



CHAPTER 3

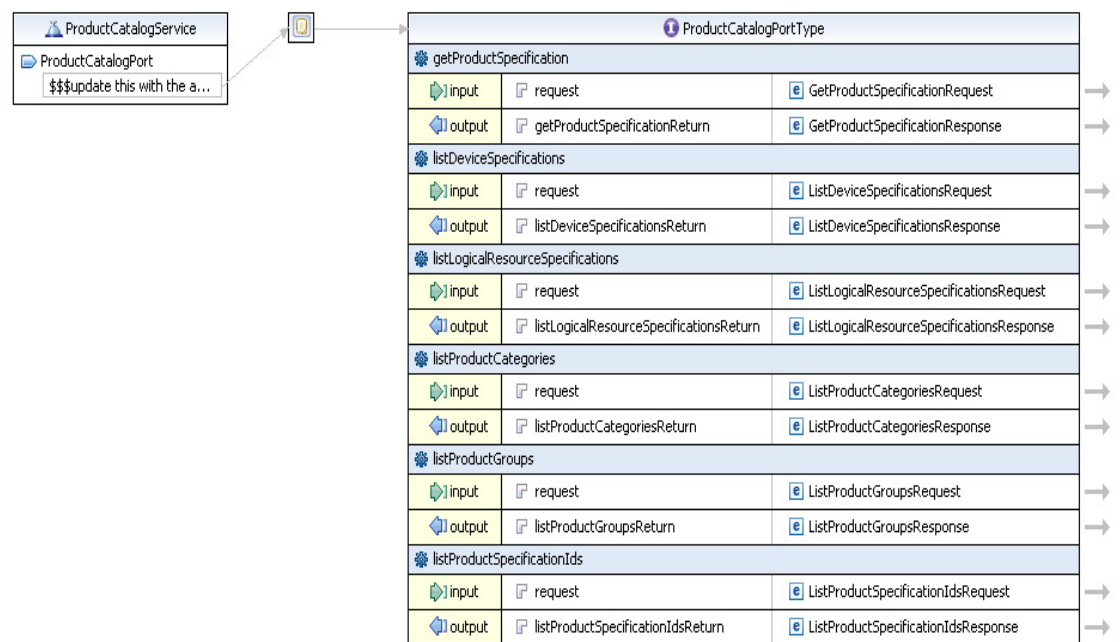
Understanding Product Catalog Web Service Interface

This chapter describes the Mediation Product Catalog web service interface for HCM. You can provision Product Catalog information.

Product Catalog Data Services

The ProductCatalog data service exposes the HCM northbound interface and operations, enabling queries of the product catalog entities. All operation request and response messages extend from a common base complexType, called OperationRequest and OperationResponse. See [Figure 3-1](#).

Figure 3-1 Service Interface



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This section describes the HCM XML API for the ProductCatalog data service that contains the following operations:

- `getProductSpecification`
 - `GetProductSpecificationRequest`—[Appendix B, “Sample getProductSpecification XML Request”](#)
 - `GetProductSpecificationResponse`—[Appendix B, “Sample getProductSpecification XML Response”](#)
- `listDeviceSpecifications`
 - `ListDeviceSpecifcaitonsRequest`—[Appendix B, “Sample listDeviceSpecifications XML Request”](#)
 - `ListDeviceSpecifcaitonsResponse`—[Appendix B, “Sample listDeviceSpecifications XML Response”](#)
- `listLogicalResourceSpecifications`
 - `ListLogicalResourceSpecificationsRequest`—[Appendix B, “Sample listLogicalResourceSpecifications XML Request”](#)
 - `ListLogicalResourceSpecificationsResponse`—[Appendix B, “Sample listLogicalResourceSpecifications XML Response”](#)
- `listProductCategories`
 - `ListProductCategoriesRequest`—[Appendix B, “Sample listProductCategories XML Request”](#)
 - `ListProductCategoriesResponse`—[Appendix B, “Sample listProductCategories XML Response”](#)
- `listProductGroups`
 - `ListProductGroupsRequest`
 - `ListProductGroupsResponse`
- `listProductSpecificationIds`
 - `ListProductSpecificationIdsRequest`—[Appendix B, “Sample listProductSpecificationIds XML Request”](#)
 - `ListProductSpecificationIdsResponse`—[Appendix B, “Sample listProductSpecificationIds XML Response”](#)
- `listProductSpecCharacteristicValues`
- `listProductSpecCharacteristicValuesRequest`—[Appendix B, “Sample listProductSpecCharacteristicValues XML Request”](#)
- `listProductSpecCharacteristicValuesResponse`—[Appendix B, “Sample listProductSpecCharacteristicValues XML Response”](#)

