TM Forum Specification

Service Catalog Management API Conformance Profile

TMF633B

Team Approved Date: 07-Dec-2020

Release Status: Pre-production	Approval Status: Team Approved
Version 4.0.0	IPR Mode: RAND

NOTICE

TABLE OF CONTENTS

INTRODUCTION - API DESCRIPTION

The Service Catalog API is one of Catalog Management API Family. Service Catalog API goal is to provide a catalog of services. \nService Catalog API performs the following operations on the resource :\n- Retrieve an entity or a collection of entities depending on filter criteria\n- Partial update of an entity (including updating rules)\n- Create an entity (including default values and creation rules)\n- Delete an entity (for administration purposes)\n- Manage notification of events.

RESOURCE MODEL CONFORMANCE

API MANDATORY RESOURCES

The following table indicates the mandatory resources for this API.

Resource Name	Comment
ServiceSpecification	

General Notes on Resource Attribute Conformance

There are three situations that could occur for an attribute:

- o Mandatory attribute,
- o Mandatory attribute if the optional parent attribute is present,
- o Non-mandatory/Optional attribute. Those are all the other attributes not mentioned in the following subsections. Please refer to the corresponding API REST Specification for more details.
- The tables in the subsections below indicate which attributes are mandatory including mandatory when an optional parent is present.
- Where a resource is an input into an API (e.g. POST, PATCH), Mandatory means that the attribute value must be supplied by the API consumer in the input (and must not be blank or null).
- Where a resource is an output from an API (e.g. GET, POST), Mandatory means that the attribute value must be supplied by the API provider in the output (and must not be blank or null).
- For a sub-resource that is not an array, Mandatory (cardinality 1..1) means that the sub-resource must be present, while Optional (cardinality 0..1) means that the sub-resource may be absent. Mandatory and Optional on the sub-resource attributes apply to the sub-resource if present.
- For a sub-resource that is an array, Mandatory (cardinality 1..*) means that at least one sub-resource must be present in the array, while Optional (cardinality 0..*) means that the array may be absent. Mandatory and Optional on the sub-resource attributes apply to each of the sub-resources if present.

In this table are listed all mandatory attributes. A mandatory attribute MUST be retrieved in resource representation when no attribute selection is used (e.g., GET /../{id}) without any attribute selection.

When an attribute is listed with an indentation (in second column) it means this attribute is mandatory if root (parent) attribute is present.

ServiceSpecification Resource Mandatory Attributes

Mandatory attribute when parent is present	Rule
@type	M

Mandatory attribute when parent is present	Rule
href	M (in response messages) O (otherwise)
id	M (in response messages) O (otherwise)
isBundle	M (in response messages) O (otherwise)
lastUpdate	M (in response messages) O (otherwise)
lifecycleStatus	M (in response messages) O (otherwise)
name	M
constraint (if present)	Array of ConstraintRef
@referredType	M
id	M
resourceSpecification (if present)	Array of ResourceSpecificationRef
@referredType	M
id	M
serviceLevelSpecification (if present)	Array of ServiceLevelSpecificationRef
@referredType	M
id	M
targetEntitySchema (if present)	
@schemaLocation	M
@type	M
relatedParty (if present)	Array of RelatedParty
@referredType	M

Mandatory attribute when parent is present	Rule
	If the id is a partyRole id, @referredType must indicate the partyRole (User, Customer, etc.)
id	M
role	M (If the id is a Party id) O (otherwise)
serviceSpecRelationship (if present)	Array of ServiceSpecRelationship
@referredType	M
id	M
relationshipType	M
entitySpecRelationship (if present)	Array of EntitySpecificationRelationship
@referredType	M
id	M
relationshipType	M
entitySpecRelationship.associationSpec (if present)	
@referredType	M
id	M
specCharacteristic (if present)	Array of CharacteristicSpecification
name	M
valueType	M
specCharacteristic.characteristicValueSpecification (if present)	Array of CharacteristicValueSpecification
value	M
valueType	M
specCharacteristic.charSpecRelationship (if present)	Array of CharacteristicSpecificationRelationship

