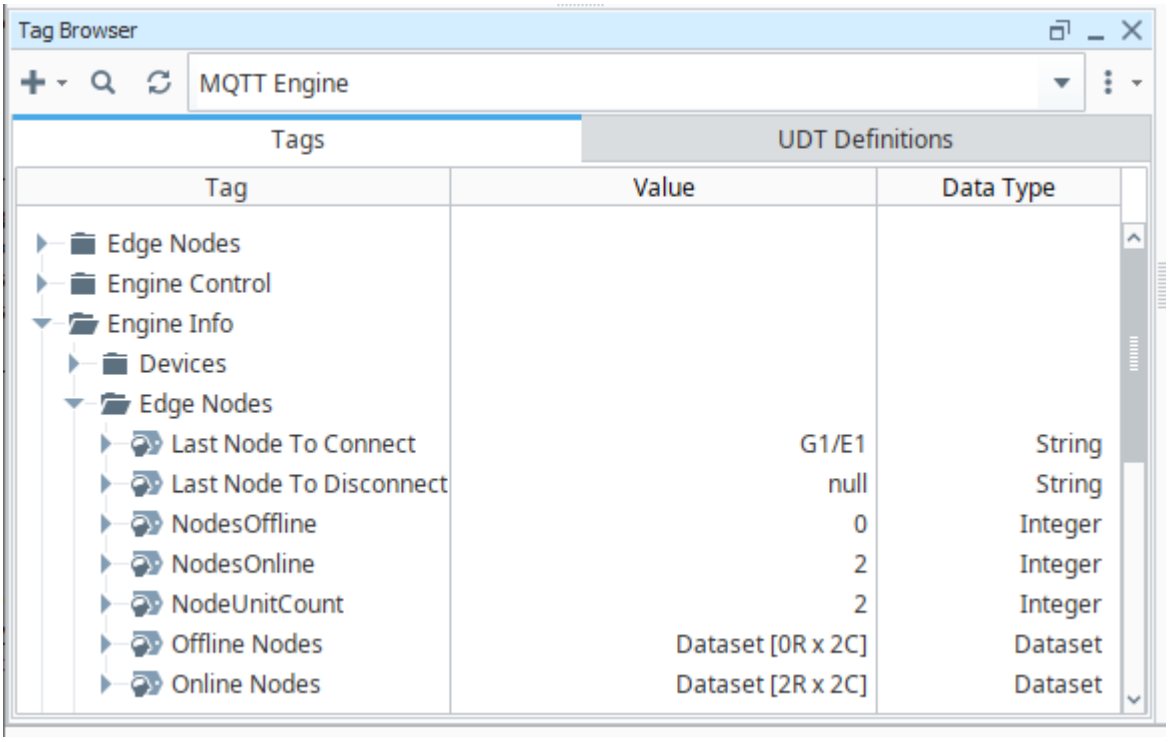
How do I know how many Sparkplug EdgeNodes are connected at MQTT Engine

Details about the Sparkplug EdgeNodes connected at Engine can be found in the Engine Info > Edge Nodes folder in the MQTT Engine tag provider.



where:

Name	Data Type	Description
Last Node to Connect	String	The Sparkplug ID of the last node to connect
Last Node To Disconnect	String	The Sparkplug ID of the last node to disconnect
NodesOffline	Integer	The number of Sparkplug Edge Nodes offline. This is determined by whether the last lifecycle message was an NBIRTH or NDEATH
NodesOnline	Integer	The number of Sparkplug Edge Nodes online. This is determined by whether the last lifecycle message was an NBIRTH or NDEATH
NodeUnitCount	Integer	The total number of Sparkplug Edge Nodes as determined by the received NBIRTH messages
Offline Nodes	Dataset	A dataset containing the Sparkplug ID and timestamp for all offline Sparkplug edge nodes
Online Nodes	Dataset	A dataset containing the Sparkplug ID and timestamp for all online Sparkplug edge nodes

Executing the code below in the Ignition Script Console will print out the values in the Offline Nodes and Online Nodes datasets for review:

```
onlineEdgeNodes = system.dataset.toPyDataSet(system.tag.readBlocking("[MQTT Engine]Engine Info/Edge Nodes
/Online Nodes")[0].value)
print "Online Sparkplug EdgeNodes: " + str(system.tag.readBlocking("[MQTT Engine]Engine Info/Edge Nodes
/NodesOnline")[0].value)
if system.tag.readBlocking("[MQTT Engine]Engine Info/Edge Nodes/NodesOnline")[0].value > 0:
        for row in onlineEdgeNodes:
                data = []
                data.append(["Sparkplug EdgeNode Descriptor", row[0]])
                data.append(["Last Connect Date", row["Date"]])
                print data

offlineEdgeNodes = system.dataset.toPyDataSet(system.tag.readBlocking("[MQTT Engine]Engine Info/Edge Nodes
/Offline Nodes")[0].value)
print "Offline Sparkplug EdgeNodes: " + str(system.tag.readBlocking("[MQTT Engine]Engine Info/Edge Nodes
/NodesOffline")[0].value)
if system.tag.readBlocking("[MQTT Engine]Engine Info/Edge Nodes/NodesOffline")[0].value > 0:
        for row in offlineEdgeNodes:
                data = []
                data.append(["Sparkplug EdgeNode Descriptor", row[0]])
                data.append(["Last Connect Date", row["Date"]])
                print data
```

Example result from the Engine Info > Edge Nodes above

```
>>>
Online Sparkplug EdgeNodes: 1
[['Sparkplug EdgeNode Descriptor', u'G1/E1'], ['Last Connect Date', Tue Sep 26 08:59:01 CDT 2023]]
Offline Sparkplug EdgeNodes: 1
[['Sparkplug EdgeNode Descriptor', u'MyGroup/MyEdgeNode'], ['Last Connect Date', Tue Sep 26 09:06:49 CDT 2023]]
>>>
```

Additional Resources

- Inductive Automation's Ignition download with free trial
  - Current Ignition Release
- Cirrus Link Solutions Modules for Ignition
  - Ignition Strategic Partner Modules
- Support questions
  - Check out the Cirrus Link Forum: https://forum.cirrus-link.com/
  - Contact support: support@cirrus-link.com
- Sales questions
  - Email: sales@cirrus-link.com
  - Phone: +1 (844) 924-7787
- About Cirrus Link
  - https://www.cirrus-link.com/about-us/