

# orchestration-create-flexible-store-rules

## Service Description

### Abstract

This document provides service description for the **orchestration-create-flexible-store-rules** service.

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# 1 Overview

This document describes the **orchestration-create-flexible-store-rules** service which enables systems to add flexible matching rules to the Orchestrator Core System (if the Orchestrator is in flexible store mode).

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 Plant Description Engine Core System should consume the Service Registry Core System's **query** service to get information about the **orchestration-create-flexible-store-rules** service. Using this information the system can add a list of flexible store rules to the database of the Orchestrator Core System.

## 1.2 Important Delimitations

- Only works if the Orchestrator Core System is in flexible store mode. Otherwise, it returns with an error.
- Not support rules about providers from an other cloud.

## 1.3 Access policy

This service is only available for the Plant Description Engine Core System.

## 2 Service Interface

This section describes the interfaces to the service. The **orchestration-create-flexible-store-rules** service is used to add new rules to the Orchestrator's flexible store. The various parameters are representing the necessary system and service input information. In particular, each subsection names an interface, an input type and an output type, in that order. The input type is named inside parentheses, while the output type is preceded by a colon. Input and output types are only denoted when accepted or returned, respectively, by the interface in question. All abstract data types named in this section are defined in Section 3.

The following interfaces are available.

### 2.1 interface **HTTP/TLS/JSON** (**List<FlexibleRule>**) : **FlexibleRuleListResponse**

Profile type	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 **orchestration-create-flexible-store-rules** 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 3.6, which are used to represent things like hashes and identifiers.

### 3.1 struct **FlexibleRule**

Field	Type	Mandatory	Description
consumerSystem	SystemDescriptor	yes	Requirements for a system that tells if this rule is applied to a consumer.
priority	Number	no	Priority of the rule.
providerSystem	SystemDescriptor	yes	Requirements for a system that tells if this rule is applied to a provider.
serviceDefinition	Name	yes	Identifier of a service.
serviceInterfaceName	Interface	no	Interface requirement
serviceMetadata	Metadata	no	Service instance level metadata requirements.

### 3.2 struct **SystemDescriptor**

Field	Type	Mandatory	Description
systemName	Name	no (yes)	Name of a system. Mandatory if <i>metadata</i> is not specified.
metadata	Metadata	no (yes)	System level metadata requirements (a system's metadata must contain all of its keys with the same value to match). Mandatory if <i>systemName</i> is not specified.

### 3.3 struct **Metadata**

An Object which maps String key-value pairs.

### 3.4 struct **FlexibleRuleListResponse**

Field	Type	Description
count	Number	The number of created rules.
data	List<FlexibleRuleResponse>	Created rule records.

### 3.5 struct **FlexibleRuleResponse**

Field	Type	Description
consumerSystem	SystemDescriptor	Requirements for a system that tells if this rule is applied to a consumer.
createdAt	DateTime	Rule record was created at this UTC timestamp.
id	Number	Identifier of the rule.
priority	Number	Priority of the rule.
providerSystem	SystemDescriptor	Requirements for a system that tells if this rule is applied to a provider.
serviceDefinition	Name	Identifier of a service.
serviceInterface	Interface	Interface requirement
serviceMetadata	Metadata	Service instance level metadata requirements.
updatedAt	DateTime	Rule record was modified at this UTC timestamp.

### 3.6 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
DateTime	Pinpoints a specific moment in time.
Object	Set of primitives and possible further objects.
Interface	Any suitable type chosen by the implementor of service
List<A>	An <i>array</i> of a known number of items, each having type A.
Name	A string identifier that is intended to be both human and machine-readable.
Number	Decimal number

## 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>



ARROWHEAD

Document title  
**orchestration-create-flexible-store-rules**  
Date  
**2023-02-27**

Version  
**4.6.0**  
Status  
**RELEASE**  
Page  
**8 (8)**

## 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
1	YYYY-MM-DD	4.6.0	