

# Service Registry Core System

## System Design Description

### Abstract

This is the template for System Design Description (SysDD document) according to the Eclipse Arrowhead documentation structure.

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## 1 Overview

This document describes the Service Registry Core System, which exists to enable service discovery in a Eclipse Arrowhead Local Cloud (LC). In Section 2, we describe implementation details of the system.

## 2 Implementation

### 2.1 Implementation language and tools

- *Programming Language:* **Java 11**
- *Programming Framework:* **Spring-Boot 2.1.5**
- *Building Tool:* **Maven 3.5+**
- *Database Management System:* **MySQL 5.7**
- Stateful or stateless implementation ????

### 2.2 Functional properties implementation

- Resources necessary to perform the function operations
- Data handled and eventually stored by the system
  - Used database
  - Database structure
  - Used ontology
  - Data models
- Result provided as ...

### 2.3 Non functional properties implementation

Typical non-functional properties implemented are e.g.

#### 2.3.1 Security

#### 2.3.2 Power management

#### 2.3.3 Internal monitoring

#### 2.3.4 Configuration

- Configuration data accepted
- Configuration data formats, see below.
- ...

For each of the non-functional operations the following details should be documented

- Resources necessary to perform the non-functional operations

- Data handled and eventually stored by the system
  - Used database
  - Database structure
  - Used ontology
  - Data models
- Result provided as ...

### 3 Services

Reference to the appropriate SysD, SD and IDD documents plus a reference to used library shall be made.

Table 1: References to documentation for services produced and consumed.

Services produced	SysD ref	SD ref	IDD ref
aaa	SysD XXX	SD aaa	IDD aaa
bbb	SysD XXX	SD bbb	IDD bbb
Services consumed	SysD ref	SD ref	IDD ref
zzz	SysD ZZZ	SD zzz	IDD zzz
yyy	SysD YYY	SD yyy	IDD yyy

### 4 References



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## 5 Revision History

### 5.1 Amendments

Revision history and Quality assurance as per examples below

No.	Date	Version	Subject of Amendments	Author
1	2020-12-05	4.4.0		Tanyi Szvetlin
2	2021-07-14	4.4.0	Minor updates	Jerker Delsing
3	2022-01-12	4.4.0	Minor updates	Jerker Delsing

### 5.2 Quality Assurance

No.	Date	Version	Approved by
1	2022-01-10	4.4.0	