What's new in Dashbuilder

2022 Update
Agenda

● What is Dashbuilder
● New Features
● Installation
● Sample Dashboards
● Planned Features
What is Dashbuilder

Tool to build Dashboards and general data visualizations.
New Features

- Dashbuilder's New Home
- Dashbuilder Runtime is a Quarkus Application
- New DataSet Provider: External DataSets (JSON)
- New Authoring Tool
- Client Bundle Size Reduction
- SQL DataSets configuration in Runtime
Dashbuilder's New Home

https://github.com/kiegroup/kogito-tooling/releases
DB Runtime is a Quarkus App

[wsiqueir@localhost dashbuilder]$ java -jar dashbuilder-runtime-app-runner.jar
2021-12-28 19:58:13,062 WARN [com.arj.ats.common] (main) ARJUNA048002: Could not find configuration file, URL was: null
2021-12-28 19:58:13,157 INFO [org.das.bac.RuntimeOptions] (main) Max upload size is 10485760
2021-12-28 19:58:13,229 INFO [io.quarkus] (main) dashbuilder-runtime-app 0.0.0 on JVM (powered by Quarkus 2.2.2.Final) started in 0.980s. Listening on: http://0.0.0.0:8080
# External DataSets

```json
{
  "columns": [
    { "id": "Name", "type": "label" },
    { "id": "2021 Population", "type": "number" },
    { "id": "2020 Population", "type": "number" },
    { "id": "Growth Rate", "type": "number" },
    { "id": "Area (km²)", "type": "number" },
    { "id": "Density (per km²)", "type": "label" }
  ],
  "values": [
    ["China", "1444216107", "1439323776", "0.34", "9706961", "149"],
    ["India", "1393409638", "1380004385", "0.97", "3287590", "424"],
    ["United States", "332815673", "331602651", "0.58", "9372610", "36"],
    ["Indonesia", "276361738", "273523615", "1.04", "1904569", "145"],
    ["Pakistan", "225199937", "220892346", "1.95", "881912", "255"],
    ["Brazil", "213993437", "212559417", "0.67", "8515767", "25"],
    ["Nigeria", "211406708", "206139589", "2.55", "923768", "229"],
    ["Bangladesh", "166393498", "164689383", "0.98", "147579", "1127"],
    ["Russia", "145912025", "145934462", "-0.02", "17098242", "9"],
    ["Mexico", "136262216", "128932753", "1.03", "1964375", "66"]
  ]
}
```
New Authoring Tool

Welcome to Dashbuilder
Dashbuilder offers tools to create Business Dashboards. Select a tool below to get started

Datasets
Create and edit source of data that can be used to build dashboards.

Design
Build pages with charts and metrics components.

Data Transfer
Transfer content between installations.
# Client Bundle Size Reduction

<table>
<thead>
<tr>
<th>File Path</th>
<th>Size</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>F0044A05988F9CFC95C5427116A83A3C0.cache.js</td>
<td>1.4 MB</td>
<td>274 ms</td>
</tr>
<tr>
<td>fontsawesome-webfontwoff-4.6.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>patternfly.min.css</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OpenSans-Semibold-webfontwoff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OpenSans-Regular-webfontwoff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>patternfly-additions.min.css</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OpenSans-Light-webfontwoff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>patternfly-icons-webfont.ttf</td>
<td></td>
<td></td>
</tr>
<tr>
<td>jquery-ui-min.css</td>
<td></td>
<td></td>
</tr>
<tr>
<td>org.dashbuilder.DashbuilderRuntime.nocache.js</td>
<td></td>
<td></td>
</tr>
<tr>
<td>twitter-pattyfly.css</td>
<td></td>
<td></td>
</tr>
<tr>
<td>bootstrap-daterangepicker-3.1.6.4.min.cache.css</td>
<td></td>
<td></td>
</tr>
<tr>
<td>bootstrap-slider-0.3.6.min.cache.css</td>
<td></td>
<td></td>
</tr>
<tr>
<td>bootstrap-datepicker-0.4.4.min.cache.css</td>
<td></td>
<td></td>
</tr>
<tr>
<td>datarangepicker.css</td>
<td></td>
<td></td>
</tr>
<tr>
<td>bootstrap-select.min.css</td>
<td></td>
<td></td>
</tr>
<tr>
<td>bootstrap-switch-3.2.2.min.cache.css</td>
<td></td>
<td></td>
</tr>
<tr>
<td>twicon.ico</td>
<td></td>
<td></td>
</tr>
<tr>
<td>localhost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>positioned-tabs-1.0.0.min.cache.css</td>
<td></td>
<td></td>
</tr>
<tr>
<td>index.css</td>
<td></td>
<td></td>
</tr>
<tr>
<td>prettify.min.css</td>
<td></td>
<td></td>
</tr>
<tr>
<td>info</td>
<td></td>
<td></td>
</tr>
<tr>
<td>function</td>
<td></td>
<td></td>
</tr>
<tr>
<td>subscribe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>runtime.logo.png</td>
<td></td>
<td></td>
</tr>
<tr>
<td>data:image/png;base...</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total requests</th>
<th>27 MB transferred</th>
<th>5.6 MB resources</th>
<th>DOMContentLoaded: 93 ms</th>
<th>Load: 452 ms</th>
</tr>
</thead>
</table>