Mandatory attribute when parent is present	Rule
name	M
parentSpecificationHref	M
parentSpecificationId	M
relationshipType	M
featureSpecification (if present)	Array of ServiceFeatureSpecification Array of FeatureSpecification
id	M (in response messages) O (otherwise)
isEnabled	M (in response messages) O (otherwise)
name	M
featureSpecification.constraint (if present)	Array of ConstraintRef See conditions for ConstraintRef at constraint
featureSpecification.featureSpecRelationship (if present)	Array of FeatureSpecificationRelationship
name	M
parentSpecificationId	M
relationshipType	M
featureSpecification.featureSpecCharacteristic (if present)	Array of CharacteristicSpecification Array of FeatureSpecificationCharacteristic See conditions for CharacteristicSpecification at specCharacteristic
featureSpecification.featureSpecCharacteristic.characteristicValueSpecification (if present)	Array of CharacteristicValueSpecification See conditions for CharacteristicValueSpecification at specCharacteristic.characteristicValueSpecification

Mandatory attribute when parent is present	Rule
featureSpecification.featureSpecCharacteristic.charSpecRelationship (if present)	Array of CharacteristicSpecificationRelationship Array of FeatureSpecificationCharacteristicRelationship See conditions for CharacteristicSpecificationRelationship at specCharacteristic.charSpecRelationship

API OPERATIONS CONFORMANCE

For every single resource the following tables includes mandatory operations.

ServiceSpecification Mandatory Operations

The following table indicates which ones are mandatory for the ServiceSpecification resource:

Uniform API Operation
GET
POST
PATCH
DELETE

API GET OPERATION CONFORMANCE

All the GET operations in this API share the same status code pattern.

GET	Mandatory/Optional
Response Status Code 200 if successful	M
Response Status Code 404 if not found	M

Definitions for Filter

The following definitions apply to all the GET operations:

- Filtered Search: A filtered search can be applied using query parameters to obtain only the resources that meet the criteria defined by the filtering parameters included in the query request. Several elements can be applied to the filtered search. In that case logic, a logical AND is applied to combine the criteria (e.g.:?severity=<value>&status=<value>).
- Attribute selection (Limiting Response Data): In order to limit which attributes are included in the response, the GET request can include the ?fields= query parameter. Only those attributes whose names are supplied in this parameter will be returned. Attribute selection capabilities are the same for collections retrieval and individual resource queries.
- Level: The filtering and attribute selection can apply to the top level properties (attributes) and subproperties. The tables below show which attributes need to be supported in top-level or contained resources.

GET /serviceSpecification?fields=...&{filtering}

This operation list or find ServiceSpecification entities

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels

GET /serviceSpecification/{id}?fields=...&{filtering}

This operation retrieves a ServiceSpecification entity. Attribute selection is enabled for all first level attributes.

Attribute selection is mandatory for all first level attributes except for the href attribute.

Filtering on sub-resources is optional for all compliance levels

API POST OPERATION CONFORMANCE

All the POST operations in this API share the same status code pattern.

POST	Mandatory/Optional
Status Code 201 if resource created	M

POST /serviceSpecification

This operation creates a ServiceSpecification entity.

The following table provides the list of mandatory attributes when creating an instance of the ServiceSpecification resource, including any possible rule, conditions and applicable default values.

Mandatory Attributes	Rule
name	

API PATCH OPERATION CONFORMANCE

All the PATCH operations in this API share the same status code pattern.

The mandatory application context is JSON Merge.

PATCH	Mandatory/Optional
Status Code 200 if resource modified	M

PATCH /serviceSpecification/{id}

This operation updates partially a ServiceSpecification entity.

Patchable Attributes	Rule
@baseType	
@schemaLocation	
@type	
attachment	
constraint	
description	
entitySpecRelationship	
featureSpecification	
isBundle	
lifecycleStatus	
name	
relatedParty	
resourceSpecification	
serviceLevelSpecification	
serviceSpecRelationship	

Patchable Attributes	Rule
specCharacteristic	
targetEntitySchema	
validFor	
version	

API DELETE OPERATION CONFORMANCE

All the DELETE operations in this API share the same status code pattern.

DELETE	Mandatory/Optional
Status Code 204 if resource deleted	M

DELETE /serviceSpecification/{id}

This operation deletes a ServiceSpecification entity.

ACKNOWLEDGEMENTS

Release History

Release Status	Date	Release led by:	Description
Pre-production	07-Dec-2020	Kamal Maghsoudlou, Ericsson	Updated to v4.0.0

Version History

Version Number	Date	Modified by	Description
4.0.0	07-Dec-2020	Alan Pope	Final edits prior to publication