Arrowhead AuthorizationControl Service IDD

**Abstract**

This document defines interface design of the AuthorizationControl Service based on REST within Arrowhead generation 4.0.

1. Overview

This document describes the AuthorizationControl service of G4.0 with the REST interface.

This interface uses HTTP or HTTPS, therefore the related CP is valid.

1. Interfaces

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

Table 1 Function description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Function** | **URL subpath** | **Method** | **Input** | **Output** |
| Intra-Cloud authorization control | “/intracloud” | PUT | **IntraCloudAuthRequest** | **IntraCloudAuthResponse**  HTTP OK,  BAD\_REQUEST,  DATA\_NOT\_FOUND |
| Inter-Cloud authorization control | “/intercloud” | PUT | **InterCloudAuthRequest** | **InterCloudAuthResponse**  HTTP OK,  BAD\_REQUEST,  DATA\_NOT\_FOUND |

1. Information Model

The IntraCloudAuthRequest payload has a response payload called IntraCloudAuthResponse, while the InterCloudAuthRequest only has a response consisting of a simple boolean value (is the Cloud authorized or not). Examples for these payloads are given here for the REST-JSON-TLS implementation.

# 

# 3.1. IntraCloudAuthRequest

{

"consumer": {

"systemName": "client1",

"address": "localhost",

"port": 8080

},

"providers": [{

"systemName": "InsecureTemperatureSensor",

"address": "0.0.0.0",

"port": 8460

}],

"service": {

"serviceDefinition": "IndoorTemperature",

"interfaces": ["json"],

"serviceMetadata": {

"unit": "celsius",

"security": "token"

}

}

}

# 3.2. IntraCloudAuthResponse

{

"authorizationState": {

"InsecureTemperatureSensor,0.0.0.0,8460,null": true

}

}

# 3.3. InterCloudAuthRequest

{

"cloud":{

"operator": "EVManufacturer",

"cloudName": "EVCloud",

"address": "arrowhead2.tmit.bme.hu",

"port": 8446,

"gatekeeperServiceURI": "gatekeeper",

"authenticationInfo": ""

},

"service": {

"serviceDefinition": "DCCharging",

"interfaces": ["JSON"],

"serviceMetadata": {

"unit": "celsius",

"ampere": "15"

}

}

}

# 3.4 InterCloudAuthResponse

{

"authorized": true

}

# Revision history

# Amendments

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Date | Version | Subject of Amendments | Author |
| 1 | 2017-10-02 | M2 | Initial | Csaba Hegedűs |
| 2 | 2018-02-14 | M3 | Updating document to M3 | Csaba Hegedűs |
| 3 | 2018-05-22 | G4.0 | Updated document to G4.0 | Zoltán Umlauf |

# Quality Assurance

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