

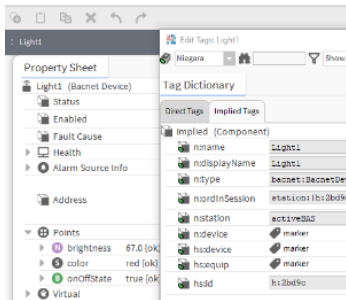
# Data Types

## Devices

Devices can be a Niagara network device or any Niagara container containing points (such as a Folder)

## Tags

The tags are metadata added to the device to help identify it and simplify its management.

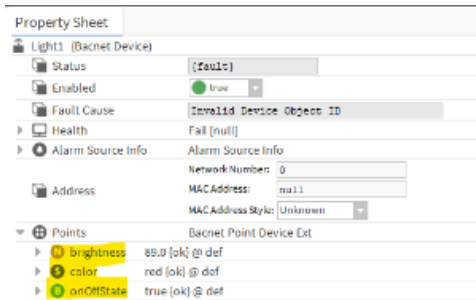


## Points

In the Niagara framework points are the building blocks of any IoT application. A point is a component that can read or write a sensor value for example: **Light Brightness** or **Color**.

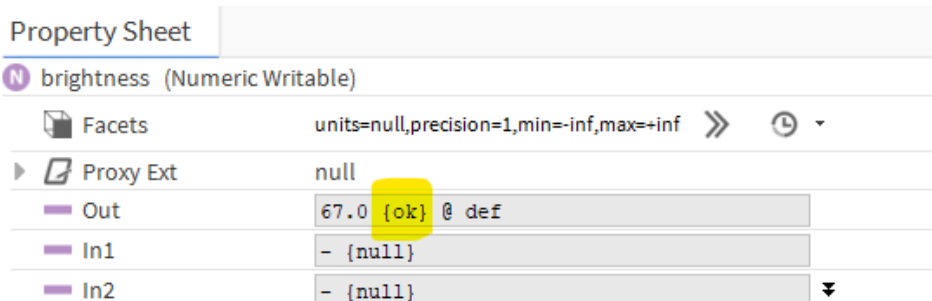
## Values

Points have a current value.



## State

In addition to the value the point has also a state which represent the current status of the sensor.



## Tags

The tags are metadata added to the points to help identify it and simplify its management.

| Property Sheet               |                |
|------------------------------|----------------|
| brightness (NumericWritable) | Tag Dictionary |
| Facets                       | an Name Type   |
| Proxy Ext                    | mul            |
| Out                          | 61             |
| In1                          | ...            |
| In2                          | ...            |
| In3                          | ...            |
| In4                          | ...            |
| In5                          | ...            |
| In6                          | ...            |
| In7                          | ...            |
| In8                          | ...            |
| In9                          | ...            |
| In10                         | ...            |
| In11                         | ...            |
| In12                         | ...            |
| In13                         | ...            |
| In14                         | ...            |
| In15                         | ...            |
| In16                         | ...            |
| Fallback                     | 61             |
| Override Expiration          | 0.0            |

## Histories

The data generated by the points can be recorded and saved on disk for later use. and called a points history.

|                 |
|-----------------|
| Hierarchy       |
| History         |
| activeBAS       |
| AuditHistory    |
| LogHistory      |
| SecurityHistory |
| brightness      |




| activeBAS/brightness      |             |        |       |
|---------------------------|-------------|--------|-------|
| Timestamp                 | Trend Flags | Status | Value |
| 06-Oct-20 2:40:51 PM CEST | {start}     | {ok}   | 89.0  |
| 06-Oct-20 2:42:05 PM CEST | {}          | {ok}   | 67.0  |

## Alarms

Alarms are incidence that points generate when an abnormal behavior is detected for example a **Temperature > 60°**

Today

Alarm History


| Timestamp  | Source State | Ack State | Source   | Alarm Class         | Priority | Message   |
|--|--------------|-----------|--|---------------------|----------|-----------|
|  06-Oct-20 4:23:11 AM CEST  | Normal       | Unacked   | slot/Services/BtibService/externalConnectors/realtimeConnector/MongoDbRTConnector/ContinuousTest/Latency/MongoPointTestExt | Default Alarm Class | 255      | Cannot se |
|  06-Oct-20 11:14:22 AM CEST | Normal       | Unacked   | slot/Services/BtibService/externalConnectors/realtimeConnector/MongoDbRTConnector/ContinuousTest/Latency/MongoPointTestExt | Default Alarm Class | 255      | Unknown   |
|  06-Oct-20 11:16:02 AM CEST | Normal       | Unacked   | slot/Services/BtibService/externalConnectors/realtimeConnector/MongoDbRTConnector/ContinuousTest/Latency/MongoPointTestExt | Default Alarm Class | 255      | Unknown   |


## References

References are used to represent a remote resource such as a maintenance CMMS work order, a SharePoint document, an incident etc.

Reference of the station

Name

 myRef

 myRef1