

MQTT Engine Default Namespaces

Abstract

MQTT Engine Default Namespaces are used to provide support for Sparkplug compliant MQTT messages. Each namespace configuration represents a family of devices and/or data that MQTT Engine will support. A namespace defines the topics that each MQTT Engine client will subscribe on as well as indicates how the payload will be handled.

The default namespaces are provided out of the box and can be simple enabled or disabled.

Default Namespaces

Name	Namespace Type	Topic Subscriptions
Elecsys	Elecsys	tags/#, RBE/#, JPG/#, sys/# and cmd/#
Sparkplug A	SparkplugA	spAv1.0/#
Sparkplug B	SparkplugB	spBv1.0/#
Xirgo	Xirgo	+/LSD/#

Sparkplug B Payload

The [Sparkplug Specification](#) fully defines the payload definition and components and uses Google Protocol Buffers, referred to as Google Protobufs, as the data payload encoding method.

Below are examples of the payloads by message type:

Message Type	Topic Example	Payload Example
NBIRTH	spBv1.0 /Facility1 /NBIRTH /PLC1	<pre>{ "timestamp":1644444653413, "metrics":{ {"name":"Sine0", "timestamp":1644444653413, "dataType":"Int32", "metaData":{ {"contentType":"","size":0,"seq":0,"fileName":"","fileType":"","md5":"","description":""}, {"Quality":{"type":"Int32", "value":192}}, {"value":-49}, {"name":"Node Control/Next Server", "timestamp":1644444653414, "dataType":"Boolean", "value":false}, {"name":"Sine 1", "timestamp":1644444653413, "dataType":"Int32", "metaData":{ {"contentType":"","size":0,"seq":0,"fileName":"","fileType":"","md5":"","description":""}, {"Quality":{"type":"Int32", "value":192}}, {"value":318}, {"name":"Node Info/Transmission Version", "timestamp":1644444653414, "dataType":"String", "value":"4.0.10 (b2022020721)"}, {"name":"bdSeq", "timestamp":1644444653413, "dataType":"Int64", "value":14}, {"name":"Node Control/Rebirth", "timestamp":1644444653414, "dataType":"Boolean", "value":false}}, "seq":0} } } }</pre>
NDEATH	spBv1.0 /Facility1 /NDEATH /PLC1	<pre>{ "timestamp":1644444569832, "metrics":{ {"name":"bdSeq", "timestamp":1644444569832, "dataType":"Int64", "value":13}, "seq":0} }</pre>
NDATA	spBv1.0 /Facility1 /NDATA /PLC1	<pre>{ "timestamp":1644444657313, "metrics":{ {"name":"Sine0", "timestamp":1644444655728, "dataType":"Int32", "value":-48}, {"name":"Sine 1", "timestamp":1644444655728, "dataType":"Int32", "value":319}}, "seq":1} } { "timestamp":1644444661355, "metrics":{ {"name":"Sine0", "timestamp":1644444659744, "dataType":"Int32", "value":-47}}, "seq":3} } }</pre>
STATUS	spBv1.0 /STATE /primary_host_id	<pre>{ "online" : true, "timestamp" : 1668114759262} { "online" : false, "timestamp" : 1668114759262}</pre>
STATUS (Legacy)	STATE /primary_host_id	ONLINE OFFLINE

Sparkplug A Payload

Elecsys

Xirgo



See [MQTT Engine Custom Namespaces](#) for managing support for generic, non Sparkplug compliant MQTT messages with string based payloads.