



TM Forum Specification

Product Catalog Management API Conformance Profile

TMF620

Release 17.5.0

January 2018

Latest Update: TM Forum Release 17.5.0	Member Evaluation
Version: 2.2.1	IPR Mode: RAND

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Direct inquiries to the TM Forum office:

4 Century Drive, Suite 100
Parsippany, NJ 07054, USA
Tel No. +1 973 944 5100
Fax No. +1 973 944 5110
TM Forum Web Page: www.tmforum.org



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INTRODUCTION

The following document is the REST API Conformance for the Product Catalog API Release 17.0.

API DESCRIPTION

The Catalog Management API allows the management of the entire lifecycle of the catalog elements (i.e.: product offering, product specification), the consultation of catalog elements during several processes such as ordering process, campaign management, sales management, ...

RESOURCE MODEL CONFORMANCE**Product Catalog API: Mandatory and Optional Resources**

Resource Name	Mandatory or Optional	Comments
ProductOffering	M	
ProductSpecification	M	
ProductOfferingPrice	O	The description of product offering prices can be directly provided as part of the ProductOffering structure
Category	O	
Catalog	O	
ImportJob	O	
ExportJob	O	

ProductOffering resource: Mandatory and Optional Attributes

Note 1: Any Product Offering attribute which is not listed in the following table but addressed in the Product Offering data model is considered as an optional attribute of ProductOffering resource.

Note 2: Any Product Offering sub-resource attribute which is marked as M/O is considered as mandatory if the sub-resource is included in request or response messages. If specified, other conditions also may be applied.

Attribute Name	Mandatory or Optional	Comments
id	M (in response messages) O (otherwise)	Generated by the server and provided in the response upon resource creation. Accepted in entity-creation requests if the server supports the incoming identifier as the reference to create new resources
href	M (in response messages) O (otherwise)	Value in response must be the same as the one set in Location header provided upon entity creation
version	O	
lastUpdate	O	
name	M	
description	O	
isBundle	O	Default value is "false"
lifecycleStatus	M/O	Only required in response messages from the server when providing the ProductOffering entity contents

Attribute Name	Mandatory or Optional	Comments
@type	O	
@baseType	O	
@schemaLocation	O	
isSellable	O	
validFor	M/O	Only required in response messages from the server when providing the ProductOffering entity contents
startDateTime	M/O	If validFor included
endDateTime	O	
category	O	Array of structures
id	M (if category included) O (otherwise)	
href	M (in response messages and if category included) O (otherwise)	Only required in response messages from the server
version	O	
name	O	
@referredType	O	
channel	O	Array of structures
id	M (if channel included) O (otherwise)	

Attribute Name		Mandatory or Optional	Comments
	href	M (if channel included and supported as a REST resource) O (otherwise)	
	name	O	
	@REFERREDType	O	
place		O	Array of structures
	id	M (if place included) O (otherwise)	
	href	M (if place included and supported as a REST resource) O (otherwise)	
	name	O	
	@REFERREDType	O	
bundledProductOffering		M (if isBundle set to true) O (otherwise)	Array of structures Mandatory if isBundle set to true, including at least one entity
	id	M (if bundledProductOffering included) O (otherwise)	
	href	M (if bundledProductOffering included) O (otherwise)	

Attribute Name		Mandatory or Optional	Comments
	lifeCycleStatus	O	
	name	O	
	bundledProductOfferingOption	O	
	numberRelOfferLowerLimit	O	
	numberRelOfferUpperLimit	O	
	numberRelOfferDefault	O	
	serviceLevelAgreement	O	
	id	M (if serviceLevelAgreement included) O (otherwise)	
	href	M (if serviceLevelAgreement included and supported as a REST resource) O (otherwise)	
	name	O	
	@referredType	O	
	productSpecification	M (if isBundle set to false) O (otherwise)	Mandatory if isBundle set to false
	id	M (if productSpecification included)	

Attribute Name	Mandatory or Optional	Comments
	O (otherwise)	
href	M (if productSpecification included) O (otherwise)	
version	O	
name	O	
@referredType	O	
serviceCandidate	O	
id	M (if serviceCandidate included) O (otherwise)	
href	M (if serviceCandidate included and supported by a REST resource) O (otherwise)	
version	O	
name	O	
@referredType	O	
resourceCandidate	O	
id	M (if resourceCandidate included) O (otherwise)	
href	M (if resourceCandidate included and supported by a REST resource)	

Attribute Name		Mandatory or Optional	Comments
		O (otherwise)	
	version	O	
	name	O	
	@referredType	O	
productOfferingTerm		O	Array of structures
	name	M (if productOfferingTerm included) O (otherwise)	
	description	O	
	duration	M (if productOfferingTerm included) O (otherwise)	
	validFor	M (if productOfferingTerm included) O (otherwise)	
	startDateTime	M/O	
	endDateTime	O	
	@type	O	
	@schemaLocation	O	
productOfferingPrice		O	Array of structures
	name	M (if productOfferingPrice included) O (otherwise)	

Attribute Name	Mandatory or Optional	Comments
description	O	
id	M (if productOfferingPrice included and supported by a REST resource) O (otherwise)	
href	M (if productOfferingPrice included and supported by a REST resource) O (otherwise)	
@type	O	
@baseType	O	
@schemaLocation	O	
isBundle	O	Default is 'false'
validFor	M (if productOfferingPrice included) O (otherwise)	
startDateTime	O	
endDateTime	O	
priceType	M (if productOfferingPrice included) O (otherwise)	
unitOfMeasure	M (if productOfferingPrice included) O (otherwise)	
price	M (if productOfferingPrice	

Attribute Name		Mandatory or Optional	Comments
		included) O (otherwise)	
	taxIncludedAmount	M (if price included) O (otherwise)	
	dutyFreeAmount	O	
	taxRate	O	
	recurringChargePeriod	M (if priceType set to "recurring") O (otherwise)	Mandatory if priceType set to "recurring"
	version	O	
	productOfferPriceAlteration	O	
	name	M (if productOfferPriceAlteration included) O (otherwise)	Mandatory if productOfferPriceAlteration included
	description	O	
	validFor	M (if productOfferPriceAlteration included) O (otherwise)	Mandatory if productOfferPriceAlteration included
	startDateTime	O	
	endDateTime	O	
	priceType	M (if productOfferPriceAlteration included)	Mandatory if productOfferPriceAlteration included

