

Visual Spark

A visual Spark simulator, composing a *Data Source*,
Spark Flow and *Data Sink*.

- Data Source: Cassandra, Hdfs, Kafka, Text
- Spark Flow: Transformations and Action
- Data Sink: Cassandra, Hdfs, Kafka, Text

Technologies

Scala

ScalaFX

Spark

Kafka

Cassandra

Cassandra-Spark Connector

Rationale

Spark engineers work with Scala.

Spark simulations can be built with ScalaFX, a JavaFX wrapper.

JavaFX includes Charts, 2D, 3D and Animations.

JavaFX apps and controls are decorated by CSS.

Third party JavaFX charts and components exist.

JavaFX includes a WebView component that allows for the rendering of Javascript content. For instance, D3 could be used to build an exotic chart.

Application

Executes and visualizes a *Source* ~> *Flow* ~> *Sink* pipeline as:

- Source: Kafka Topic Messages
- Flow: Time Series Chart
- Sink: Aggregate Pie Chart

Play

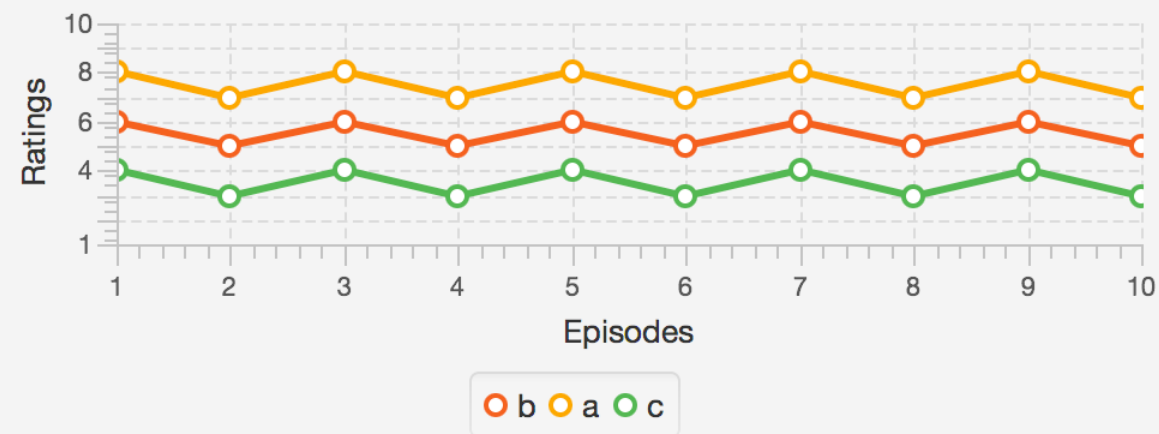
30 messages processed in 22 seconds.

Source

Program	Season	Episode	Rating	
a	1	1	8	
a	1	2	7	
a	1	3	8	
a	1	4	7	
a	1	5	8	
a	1	6	7	
a	1	7	8	
a	1	8	7	

Flow

Episode Ratings



Sink

Program Ratings

