

## EXTERNAL DATA SOURCES

Device discovery via Controls Configuration Service (CCS)  
 Metadata via Injector Controls Architecture (INCA)

**PERMISSIONS**  
 Others can view, edit, administrate

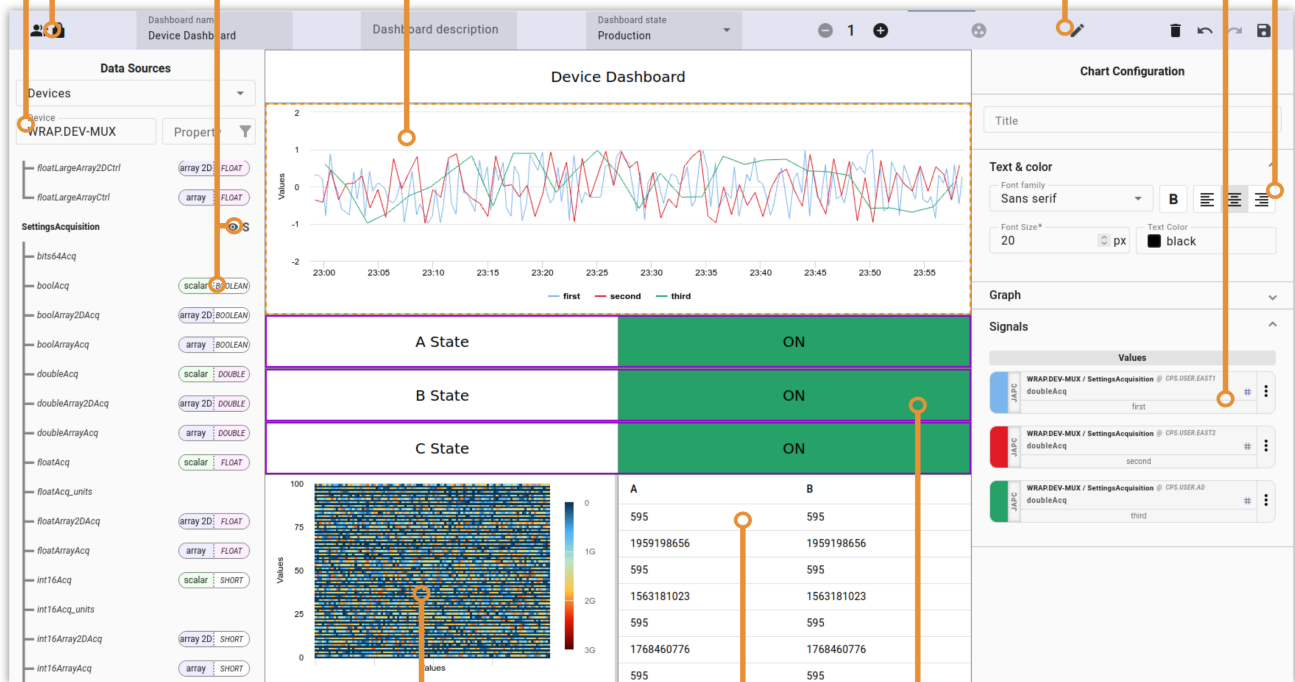
**METADATA**  
 Consolidated from low level definition / high-level services

**CHART WIDGETS**  
 Display live and/or historical time-series data  
 Snapshots of 1D data live data can also be rendered

**EXTENSIVE CUSTOMIZATION**  
 Font sizes, colors, graph options, etc.

**DATA SOURCE ASSIGNMENTS**  
 Type-aware, slicing support

**BULK EDIT SUPPORT**



## HEATMAP WIDGETS

Display live and/or historical 1D time-series data  
 Snapshots of 2D data live data can also be rendered

## TABLE WIDGETS

Display live scalar, 1D, and 2D data  
 Control row / column / label display

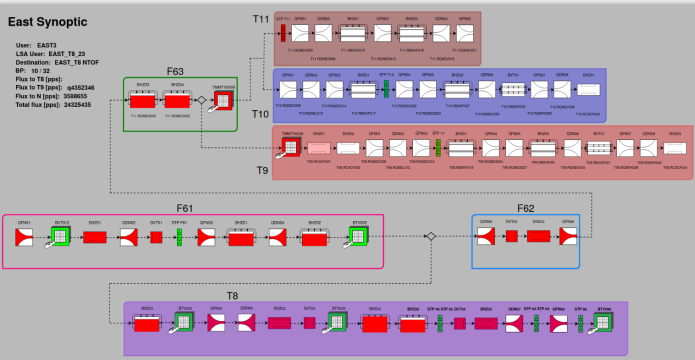
## DYNAMIC LABEL

Display live scalar values, multiple supported formats  
 The background can also be driven by live data, mapped to colors

## SSVG WIDGETS

Stateful Scalable Vector Graphics (SSVG) files can be created by **embedding** metadata on regular SVG files.

This metadata can be used to turn a static image file into a dynamic **custom widget** by dictating how data can be injected into it, and optionally what animation should be triggered. All data source semantics and **data acquisition** options can be applied similarly to any native widget.



## DATA ACQUISITION

WRAP connects directly to devices and incorporates layers of:

- **Transformation**, based on metadata to make the payload conform to UI needs
- **Synchronization**, to guarantee coherency of updates
- Message **aggregation** through websocket, to make the data available

