Femal
50.00	Boston	52.00	4/11/1993 12:0...	1033.00	4/25/1994 12:0...	584.00	1582.00	Femal
10.00	Seattle	18.00	4/8/1993 12:00...	0.00	4/6/1994 12:00...	417.00	0.00	Femal
70.00	Los Angeles	74.00	3/28/1993 12:0...	436.00	5/18/1994 12:0...	0.00	467.00	Femal
50.00	Boston	55.00	3/28/1993 12:0...	5586.00	4/7/1994 12:00...	1369.00	731.00	Femal
70.00	New York	75.00	4/5/1993 12:00...	474.00	5/17/1994 12:0...	379.00	1626.00	Femal
40.00	Los Angeles	44.00	4/4/1993 12:00...	492.00	5/2/1994 12:00...	91.00	464.00	Femal
60.00	New York	66.00	4/5/1993 12:00...	2593.00	4/9/1994 12:00...	4377.00	5535.00	Femal

TSSLibrarySize

Path	Type	Bytes	Parent	Created	CreatedBy	Modified	ModifiedBy
Spotfire Library	spotfire.folder	2620158		5/16/2013 5:23...		7/12/2013 4:34...	spotfireadmin
/JS Visualization	spotfire.folder	0		7/15/2013 2:16...	spotfireadmin	7/15/2013 2:16...	spotfireadmin
/Demo	spotfire.folder	2620158		4/15/2009 11:3...	dleigh	7/12/2013 4:34...	spotfireadmin
/Demo/Statistics	spotfire.folder	414771	/Demo	1/18/2010 1:56...	dleigh	5/16/2013 11:4...	dleigh
/Demo/Statistic...	spotfire.datafu...	11503	/Demo/Statistics	1/14/2010 9:30...	dleigh	5/16/2013 11:4...	dleigh
/Demo/Statistic...	spotfire.datafu...	5569	/Demo/Statistics	1/17/2010 8:06...	dleigh	5/16/2013 11:4...	dleigh
/Demo/Statistic...	spotfire.datafu...	3152	/Demo/Statistics	1/15/2010 9:37...	dleigh	5/16/2013 11:4...	dleigh
/Demo/Statistic...	spotfire.datafu...	1892	/Demo/Statistics	1/17/2010 6:55...	dleigh	5/16/2013 11:4...	dleigh
/Demo/Statistic...	spotfire.datafu...	6457	/Demo/Statistics	2/1/2010 1:59:...	dleigh	5/16/2013 11:4...	dleigh
/Demo/Statistic...	spotfire.datafu...	6310	/Demo/Statistics	1/19/2010 3:37...	dleigh	5/16/2013 11:4...	dleigh
/Demo/Statistic...	spotfire.dxp	89451	/Demo/Statistics	2/18/2010 5:24...	dleigh	5/16/2013 11:4...	dleigh
/Demo/Statistic...	spotfire.datafu...	2527	/Demo/Statistics	1/18/2010 4:39...	dleigh	5/16/2013 11:4...	dleigh
/Demo/Statistic...	spotfire.dxp	287910	/Demo/Statistics	2/18/2010 6:16...	dleigh	5/16/2013 11:4...	dleigh
/Demo/Analysi...	spotfire.folder	2114310	/Demo	4/15/2009 11:4...	dleigh	5/16/2013 11:4...	dleigh
/Demo/Analysi...	spotfire.folder	354214	/Demo/Analysi...	4/15/2009 11:4...	dleigh	5/16/2013 11:4...	dleigh

Age group	Business loc...
60.00	New York
50.00	New York
70.00	New York
70.00	New York
60.00	New York
30.00	New York
50.00	New York
40.00	New York
50.00	New York
50.00	New York
50.00	New York
40.00	New York
40.00	New York
40.00	New York
40.00	New York
50.00	New York
50.00	New York
70.00	New York
40.00	New York
60.00	New York
60.00	New York
20.00	New York
60.00	New York
20.00	New York
40.00	New York
40.00	New York
50.00	New York

Description

The sample shows how to use the Data Paging options. It also demonstrates the default spinner that displays while data is being read.

This sample demonstrates:

- Using the Spotfire Data Engine to calculate aggregated data values
- Using the Data Paging option when sending data to the JavaScript code
- Using the default "spinner" busy indicator
- Using marking to control the display of the JS visualization
- Using the JS visualization to control marking within Spotfire
- Resizing

Status

This is a complete sample with resizing and marking.

Data

This sample uses two data sets that ship with JSViz:

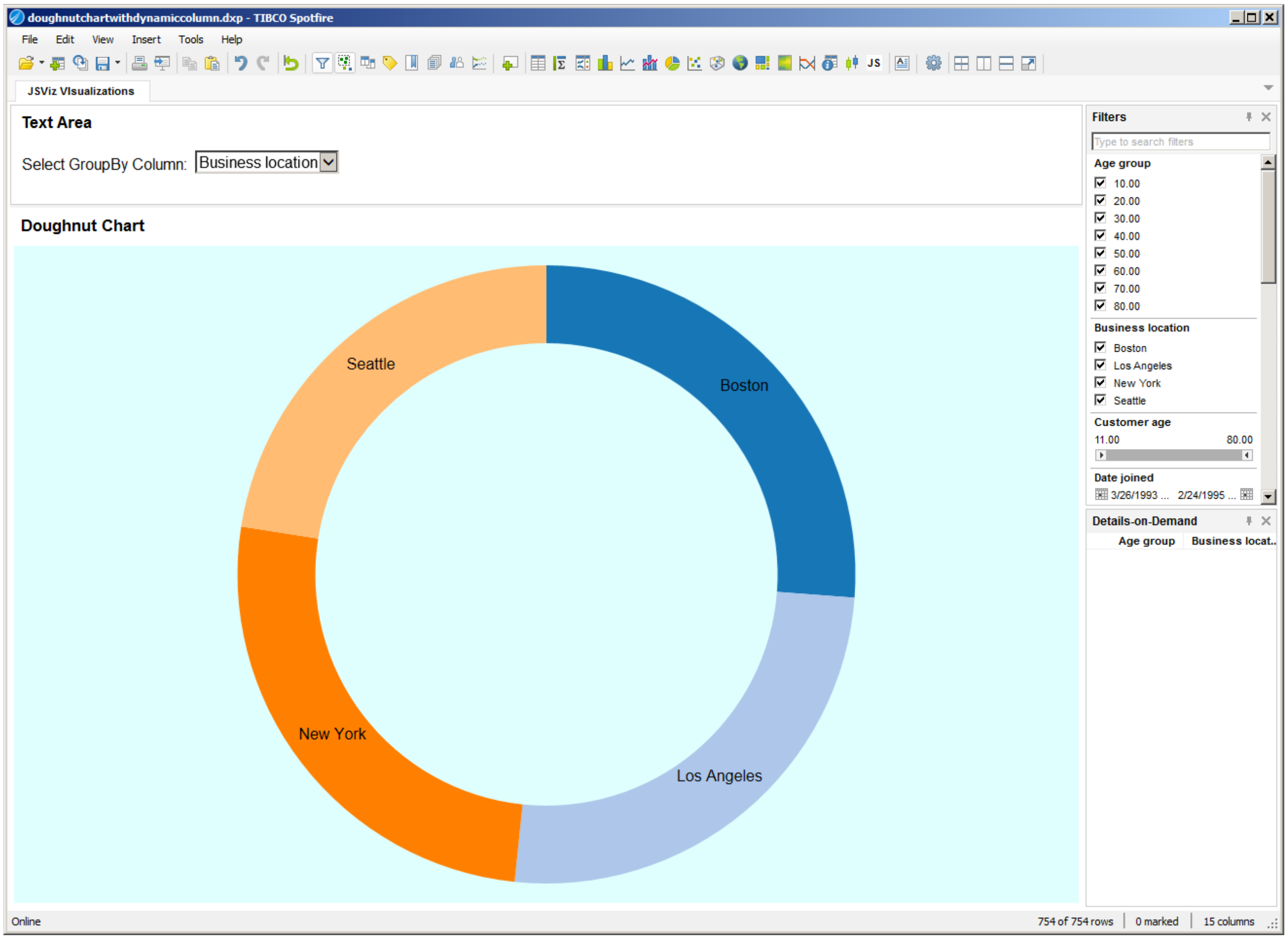
- Store Sales data that comes with Spotfire Analyst - “`StoreSales.sbdf`”.
- a data set containing information on the Spotfire Demo Library contents - “`TSSLibrarySize.sbdf`”.

Files

DXP File:	`doughnutchartswithdatapaging.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	`/src/css/DoughnutChart.css`
JS File:	`/src/js/DoughnutChartMultiple.js`

Includes:	`/lib/jQuery/jQuery.js`
	`/lib/d3/d3.v3.min.js`
	`/lib/spin/spin.js`
	`/lib/spin/spinner.js`

10. Doughnut Chart with Dynamic Column



Select GroupBy Column: Business location

Age group
☑ 10.00
☑ 20.00
☑ 30.00
☑ 40.00
☑ 50.00
☑ 60.00
☑ 70.00
☑ 80.00

Business location
☑ Boston
☑ Los Angeles
☑ New York
☑ Seattle

Customer age
11.00 80.00

Date joined
3/26/1993 ... 2/24/1995 ...

754 of 754 rows | 0 marked | 15 columns

Description

The sample shows how to dynamically change the Group By Column using IronPython Scripting.

This sample demonstrates:

- Using the Spotfire Data Engine to calculate aggregated data values
- Using marking to control the display of the JS visualization
- Using the JS visualization to control marking within Spotfire
- Resizing
- Using Document Properties and IronPython Scripting to modify the JSViz configuration

Status

This is a complete sample with resizing, marking and scripting.