Dashbuilder
SQL DataSets in Runtime

java -Ddashbuilder.runtime.multi=true \
-Ddashbuilder.datasources=sample \
-Ddashbuilder.datasource.sample.jdbcUrl=jdbc:mariadb://localhost:3306/sample \
-Ddashbuilder.datasource.sample.providerClassName=org.mariadb.jdbc.Driver \
-Ddashbuilder.datasource.sample.maxSize=10 \
-Ddashbuilder.datasource.sample.principal=repass
-Ddashbuilder.datasource.sample.credential=repass \
-jar target/dashbuilder-runtime-app-7.56.0-SNAPSHOT-runner.jar
On-Premise installation

Requirement: **Java JDK 11**

Runtime

```
java -jar dashbuilder-runtime-app-runner.jar
```

Authoring Bootable JAR

```
java -jar dashbuilder-authoring-bootable.jar
```

Deployable WAR on Wildfly 23.0.2:

```
dashbuilder-authoring.war
```
Openshift Installation

Dashbuilder Runtime*
quay.io/kogito_tooling_bot/dashbuilder-runtime:0.14.1

Dashbuilder Authoring**
quay.io/kogito_tooling_bot/dashbuilder-authoring:0.14.1

* Use JAVA_OPTS environment variable to configure Dashbuilder
** Set JAVA_OPTS as -Dorg.dashbuilder.project.location=/tmp/
DEMO
Planned Features*

- Client External DataSets Support
- YML Editor
- External DataSet Operation on Source
- Remote External Components
- New Dashbuilder Website
- Pre-made Reusable External DataSets library

* Subject to change
YML Editor

```yaml
- datasets:
  - uid: pop
    url: /datasets/population.json
    layoutTemplates:
      - name: Countries Population
        rows:
          - layoutColumns:
              - layoutComponents:
                  - type: HTML
                    properties:
                      HTML_CODE: Countries Population
                      font-size: xx-large
                  - settings:
                    type: BARCHART
                    subtype: COLUMN
                    chart:
                      width: '800'
                      margin: left: '180'
                  dataSetLookup:
                    dataSetUid: pop
                    rowCount: 10
                    groupOps:
                    - columnGroup:
                        source: Name
                        groupStrategy: DYNAMIC
                        groupFunctions:
                        - source: 2020 Population
                        - source: 2021 Population
                    settings:
                    - type: TABLE
                      chart:
                        resizable: 'true'
                        table:
                          sort:
                            enabled: 'true'
                  dataSetLookup:
                    dataSetUid: pop
```

Countries Population

<table>
<thead>
<tr>
<th>Name</th>
<th>2020 Population</th>
<th>2020 Population Area (km²)</th>
<th>Density (per km²)</th>
<th>Growth Rate</th>
<th>Population Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>1,444,215,105</td>
<td>9,576,061</td>
<td>149</td>
<td>0.34</td>
<td>18.34</td>
</tr>
<tr>
<td>India</td>
<td>1,370,591,058</td>
<td>3,237,535</td>
<td>458</td>
<td>0.97</td>
<td>17.05</td>
</tr>
<tr>
<td>Indonesia</td>
<td>276,361,793</td>
<td>1,904,569</td>
<td>140</td>
<td>1.04</td>
<td>3.51</td>
</tr>
<tr>
<td>Pakistan</td>
<td>225,199,937</td>
<td>881,512</td>
<td>255</td>
<td>1.95</td>
<td>2.66</td>
</tr>
<tr>
<td>Brazil</td>
<td>213,993,437</td>
<td>8,515,747</td>
<td>25</td>
<td>0.67</td>
<td>2.72</td>
</tr>
<tr>
<td>Nigeria</td>
<td>211,406,708</td>
<td>922,768</td>
<td>229</td>
<td>2.55</td>
<td>2.68</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>165,209,988</td>
<td>17,375</td>
<td>1,177</td>
<td>0.98</td>
<td>2.11</td>
</tr>
<tr>
<td>Russia</td>
<td>149,912,623</td>
<td>17,096,242</td>
<td>10</td>
<td>-0.02</td>
<td>1.85</td>
</tr>
<tr>
<td>Mexico</td>
<td>133,742,218</td>
<td>1,964,373</td>
<td>86</td>
<td>1.03</td>
<td>1.85</td>
</tr>
</tbody>
</table>
Thanks!