

# Radiator

## System Description

### Abstract

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

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## 1 Overview

This document describes the Radiator application system with the purpose of providing on and off services to the Radiator Controller.

## 2 Services provided

### 2.1 service **turn-on**

The purpose of this service is to turn on the radiator. The service is offered for application.

### 2.2 service **turn-off**

The purpose of this service is to turn off the radiator. The service is offered for application.

## 3 Security

The security of Eclipse Arrowhead - and therefore the security of Radiator - 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: `radiatorprovider.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.