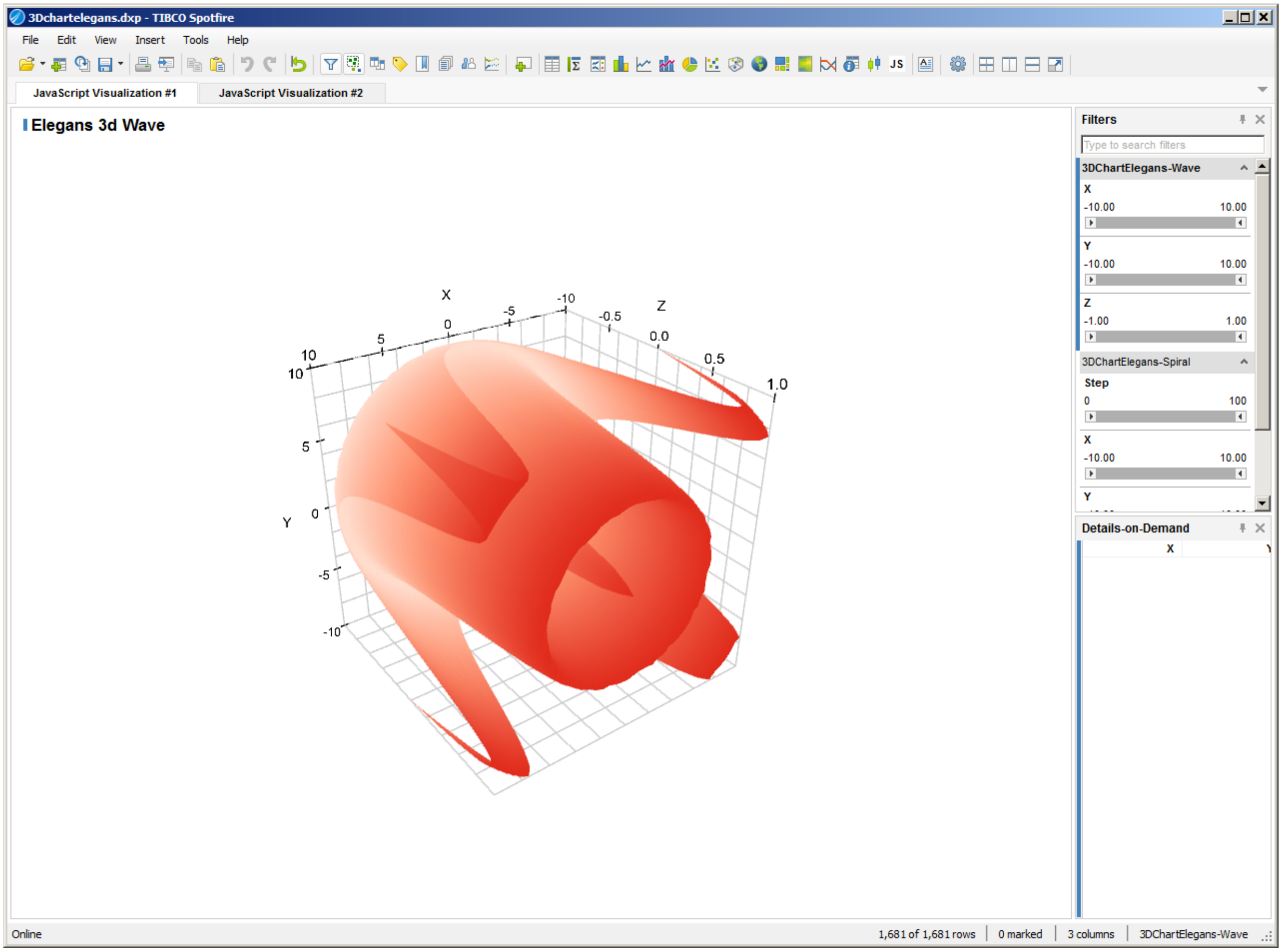
Data

Store Sales data that comes with Spotfire Analyst. It is shipped with JSViz as “`StoreSales.sbdf`”.

Files

DXP File:	`doughnutchartwithdynamiccolumn.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	`/src/css/DoughnutChart.css`
JS File:	`/src/js/DoughnutChart.js`
Includes:	`/lib/jQuery/jQuery.js` `/lib/d3/d3.v3.min.js`

11. Elegans 3D Chart



3DChartElegans-Wave

X -10.00 10.00

Y -10.00 10.00

Z -1.00 1.00

3DChartElegans-Spiral

Step 0 100

X -10.00 10.00

Y

Online | 1,681 of 1,681 rows | 0 marked | 3 columns | 3DChartElegans-Wave

Description

This sample uses the `elegans` 3D libraries to draw 3D Surface and 3D Line plots. Once rendered, the plots can be rotated and zoomed using the mouse.

This sample demonstrates:

- Using a 3rd Party Library - https://github.com/domitry/elegans
- Resizing
- Support for printing and exporting using the Export Timing option

Status

This is a basic sample with resizing but no marking.

Data

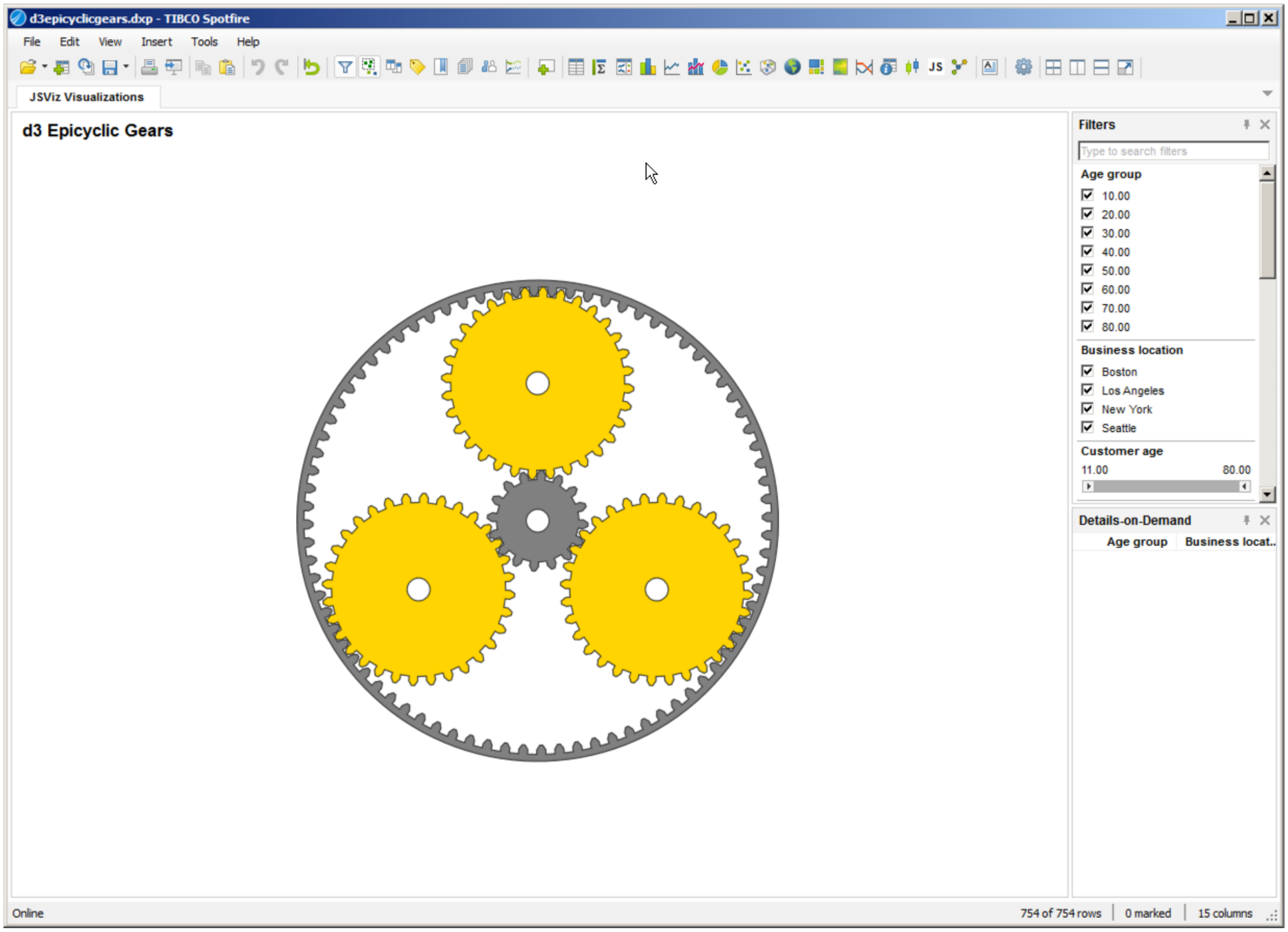
Custom data files that are shipped with JSViz as “`3DChartElegans-Spiral.sbdf`” and “`3DChartElegans-Wave.sbdf`”.

Files

DXP File:	`3dchartelegans.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	None
JS File:	`/src/js/3DChart-Elegans.js`

Includes:	`/lib/jQuery/jQuery.js`
	`/lib/d3/d3.v3.min.js`
	`/lib/elegans/elegans.js`
	`/lib/threejs/three.js`

12. Epicyclic Gears



Age group

☑ 10.00
☑ 20.00
☑ 30.00
☑ 40.00
☑ 50.00
☑ 60.00
☑ 70.00
☑ 80.00

Business location

☑ Boston
☑ Los Angeles
☑ New York
☑ Seattle

Customer age

11.00 80.00

754 of 754 rows | 0 marked | 15 columns

Description

This sample uses the `topojson` d3 libraries to draw a set of epicyclic or planetary gears. While the sample is running, the user can continue to interact with Spotfire. This demonstrates the ability of JavaScript to execute threads independently of Spotfire.

This sample demonstrates:

- Using timers within JavaScript to update visualizations
- Resizing
- Support for printing and exporting using the Export Timing option

Status

This is a basic sample with fixed sizing.

