SessionEstablish-M3-IDD-REST-JSON-TLS

**Abstract**

This document defines interface design of the SessionEstablish Service based on REST.

1. Overview

This document describes the Session Establish Service and how it can be accessed using HTTP methods and JSON payloads.

1. Interfaces

As per the SD of this Service, there are two methods implemented. Table 1 describes these.

Table 1 Function description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Function | Service | Method | Input | Output |
| Connect To Consumer | “/connectToConsumer” | PUT | ConnectToConsumerRequest | ConnectToConsumerResponse  200 OK |
| Connect To Provider | “/connectToProvider” | PUT | ConnectToProviderRequest | ConnectToProviderResponse  200 OK |

1. Information Model

The ConnectToConsumerRequest payload has a response payload called ConnectToConsumerResponse, while the ConnectToProviderRequest has a response payload called ConnectToProviderResponse. Examples for these payloads are given here for the REST-JSON-TLS implementation.

# 3.1. ConnectToConsumerRequest

{

"brokerName": "arrowhead3.tmit.bme.hu",

"brokerPort": 5672,

"queueName": "151861826039903007399088612781",

"controlQueueName": "151861826039903007399088612781\_control",

"consumer": {

"systemName": "client1",

"address": "localhost",

"port": 0,

"authenticationInfo": "null"

},

"provider": {

"systemName": "InsecureTemperatureSensor",

"address": "10.0.0.82",

"port": 8454

},

"consumerCloud": {

"operator": "EVManufacturer",

"cloudName": "EVCloud",

"address": "10.0.0.80",

"port": 8446,

"gatekeeperServiceURI": "gatekeeper",

"authenticationInfo": "Gatekeeper PK",

"secure": false

},

"providerCloud": {

"operator": "SmartGridOperator",

"cloudName": "SmartGrid",

"address": "10.0.0.82",

"port": 8446,

"gatekeeperServiceURI": "gatekeeper",

"authenticationInfo": "Gatekeeper PK",

"secure": false

},

"service": {

"serviceDefinition": "IndoorTemperature",

"interfaces": [

"json"

],

"serviceMetadata": {

"unit": "celsius"

}

},

"isSecure": false,

"timeout": 30000

}

# 3.2. ConnectToConsumerResponse

{

"serverSocketPort": 8000

}

# 3.3. ConnectToProviderRequest

{

"brokerName": "arrowhead3.tmit.bme.hu",

"brokerPort": 5672,

"consumer": {

"systemName": "client1",

"address": "localhost",

"port": 0,

"authenticationInfo": "null"

},

"provider": {

"systemName": "InsecureTemperatureSensor",

"address": "10.0.0.82",

"port": 8454

},

"consumerCloud": {

"operator": "EVManufacturer",

"cloudName": "EVCloud",

"address": "10.0.0.80",

"port": 8446,

"gatekeeperServiceURI": "gatekeeper",

"authenticationInfo": "Gatekeeper PK",

"secure": false

},

"providerCloud": {

"operator": "SmartGridOperator",

"cloudName": "SmartGrid",

"address": "10.0.0.82",

"port": 8446,

"gatekeeperServiceURI": "gatekeeper",

"authenticationInfo": "Gatekeeper PK",

"secure": false

},

"service": {

"serviceDefinition": "IndoorTemperature",

"interfaces": [

"json"

],

"serviceMetadata": {

"unit": "celsius"

}

},

"isSecure": false,

"timeout": 30000

}

# 3.4. ConnectToProviderResponse

{

"queueName": "151861826039903007399088612781",

"controlQueueName": "151861826039903007399088612781\_control"

}

1. Revision history

# Amendments

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Date | Version | Subject of Amendments | Author |
| 1 | 2018-01-30 | 0.1 | Initial | Csaba Hegedűs |
| 2 |  |  |  |  |

# Quality Assurance

|  |  |  |  |
| --- | --- | --- | --- |
| No. | Date | Version | Approved by |
| 1 |  |  |  |
| 2 |  |  |  |