Interface Design Description (IDD) and Software Design (SD)

**Abstract**

This document defines the template for the Interface Design Description of Arrowhead compliant Interfaces.

An Interface Design Description provides a detailed description of how the service is implemented/realized by using the Communication Profile and the chosen technologies.

All Arrowhead Interface Designs should be specified using this template and stored on a common repository (available on the SVN server), in order to document and formalize the pilot demonstrators and the common Arrowhead framework.

1. Electricity-generation-start (SD/IDD)

* Protocol: HTTP(S).
* Encoding: JSON.
* Compression: None.
* Security: Optionally using TLS and X.509 certificates (server/client).
* Accessed at http(s)://127.0.0.1:8880/electricity-generation/start.

# Service

* Data model is plain text.
* No payload encryption.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Function** | **Service** | **Extension** | **Method** | **Input** | **Output** |
| startGeneratedEletricity() | electricity-generation-start | start | **POST** | - | String |

### Description:

Starts electricity production of solar panels. Returns String stating that production has started.

### Parameters:

This interface doesn’t take any parameters.

### Response code:

|  |  |  |
| --- | --- | --- |
| **Code** | **Meaning** | **Comment** |
| 200 | Successful request | Success |
| 401 | Unauthorized | Access denied |
| 400 | Bad request | If production already have been started. |

### Error handling

All errors are handled using HTTP response code. Error message is added in the response payload.

### Output

Returns String with status code of electricity production.

Example: { “ Solar panels started “ }.

### Interaction with consumers

When a consumer starts sends a start request. Application system starts generating electricity.

En bild som visar text, skärmbild, Teckensnitt, diagram

Automatiskt genererad beskrivning

Figure 1: ELECTRICITY GENERATION START INTERFACE