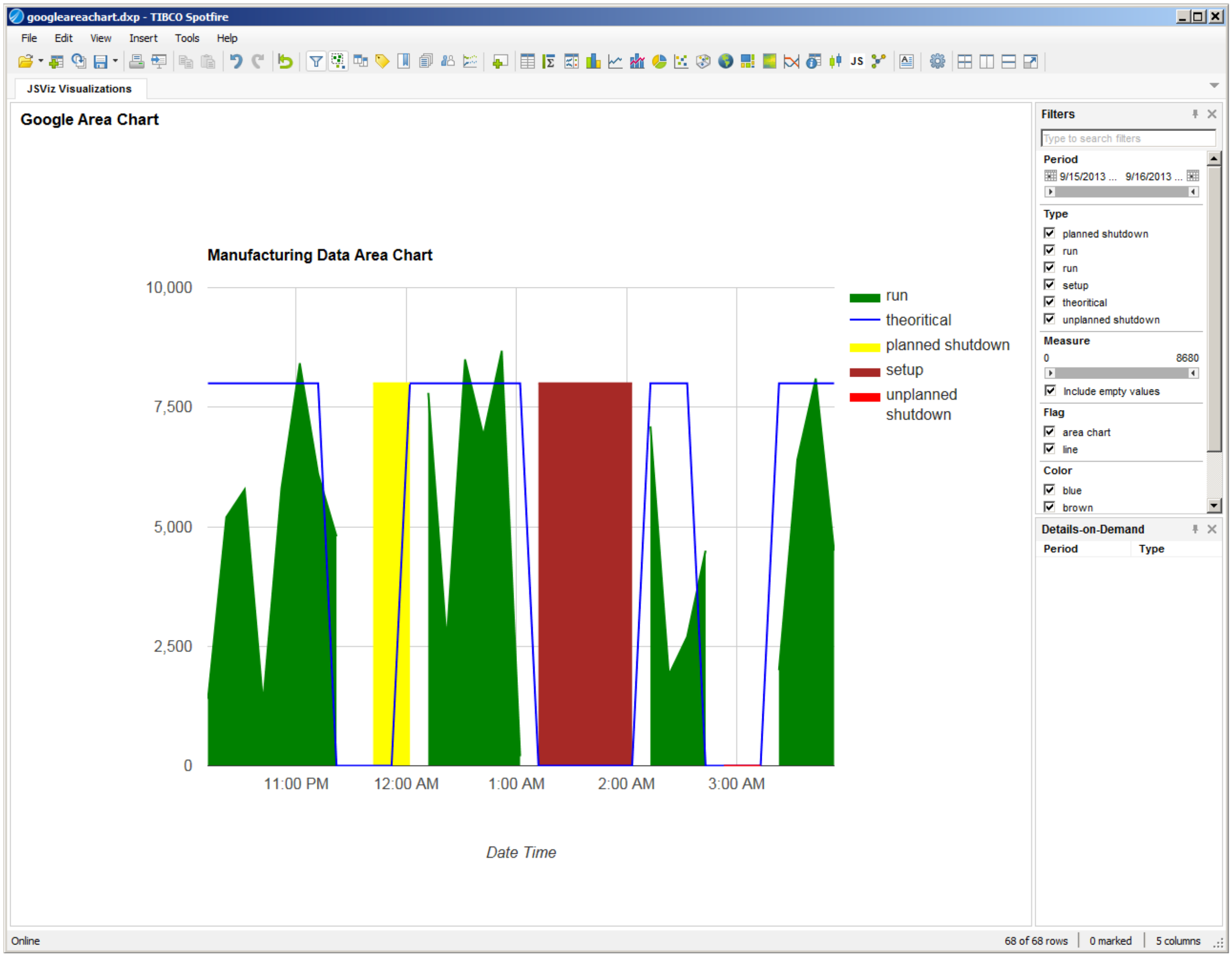
Data

There is no data contained within this sample file.

Files

DXP File:	`d3epicyclicgears.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	`/src/css/D3EpicyclicGears.css`
JS File:	`/src/js/D3EpicyclicGears.js`
Includes:	`/lib/jQuery/jQuery.js` `/lib/d3/d3.v3.min.js`

13. Google Area Chart



Period: 9/15/2013 ... 9/16/2013 ...

Type

☑ planned shutdown
☑ run
☑ run
☑ setup
☑ theoritical
☑ unplanned shutdown

Measure: 0 8680

☑ Include empty values

Flag

☑ area chart
☑ line

Color

☑ blue
☑ brown

68 of 68 rows | 0 marked | 5 columns

Description

This sample shows how to use the Google Chart APIs to draw an Area Chart.

This sample demonstrates:

- Using the Spotfire Data Engine to calculate aggregated data values
- Using Google Chart APIs with JSViz
- Support for printing and export using the Export Timing option

Status

Only initial rendering and resizing are implemented.

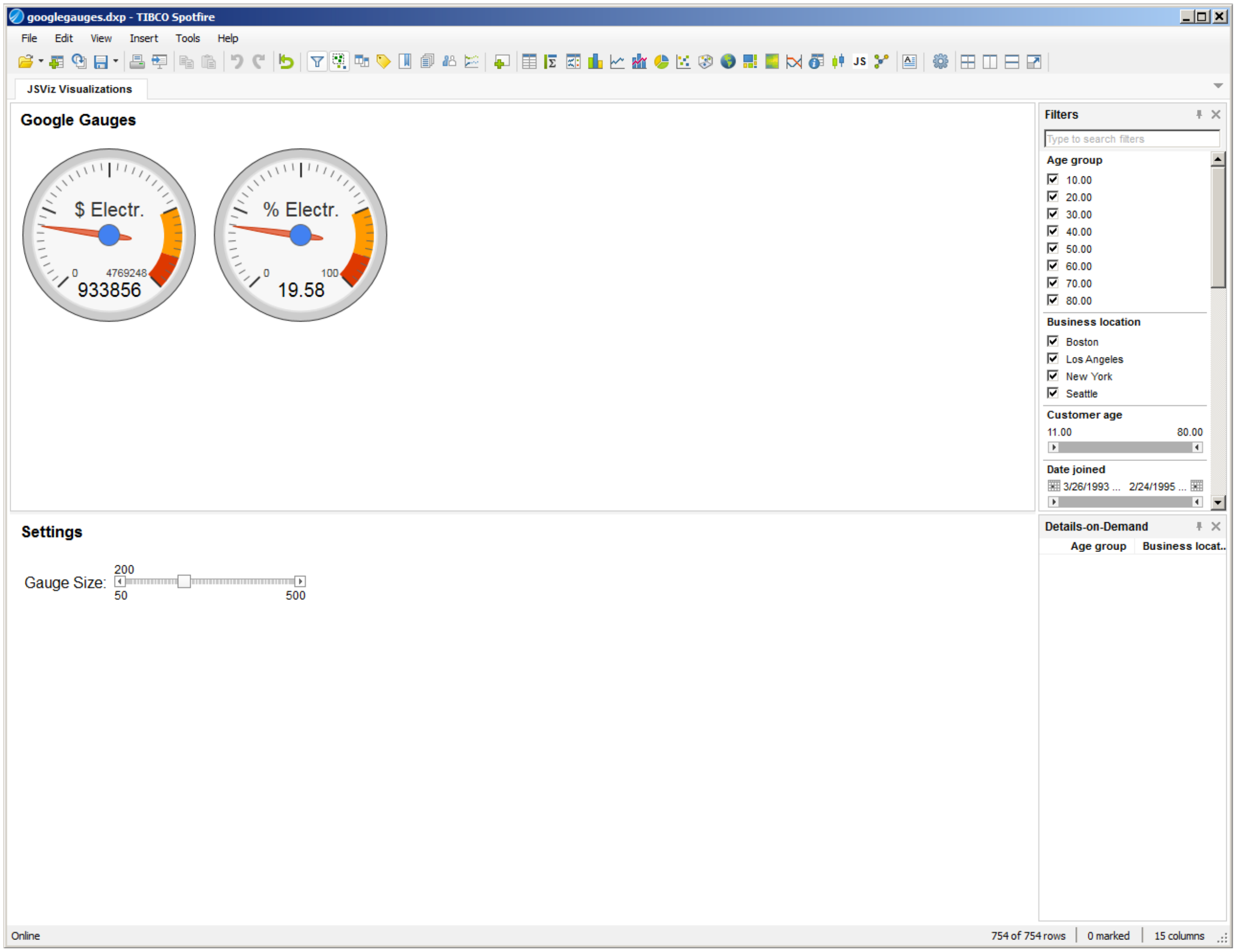
Data

The sample data is based on a custom data set "AreaChart.sbdf", which is shipped with JSViz.

Files

DXP File:	googleareachart.dxp
JSViz File:	/src/lib/JSViz/JSViz.js
CSS File:	N/A
JS File:	/src/js/GoogleAreaChart.js
Includes:	/lib/jQuery/jQuery.js https://www.google.com/jsapi?__id=js

14. Google Gauges



Age group
☑ 10.00
☑ 20.00
☑ 30.00
☑ 40.00
☑ 50.00
☑ 60.00
☑ 70.00
☑ 80.00

Business location
☑ Boston
☑ Los Angeles
☑ New York
☑ Seattle

Customer age
11.00 80.00

Date joined
3/26/1993 ... 2/24/1995 ...

Settings

Gauge Size: 200 (50 – 500)

754 of 754 rows | 0 marked | 15 columns

Description

This sample shows how to use the Google Chart APIs to create Gauge Controls.

This sample demonstrates:

- Using the Spotfire Engine to calculate aggregated data values
- Using custom expressions in the data configuration
- Using document properties in the configuration parameters
- Using the Google Chart API's
- Support for printing and exporting using the Export Timing option

Status

Initial rendering and resizing are implemented (no marking or filtering). Additionally, changing the value of the "`GaugeSize`" Document Property will change the size of the gauges.

