

Subscriptions



Subscription

```
POST <cb_host>:1026/v2/subscriptions
Content-Type: application/json
...
{
  "subject": {
    "entities": [
      {
        "id": "Room1",
        "type": "Room"
      }
    ],
    "condition": {
      "attrs": [ "temperature" ]
    }
  },
  "notification": {
    "http": {
      "url": "http://<host>:<port>/publish"
    },
    "attrs": [ "temperature" ]
  },
  "expires": "2026-04-05T14:00:00.00Z"
}
```



```
201 Created
Location: /v2/subscriptions/ 51c0ac9ed714fb3b37d7d5a8
...
```

Notification

```
POST /publish HTTP/1.1
Content-type: application/json; charset=utf-8
Ngsiv2-AttrsFormat: normalized
...
{
  "subscriptionId": "574d720dbef222abb860534a",
  "data": [
    {
      "id": "Room1",
      "type": "Room",
      "temperature": {
        "type": "Float",
        "value": 19,
        "metadata": {}
      }
    }
  ]
}
```



Get all Notifications

```
GET <cb_host>:1026/v2/subscriptions
```

The full description of the subscription object (including all its fields) can be found in the NGS/v2 Specification

```
200 OK
Content-Type: application/json
...
[[
  {
    "id": " 51c0ac9ed714fb3b37d7d5a8 ",
    "expires": "2026-04-05T14:00:00.00Z",
    "status": "active",
    "subject": {
      "entities": [{
        "id": "Room1",
        "type": "Room"
      }],
      "condition": {
        "attrs": ["temperature"]
      }
    },
    "notification": {
      "timesSent": 3,
      "lastNotification": "2016-05-31T11:19:32.00Z",
      "attrs": ["temperature"],
      "attrsFormat": "normalized",
      "http": {
        "url": "http://localhost:1028/publish"
      }
    }
  }
]]
```



Hands on – Subscription/notification



Create Subscriber/Notification



<http://consumer.fiware.infotec.mx:8080>
192.168.83.2



<http://orion.fiware.infotec.mx:1026>
192.168.83.3

Query filters

- Filters can be also used in subscriptions
 - id
 - type
 - id pattern
 - type pattern
 - attribute values
 - metadata value
 - geographical location

```
POST <cb_host>:1026/v2/subscriptions
...
{
  "subject": {
    "entities": [
      {
        "id": "Car5",
        "type": "Car"
      },
      {
        "idPattern": "^Room[2-5]",
        "type": "Room"
      },
      {
        "id": "D37",
        "typePattern": "Type[ABC]"
      },
    ],
    "condition": {
      "attrs": [ "temperature" ],
      "expression": {
        "q": "temperature>40",
        "mq": "humidity.avg==80..90",
        "georel": "near;maxDistance:100000",
        "geometry": "point",
        "coords": "40.418889,-3.691944"
      }
    }
  }
}
...
}
```



Exercise



Gracias

