ServiceDiscovery Service IDD

**Abstract**

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

1. Overview

This document describes the ServiceDiscovery 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 three methods implemented (and two supporting ones). Table 1 describe these.

The base URL for the requests: http://<host>:<port>/serviceregistry.

Table 1 Function description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Function | URL subpath | Method | Input | Output |
| Publish | “/register” | POST | ServiceRegistryEntry | CREATED,  BAD\_REQUEST |
| Unpublish | “/remove” | PUT | ServiceRegistryEntry | OK,  BAD\_REQUEST,  NO\_CONTENT |
| Query | “/query” | PUT | ServiceQueryForm | ServiceQueryResult  OK,  BAD\_REQUEST, PARTIAL\_CONTENT |

1. Information Model

As per discussed in the SD document, there are two possible request payloads and one response payload. Here, examples are given for these messages for this interface implementation (REST-JSON-TLS).

# ServiceRegistryEntry

{

"providedService" : {

"serviceDefinition" : "IndoorTemperature",

"interfaces" : [ "JSON", "XML" ],

"serviceMetadata" : {

"unit" : "celsius"

}

},

"provider" : {

"systemName" : "InsecureTemperatureSensor",

"address" : "0.0.0.0",

"port" : 8460

},

"serviceURI" : "temperature",

"version" : 1,

"udp" : false,

"ttl" : 0

}

# ServiceQueryForm

{

"service" : {

"serviceDefinition" : "IndoorTemperature",

"interfaces" : [ "json" ],

"serviceMetadata" : {

"unit" : "celsius"

}

},

"pingProviders" : false,

"metadataSearch" : true,

"version" : 1

}

# ServiceQueryResult

{

"serviceQueryData" : [ {

"providedService" : {

"serviceDefinition" : "IndoorTemperature",

"interfaces" : [ "JSON", "XML" ],

"serviceMetadata" : {

"unit" : "celsius"

}

},

"provider" : {

"systemName" : "InsecureTemperatureSensor",

"address" : "0.0.0.0",

},

"port" : 8460,

"serviceURI" : "temperature",

"version" : 1,

"udp" : false,

"ttl" : 0

} ]

}

1. Revision history

# Amendments

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Date | Version | Subject of Amendments | Author |
| 1 | 2017-09-29 | M2 | Initial | Csaba Hegedűs |
| 2 | 2018-02-15 | M3 | Updated document to M3 | Csaba Hegedűs |
| 3 | 2018-05-23 | G4.0 | Updated to G4.0 | Zoltán Umlauf |

# Quality Assurance

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