Data

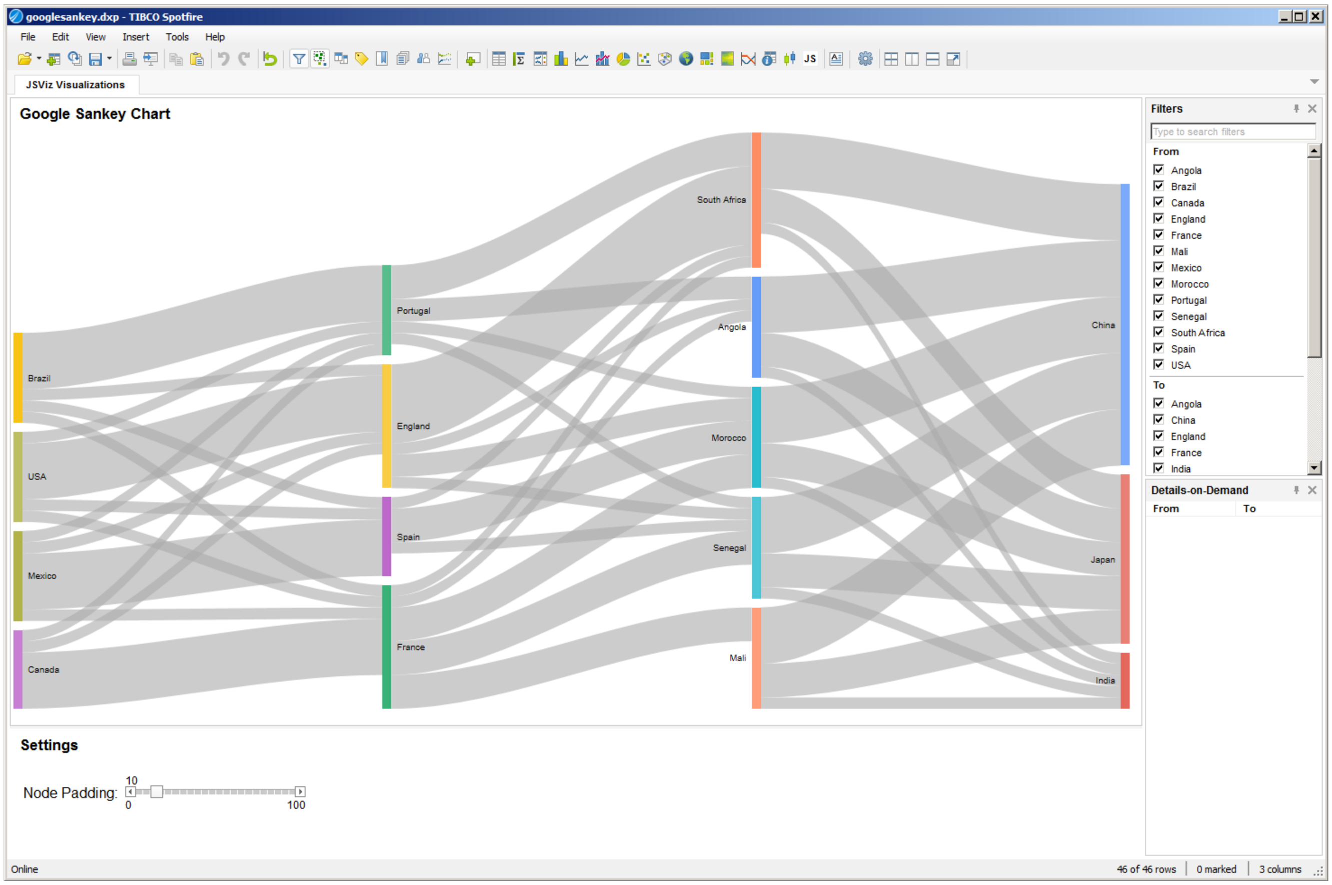
Store Sales data that comes with Spotfire Analyst. It is shipped with JSViz as "`StoreSales.sbdf`".

Files

DXP File:	`googlegauges.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	N/A
JS File:	`/src/js/GoogleGauges.js`

Includes:	`/lib/jQuery/jQuery.js`
	`https://www.google.com/jsapi?__id=js`

15. Google Sankey



Filters

From

☑ Angola
☑ Brazil
☑ Canada
☑ England
☑ France
☑ Mali
☑ Mexico
☑ Morocco
☑ Portugal
☑ Senegal
☑ South Africa
☑ Spain
☑ USA

To

☑ Angola
☑ China
☑ England
☑ France
☑ India

Settings

Node Padding: 10 (0 – 100)

46 of 46 rows | 0 marked | 3 columns

Description

This sample shows how to use the Google Chart APIs to create a Sankey Diagram.

This sample demonstrates:

- Using the Google Chart API's
- Using document properties in the configuration parameters

Status

Initial rendering and resizing are implemented (no marking or filtering). Additionally, changing the value of the "`NodePadding`" Document Property will change the distance between the Nodes.

Data

The sample data is based on a custom data set "`SankeyChart.sbdf`", which is shipped with JSViz.

Files

DXP File:	`googlesankey.dxp`
JSViz File:	`/lib/JSViz/JSViz.js`
CSS File:	N/A
JS File:	`/src/js/GoogleSankey.js`

Includes:	`/lib/jQuery/jQuery.js`
	`https://www.google.com/jsapi?__id=js`

16. Horizon Chart

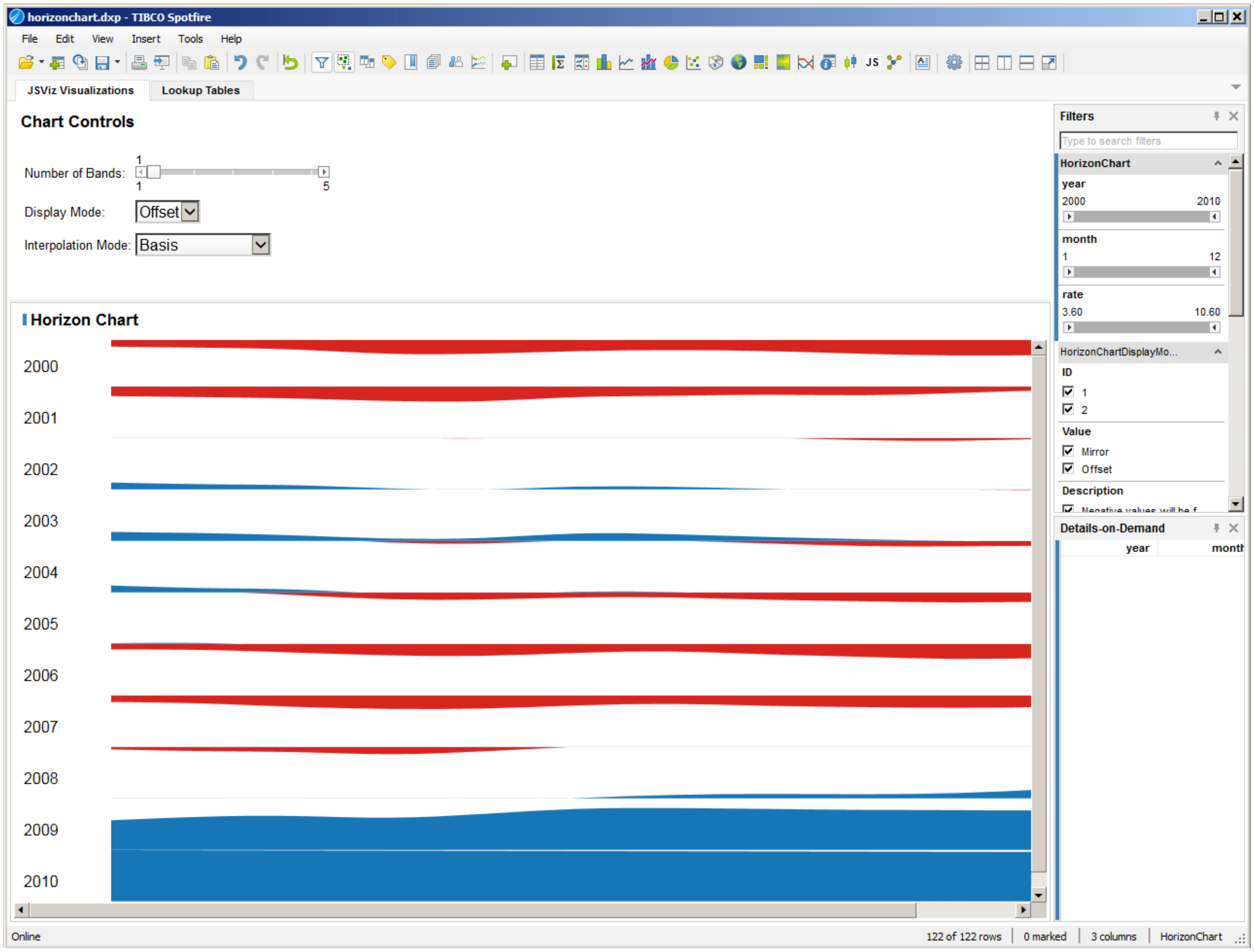


Chart Controls

Number of Bands: 1 (1–5)

Display Mode: Offset

Interpolation Mode: Basis

year 2000 2010

month 1 12

rate 3.60 10.60

ID

☑ 1

☑ 2

Value

☑ Mirror

☑ Offset

Description

☑ Negative values will be f

Online | 122 of 122 rows | 0 marked | 3 columns | HorizonChart

Description

This sample shows how to use create a Horizon Chart using the d3 libraries. A Horizon Chart folds larger vertical values within the same space to make better use of screen real estate.

This sample demonstrates:

- Using the Spotfire Engine to calculate aggregated data values
- Using the d3 API's
- Using IronPython Scripting to update the Configuration Properties of a JSViz visualization

- Resizing
- Support for printing and exporting using the Export Timing option

Status

The sample does not use the simpler technique of passing Document Property values directly to the JSViz Visualization. This is not intended to be a best practice, but simply a way to demonstrate using scripts with JSViz.

