

Interface Design Description (IDD) SystemDiscovery

25 september 2019

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1 Interface Design Description Overview

This document describes the SystemDiscovery service with the REST interface, which uses a basic three-tier architecture:

- Presentation tier
 - implements the RegistryResource interface named SystemRegistryResource.java
 - transforms the view into domain specific objects and vice versa
- Application tier
 - implements the RegistryService interface named SystemRegistryService.java
 - is responsible for any business logic and extensive validation
- Data tier
 - taken from the arrowhead common project (DatabaseManager.java), which is a generic and hibernate specific implementation to deal with any entity in the arrowhead code

2 Interfaces

According to SD document(https://forge.soa4d.org/docman/view.php/58/178/Arrowhead_SD_SystemDiscovery.pdf), ServiceDiscovery service has three functions implemented as shown in the table below.

Table 1: SystemDiscovery Functions

Function	URL Path	Method	Input	Output
Publish	"/publish"	POST	SystemRegistryEntry	SystemRegistryEntry
Unpublish	"/unpublish"	POST	SystemRegistryEntry	SystemRegistryEntry
Lookup	"/lookup"	GET	Integer	SystemRegistryEntry

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3 Information Model

3.1 SystemRegistryEntry

POST /systemregistry/publish

Parameters

No parameters

Request body

application/json

Edit Value | Model

```

{
  "providedSystem": {
    "systemName": "test",
    "address": "string",
    "port": 2,
    "authenticationInfo": "string"
  },
  "provider": {
    "deviceName": "testdevice"
  },
  "serviceUri": "string",
  "endOfValidity": "2018-11-26T15:58:42.577Z"
}

```

Cancel

Reset

Execute

Clear

Figure 1: SystemRegistryEntry



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3.2 SystemQueryForm

GET /systemregistry/lookup/{id} Searches a SystemRegistryEntry by id

Parameters

Name	Description
id * required integer (path)	153

Execute Clear

Figure 2: SystemQueryForm

3.3 SystemQueryResponse

Responses

Curl

```
curl -X GET "http://172.22.101.102:8436/systemregistry/lookup/153" -H "accept: application/json"
```

Request URL

```
http://172.22.101.102:8436/systemregistry/lookup/153
```

Server response

Code	Details
200	<p>Response body</p> <pre>{ "id": 153, "providedSystem": { "id": 151, "systemName": "test", "address": "string", "port": 2, "authenticationInfo": "string" }, "provider": { "id": 152, "deviceName": "testdevice" }, "serviceUri": "string", "endOfValidity": "2018-11-26T15:58:43" }</pre> <p>Response headers</p> <pre>access-control-allow-credentials: true access-control-allow-headers: origin, content-type, accept, authorization access-control-allow-methods: GET, POST, PUT, DELETE, OPTIONS, HEAD access-control-allow-origin: * content-length: 305 content-type: application/json date: Thu, 22 Nov 2018 16:03:35 GMT</pre>

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Figure 3: SystemQueryResponse



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4 Revision history

4.1 Amendments

No.	Date	Version	Subject of Amendments	Author
1	2017-09-10	1.0	Initial Version	Silia Maksuti
2	2017-11-15	1.1	Updated Version	Silia Maksuti
3	2019-09-23	1.2	Updated Version	Silia Maksuti, Mario Zsilak

4.2 Quality Assurance

No.	Date	Version	Approved by
1			
2			