Attribute Name		Mandatory or Optional	Comments
		O (otherwise)	
	unitOfMeasure	M (if productOfferPriceAlteration included) O (otherwise)	Mandatory if productOfferPriceAlteration included
	price	M (if productOfferPriceAlteration included) O (otherwise)	Mandatory if productOfferPriceAlteration included
	taxIncludedAmount	M (if price included) O (otherwise)	
	dutyFreeAmount	O	
	taxRate	O	
	percentage	O	
	recurringChargePeriod	O	
	priceCondition	O	
	applicationDuration	O	
marketSegment			
	href	M/O	
	id	M/O	
	name	O	
	@referredType	O	

Attribute Name		Mandatory or Optional	Comments
agreement			
	href	M/O	
	id	M/O	
	name	O	
	@referredType	O	
prodSpecCharValueUse		O	
	name	M/O	
	description	O	
	valueType	O	
	minCardinality	O	
	maxCardinality	O	
	validFor	O	
	startDateTime	M/O	
	endDateTime	O	
productSpecCharacteristicValue		M/O	
	isDefault	O	
	unitOfMeasure	O	
	validFor	O	
	startDateTime	M/O	

Attribute Name		Mandatory or Optional	Comments
	endDateTime	O	
	value	M/O	
	valueFrom	O	
	valueTo	O	
	valueType	O	
	rangeInterval	O	
	regex	O	
	@type	O	
	@schemaLocation	O	
productSpecification			
	id	M/O	
	href	M/O	
	version	O	
	name	O	
	@referredType	O	

ProductOfferingPrice resource: Mandatory and Optional Attributes

Note 1: Any Product Offering Price attribute which is not listed in the following table but addressed in the Product Offering Price data model is considered as an optional attribute of ProductOfferingPrice resource.

Note 2: Any Product Offering Price sub-resource attribute which is marked as M/O is considered as mandatory if the sub-resource is included in request or response messages. If specified, other conditions also may be applied.

Note 3: The support of this resource is optional. So, all mandatory attributes are applicable if this resource is supported.

Attribute Name	Mandatory or Optional	Comments
id	M (in response messages) O (otherwise)	Generated by the server and provided in the response upon resource creation. Accepted in entity-creation requests if the server supports the incoming identifier as the reference to create new resources
href	M (in response messages) O (otherwise)	Value in response must be the same as the one set in Location header provided upon entity creation
version	O	
lastUpdate	O	
name	M	
description	O	
isBundle	O	Default value is "false"
lifecycleStatus	M/O	Only required in response messages from the server when providing the ProductOffering entity contents

Attribute Name		Mandatory or Optional	Comments
priceType		M/O	Mandatory if it is not bundled
unitOfMeasure		M/O	Mandatory if it is not bundled
	amount	O	Default is 1
	units	M/O	
recurringChargePeriodType		M/O	Mandatory for a recurring charge (Mandatory if priceType available and set to "recurring")
recurringChargePeriodLength		M/O	Mandatory for a recurring charge (Mandatory if priceType available and set to "recurring")
@type		M/O	Default is "ProductOfferingPrice". Mandatory in response messages
@baseType		O	
@schemaLocation		O	
percentage		M/O	Mandatory for a discount charge
validFor		M/O	Only required in response messages from the server when providing the ProductOfferingPrice entity contents
	startDateTime	M/O	
	endDateTime	O	
price		M/O	Mandatory if it is not bundled and unitOfMeasure requires

Attribute Name		Mandatory or Optional	Comments
			price
value		M/O	
unit		M/O	
constraint		O	Array of structures
id		M/O	
href		M (if constraint included and supported as a REST resource) O (otherwise)	
name		O	
@referredType		O	
version		O	
place		O	Array of structures
id		M/O	
href		M (if place included and supported as a REST resource) O (otherwise)	
name		O	
@referredType		O	
popRelationship		O	Array of structures
id		M/O	
href		M/O	

Attribute Name		Mandatory or Optional	Comments	
	name	O		
	@type	O		
bundledPopRelationship		M (if isBundle set to true) O (otherwise)	Array of structures Mandatory if isBundle set to true, including at least one entity	
	id	M/O		
	href	M/O		
	@type	O		
	name	O		
pricingLogicAlgorithm		O		
	id	M/O		
	href	M (if pricingLogicAlgorithm included and supported as a REST resource) O (otherwise)		
	name	O		
	description	O		
	validFor	O		
	startDateTime	startDateTime	M/O	
		endDateTime	O	
	plaSpecId		O	

Attribute Name		Mandatory or Optional	Comments
	@type	O	
tax		O	
	taxAmount	M/O	
	taxCategory	M/O	
	taxRate	M/O	
productOfferingTerm		O	Array of structures
	name	M (if productOfferingTerm included) O (otherwise)	
	description	O	
	duration	M (if productOfferingTerm included) O (otherwise)	
	validFor	M (if productOfferingTerm included) O (otherwise)	
	startDateTime	M/O	
	endDateTime	O	
	@type	O	
	@schemaLocation	O	
prodSpecCharValueUse		O	

Attribute Name		Mandatory or Optional	Comments
	name	M/O	
	description	O	
	valueType	O	
	minCardinality	O	
	maxCardinality	O	
	validFor	O	
	startDateTime	M/O	
	endDateTime	O	
	productSpecCharacteristicValue	M/O	
	isDefault	O	
	unitOfMeasure	O	
	validFor	O	
	startDateTime	M/O	
	endDateTime	O	
	value	M/O	
	valueFrom	O	
	valueTo	O	
	valueType	O	
	rangeInterval	O	

Attribute Name		Mandatory or Optional	Comments
	regex	O	
	@type	O	
	@schemaLocation	O	
productSpecification			
	id	M/O	
	href	M/O	
	version	O	
	name	O	
	@referredType	O	

ProductSpecification resource: Mandatory and Optional Attributes

Note 1: Any Product Specification attribute which is not listed in the following table but addressed in the Product Specification data model is considered as an optional attribute of ProductSpecification resource.

Note 2: Any Product Specification sub-resource attribute which is marked as M/O is considered as mandatory if the sub-resource is included in request or response messages. If specified, other conditions also may be applied.

