Proxy Service SD

**Abstract**

This document defines the Proxy Service functionality within Arrowhead Framework generation 4.0. The proxy server is used to allow information exchange between sleepy nodes and other Arrowhead systems.

1. Service Overview

The Proxy Service provides an interface to publish and receive messages to a Local Cloud. The Proxy Service is designed so that sleepy nodes can wake up from low-power mode, publish a message containing sensor readings and return to sleep. Other Arrowhead Systems can then fetch the latest message at any time.

1. Abstract Interfaces

This Service provides two functionalities.

# Upload

This method is used to upload a message to the Proxy Service in a Local Cloud through the DataManager Core System.

# Download

This method is used to download a message from the Proxy Service in a Local Cloud through the DataManager Core System.

1. Abstract Information Model

Accepted data model for Upload is SenML. The JSON response to this Service is optional. HTTP or CoAP responses are also use the indicate errors.

|  |  |
| --- | --- |
| **Field name** | **Description** |
| source | The Arrowhead System that is publishing the event. |
| message | The published message, which contains the following fields:   * Time stamp: the time when the message vas created * Sensor data: Data of the message |

Table 1 - Upload

|  |  |
| --- | --- |
| **Field name** | **Description** |
| res | Result weather the message was properly received or not. |

Table 2 - UploadResponse

1. Non-functional Requirements

1. Revision history

# Amendments

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Date | Version | Subject of Amendments | Author |
| 1 | 2018-09-17 | G4.0 | Initial | Jens Eliasson |
|  |  |  |  |  |

# Quality Assurance

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