

XXX

System Description

Abstract

This is the template for System of Systems Description (SoSD document) according to the Eclipse Arrowhead documentation structure.

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1 Overview

This document describes the [XX] system of systems (SoS), which provides [brief description of system functionality]. Prefereable make use of SysML/UML use case diagram.

The rest of this document is organized as follows. In Section 1.1, we reference major prior art capabilities of the SoS. In Section 1.2, we the intended usage of the SoS. In Section 1.3, we describe fundamental properties provided by the SoS. In Section 1.4, we describe de-limitations of capabilities ofn the SoS. In Section 2, we describe the microsystem (abstract level with references to their SysDs) which constitutes the SoS. In Section 3, we describe the security capabilities of the SoS.

1.1 Significant Prior Art

Describe significant prior art which provides the foundation for the SoS - May be omitted for simple services

1.2 How This SoS Is Meant to Be Used

Describe intended usage of the SoS. Usage scenarios shall be described. Preferable a SysML/UML block diagram of the System should be provided. See the SysML profile and library (github.com/eclipse-arrowhead/profile-library-sysml) for support on how such block diagram should look like. Suitable tools are Eclipse Papyrus and MagicDraw.

1.3 SoS functionalities and properties

Narrative describe system functionalities and properties (no implementation details) like e.g.:

1.3.1 Functional properties of the SoS

1.3.2 Configuration of SoS properties

1.3.3 Data stored by the individual microsystem

Brief overview of data stored to achieve the functionality of the SoS.

1.3.4 Non functional properties

- security,
- safety,
- energy consumption,
- latency
- Power saving properties,

1.3.5 Stateful or stateless

- states preserved, functional and non-functional

1.4 Important Delimitations

Provide delimitations of the provided system. Describe what the SoS solve and what it does not solve.

2 Services

This section describes consumed and produced service. In particular, each subsection names a produced or consumed service indicating the different capabilities and associated interfaces of the service. Reference to the appropriate SD document shall be made.

2.1 Produced service

with references to SD and IDD documents

2.2 Consumed services

with references to SD and IDD documents

3 Security

Overview of security level chosen for the system

The following bullets should be covered

- If the system can be started in un-secure and/or Arrowhead secure mode.
- Handling of Arrowhead compliant and non-compliant X.509 certificates.

3.1 Security model

The following points should be described:

- protocol supported
- data protection supported
- system authentication capability supported
- produced service authorisation checking,
- etc.

For Arrowhead certificate profile see github.com/eclipse-arrowhead/documentation

4 Revision History

4.1 Amendments

Revision history and Quality assurance as per examples below

No.	Date	Version	Subject of Amendments	Author
1	2023-08- 10	X.Y.Z		Jerker Delsing
2				
3				

4.2 Quality Assurance

No.	Date	Version	Approved by
1	2022-01-10	X.Y.Z	