Gatekeeper system description (SysD)

**Abstract**

The Gatekeeper System is a component that handles establishment of intercloud information exchange between Arrowhead local clouds.

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1. Overview

# Significant prior art

TBD

# How this system is meant to be used

The Gatekeeper system is a component that enables information exchange between systems in different Arrowhead local clouds to exchange information. Every local cloud with intercloud communication needs will have to have a Gatekeeper system at the border to the outside of the local cloud. The Gatekeepers of different clouds will communicate and eventually set up and tear down connections between the clouds using entry/exit points. The Gatekeeper system is responsible for registering external Arrowhead cloud services in the local cloud and administer the entry/exit points to enable/disable the actual information transmission.

# System functionalities and properties

The Gatekeeper system should have a capability to expose services to other Gatekeeper systems and expose other Gatekeepers services in the local cloud. The Gatekeeper system also should be able to control entry/exit points and prepare them for consumer connections.

# Important delimitations

None defined.

1. Services

The Gatekeeper system should produce services for Global Service Discovery and Inter-Cloud Negotiations. The system will consume Service Discovery service.

# Produced services

The System Registry produces the following services:

|  |  |
| --- | --- |
| Service name | SD |
| Global Service Discovery | SD Global Service Discovery |
| Inter-cloud Negotiations | SD Inter-Cloud Negotiations |

# Consumed services

|  |  |
| --- | --- |
| Service name | SD |
| Service Discovery | SD Service Discovery |

1. Security

# Security Model

A higher-than-average security classification can be expected on the Gatekeeper system because is acts on the border of the Arrowhead local cloud and can be exposed to an uncontrolled domain such as internet.

1. Revision history

# Amendments

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Date | Version | Subject of Amendments | Author |
| 1 | 2022-06-28 | 0.1 | First version for AH 5.0. | Per Olofsson |
| 2 |  |  |  |  |

# Quality Assurance

|  |  |  |  |
| --- | --- | --- | --- |
| No. | Date | Version | Approved by |
| 1 |  |  |  |
| 2 |  |  |  |