Attribute Name	Mandatory or Optional	Comments
id	M (in response messages) O (otherwise)	Generated by the server and provided in the response upon resource creation. Accepted in entity-creation requests if the server supports the incoming identifier as the reference to create new resources
href	M (in response messages) O (otherwise)	Value in response must be the same as the one set in Location header provided upon entity creation
productNumber	O	
version	O	
lastUpdate	O	
name	M	
description	O	
isBundle	O	Default value is "false"

Attribute Name		Mandatory or Optional	Comments	
brand		O		
lifeCycleStatus		M/O	Only required in response messages from the server when providing the ProductSpecification entity contents	
validFor		M/O	Only required in response messages from the server when providing the ProductSpecification entity contents	
	startDateTime	M/O		
	endDateTime	O		
relatedParty		O	Array of structures	
	id	M/O		
	href	M (in response messages and if relatedParty included) O (otherwise)	Only required in response messages from the server	
	role	O		
	name	O		
	@referredType	O		
	validFor	O		
		startDateTime	M/O	
		endDateTime	O	

Attribute Name		Mandatory or Optional	Comments
attachment		O	Array of structures
	id	M (if attachment included) O (otherwise)	
	href	M (in response messages and if attachment included) O (otherwise)	Only required in response messages from the server
	type	M	
	url	O	
	description	O	
	contentType	O	
	validFor	O	
	@type	O	
	@baseType	O	
	@schemaLocation	O	
bundledProductSpecification		M (if isBundle set to true) O (otherwise)	Array of structures Mandatory if isBundle set to true, including at least one entity
	id	M (if bundledProductSpecification included) O (otherwise)	
	href	M (in response messages and if	Only required in response messages

Attribute Name		Mandatory or Optional	Comments
		bundledProductSpecification included) O (otherwise)	from the server
	lifeCycleStatus	O	
	name	O	
	@type	O	
	targetProductSchema	O	
	@referredType	M/O	
	@schemaLocation	M/O	
	productSpecificationRelationship	O	Array of structures
	id	M (if productSpecificationRelationship included) O (otherwise)	
	href	M (in response messages and if productSpecificationRelationship included) O (otherwise)	Only required in response messages from the server
	type	O	
	url	O	
	serviceSpecification	O	Array of structures
	id	M (if serviceSpecification included)	

Attribute Name		Mandatory or Optional	Comments
		O (otherwise)	
	href	M (in response messages and if serviceSpecification included) O (otherwise)	Only required in response messages from the server
	name	O	
	version	O	
	@referredType	O	
	resourceSpecification	O	Array of structures
	id	M (if resourceSpecification included) O (otherwise)	
	href	M (in response messages and if resourceSpecification included) O (otherwise)	Only required in response messages from the server
	name	O	
	version	O	
	@referredType	O	
	productSpecCharacteristic	O	Array of structures
	name	M (if productSpecCharacteristic included) O (otherwise)	
	description	O	

Attribute Name		Mandatory or Optional	Comments
	valueType	M (if productSpecCharacteristic included) O (otherwise)	
	configurable	O	
	@type	O	
	@schemaLocation	O	
	@valueSchemaLocation	O	
	productSpecCharacteristicValue	M (if productSpecCharacteristic included) O (otherwise)	Array of structures Mandatory if productSpecCharacteristic is present, including at least one entity
	valueType	O	
	isDefault	O	
	rangeInterval	O	
	value	M/O	
	unitOfMeasure	O	
	valueFrom	O	
	valueTo	O	
	regex	O	
	@type	O	

Attribute Name		Mandatory or Optional	Comments
	@schemaLocation	O	
	validFor	O	
	startDateTime	M/O	
	endDateTime	O	
	validFor	O	
	startDateTime	M/O	
	endDateTime	O	
	productSpecCharRelationship		
	type	M/O	
	validFor	O	
	charSpecSeq	O	
	id	M/O	
	name	O	
	href	M/O	
	@type	O	

Category resource: Mandatory and Optional Attributes

Note 1: Any Category attribute which is not listed in the following table but addressed in the Category data model is considered as an optional attribute of Category resource.

Note 2: Any Category sub-resource attribute which is marked as M/O is considered as mandatory if the sub-resource is included in request or response messages. If specified, other conditions also may be applied.

Note 3: The support of this resource is optional. So, all mandatory attributes are applicable if this resource is supported

Attribute Name	Mandatory or Optional	Comments
id	M (in response messages) O (otherwise)	Generated by the server and provided in the response upon resource creation. Accepted in entity-creation requests if the server supports the incoming identifier as the reference to create new resources
href	M (in response messages) O (otherwise)	Value in response must be the same as the one set in Location header provided upon entity creation
name	M	
description	O	
@type	O	
@baseType	O	
@schemaLocation	O	
lastUpdate	O	
lifecycleStatus	O	
version	O	

Attribute Name	Mandatory or Optional	Comments
parentId	O	
isRoot	O	Default is false
validFor	M/O	Only required in response messages from the server
startDateTime	M/O	
endDateTime	O	
subCategory	M/O	Array of structures. Mandatory If any ProductOffering items not included. If specified at least one item must be included
id	M/O	
href	M/O	Only required in response messages from the server
version	O	
name	O	
@referredType	O	
productOffering	O	Array of structures Mandatory If any other category items not included. If specified at least one item must be included
id	M/O	
href	M/O	Only required in response messages from the server
name	M	

Attribute Name	Mandatory or Optional	Comments
	@referredType O	

Catalog resource: Mandatory and Optional Attributes

Note 1: Any Catalog attribute which is not listed in the following table but addressed in the Catalog data model is considered as an optional attribute of Catalog resource.

Note 2: Any Catalog sub-resource attribute which is marked as M/O is considered as mandatory if the sub-resource is included in request or response messages. If specified, other conditions also may be applied.

Note 3: The support of this resource is optional. So, all mandatory attributes are applicable if this resource is supported.

Attribute Name	Mandatory or Optional	Comments
id	M (in response messages) O (otherwise)	Generated by the server and provided in the response upon resource creation. Accepted in entity-creation requests if the server supports the incoming identifier as the reference to create new resources
href	M (in response messages) O (otherwise)	Value in response must be the same as the one set in Location header provided upon entity creation
name	M	
description	O	
@type	O	
@baseType	O	
@schemaLocation	O	
lastUpdate	O	

Attribute Name		Mandatory or Optional	Comments
lifecycleStatus		O	
version		O	
validFor		M/O	Only required in response messages from the server
	startDateTime	M/O	
	endDateTime	O	
category		O	Array of structures.
	id	M/O	
	href	M/O	Only required in response messages from the server
version		O	
name		O	
@referredType		O	
validFor		O	
	startDateTime	M/O	
	endDateTime	O	
relatedParty		O	Array of structures
	id	M/O	
	href	M/O	Only required in response messages from the server

Attribute Name		Mandatory or Optional	Comments
	name	M	
	role	O	
	@referredType	O	
	validFor	O	
	startDateTime	M/O	
	endDateTime	O	

API OPERATIONS CONFORMANCE

For every single resource use the following templates and define what operations are optional and what operations are mandatory.