Data

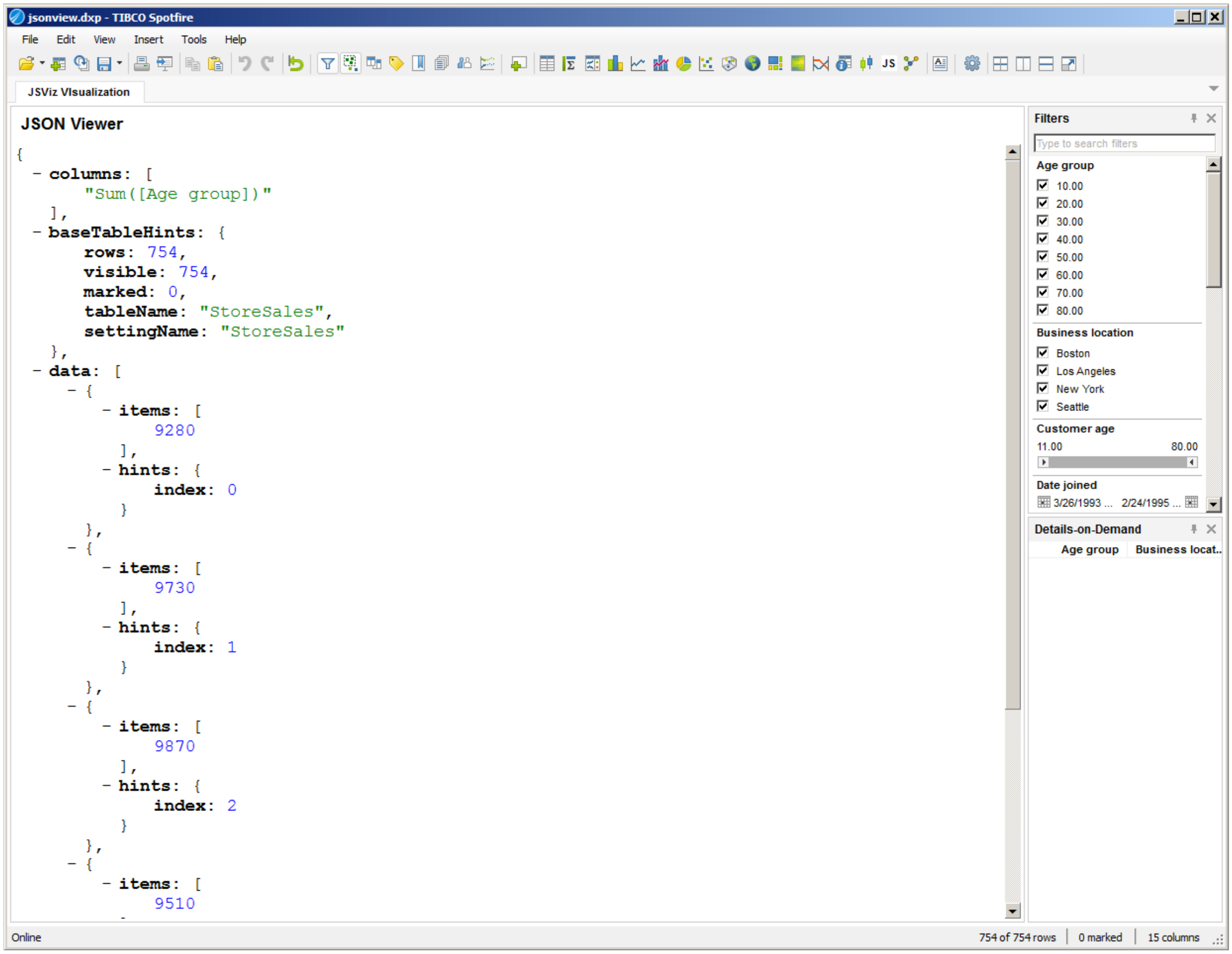
The data is based on sample stock ticker data retrieved from the internet and anonymized. It is shipped with JSViz as "`HorizonChart.sbdf`". The additional lookup tables are included as "`HorizonChartDisplayModes.txt`" and "`HorizonChartInterpolationModes.txt`".

Files

DXP File:	`horizonchart.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	`/src/css/HorizonChart.css`
JS File:	`/src/js/HorizonChart.js`

Includes:	`/lib/jQuery/jQuery.js`
	`/lib/d3/d3.v3.min.js`
	`/lib/d3/d3.horizon.js`

17. JSON View



```
{
  - columns: [
        "Sum([Age group])"
    ],
  - baseTableHints: {
        rows: 754,
        visible: 754,
        marked: 0,
        tableName: "StoreSales",
        settingName: "StoreSales"
    },
  - data: [
      - {
          - items: [
                9280
            ],
          - hints: {
                index: 0
            }
        },
      - {
          - items: [
                9730
            ],
          - hints: {
                index: 1
            }
        },
      - {
          - items: [
                9870
            ],
          - hints: {
                index: 2
            }
        },
      - {
          - items: [
                9510
```

Age group
- ☑ 10.00
- ☑ 20.00
- ☑ 30.00
- ☑ 40.00
- ☑ 50.00
- ☑ 60.00
- ☑ 70.00
- ☑ 80.00

Business location
- ☑ Boston
- ☑ Los Angeles
- ☑ New York
- ☑ Seattle

Customer age
11.00 80.00

Date joined
3/26/1993 ... 2/24/1995 ...

754 of 754 rows | 0 marked | 15 columns

Description

This sample is provided as a debugging tool. It display the JSON being passed to the visualization by JSViz in an indented format with the option to expand and collapse each nested tree. The library used is `jquery.jsonview` from https://github.com/yesmeck/jquery-jsonview.

This sample demonstrates:

- Using the Spotfire Engine to calculate aggregated data values
- Using a 3rd party visualization library – `jquery.jsonview`
- Support for printing and exporting using the Export Timing option

Status

Initial rendering and resizing are implemented, no marking.

Data

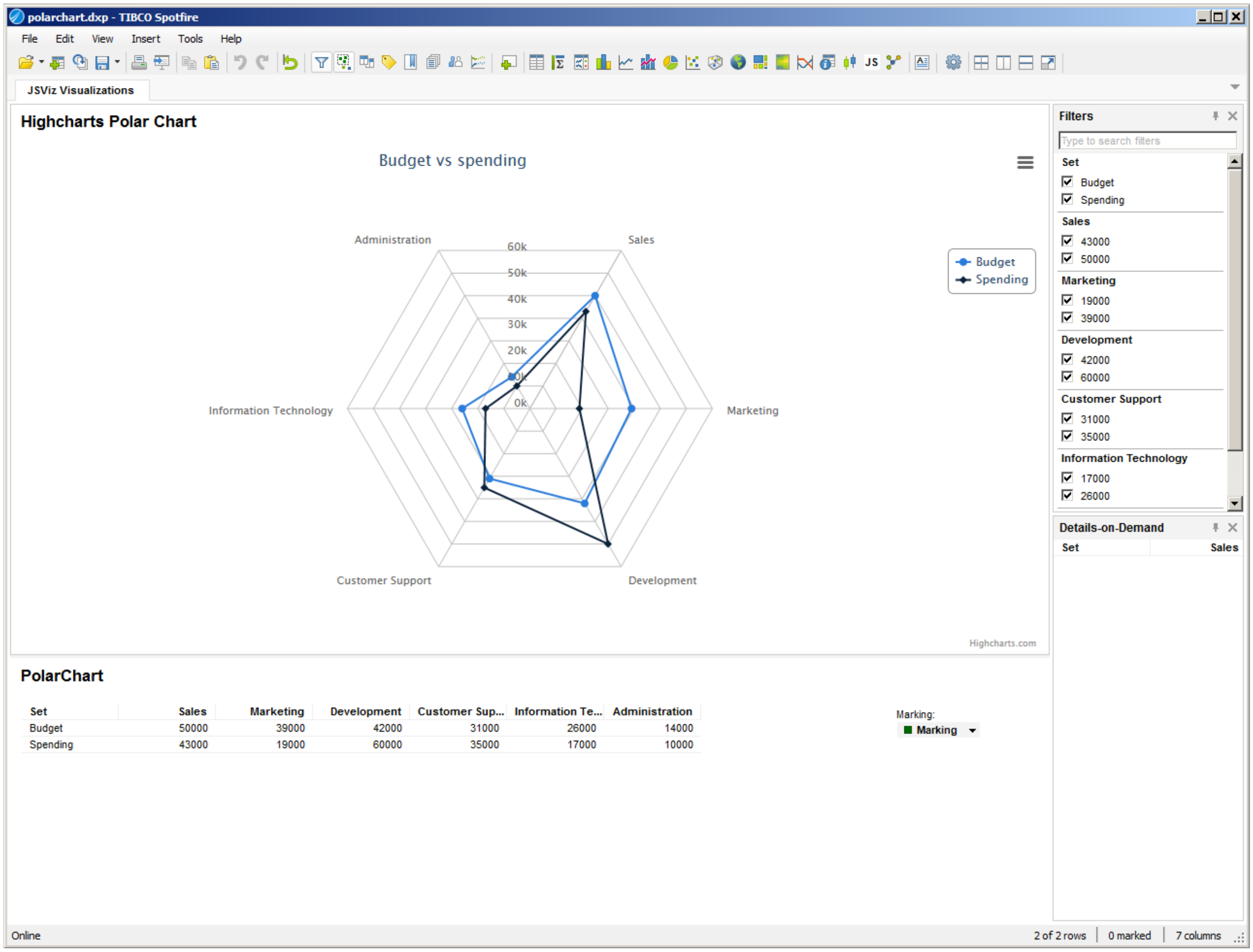
Store Sales data that comes with Spotfire Analyst. It is shipped with JSViz as "`StoreSales.sbdf`".

