Service Description (SD) Arrowhead Z-wave System Demonstrator – ZwaveController Service

**Abstract**

This document defines the Service Description of **live-zwave-devices** and **register-zwave-devices** service which gets the metadata (deviceID, deviceName, deviceType, deviceVendor, deviceVersion) and the services (deviceServices) provided by the device and stores that information into the DataManager respectively.

1. Service Description Overview

This service provides interfaces to get and register metadata ( deviceID, deviceName, deviceType, deviceVendor, deviceVersion) and the services (deviceServices) provided by the device for each live device currently connected to the z-wave controller.

The encrypted JSON object contains the following fields:

{

“ deviceID” : 24,

“deviceName” : MainsDevice \_24,

“deviceType” ; Binary Power Switch,

“ deviceVendor” : Fibaro,

” deviceVersion” : 1.1,

“deviceServices” : [get-state, set-state, get-power, get-energy-consumption, set-energy-counter-reset]

,{

“ deviceID” : 22,

“deviceName” : DanfossRadiatorThermostat\_22,

“deviceType” ; Thermostat,

“ deviceVendor” : Danfoss

” deviceVersion” : 1.1,

“deviceServices” : [get-setpoint, set-setpoint, get-battery-level]

}

1. Data Model

|  |  |  |
| --- | --- | --- |
| Object Field | Value Type | Description |
| ” deviceID” | [String](#_bookmark12) | Unique ID of the device from 2 to N assigned by the zwave controller / Hat |
| ” deviceName” | String | Name of the device assigned by the zwave controller / Hat |
| ” deviceType” | String | Type of the device |
| ” deviceVendor” | [String](#_bookmark14) | Name of device manufacturer |
| ” deviceVersion” | String | Version of the device |
| “deviceServices” | Array | Array of services provided by the device |

1. Abstract Interfaces

This Service provides two functionalities.

# live-zwave-devices:

This is used to get all the live devices connected with zwave hat in the zwave network after fresh inclusion after exclusion using GET API.

# register-zwave-devices:

This is used to register all the live devices connected with zwave hat in the zwave network after fresh inclusion after exclusion using POST API.

1. Non-functional Requirements

The service has none non-functional requirements.

1. Revision history

# Amendments

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Date | Version | Subject of Amendments | Author |
| 1 | 2021-01-6 | 0.1 | First draft | Salman Javed |
| 2 | 2021-03-17 | 0.2 | Second draft | Salman Javed |

# Quality Assurance

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