# Corridor - openHAB

## Corridor

XML

<?xml version="1.0" encoding="UTF-8"?>

<items>

<item>

<type>NumberItem</type>

<name>PresenceSensor</name>

<state>0</state>

<link>/presencesensor1</link>

</item>

<item>

<type>SwitchItem</type>

<name>SmartBulb</name>

<state>Off</state>

<link>/smartbulb1</link>

</item>

</items>

JSON-LD

{

"@context": "http://lab.wot-rdf.org/jsonld/context/building",

"@id": "http://lab.wot-rdf.org/jsonld/corridor1/",

"items": {

"item": [{

"type": "NumberItem",

"name": "PresenceSensor",

"state": "0",

"link": "/presencesensor1"

}, {

"type": "SwitchItem",

"name": "SmartBulb",

"state": "Off",

"link": "/smartbulb1"

}]

}

}

## Presence Sensor

XML

<?xml version="1.0" encoding="UTF-8"?>

<item>

<type>NumberItem</type>

<name>PresenceSensor</name>

<state>0</state>

<link>/</link>

</item>

JSON-LD

{

"@context": "http://lab.wot-rdf.org/jsonld/context/building",

"@id": "http://lab.wot-rdf.org/jsonld/corridor1/presencesensor1/",

"item": {

"type": "NumberItem",

"name": "PresenceSensor",

"state": "0",

"link": "/"

}

}

## Smart Bulb

XML

<?xml version="1.0" encoding="UTF-8"?>

<item>

<type>SwitchItem</type>

<name>SmartBulb</name>

<state>Off</state>

<link>/</link>

</item>

JSON-LD

{

"@context": "http://lab.wot-rdf.org/jsonld/context/building",

"@id": "http://lab.wot-rdf.org/jsonld/corridor1/smartbulb1/",

"item": {

"type": "SwitchItem",

"name": "SmartBulb",

"state": "Off",

"link": "/"

}

}

# Room - FIWARE

## Room

{

"@context": "http://lab.wot-rdf.org/jsonld/context/building",

"@id": "http://lab.wot-rdf.org/jsonld/room1/",

"type": "Room",

"id": "room1",

"location": {

"value": "45.2098, 5.7945",

"type": "Point",

"metadata": {

"accuracy": {

"type": null,

"value": 0.0001

},

"contains": {

"value": "/door1",

"type": "URL"

},

"acutator": {

"value": "/dooractuator1",

"type": "URL"

},

"sensor": {

"value": "/presencesensor1",

"type": "URL"

}

}

}

}

## Door

{

"@context": "http://lab.wot-rdf.org/jsonld/context/building",

"@id": "http://lab.wot-rdf.org/jsonld/room1/door1",

"type": "Door",

"id": "door1",

"state": {

"value": "closed",

"type": null,

"metadata": {

"acutator": {

"value": "../dooractuator1",

"type": "URL"

}

}

}

}

## DoorActuator

{

"@context": "http://lab.wot-rdf.org/jsonld/context/building",

"@id": "http://lab.wot-rdf.org/jsonld/room1/dooractuator1",

"type": "DoorAcutator",

"id": "dooracuator1",

"commmand": {

"value": "open",

"type": "Command"

}

}

## PresenceSensor

URI:

{

"@context": "http://lab.wot-rdf.org/jsonld/context/building",

"@id": "http://lab.wot-rdf.org/jsonld/room1/presencesensor1",

"type": "PresenceSensor",

"id": "presencesensor1",

"state": {

"value": "1",

"type": "State"

}

}

# Thermostat - Netatmo

{

"@context": "http://lab.wot-rdf.org/jsonld/context/ building",

"@id": "http://lab.wot-rdf.org/jsonld/thermostat1",

"status": "ok",

"body": {

"temperature": 21.7,

"unit": "Celsius"

},

"module\_name": "Inside",

"rf\_status": 161

}

# Context

## Composition

URI: http://lab.wot-rdf.org/jsonld/context/ building

{

"@context": [

"http://lab.wot-rdf.org/jsonld/context/GenericIoTContext",

"http://lab.wot-rdf.org/jsonld/context/SmartHomeContext",

"http://lab.wot-rdf.org/jsonld/context/NetatmoContext"

]

}

## Generic IoT

URI: http://lab.wot-rdf.org/jsonld/context/GenericIoTContext

{

"@context": {

"cd": " http://lab.wot-rdf.org/CrossDomain#",

"schema": "https://schema.org/",

"mexperf": "http://mex.aksw.org/mex-perf#",

"item": "cd:hasDevice",

"status": "cd:hasOperationState",

"body": "cd:hasOutput",

"unit": "cd:concerns",

"location": "cd:hasLocation",

"commmand": "cd:hasCommand",

"metadata": "cd:canHaveMetadata",

"accuracy": "mexperf:accuracy",

"contains": "cd:contains",

"sensor": "cd:hasSensor",

"actuator": "cd:hasActuator",

"state": "cd:hasState",

"id": "cd:hasId",

"type": "@type",

"value": "@value",

"URL": "schema:URL"

}

}

## Smart Home

URI: http://lab.wot-rdf.org/jsonld/context/SmartHomeContext

{

"@context": {

"saref": "http://ontology.tno.nl/saref#",

"dogont": "http://ontology.tno.nl/saref#",

"biopax": "http://www.biopax.org/release/biopax-level3.owl#",

"floor": "dogont:hasFloor",

"temperature": {

"@id": " biopax:temperature",

"@type": "saref:Temperature"

}

}

}

## Netatmo Context

URI: " http://lab.wot-rdf.org/jsonld/context/NetatmoContext"

{

"@context": {

"schema": "http://schema.org/",

"m2m": "http://www.onem2m.org/ontology/Base\_Ontology/",

"module\_name": "m2m:isPartOf",

"rf\_status": "netatmo:radioStatus"

}

}