Files

DXP File:	`jsonview.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	N/A
JS File:	`/src/js/JSONViewer.js`

Includes:	`/lib/jQuery/jQuery.js`
	`/lib/jsonview/jquery.jsonview.css`
	`/lib/jsonview/jquery.jsonview.js`

18. Polar Chart



Set
☑ Budget
☑ Spending

Sales
☑ 43000
☑ 50000

Marketing
☑ 19000
☑ 39000

Development
☑ 42000
☑ 60000

Customer Support
☑ 31000
☑ 35000

Information Technology
☑ 17000
☑ 26000

PolarChart

Set	Sales	Marketing	Development	Customer Sup...	Information Te...	Administration
Budget	50000	39000	42000	31000	26000	14000
Spending	43000	19000	60000	35000	17000	10000

Marking:
🟩 Marking

Description

This sample demonstrates how to embed a 3rd party commercial charting library, in this case a polar chart from Highcharts.

This sample demonstrates:

- Using the Spotfire Engine to calculate aggregated data values
- Using the Highcharts API's
- Resizing
- Support for printing and exporting using the Export Timing option

Status

Initial rendering and resizing are implemented, no marking. Tooltips are implemented by Highcharts directly.

Data

The sample data is a custom data set "`PolarChart.sbdf`", which is shipped with JSViz.

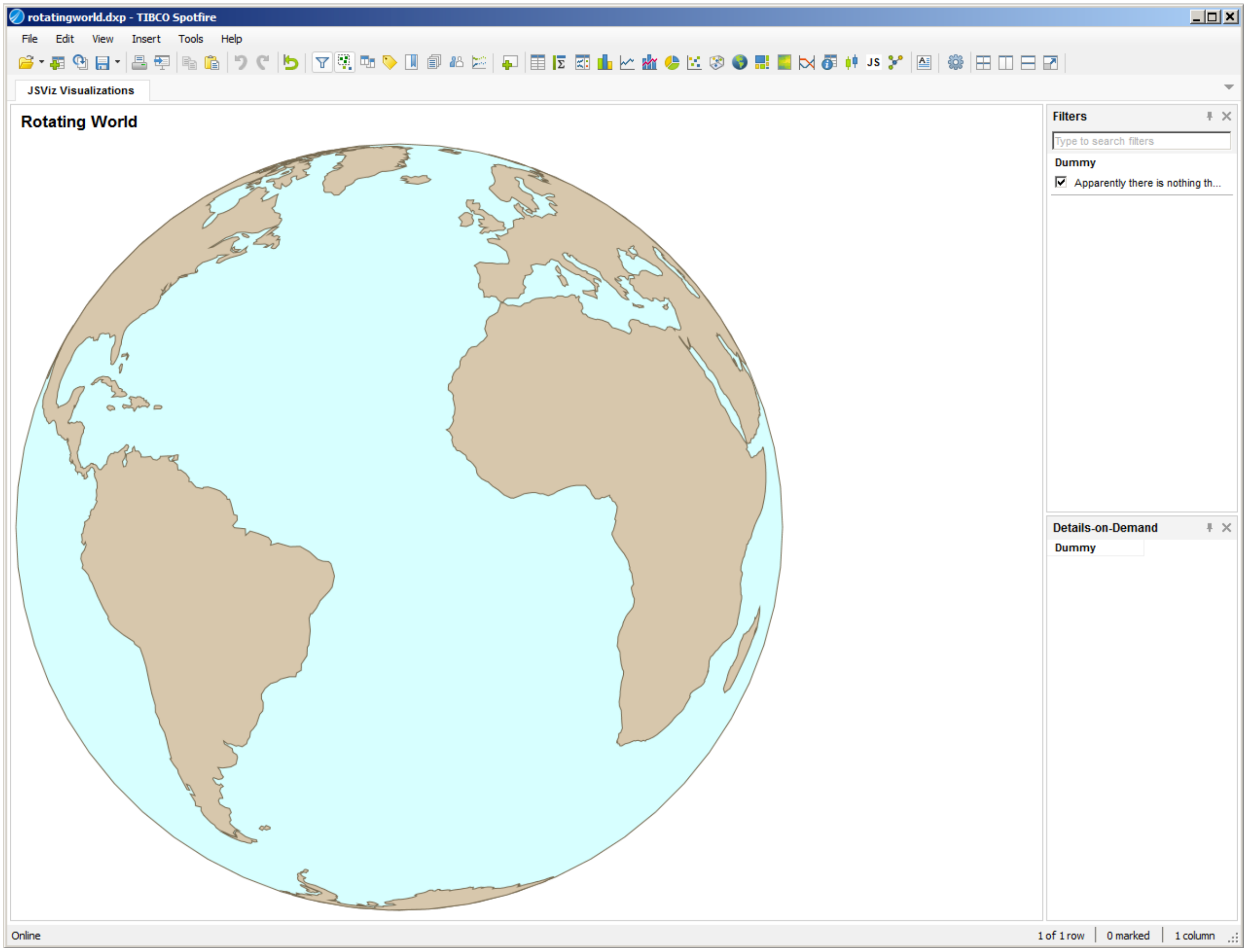
Files

DXP File:	`polarchart.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	N/A
JS File:	`/src/js/PolarChart.js`

Includes:	`/lib/jQuery/jQuery.js`
	`/lib/highcharts/highcharts.src.js`
	`/lib/highcharts/highcharts-more.src.js`
	`/lib/highcharts/exporting.src.js`

Note: *The user must download the Highcharts libraries themselves. They are not included with the JSViz installation*

19. Rotating World



Dummy

☑ Apparently there is nothing th...

Dummy

Description

This sample uses the `topojson` d3 libraries to draw a rotating world map. While the sample is running, the user can continue to interact with Spotfire. This demonstrates the ability of JavaScript to execute threads independently of Spotfire.

This sample demonstrates:

- Using timers within JavaScript to update visualizations
- Resizing
- Support for printing and exporting using the Export Timing option

Status

Initial rendering and resizing are implemented, no marking.

Data

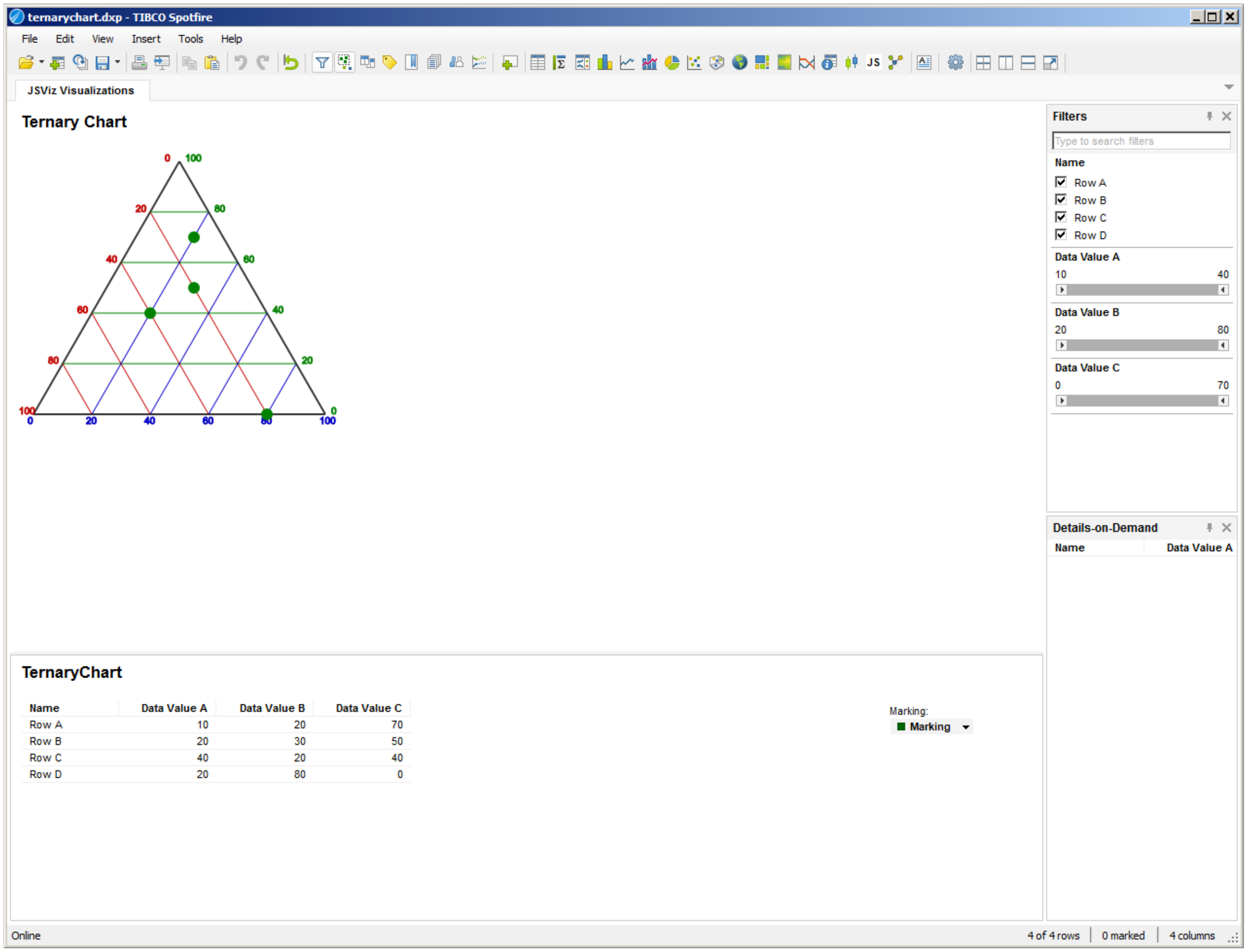
The data used to construct the world map is JSON data included via JavaScript. It is in the file “`data/world-110m.json.js`”.