Product Catalog Applicable Mandatory and Optional Operations

Uniform API Operation	Comments
GET	GET must be used to retrieve a representation of a resource
POST	POST must be used to create a new resource
PUT	PUT must be used to completely update a resource identified by its resource URI
PATCH (JSON-MERGE)	PATCH must be used to partially update a resource
DELETE	DELETE must be used to remove a resource

The following table shows the mandatory operations for each supported resource in a product catalog. If a resource is optional and not supported then the listed operations are not applicable.

REST Resource	<u>M</u> andatory operations
Catalog	<ul style="list-style-type: none"> • GET
Category	<ul style="list-style-type: none"> • GET • POST • DELETE
ProductOffering	<ul style="list-style-type: none"> • GET • POST • DELETE
ProductOfferingPrice	<ul style="list-style-type: none"> • GET • POST

REST Resource	<u>Mandatory operations</u>
	<ul style="list-style-type: none"> • DELETE
ProductSpecification	<ul style="list-style-type: none"> • GET • POST • DELETE

API GET FILTERING OPERATION CONFORMANCE

Definitions

Filtered Search: A filtered search can be applied using query parameters in order to obtain only the resource entities 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.: category=<value> &isBundle=<value>)

Filtered Data (Attribute selection): In order to apply a filter and limit the number of attributes included in the response, the GET request can include the “? fields=” query parameter. Several elements can be applied to the filter. In that case, a logical AND is applied to combine the values (e.g.: fields=category, channel) will provide in the response only the values assigned to attributes category and channel. Attribute selection capabilities are the same for collections retrieval and individual resource queries

Filtering in Product Offering resource

Attribute name	Filtered search First Level	Filtered search N Level	Attribute Selection First Level	Attribute Selection N Level
id	NA	NA	M	NA
href	NA	NA	M	NA
version	O	NA	M	NA
lastUpdate	O	NA	M	NA
name	O	NA	M	NA
description	O	NA	M	NA
isBundle	M	NA	M	NA
isSellable	O	NA	M	NA
lifecycleStatus	M	NA	M	NA
@type	O	NA	M	NA
@baseType	O	NA	M	NA
@schemaLocation	O	NA	M	NA
validFor	NA	O	M	O
category	O	NA	M	O
channel	O	NA	M	O
place	NA	O	M	O
bundledProductOffering	NA	O	M	O
serviceLevelAgreement	NA	O	M	O

Attribute name	Filtered search First Level	Filtered search N Level	Attribute Selection First Level	Attribute Selection N Level
productSpecification	NA	O	M	O
serviceCandidate	NA	O	M	O
resourceCandidate	NA	O	M	O
productOfferingTerm	NA	O	M	O
productOfferingPrice	NA	O	M	O
prodSpecCharValueUse	NA	O	M	O
agreement	NA	O	M	O
marketSegment	NA	O	M	O
attachment	NA	O	M	O

GET /catalogManagement/productOffering/

Filtered Search: A filtered search can be applied using the following filtering criteria

- isBundle: to obtain the list of offerings that are single product (false) or bundle (true)
- isSellable: to obtain the list of offerings that can be sold stand-alone (true) or only through a bundle offering (false)
- lifecycleStatus: To obtain the list of offerings that are in a given status
- name (optional): To obtain the details of the offering with a given name
- category (optional): To obtain the list of offerings belonging to a given category identifier
- channel (optional): To obtain the list of offerings belonging to a given channel identifier
- other optional attributes as defined in the table above

Filtered Data: A filtered response can be requested for the following attributes using the “? fields=” query parameter

- Any of the attributes in the first level of ProductOffering resource definition

GET /catalogManagement/productOffering/{ID}

Filtered Search: A filtered response can be requested for the following attributes using the “? fields=” query parameter

- Any of the attributes in the first level of ProductOffering resource definition

Filtering in Product Offering Price resource

Attribute name	Filtered search First Level	Filtered search N Level	Attribute Selection First Level	Attribute Selection N Level
id	NA	NA	M	NA
href	NA	NA	M	NA
version	O	NA	M	NA
lastUpdate	O	NA	M	NA
name	M	NA	M	NA
description	O	NA	M	NA
isBundle	M	NA	M	NA
lifecycleStatus	M	NA	M	NA
@type	O	NA	M	NA
@baseType	O	NA	M	NA
@schemaLocation	O	NA	M	NA
priceType	O	NA	M	NA
unitOfMeasure	NA	O	M	O
recurringChargePeriodType	O	NA	M	NA
recurringChargePeriodLength	O	NA	M	NA
percentage	O	NA	M	NA
validFor	NA	O	M	O
price	NA	O	M	O
bundledPopRelationship	NA	O	M	O

Attribute name	Filtered search First Level	Filtered search N Level	Attribute Selection First Level	Attribute Selection N Level
popRelationship	NA	O	M	O
prodSpecCharValueUse	NA	O	M	O
productOfferingTerm	NA	O	M	O
place	NA	O	M	O
constraint	NA	O	M	O
pricingLogicAlgorithm	NA	O	M	O
tax	NA	O	M	O

GET /catalogManagement/productOfferingPrice/

Filtered Search: A filtered search can be applied using the following filtering criteria

- isBundle: to obtain the list of offering prices that are single (component) product price (false) or bundle(composite) product price (true)
- lifecycleStatus: To obtain the list of offering prices that are in a given status
- name: To obtain the details of the offering price with a given name
- other optional attributes as defined in the table above

Filtered Data: A filtered response can be requested for the following attributes using the “? fields=” query parameter

- Any of the attributes in the first level of ProductOfferingPrice resource definition

GET /catalogManagement/productOfferingPrice/{ID}

Filtered Search: A filtered response can be requested for the following attributes using the “? fields=” query parameter

- Any of the attributes in the first level of ProductOfferingPrice resource definition

