IndoorTemperature Service SD

1. IndoorTemperature Overview

This document describes an Arrowhead service, including its interfaces, functions and information model.

1. Abstract Interface

This simple Service provides the value of an indoor temperature in Celsius.

# getTemperature

This method is a simple (GET) request-response. There is no request message, and the response is called TemperatureReadout.

1. Abstract Information Model

The information model of the response uses the Sensor Markup Language [1] message ontology, which is a standard providing JSON and XML message formats to describe sensor readouts. The response payload contains the following information, as presented in Table 1.

Table 1 TemperatureReadout type description

|  |  |
| --- | --- |
| **Field** | **Description** |
| bn: String | Base Name, this field stores the name of the ArrowheadSystem |
| bt: Double | Base Time, this field contains the unix timestamp of the sensor readout |
| bu: String | Base Unit of the sensor readout |
| ver: Integer | Version identifier |
| e: List<MeasurementEntry> | List of measurements, containing the ArrowheadService, measured value and time |

1. Non-functional Requirements

This Service is secured via the ArrowheadToken. Therefore, all Providers that implement this Service shall register this Service in the Service Registry with a special metadata: “security” = “token”.

1. References

[1] SensorML specifications: <https://tools.ietf.org/html/draft-jennings-senml-10>

1. Revision history

# Amendments

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Date | Version | Subject of Amendments | Author |
| 1 | 2017-10-02 | 1.0 | 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

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