Files

DXP File:	`rotatingworld.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	N/A
JS File:	`/src/js/RotatingWorld.js`

Includes:	`/lib/jQuery/jQuery.js`
	`/lib/d3/d3.v3.min.js`
	`/lib/topojson/topojson.v0.min.js`
	`/data/world-110m.json.js`

20. Ternary Chart



Filters

Type to search filters

Name

☑ Row A
☑ Row B
☑ Row C
☑ Row D

Data Value A: 10 – 40

Data Value B: 20 – 80

Data Value C: 0 – 70

Details-on-Demand

Name	Data Value A

TernaryChart

Name	Data Value A	Data Value B	Data Value C
Row A	10	20	70
Row B	20	30	50
Row C	40	20	40
Row D	20	80	0

Marking:
🟩 Marking

Description

This sample shows how to use d3 to create a completely new chart type. In this case a Ternary Chart. A description of a Ternary Chart can be found here: http://en.wikipedia.org/wiki/Ternary_plot.

This sample demonstrates:

- Using the Spotfire Engine to deliver un-aggregated data values
- Using the d3 API's
- Support for printing and exporting using the Export Timing option

Status

Only initial rendering is implemented and the chart is a fixed size.

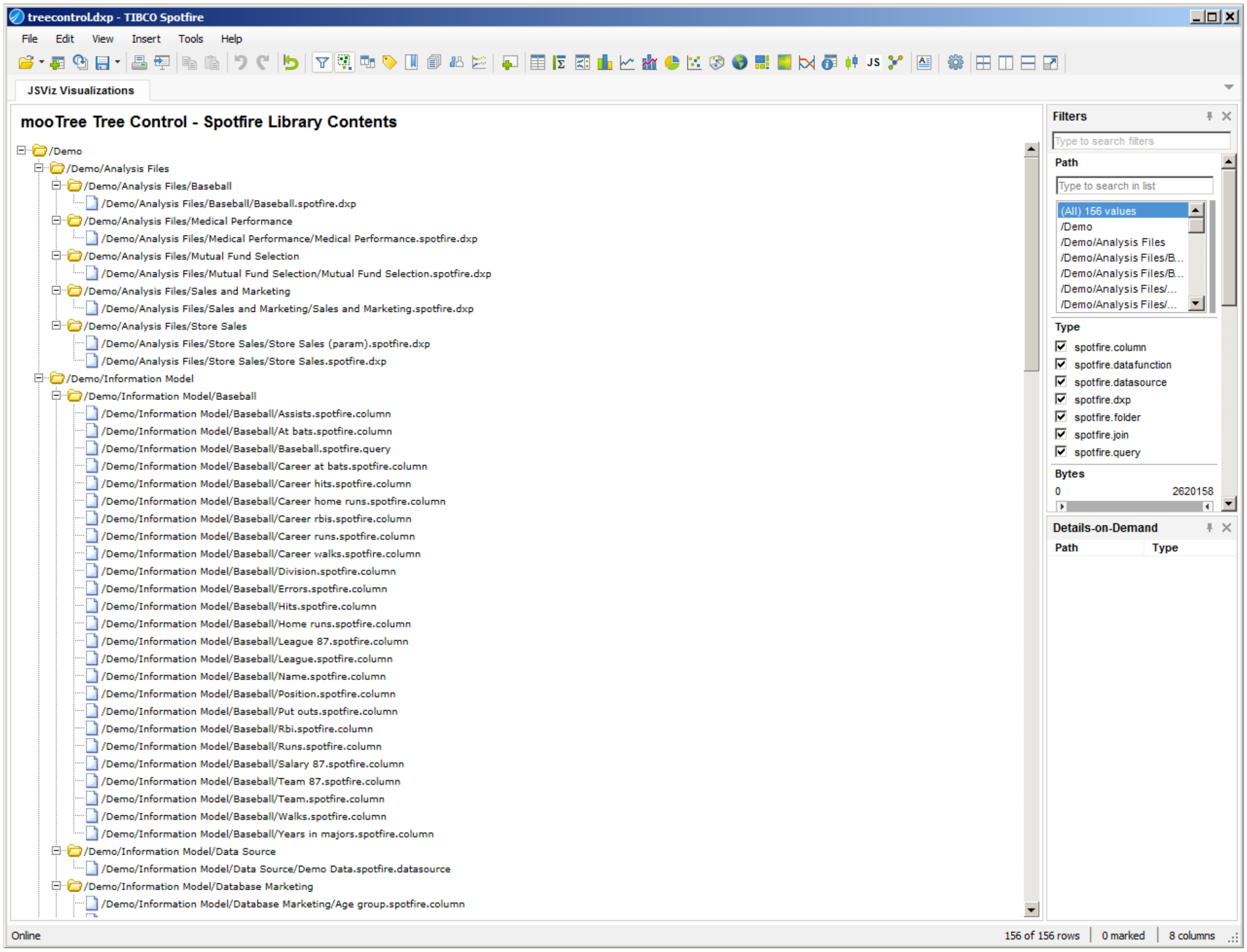
Data

The sample data is a custom data set "`TernaryChart.sbdf`", which is shipped with JSViz.

Files

DXP File:	`ternarychart.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	`/src/css/TernaryChart.css`
JS File:	`/src/js/TernaryChart.js`
Includes:	`/lib/jQuery/jQuery.js` `/lib/d3/d3.v3.min.js`

21. Tree Control



mooTree Tree Control - Spotfire Library Contents

```
⊟ /Demo
  ⊟ /Demo/Analysis Files
    ⊟ /Demo/Analysis Files/Baseball
        /Demo/Analysis Files/Baseball/Baseball.spotfire.dxp
    ⊟ /Demo/Analysis Files/Medical Performance
        /Demo/Analysis Files/Medical Performance/Medical Performance.spotfire.dxp
    ⊟ /Demo/Analysis Files/Mutual Fund Selection
        /Demo/Analysis Files/Mutual Fund Selection/Mutual Fund Selection.spotfire.dxp
    ⊟ /Demo/Analysis Files/Sales and Marketing
        /Demo/Analysis Files/Sales and Marketing/Sales and Marketing.spotfire.dxp
    ⊟ /Demo/Analysis Files/Store Sales
        /Demo/Analysis Files/Store Sales/Store Sales (param).spotfire.dxp
        /Demo/Analysis Files/Store Sales/Store Sales.spotfire.dxp
  ⊟ /Demo/Information Model
    ⊟ /Demo/Information Model/Baseball
        /Demo/Information Model/Baseball/Assists.spotfire.column
        /Demo/Information Model/Baseball/At bats.spotfire.column
        /Demo/Information Model/Baseball/Baseball.spotfire.query
        /Demo/Information Model/Baseball/Career at bats.spotfire.column
        /Demo/Information Model/Baseball/Career hits.spotfire.column
        /Demo/Information Model/Baseball/Career home runs.spotfire.column
        /Demo/Information Model/Baseball/Career rbis.spotfire.column
        /Demo/Information Model/Baseball/Career runs.spotfire.column
        /Demo/Information Model/Baseball/Career walks.spotfire.column
        /Demo/Information Model/Baseball/Division.spotfire.column
        /Demo/Information Model/Baseball/Errors.spotfire.column
        /Demo/Information Model/Baseball/Hits.spotfire.column
        /Demo/Information Model/Baseball/Home runs.spotfire.column
        /Demo/Information Model/Baseball/League 87.spotfire.column
        /Demo/Information Model/Baseball/League.spotfire.column
        /Demo/Information Model/Baseball/Name.spotfire.column
        /Demo/Information Model/Baseball/Position.spotfire.column
        /Demo/Information Model/Baseball/Put outs.spotfire.column
        /Demo/Information Model/Baseball/Rbi.spotfire.column
        /Demo/Information Model/Baseball/Runs.spotfire.column
        /Demo/Information Model/Baseball/Salary 87.spotfire.column
        /Demo/Information Model/Baseball/Team 87.spotfire.column
        /Demo/Information Model/Baseball/Team.spotfire.column
        /Demo/Information Model/Baseball/Walks.spotfire.column
        /Demo/Information Model/Baseball/Years in majors.spotfire.column
    ⊟ /Demo/Information Model/Data Source
        /Demo/Information Model/Data Source/Demo Data.spotfire.datasource
    ⊟ /Demo/Information Model/Database Marketing
        /Demo/Information Model/Database Marketing/Age group.spotfire.column
```

Filters

Type to search filters

Path

Type to search in list

(All) 156 values
/Demo
/Demo/Analysis Files
/Demo/Analysis Files/B...
/Demo/Analysis Files/B...
/Demo/Analysis Files/...
/Demo/Analysis Files/...

Type

☑ spotfire.column
☑ spotfire.datafunction
☑ spotfire.datasource
☑ spotfire.dxp
☑ spotfire.folder
☑ spotfire.join
☑ spotfire.query

Bytes

0 2620158

Details-on-Demand

Path	Type

Online | 156 of 156 rows | 0 marked | 8 columns

Description

This sample shows how to display a hierarchical tree control in Spotfire. In this case using the `mooTools` `mooTree` control

This sample demonstrates:

- Using the Spotfire Engine to deliver un-aggregated data values
- Converting a parent-child data table into a hierarchical tree
- Using mooTools mooTree control API
- Using the Script Execution interface to run a script in Spotfire whenever a node in the tree is clicked

- Using the Runtime State interface to store and retrieve the currently selected node. Without this the selection would be lost every time the control was redrawn in Spotfire Web Player.
- Resizing
- Support for printing and exporting using the Export Timing option

Status

Initial rendering, resizing, script execution and runtime state are implemented. The sample does not support marking or filtering as filtering can result in orphaned nodes.