Filtering in Product Specification resource

Attribute name	Filtered search First Level	Filtered search N Level	Attribute Selection First Level	Attribute Selection N Level
id	NA	NA	M	NA
href	NA	NA	M	NA
productNumber	O	NA	M	NA
version	O	NA	M	NA
lastUpdate	O	NA	M	NA
name	O	NA	M	NA
description	O	NA	M	NA
isBundle	M	NA	M	NA
brand	O	NA	M	NA
lifecycleStatus	M	NA	M	NA
@type	O	NA	M	NA
@baseType	O	NA	M	NA
@schemaLocation	O	NA	M	NA
validFor	NA	O	M	O
relatedParty	NA	O	M	O
attachment	NA	O	M	O
bundledProductSpecification	NA	O	M	O
productSpecificationrelationships	NA	O	M	O

Attribute name	Filtered search First Level	Filtered search N Level	Attribute Selection First Level	Attribute Selection N Level
serviceSpecification	NA	O	M	O
resourceSpecification	NA	O	M	O
productSpecCharacteristic	NA	O	M	O

GET /catalogManagement/productSpecification/

Filtered Search: A filtered search can be applied using the following filtering criteria

- **isBundle:** to obtain the list of product specifications that are single product (false) or bundle (true)
- **lifecycleStatus:** To obtain the list of product specifications that are in a given status
- **name (optional):** To obtain the details of the product specification with a given name
- **productNumber (optional):** To obtain the list of product specifications with a given product number
- **brand (optional):** To obtain the list of product specifications associated to a given brand name
- other optional attributes as defined in the table above

Filtered Data: A filtered response can be requested for the following attributes using the “? fields=” query parameter

- Any of the attributes in the first level of ProductSpecification resource definition

GET /catalogManagement/productSpecification/{ID}

Filtered Search: A filtered response can be requested for the following attributes using the “? fields=” query parameter

- Any of the attributes in the first level of ProductSpecification resource definition

Filtering in Catalog resource

Attribute name	Filtered search First Level	Filtered search N Level	Attribute Selection First Level	Attribute Selection N Level
id	NA	NA	M	NA
href	NA	NA	M	NA
version	O	NA	M	NA
lastUpdate	O	NA	M	NA
name	M	NA	M	NA
description	O	NA	M	NA
lifecycleStatus	M	NA	M	NA
@type	O	NA	M	NA
@baseType	O	NA	M	NA
@schemaLocation	O	NA	M	NA
validFor	NA	O	M	O
category	NA	O	M	O
relatedParty	NA	O	M	O

GET /catalogManagement/catalog/

Filtered Search: A filtered search can be applied using the following filtering criteria

- lifecycleStatus: To obtain the list of catalogs that are in a given status
- name: To obtain the details of the catalog with a given name
- other optional attributes as defined in the table above

Filtered Data: A filtered response can be requested for the following attributes using the “? fields=” query parameter

- Any of the attributes in the first level of Catalog resource definition

GET /catalogManagement/catalog/{ID}

Filtered Search: A filtered response can be requested for the following attributes using the “? fields=” query parameter

- Any of the attributes in the first level of Catalog resource definition

Filtering in Category resource

Attribute name	Filtered search First Level	Filtered search N Level	Attribute Selection First Level	Attribute Selection N Level
id	NA	NA	M	NA
href	NA	NA	M	NA
version	O	NA	M	NA
lastUpdate	O	NA	M	NA
name	M	NA	M	NA
description	O	NA	M	NA
lifecycleStatus	M	NA	M	NA
@type	O	NA	M	NA
@baseType	O	NA	M	NA
@schemaLocation	O	NA	M	NA
parentId	O	NA	M	NA
isRoot	M	NA	M	NA
validFor	NA	O	M	O
subCategory	NA	O	M	O
productOffering	NA	O	M	O

```
GET /catalogManagement/category/
```

Filtered Search: A filtered search can be applied using the following filtering criteria

- lifecycleStatus: To obtain the list of categories that are in a given status
- name: To obtain the details of the category with a given name
- isRoot: To obtain the root category of the list of categories.
- other optional attributes as defined in the table above

Filtered Data: A filtered response can be requested for the following attributes using the “? fields=” query parameter

- Any of the attributes in the first level of Category resource definition

```
GET /catalogManagement/category/{ID}
```

Filtered Search: A filtered response can be requested for the following attributes using the “? fields=” query parameter

- Any of the attributes in the first level of Category resource definition

API POST OPERATION CONFORMANCE

The following POST Operation requirements apply to all resources which have POST operation as Mandatory.

- The response to POST operation must include a Location header set to href of created resource.
- The server should return response code as 201 upon successful creation of a resource.
- If the POST request doesn't include mandatory parameters as per the model resource definition then the server must reject the request (replying with a 4xx error response) indicating the parameter not specified.
- If the POST request includes optional parameters as per the model resource definition that are not supported by the server, then the server must reject the request (replying with a 4xx error response) indicating the parameter not supported.
- The response to POST request from the server must include a BODY with the contents of the new resource created
- The BODY of the POST response from the server must include attribute "href" under each one of the entities within the resource model that can be addressed individually and were included in the request.

API PATCH OPERATION CONFORMANCE

This section defines which attributes are patchable.

Since PATCH operation is optional and not included in the basic CONNECT certification this is not applicable in this conformance document.

API DELETE OPERATION CONFORMANCE

The following DELETE Operation requirements apply to all resources which have POST operation as Mandatory.

- The server should return response code as 204 upon successful deletion of a resource.

API CONFORMANCE TEST SCENARIOS

This section describes the test scenarios required for the basic CONNECT certification of Product Catalog API.

Test Cases must be executed in the order defined for each resource because the result from one of the scenarios will be input for the next one.

