

SenML

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Interoperable IoT



IoT sensor data

- Common requirements for measurement data
 - Name/identifier for data source
 - Value
 - Type/unit
 - [Time]
- Simple to generate, efficient to collect
- Need evolution; while keeping it simple

Example

```
[{"n": "urn:dev:ow:10e2073a01080063", "v": 23.1, "u": "Cel"}]
```

unique sensor name



measurement value



“unit” of the value



Example

base name

base unit

```
[  
  {"bn": "urn:dev:ow:10e2073a01080063",  
    "bu": "Cel", "bt": 1468663235,  
    "v": 23.5},  
  {"t": 1, "v": 23.6},  
  {"t": 5, "v": 24.1},  
  {"t": 9, "v": 25.2}  
]
```

base time

The diagram illustrates a JSON array structure. The first object contains three fields: 'bn' (base name), 'bu' (base unit), and 'v' (value). The second, third, and fourth objects each contain two fields: 't' (time) and 'v' (value). Blue arrows point from the labels 'base name', 'base unit', and 'base time' to their respective fields in the JSON. 'base name' points to the 'bn' field of the first object. 'base unit' points to the 'bu' field of the first object. 'base time' points to the 't' field of the second object.

Serializations

- JSON
- CBOR
- XML
- EXI