Data

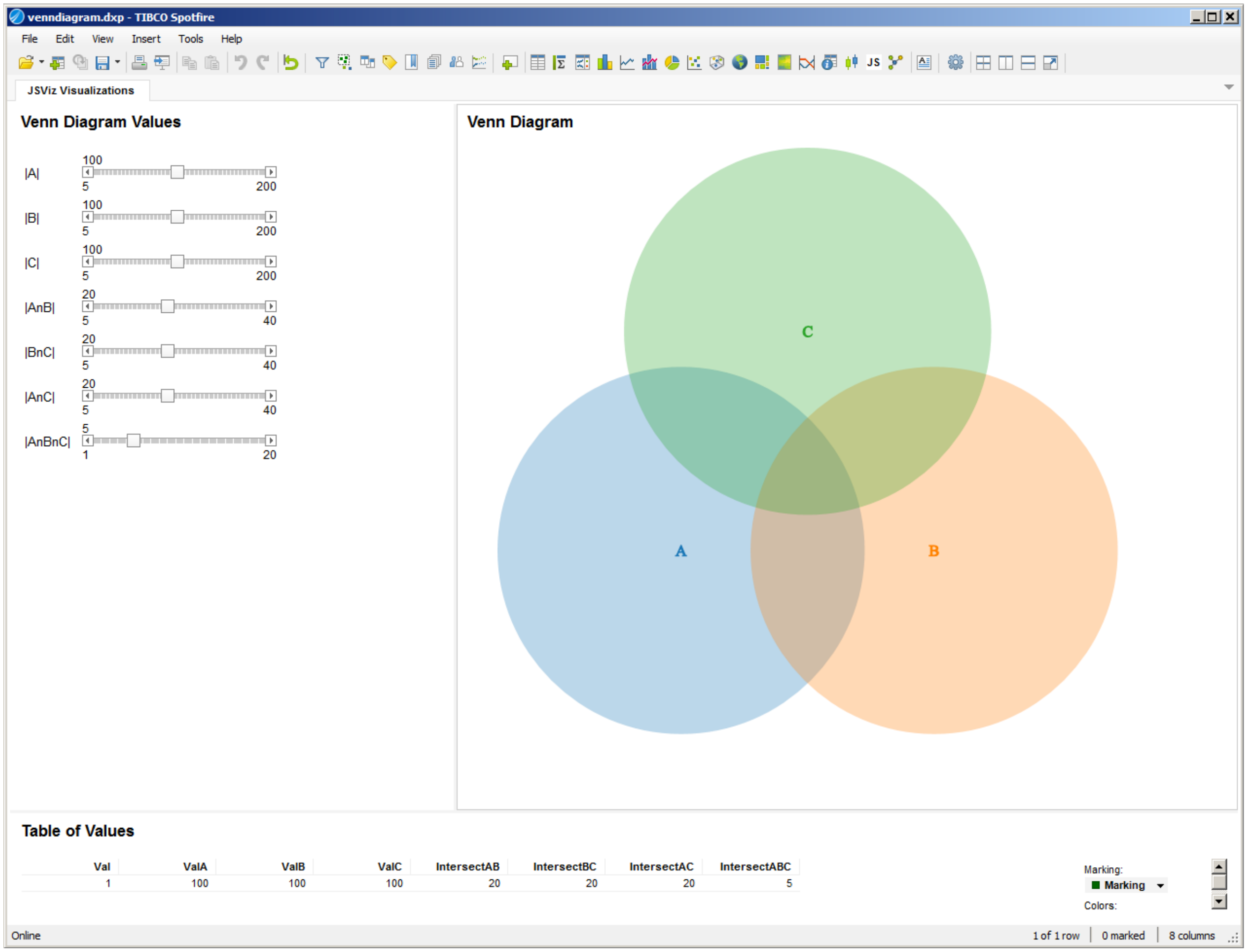
The sample is based on a data set containing information on the Spotfire Demo Library contents. The data was extracted via a .NET program using the Spotfire Server Web Service API. It is shipped with JSViz as "`TSSLibrarySize.sbdf`".

Files

DXP File:	`treecontrol.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	`/src/css/TreeControl.css`
JS File:	`/src/js/TreeControl.js`

Includes:	`/lib/jQuery/jQuery.js`
	`/lib/d3/d3.v3.min.js`
	`/lib/mootree/mootools/mootools.v1.11.js`
	`/lib/mootree/mootree.js`
	`/src/base.js`
	`/src/DataStructures.Tree.librarysize.js`

22. Venn Diagram



Venn Diagram Values

|A| 100 (5 – 200)

|B| 100 (5 – 200)

|C| 100 (5 – 200)

|AnB| 20 (5 – 40)

|BnC| 20 (5 – 40)

|AnC| 20 (5 – 40)

|AnBnC| 5 (1 – 20)

Venn Diagram

Table of Values

Val	ValA	ValB	ValC	IntersectAB	IntersectBC	IntersectAC	IntersectABC
1	100	100	100	20	20	20	5

Description

This sample shows how to create a Venn Diagram chart using the d3 libraries..

This sample demonstrates:

- Using Calculated Columns and Document Properties to plot derived values
- Resizing
- Support for printing and exporting using the Export Timing option

Status

Initial rendering and resizing are implemented, no marking.

Data

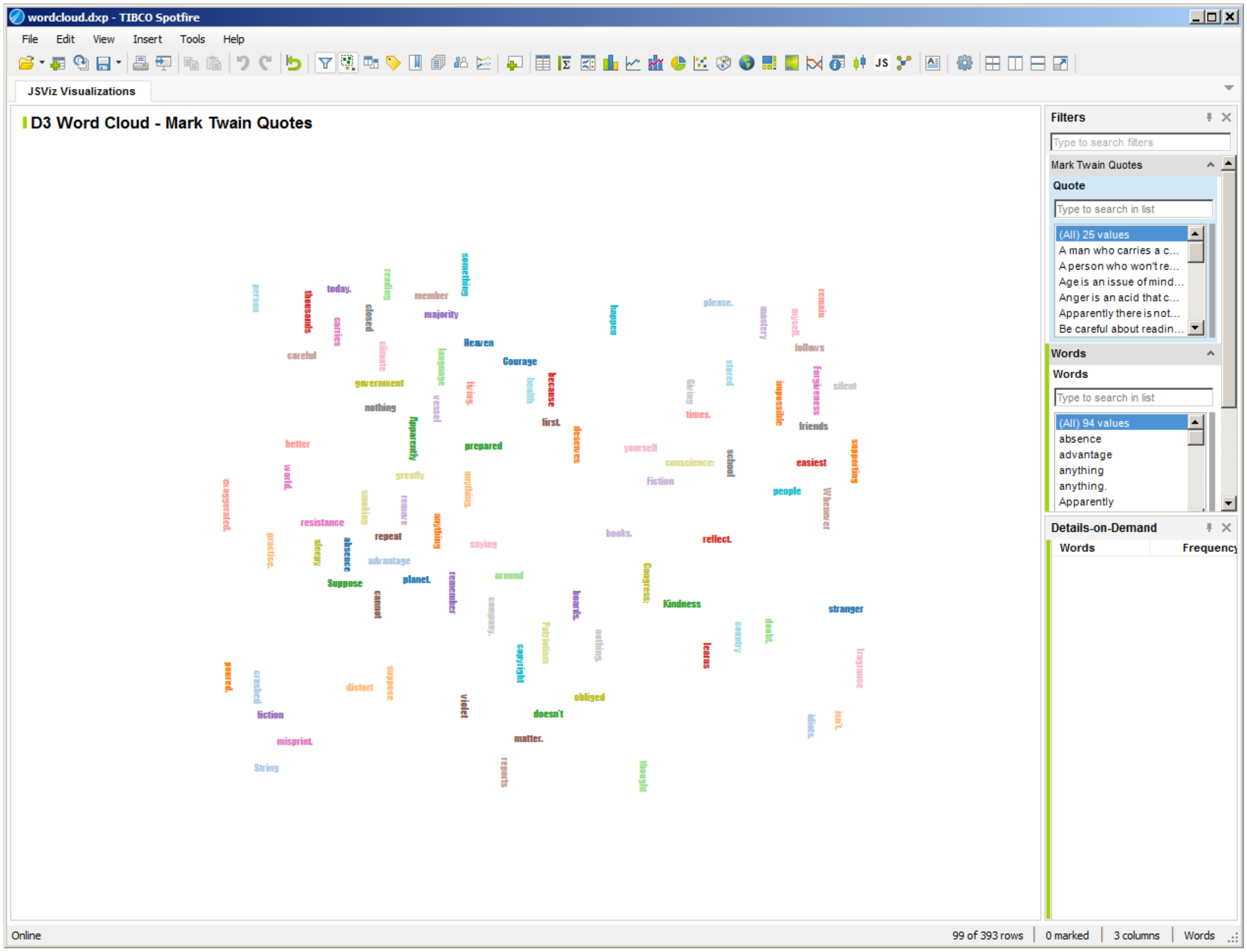
The data within this sample is derived from Document Properties set via the Text Area.

Files

DXP File:	`venndiagram.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	N/A
JS File:	`/src/js/VennDiagram.js`

Includes:	`/lib/jQuery/jQuery.js`
	`/lib/d3/d3.v3.min.js`
	`/lib/venn/d3.venn.js`

23. Word Cloud



Description

This sample demonstrates using the d3 libraries to create a Word Cloud.

This sample demonstrates:

- Using the Spotfire Engine to calculate aggregated data values
- Using the d3 API, specifically the d3.layout.cloud layout
- Resizing
- Support for printing and exporting using the Export Timing option

Status

Initial rendering and resizing are implemented, no marking. The Word Cloud will respond to filtering but the layout is random every time.

Data

The sample data is a custom data set "`WordCloud.sbdf`", containing words from quotes attributed to Mark Twain, which is shipped with JSViz.

Files

DXP File:	`wordcloud.dxp`
JSViz File:	`/src/lib/JSViz/JSViz.js`
CSS File:	N/A
JS File:	`/src/js/WordCloud.js`

Includes:	`/lib/jQuery/jQuery.js`
	`/lib/d3/d3.v3.min.js`
	`/lib/d3/d3.layout.cloud.js`