Requests must be addressed to the endpoint provided for certification, specifically they must be addressed to the URI defined by the concatenation of the {apiRoot} and the specific resource, where the {apiRoot} is defined as **{serverRoot}/catalogManagement/v1**, being {serverRoot} defines the certification endpoint

ProductOffering resource TEST CASES

Nominal Scenarios

TC_ProdOff_N1 – Create new single Product Offering

- Send a POST message to {apiRoot}/productOffering/ with the following contents in the BODY

```
{
  "name": "<anytext>",
  "description": "<anytext>",
  "isBundle": false,
  "lifecycleStatus": "Active",
  "validFor":
  {
    "startDateTime": " <any value with correct
datetime format>",
    "endDateTime": "<any value with correct datetime
format>"
  },
  "productSpecification":
  {
    "id": "11",
    "name": "Product11"
  }
}
```

- Wait for a response from the server with the following characteristics
 - Response Code 201-Created
 - Include a location header in the body set to /catalogManagement/productOffering/{IDpo1} where {IDpo1} indicates the identifier assigned by the server to the new ProductOffering resource
 - The response message includes all mandatory parameters

- The body of the response matches the values in the original request
- Send a GET message to `{apiRoot}/productOffering/`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one ProductOffering resource with ID set to `{IDpo1}`, the same identifier as assigned by the server to the new resource created
 - The response message includes all mandatory parameters
 - The body of the response for the resource with identifier `{IDpo1}` matches the values in the original request
- Send a GET message to `{apiRoot}/productOffering/{IDpo1}`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The response message includes all mandatory parameters
 - The body of the response includes a ProductOffering resource structure that matches the values in the original request

TC_ProdOff_N2 – Create new bundled Product Offering

- Send POST to `{apiRoot}/productOffering/` with the following contents in the BODY

```

{
  "name": "<anytext>",
  "description": "<anytext>",
  "isBundle": true,
  "lifecycleStatus": "Active",
  "validFor":
  {
    "startDateTime": "<any value with correct
datetime format>",
    "endDateTime": "<any value with correct datetime
format>"
  },
  "bundledProductOffering":
  [
    {
      "id": "121",
      "name": "ProductOffering121"
    }
  ]
}

```

```

    },
    {
      "id": "122",
      "name": "ProductOffering122"
    }
  ]
}

```

- Wait for a response from the server with the following characteristics
 - Response Code 201-Created
 - Include a location header in the body set to /catalogManagement/productOffering/{IDpo2} where {IDpo2} indicates the identifier assigned by the server to the new ProductOffering resource
 - The response message includes all mandatory parameters
 - The body of the response matches the values in the original request
- Send a GET message to /{apiRoot}/productOffering/
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes two ProductOffering resources, one of them with ID set to {IDpo2}, the same identifier as assigned by the server to the new resource created
 - The response message includes all mandatory parameters
 - The body of the response for the resource with identifier {IDpo2} matches the values in the original request
- Send a GET message to /{apiRoot}/productOffering/{IDpo2}
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The response message includes all mandatory parameters
 - The body of the response includes a ProductOffering resource structure that matches the values in the original request

TC_ProdOff_N3 – Create new single Product Offering with prices included

- Send a POST message to `/{apiRoot}/productOffering/` with the following contents in the BODY

```

{
  "name": "<anytext>",
  "description": "<anytext>",
  "isBundle": false,
  "lifecycleStatus": "Retired",
  "validFor":
  {
    "startDateTime": "<any value with correct
datetime format>",
    "endDateTime": "<any value with correct datetime
format>"
  },
  "productSpecification":
  {
    "id": "13",
    "name": "Product13"
  },
  "productOfferingPrice":
  [
    {
      "name": "Price13_1",
      "description": "This is the first price plan
for ProductOffering13",
      "validFor":
      {
        "startDateTime": "<any value with correct
datetime format>",
        "endDateTime": "<any value with correct
datetime format>"
      },
      "priceType": "recurring",
      "unitOfMeasure": "1 subscription",
      "price":
      {
        "taxIncludedAmount": 131,
        "currencyCode": "GBP",
      },
      "recurringChargePeriod": "monthly"
    },
    {
      "name": "Price13_2",
      "description": "This is the second price plan
for ProductOffering13"
      "validFor":
      {
        "startDateTime": "<any value with correct
datetime format>",
        "endDateTime": "<any value with correct
datetime format>"
      },
      "priceType": "one time",
    }
  ]
}

```

```

        "unitOfMeasure": "1 subscription",
        "price":
            {
                "taxIncludedAmount": 132,
                "currencyCode": "EUR"
            }
    ]
}

```

- Wait for a response from the server with the following characteristics
 - Response Code 201-Created
 - Include a location header in the body set to `/catalogManagement/productOffering/{IDpo3}` where {IDpo3} indicates the identifier assigned by the server to the new ProductOffering resource
 - The response message includes all mandatory parameters
 - The body of the response matches the values in the original request
- Send a GET message to `/{apiRoot}/productOffering/`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes three ProductOffering resources, one of them with ID set to {IDpo3}, the same identifier as assigned by the server to the new resource created
 - The response message includes all mandatory parameters
 - The body of the response for the resource with identifier IDn3 matches the values in the original request
- Send a GET message to `/{apiRoot}/productOffering/{IDpo3}`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The response message includes all mandatory parameters
 - The body of the response includes a ProductOffering resource structure that matches the values in the original request

TC_ProdOff_N4 – Search for Product Offerings with specific characteristics

- Send a GET message to `/{apiRoot}/productOffering`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes three productSpecification resources, referring to {IDps1}, {IDps2} and {IDps3}
 - The body of the response for the resource with each identifier matches the values in the corresponding original request
- Send a GET message to `/{apiRoot}/productOffering/?isBundle=true`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one ProductOffering resource, referring to {IDpo2}
 - The response message includes all mandatory parameters
 - The body of the response for the resource with identifier {IDpo2} matches the values in the original request
- Send a GET message to `/{apiRoot}/productOffering/?isBundle=false`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes two ProductOffering resources, referring to {IDpo1} and {IDpo3}
 - The response message includes all mandatory parameters
 - The body of the response for the resource with each identifier matches the values in the corresponding original request
- Send a GET message to `/{apiRoot}/productOffering/?status=Active`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK

- The body of the response includes two ProductOffering resources, referring to {IDpo1} and {IDpo2}
- The response message includes all mandatory parameters
- The body of the response for the resource with each identifier matches the values in the corresponding original request
- Send a GET message to `/{apiRoot}/productOffering/?status=Retired`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one ProductOffering resource, referring to {IDpo3}
 - The response message includes all mandatory parameters
 - The body of the response for the resource with identifier {IDpo3} matches the values in the original request

TC_ProdOff_N5 – Filtered retrieval of Product Offering data

- Send a GET message to `/{apiRoot}/productOffering/{IDpo1}?fields=name,description`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one ProductOffering resource, referring to {IDpo1} and including only attributes name and description, matching the values in the original request
- Send a GET message to `/{apiRoot}/productOffering/{IDpo2}?fields=name,validFor,bundledProductOffering`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one ProductOffering resource, referring to {IDpo2} and including only attributes name, validFor and bundledProductOffering, matching the values in the original request

