

gw-public-key

Service Description

Abstract

This document provides service description for the **gw-public-key** service.

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1 Overview

This document describes the **gw-public-key** service, which provides the public key of the system. It is necessary for validating messages between Gateways from different clouds.

The rest of this document is organized as follows. In Section 2, we describe the abstract message functions provided by the service. In Section 3, we end the document by presenting the data types used by the mentioned functions.

1.1 How This Service Is Meant to Be Used

The Gatekeeper Core System should use this service during the inter-cloud negotiation process, if gateway tunnel is necessary to make connection between the consumer and the provider. This public key is part of the inter-cloud negotiation form.

1.2 Important Delimitations

The public key string must be a Base64 encoded JSON string.

1.3 Access policy

Only available for Gatekeeper Core System of the local cloud.

2 Service Interface

This section describes the interfaces to the service. The **gw-public-key** service is used to provide the public key of the system.

The following interfaces are available.

2.1 interface **HTTP/TLS/JSON () : PublicKey**

Profile ype	Type	Version
Transfer protocol	HTTP	1.1
Data encryption	TLS	1.3
Encoding	JSON	RFC 8259 [1]
Compression	N/A	-

Table 1: HTTP/TLS/JSON communication details.

3 Information Model

Here, all data objects that can be part of the **gw-public-key** service provides to the hosting System are listed in alphabetic order. Note that each subsection, which describes one type of object, begins with the *struct* keyword, which is used to denote a collection of named fields, each with its own data type. As a complement to the explicitly defined types in this section, there is also a list of implicit primitive types in Section 3.2, which are used to represent things like hashes and identifiers.

3.1 struct **PublicKey**

Base64 encoded JSON String.

3.2 Primitives

Types and structures mentioned throughout this document that are assumed to be available to implementations of this service. The concrete interpretations of each of these types and structures must be provided by any IDD document claiming to implement this service.

Type	Description
String	A chain of characters.



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4 References

- [1] T. Bray, "The JavaScript Object Notation (JSON) Data Interchange Format," RFC 8259, Dec. 2017. [Online]. Available: <https://rfc-editor.org/rfc/rfc8259.txt>



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5 Revision History

5.1 Amendments

No.	Date	Version	Subject of Amendments	Author
1	YYYY-MM-DD	4.6.0		Xxx Yyy

5.2 Quality Assurance

No.	Date	Version	Approved by
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