

ApiGear NATS

Spec v0.1

NATS

- <https://docs.nats.io/>

Topic Mapping Overview

- Operations

{moduleName} . {interfaceName}. rpc . {functionName}

- Signals

{moduleName} . {interfaceName} . sig . {signalName}

- Properties

{moduleName} . {interfaceName} . prop . {propertyName}

{moduleName} . {interfaceName} . set . {propertyName}

- Connectivity messaging

{moduleName} . {interfaceName}.service.available

{moduleName} . {interfaceName}.init

{moduleName} . {interfaceName}.init.resp.{clientId}

Operations

- We use default NATS request - response mechanism, with default response

Topic: {moduleName} . {interfaceName}. rpc . {functionName}

Content: Data (string format, arguments in nlohmann::json array)

- For the non api defined rpc calls we suggest to use an underscore before function name

Topic: {moduleName} . {interfaceName}. rpc ._ {functionName}

- Service subscribes, Client(s) publish

Signals

- Topic: {moduleName} . {interfaceName} . sig . {signalName}
- Content: Data (string format, arguments in nlohmann::json array)
- Client(s) subscribe, Service publishes

Properties

- Property change request
 - Topic: {moduleName} . {interfaceName} . prop . {propertyName}
 - Content: Data (string, nlohman::json element)
 - Service subscribes, Client(s) publish
- Property value notification
 - Topic: {moduleName} . {interfaceName} . set . {propertyName}
 - Content: Data (string, nlohman::json element)
 - Client(s) subscribe, Service publishes

Connectivity messaging

- Service available message:
 - Topic: {moduleName} . {interfaceName}.service.available
 - Empty Data
 - Client(s) subscribe, Service publishes
- Init request message
 - {moduleName} . {interfaceName}.init
 - Content: ClientId (string, nlohman::json element)
 - Service subscribes, Client(s) publish
- Init response message
 - {moduleName} . {interfaceName}.init.resp.{clientId}
 - Content: Data (string, nlohman::json dictionary)
 - Client(s) subscribe, Service publishes