Notice that this test case is using parameters "name" and "description" to filter the data included in the response but any other parameter could be used

TC_ProdOff_N6 – Filtered Search and Filtered data response

- Send a GET message to
 /{apiRoot}/productOffering/?isBundle=false&fields=name,description,validFor
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes two ProductOffering resources, referring to {IDpo1} and {IDpo3}
 - The body of the response for the resource with each identifier includes only attributes name, description and validFor, matching the values in the corresponding original request

Notice that this test case is using parameters "name", "description" and "validFor" to filter the data included in the response but any other parameter could be used

TC_ProdOff_N7 – Parameter not included in create request but provided in response

- Send a POST message to {apiRoot}/productOffering/ with the following contents in the BODY

```

{
  "name": "<anytext>",
  "description": "<anytext>",
  "isBundle": false,
  "validFor":
  {
    "startDateTime": "<any value with correct
datetime format>",
    "endDateTime": "<any value with correct datetime
format>"
  },
  "productSpecification":
  {
    "id": "11",
    "name": "Product71"
  }
}

```

- Wait for a response from the server with the following characteristics
 - Response Code 201-Created

- Include a location header in the body including the identifier assigned by the server to the new ProductOffering resource
- The body of the response includes parameter "lifecycleStatus"

Notice that this test case is using "lifecycleStatus" parameter but any other parameter that is mandatory as part of the entity definition stored in the server (as defined by SID) but not required to be sent in the creation request, can be used, as for instance "validFor".

Error Scenarios

TC_ProdOff_E1 – Unknown Product Offering

- Send a GET message to `{apiRoot}/productOffering/{IDpo4}`, where `{IDpo4}` does not match any of the identifiers previously created in the server
- Wait for a response from the server with the following characteristics
 - Response Code 404-Not Found

TC_ProdOff_E2 – Invalid Request – Missing mandatory parameter

- Send a POST message to `{apiRoot}/productOffering/` with the following contents in the BODY.

```
{
  "description": "<anytext>",
  "isBundle": false,
  "lifecycleStatus": "Active",
  "validFor":
  {
    "startDateTime": "<any value with correct
datetime format>",
    "endDateTime": "<any value with correct datetime
format>"
  },
  "productSpecification":
  {
    "id": "11",
    "name": "Product11"
  }
}
```

Notice that this request is missing mandatory parameter "name" but any other mandatory parameter could be used

- Wait for an error response from the server indicating the mandatory parameter is missing in the request

TC_ProdOff_E3 – Invalid Request – Missing parameter mandatory in context

- Send a POST message to {apiRoot}/productOffering/ with the following contents in the BODY.

```
{
  "name": "",
  "description": "",
  "isBundle": true,
  "lifecycleStatus": "Active",
  "validFor":
  {
    "startDateTime": "<any value with correct
datetime format>",
    "endDateTime": "<any value with correct datetime
format>"
  }
}
```

Notice that this request is missing mandatory parameter “bundledProductOffering” when parameter “isBundle” is set to true but any other parameter that becomes mandatory based on the context could be used

- Wait for an error response from the server indicating the mandatory parameter is missing in the request

ProductSpecification resource TEST CASES

Nominal Scenarios

TC_ProdSpec_N1 – Create new single Product Specification

- Send a POST message to {apiRoot}/productSpecification/ with the following contents in the BODY

```
{
  "name": "<anytext>",
  "description": "<anytext>",
  "productNumber": "<anytext>",
  "brand": "<anytext>",
  "isBundle": false,
  "lifecycleStatus": "Retired",
  "validFor":
  {
    "startDateTime": "<any value with correct
datetime format>",
    "endDateTime": "<any value with correct datetime
format>"
  },
}
```

```

    "productSpecCharacteristic":
    [
      {
        "name": "Characteristic1",
        "valueType": "string",
        "productSpecCharacteristicValue":
          [
            {
              "valueType": "string",
              "isDefault": true,
              "value": "value11"
            },
            {
              "valueType": "string",
              "isDefault": false,
              "value": "value12"
            }
          ]
      }
    ]
  }
}

```

- Wait for a response from the server with the following characteristics
 - Response Code 201-Created
 - Include a location header in the body set to /catalogManagement/productSpecification/{IDps1} where {IDps1} indicates the identifier assigned by the server to the new ProductSpecification resource
 - The response message includes all mandatory parameters
 - The body of the response matches the values in the original request
- Send a GET message to /{apiRoot}/productSpecification/
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one ProductSpecification resource with ID set to {IDps1}, the same identifier as assigned by the server to the new resource created
 - The response message includes all mandatory parameters
 - The body of the response for the resource with identifier {IDps1} matches the values in the original request
- Send a GET message to /{apiRoot}/productOffering/{IDps1}

- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The response message includes all mandatory parameters
 - The body of the response includes a ProductSpecification resource structure that matches the values in the original request

TC_ProdSpec_N2 – Create new bundled Product Specification

- Send a POST message to {apiRoot}/productSpecification/ with the following contents in the BODY

```

{
  "name": "<anytext>",
  "description": "<anytext>",
  "productNumber": "<anytext>",
  "brand": "<anytext>",
  "isBundle": true,
  "lifecycleStatus": "Active",
  "validFor":
  {
    "startDateTime": "<any value with correct
datetime format>",
    "endDateTime": "<any value with correct datetime
format>"
  },
  "bundledProductSpecification":
  [
    {
      "id": "121",
      "name": "ProductSpec121"
    },
    {
      "id": "122",
      "name": "ProductSpec122"
    }
  ]
}

```

- Wait for a response from the server with the following characteristics
 - Response Code 201-Created
 - Include a location header in the body set to /catalogManagement/productSpecification/{IDps2} where {IDps2} indicates the identifier assigned by the server to the new ProductSpecification resource

- The response message includes all mandatory parameters
- The body of the response matches the values in the original request
- Send a GET message to `/{apiRoot}/productSpecification/`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one ProductSpecification resource with ID set to `{IDps2}`, the same identifier as assigned by the server to the new resource created
 - The response message includes all mandatory parameters
 - The body of the response for the resource with identifier `{IDps2}` matches the values in the original request
- Send a GET message to `/{apiRoot}/productSpecification/{IDps2}`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The response message includes all mandatory parameters

The body of the response includes a ProductSpecification resource structure that matches the values in the original request