This section includes:

- [getProductSpecification, page 3-3](#)
- [listDeviceSpecifications, page 3-5](#)
- [listLogicalResourceSpecifications, page 3-6](#)
- [listProductCategories, page 3-7](#)
- [listProductSpecificationIds, page 3-8](#)

See [Appendix A, “HCSPProductCatalog.wsdl File”](#) for the ProductCatalog WSDL file.

See [Appendix B, “Sample ProductCatalog Data Service XML API Requests and Responses”](#) for samples of outbound request message and inbound server response message.

getProductSpecification

The getProductSpecification operation returns a ProductSpecification for the specified ProductId.

GetProductSpecificationRequest

[Table 3-1](#) lists the Logical Name, XPath, and Data Types for the GetProductSpecificationRequest operation.

Table 3-1 *GetProductSpecificationRequest*

Logical Name	XPath	Data Type	Comments/ Validation/ Rules
GetProductSpecificationRequest (extends OperationRequest)			
ProductNumber	GetProductSpecificationRequest/ ProductNumber	String	Identifier of the product.

GetProductSpecificationResponse

[Table 3-2](#) lists the Logical Name, XPath, Data Types, and Comments/Validation/Rules for the GetProductSpecificationResponse operation.

Table 3-2 *GetProductSpecificationResponse*

Logical Name	XPath	Data Type	Comments/ Validation/ Rules
GetProductSpecificationResponse (extends OperationResponse)			
ProductSpecification	ProductSpecification	ProductSpecification	Structure describing the product.
	Description	String	Description of the product.
	Name	String	Name of the product.
	productNumber	String	Identifier of the product.

Table 3-2 GetProductSpecificationResponse (continued)

Logical Name	XPath	Data Type	Comments/ Validation/ Rules
ProductSpecCharacteristic [*]	.../ProductSpecCharUse/ ProductSpecCharacteristic	List <i>ProductSpecCharacteristic</i>	Collection of attributes describing the product.
—	description	String	—
—	ID	String	—
—	isKey	Boolean	<i>True</i> if the attribute is a KEY of the product.
—	maxCardinality	Integer	Maximum number of occurrences.
—	minCardinality	Integer	Minimum number of occurrences. It is mandatory if the occurrences are more than 0.
—	name	String	—
—	unique	Boolean	Only for child characteristics.
—	valueType	String	—
ProdSpecCharacteristicValue[*]	.../ProductSpecCharacteristicEnumeratedBy/ ProductSpecCharacteristicValue	List <i>ProductSpecCharacteristicValue</i>	—
—	valueType	string	—
LogicalResourceSpec[*]	.../SupportedResourceSpecification/ LogicalResourceSpec	List <i>LogicalResourceSpec</i>	List of logical resources associated with the product.
—	objectId	String	—
Protocol[*]	.../SupportsProtocol/Protocol	List <i>Protocol</i>	Protocol of the logical resource.
—	commonName	String	—

Table 3-2 GetProductSpecificationResponse (continued)

