

Declaratively Transforming JSON

Klaus Hartke

WISHI

September 20, 2018

Demo #1: JSON-to-JSON Transformation

Input

```
[
  {
    "temperature": 23.1,
    "unit": "Cel"
  },
  {
    "temperature": 73.6,
    "unit": "Fah"
  },
  {
    "temperature": 25.8,
    "unit": "Cel"
  }
]
```

+ Transformation

```
[
  {
    "bn": "3303/0/",
    "n": "5701",
    "vs": "$[0].unit"
  },
  {
    "$": "$[?(@.unit==$[0].unit)]",
    "n": "5700",
    "v": "$.temperature"
  }
]
```

= Output

```
[
  {
    "bn": "3303/0/",
    "n": "5701",
    "vs": "Cel"
  },
  {
    "n": "5700",
    "v": 23.1
  },
  {
    "n": "5700",
    "v": 25.8
  }
]
```

Demo #2: JSON-to-SenML Transformation

Input	+ Transformation	= Output
<pre>[{ "temperature": 23.1, "unit": "Cel" }, { "temperature": 73.6, "unit": "Fah" }, { "temperature": 25.8, "unit": "Cel" }]</pre>	<pre>{ "3303/0/5700": "\$[*].temperature", "3304/0/5700": "\$[*].humidity", "3305/0/5800": "\$[*].power" }</pre>	<pre>[{ "n": "3303/0/5700", "v": 23.1 }, { "n": "3303/0/5700", "v": 73.6 }, { "n": "3303/0/5700", "v": 25.8 }]</pre>