TC_ProdSpec_N3 – Search for Product Spec with specific characteristics

- Send a GET message to `/{apiRoot}/productSpecification`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes two productSpecification resources, referring to `{IDps1}` and `{IDps2}`
 - The body of the response for the resource with each identifier matches the values in the corresponding original request
- Send a GET message to `/{apiRoot}/productSpecification/?isBundle=true`
- Wait for a response from the server with the following characteristics

- Response Code 200-OK
- The body of the response includes one single productSpecification resource, referring to {IDps2}
- The response message includes all mandatory parameters
- The body of the response for the resource matches the values in the original request for {IDps2}
- Send a GET message to `/{apiRoot}/ productSpecification /?isBundle=false`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one single productSpecification resource, referring to {IDps1}
 - The response message includes all mandatory parameters
 - The body of the response for the resource matches the values in the original request for {IDps1}
- Send a GET message to `/{apiRoot}/ productSpecification /?status=Active`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one single productSpecification resources, referring to {IDps2}
 - The response message includes all mandatory parameters
 - The body of the response for the resource matches the values in the original request for {IDps2}
- Send a GET message to `/{apiRoot}/ productSpecification /?status=Retired`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one single productSpecification resource, referring to {IDps1}

- The response message includes all mandatory parameters
- The body of the response for the resource matches the values in the original request for {IDps1}

TC_ProdSpec_N4 – Filtered retrieval of Product Offering data

- Send a GET message to `/{apiRoot}/productSpecification/{IDps1}?fields=name,description`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one productSpecification resource, referring to {IDps1} and including only attributes name and description, matching the values in the original request for {IDps1}
- Send a GET message to `/{apiRoot}/productSpecification/{IDps2}?fields=name,validFor,bundledProductSpecification`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one productSpecification resource, referring to {IDps2} and including only attributes name, validFor and bundledProductOffering, matching the values in the original request for {IDps2}

Notice that this test case is using parameters "name" and "description" to filter the data included in the response but any other parameter could be used

TC_ProdSpec_N5 – Filtered Search and Filtered data response

- Send a GET message to `/{apiRoot}/productSpecification/?isBundle=false&fields=name,description,validFor`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes on single productSpecification resource, referring to {IDps1}

- The body of the response for the resource includes only attributes name, description and validFor, matching the values in the corresponding original request for {IDps1}

Notice that this test case is using parameters "name" and "description" to filter the data included in the response but any other parameter could be used

TC_ProdSpec_N6 – Parameter not included in create request but provided in response

- Send a POST message to {apiRoot}/productSpecification/ with the following contents in the BODY

```
{
  "name": "<anytext>",
  "description": "<anytext>",
  "brand": "<anytext>",
  "isBundle": false,
  "validFor":
  {
    "startDateTime": "<any value with correct
datetime format>",
    "endDateTime": "<any value with correct datetime
format>"
  },
  "productSpecCharacteristic":
  [
    {
      "name": "Characteristic1",
      "valueType": "string",
      "productSpecCharacteristicValue":
      [
        {
          "valueType": "string",
          "isDefault": true,
          "value": "value61"
        }
      ]
    }
  ]
}
```

- Wait for a response from the server with the following characteristics
 - Response Code 201-Created
 - The body of the response includes parameter "lifecycleStatus"

Notice that this test case is using "lifecycleStatus" parameter but any other parameter that is mandatory as part of the entity definition stored in the server (as defined by SID) but not required to be sent in the creation request, can be used, as for instance "validFor".

Error Scenarios

TC_ProdSpec_E1 – Unknown Product Specification

- Send a GET message to `{apiRoot}/productSpecification/{IDps4}`, where `{IDps4}` does not match any of the identifiers previously created in the server
- Wait for a response from the server with the following characteristics
 - Response Code 404-Not Found

TC_ProdSpec_E2 – Invalid Request – Missing mandatory parameter

- Send a POST message to `{apiRoot}/productSpecification/` with the following contents in the BODY.

```

{
  "description": " < anytext > ",
  "productNumber": " < anytext > ",
  "brand": " < anytext > ",
  "isBundle": false,
  "lifecycleStatus": "Retired",
  "validFor": {
    "startDateTime": " < any value with correct
datetime format > ",
    "endDateTime": " < any value with correct
datetime format > "
  },
  "productSpecCharacteristic": [{
    "name": "Characteristic1",
    "valueType": "string",
    "productSpecCharacteristicValue": [{
      "valueType": "string",
      "isDefault": true,
      "value": "value11"
    },
    {
      "valueType": "string",
      "isDefault": false,
      "value": "value12"
    }
  ]
}]
}

```

Notice that this request is missing mandatory parameter "name" but any other mandatory parameter could be used

- Wait for an error response from the server indicating the mandatory parameter is missing in the request

TC_ProdSpec_E3 – Invalid Request – Missing parameter mandatory in context

- Send a POST message to {apiRoot}/productOffering/ with the following contents in the BODY.

```
{
  "name": "<anytext>",
  "description": "<anytext>",
  "productNumber": "<anytext>",
  "brand": "<anytext>",
  "isBundle": true,
  "lifecycleStatus": "Active",
  "validFor":
  {
    "startDateTime": "<any value with correct
datetime format>",
    "endDateTime": "<any value with correct datetime
format>"
  },
}
```

Notice that this request is missing mandatory parameter "bundledProductSpecification" when parameter "isBundle" is set to true but any other parameter that becomes mandatory based on the context could be used

- Wait for an error response from the server indicating the mandatory parameter is missing in the request

ACKNOWLEDGEMENTS

Release History

Release Number	Date	Release led by:	Description
Rev1	2015		First Release of Draft Version of the Document.
Rev 1.1	Jun. 2, 2017	Kamal Maghsoudlou Ericsson kamal.maghsoudlou@ericsson.com	Updated in correlation of the Product Catalog API Release 17.0
Rev 2.2.0	December 2017	Kamal Maghsoudlou Ericsson kamal.maghsoudlou@ericsson.com	Updated in correlation of the Product Catalog API Release 17.5.
Rev 2.2.1	16-Jan-2018	Adrienne Walcott	Formatting/style edits prior to publishing

Version History

Release Number	Date	Release led by:	Description
17.5.0	January 2018	Kamal Maghsoudlou Ericsson kamal.maghsoudlou@ericsson.com	Updated in correlation of the Product Catalog API Release 17.5.