

# unregister-system HTTP/TLS/JSON

## Interface Design Description

### Abstract

This document describes a HTTP protocol with TLS payload security and JSON payload encoding variant of the **unregister-system** service.

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## 1 Overview

This document describes the **unregister-system** service interface, which enables autonomous system unregistration. It's implemented using protocol, encoding as stated in the following table:

| Profile type      | Type | Version  |
|-------------------|------|----------|
| Transfer protocol | HTTP | 1.1      |
| Data encryption   | TLS  | 1.3      |
| Encoding          | URL  | RFC 1738 |
| Compression       | N/A  | -        |

Table 1: Communication and semantics details used for the **unregister-system** service interface

This document provides the Interface Design Description IDD to the *unregister-system – Service Description* document. For further details about how this service is meant to be used, please consult that document.

The rest of this document describes how to realize the unregister-system service HTTP/TLS/JSON interface in details.



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## 2 Interface Description

The service responses with the status code 200 Ok if called successfully. The error codes are, 400 Bad Request if request is malformed, 401 Unauthorized if improper client side certificate is provided, 500 Internal Server Error if Service Registry is unavailable.

```
1 DELETE /serviceregistry/unregister-system?system_name={systemName}&address={address}&port={port} }
   HTTP/1.1
```

Listing 1: A [unregister-system](#) invocation.

## 3 Data Models

Here, all data objects that can be part of the service calls associated with this service are listed in alphabetic order. Note that each subsection, which describes one type of object, begins with the *struct* keyword, which is meant to denote a JSON Object that must contain certain fields, or names, with values conforming to explicitly named types. As a complement to the primary types defined in this section, there is also a list of secondary types in Section 3.2, which are used to represent things like hashes, identifiers and texts.

### 3.1 struct **QueryParams**

This structure is used to unregister a system from Service Registry.

| Field      | Type       | Mandatory | Description               |
|------------|------------|-----------|---------------------------|
| systemName | Name       | yes       | Identifier of the system. |
| address    | Address    | no        | Network address.          |
| port       | PortNumber | yes       | Port of the system.       |

### 3.2 Primitives

| Type       | Description   |
|------------|---|
| Address    | A string representation of the address                                      |
| Name       | A string identifier that is intended to be both human and machine-readable. |
| Number     | Decimal number  |
| PortNumber | Decimal number in the range of 0-65535                                      |
| String     | An arbitrary UTF-8 string.  |

With these primitives now available, we proceed to define all the types specified in the **uregister-system** SD document without a direct equivalent among the JSON types. Concretely, we define the **uregister-system** SD primitives either as *aliases* or *structs*. An *alias* is a renaming of an existing type, but with some further details about how it is intended to be used. Structs are described in the beginning of the parent section. The types are listed by name in alphabetical order.

#### 3.2.1 alias **Name** = String

A String identifier that is intended to be both human and machine-readable.

#### 3.2.2 alias **PortNumber** = Number

Decimal Number in the range of 0-65535.



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## 4 References



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## 5 Revision History

### 5.1 Amendments

| No. | Date       | Version | Subject of Amendments | Author  |
|-----|------------|---------|-----------------------|---------|
| 1   | YYYY-MM-DD | 4.4.0   |                       | Xxx Yyy |

### 5.2 Quality Assurance

| No. | Date       | Version | Approved by |
|-----|------------|---------|-------------|
| 1   | YYYY-MM-DD | 4.4.0   | Xxx Yyy     |