Logical Name	XPath	Data Type	Comments/ Validation/ Rules
Child ProductSpecCharacteristic [*]	.../ProductSpecCharRelationship [CharRelationshipType = "Child"]	List <i>ProductSpecCharRelationship</i>	—
	charSpecSeq	Integer	—
	ProductSpecCharacteristic	ProductSpec Characteristic	Recursive relationship
KindOf ProductSpecification Relationship [*]	.../ProductSpecficiationRelationship [type="KindOf"]	ProductSpecification Relationship	Collection of relationships identifying the parent.
ProductSpecification	.../ProductSpecification	ProductSpecification	—
	productNumber	String	—
OrderDependency ProductSpecificationRelations hipDependency	.../ProductSpecificationRelationship (xsi:type="ProductSpecificationRelationship Dependency") [type="OrderDependency"]	ProductSpecificationRelationship Dependency	—
BusinesssInteractionType	.../BusinesssInteractionType	BusinesssInteractionType	—
	name	String	—
ProductSpecification	.../ProductSpecification	ProductSpecification	—
	productNumber	String	—
Supported LogicalResourceSpec [*]	.../SupportedResourceSpecification (xsi:type="LogicalResourceSpec")	LogicalResourceSpec	—
	objectID	String	—
Supports Protocol[*]	.../SupportsProtocol	Protocol	—
	commonName	String	—

listDeviceSpecifications

The listDeviceSpecifications operation returns the list of all the DeviceSpecifications.

This section includes:

- [ListDeviceSpecificationsRequest](#), page 3-6
- [ListDeviceSpecificationsResponse](#), page 3-6

ListDeviceSpecificationsRequest

Table 3-3 lists the Entity, Path/Attribute, and Data Types for the ListDeviceSpecificationsRequest operation.

Table 3-3 *ListDeviceSpecificationsRequest*

Entity	Path/Attribute	Data Type	Comments/Validation/Rules
ListDeviceSpecificationsRequest (extends OperationRequest)			
—	—	—	No inputs parameters.

ListDeviceSpecificationsResponse

Table 3-4 lists the Logical Name, XPath, and Data Types for the ListDeviceSpecificationsResponse operation.

Table 3-4 *ListDeviceSpecificationsResponse*

Logical Name	XPath	Data Type	Comments/Validation/Rules
ListDeviceSpecificationsResponse (extends OperationResponse)			
PhysicalDeviceSpecification[*]	PhysicalDeviceSpecification	List <i>PhysicalDeviceSpecification</i>	—
	commonName	String	—
	description	String	—
	objectID	String	—
ResourceSpecType	.../ResourceSpecType	ResourceSpecType	—
	commonName	String	—
Supported LogicalResourceSpec [*]	.../LogicalPhysicalResourceSpec/ LogicalResourceSpec	LogicalResourceSpec	—
	objectID	String	—

listLogicalResourceSpecifications

The listLogicalResourceSpecifications operation returns the list of all logical resource specifications. This section includes:

- [ListLogicalResourceSpecificationsRequest](#), page 3-7
- [ListLogicalResourceSpecificationsResponse](#), page 3-7

ListLogicalResourceSpecificationsRequest

Table 3-5 lists the Entity, Path/Attribute, and Data Types for the ListLogicalResourceSpecificationsRequest operation.

Table 3-5 *ListLogicalResourceSpecificationsRequest*

Entity	Path/Attribute	Data Type	Comments/Validation/Rules
ListLogicalResourceSpecificationsRequest (extends OperationRequest)			
—	—	—	No inputs parameters.

ListLogicalResourceSpecificationsResponse

Table 3-6 lists the Logical Name, XPath, and Data Types for the ListLogicalResourceSpecificationsResponse operation.

Table 3-6 *ListLogicalResourceSpecificationsResponse*

Logical Name	XPath	Data Type	Comments/Validation/Rules
ListLogicalResourceSpecificationsResponse (extends OperationRequest)			
LogicalResourceSpec [*]	LogicalResourceSpec	List <i>LogicalResourceSpec</i>	—
	commonName	String	—
	description	String	—
	objectID	String	—
	version	String	—
ResourceSpecType	.../ResourceSpecType	ResourceSpecType	—
	commonName	String	—
Supports Protocol[*]	.../SupportsProtocol	Protocol	—
	commonName	String	—

listProductCategories

The listProductCategories operation returns the list of all the logical product categories. This section includes:

- [ListProductCategoriesRequest](#), page 3-8
- [ListProductCategoriesResponse](#), page 3-8

ListProductCategoriesRequest

Table 3-7 lists the Entity, Path/Attribute, and Data Types for the ListProductCategoriesRequest operation.

