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Radiator Controller
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Radiator Controller

System Description

Abstract

This document provides system description for the **Radiator Controller**.

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1 Overview

This document describes the Radiator Controller application system with the purpose of controlling the radiator by subscribing to a topic ("notification") and based on payload consume one of the Radiators services.

2 Services consumed

2.1 service subscribe

Consumes the eventhandlers subscribe service.

2.2 service turn-on

Consumes the Radiators turn-on service.

2.3 service turn-off

Consumes the Radiators turn-off service.

3 Security

The security of Eclipse Arrowhead - and therefore the security of Radiator Controller - is relying on X.509 certificate trust chains. The Arrowhead trust chain consists of three level:

- Master certificate: `arrowhead.eu`

- Cloud certificate: `my-cloud.my-company.arrowhead.eu`

- Client certificate: `my-client.my-cloud.my-company.arrowhead.eu`

- Example: `radiatorcontrollersubscriber.arrowhead.ltu.arrowhead.eu`

The system sets up a filter that is responsible for validating whether the received HTTPS requests are coming from one of the local cloud's clients based on its certificate.