Table 3-7 *ListProductCategoriesRequest*

Entity	Path/Attribute	Data Type	Comments/Validation/Rules
ListProductCategoriesRequest			
—	—	—	No inputs parameters.

ListProductCategoriesResponse

Table 3-8 lists the Logical Name, XPath, and Data Types for the ListProductCategoriesResponse operation.

Table 3-8 *ListProductCategoriesResponse*

Logical Name	XPath	Data Type	Comments/Validation/Rules
ListProductCategoriesResponse			
ProductCategory[*]	ProductCategory	List <i>ProductCategory</i>	—
	description	String	—
	type	String	—

listProductSpecificationIds

The listProductSpecificationIds operation returns the list of product specification IDs that are specified by the input parameters. This section includes:

- [ListProductSpecificationIdsRequest](#), page 3-8
- [ListProductSpecificationIdsResponse](#), page 3-9

ListProductSpecificationIdsRequest

The ListProductSpecificationIdsRequest operation supports the following query modes:

- Parent Only—Returns only the parent product specifications.
- Children of Parent—Returns all child products for the specified ParentProductId.
- Products in a category—Returns all products for the specified ProductCategoryType.

These three modes are independent of each other. This operation expects a single argument for each invocation.

Table 3-9 lists the Entity, Path/Attribute, Data Types, and Comments/Validation/Rules for the ListProductSpecificationIdsRequest operation.

Table 3-9 *ListProductSpecificationIdsRequest*

Entity	Path/Attribute	Data Type	Comments/Validation/Rules
ListProductSpecificationIdsRequest			
ParentOnly	ParentOnly	Boolean	Return only “parent” products.
ParentProductId	ParentProductId	String	Return only “child” products for specified parent product ID.
ProductCategoryType	ProductCategoryType	String	Return all products in the specified category.

ListProductSpecificationIdsResponse

[Table 3-10](#) lists the Logical Name, XPath, and Data Types for the ListProductSpecificationIdsResponse operation.

Table 3-10 *ListProductSpecificationIdsResponse*

Logical Name	XPath	Data Types	Comments/Validation/Rules
ListProductSpecificationIdsResponse			
ProductIds[*]	ProductIds	Array <i>String</i>	—

listProductSpecCharacteristicValues

The listProductSpecCharacteristicValues operation returns a list of product characteristic values for the specified product, attribute, and filter criteria. The listProductSpecCharacteristicValues operation is the only asynchronous operation. This section includes:

- [ListProductSpecCharacteristicValuesRequest](#), page 3-9
- [ListProductSpecCharacteristicValuesResponse](#), page 3-10

ListProductSpecCharacteristicValuesRequest

The ListProductSpecCharacteristicValues request takes a productNumber, a collection of productSpecCharacteristic IDs, and filter criteria. The FilterCriteria entity allows a choice of either a requestedGeographicSiteId or a requestedPhysicalDevice, which contains deviceName and capabilityName fields.

[Table 3-11](#) lists the Entities, Path/Attribute, and Data Types for the ListProductSpecCharacteristicValuesRequest operation.

Table 3-11 ListProductSpecCharacteristicValuesRequest

Entity	Path/Attribute	Data Type	Comments/Validation/Rules
ListProductSpecCharacteristicValuesRequest			
productNumber	productNumber	String	
ProductSpecCharacteristic Ids [*]	ProductSpecCharacteristicIds	Array <i>String</i>	Attribute IDs
FilterCriteria	FilterCriteria	FilterCriteria	—
—	requestedGeographicSite	String	Site ID
RequestedPhysicalDevice	RequestedPhysicalDevice	RequestedPhysicalDevice	Device information
—	deviceName	String	—
—	capabilityName	String	—

ListProductSpecCharacteristicValuesResponse

The ListProductSpecCharacteristicValues response is an asynchronous operation. The response message for this is the standard operation response message. For more information, see [Chapter 2, “OperationResponse.”](#)