

ServiceOrdering Conformance Profile

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Direct inquiries to the TM Forum office:

181 New Road, Suite 304

Parsippany, NJ 07054, USA

Tel No. +1 862 227 1648

TM Forum Web Page: www.tmforum.org

Table of Contents

NOTICE	1
Introduction - API description	4
Resource Model Conformance	5
API Mandatory Resources	5
General Notes on Resource Attribute Conformance	5
ServiceOrder Resource Mandatory Attributes	6
Notification Model Conformance	14
API Operations Conformance	15
Operation	15
Prefix	15
ServiceOrder Mandatory Operations	15
RETRIEVE Operation Conformance	16
ServiceOrder	16
Channels	16
Request Message Schema	16
Response Message Schema	16
Definitions for Filter	17
LIST Operation Conformance	18
ServiceOrder	18
Channels	18
Request Message Schema	18
Response Message Schema	18
Definitions for Filter	19
CREATE Operation Conformance	20
ServiceOrder	20
Channels	20
Request Message Schema	20
Response Message Schema	21
Expected Status Codes:	21
PATCH Operation Conformance	22
ServiceOrder	22
Channels	22
Request Message Schema	22
Response Message Schema	22
Expected Status Codes:	23
Patchable and Non Patchable Attributes:	23
DELETE Operation Conformance	25
ServiceOrder	25

Channels	25
Request Message Schema	25
Response Message Schema	25
Expected Status Codes:.....	26
Acknowledgements	27
Release History.....	27
Version History.....	27

Introduction - API description

The following document is the conformance specification of the Async API for Any management.

Resource Model Conformance

API Mandatory Resources

The following table indicates the mandatory resources for this API.

Resource Name	Comment
ServiceOrder	

General Notes on Resource Attribute Conformance

There are three situations that could occur for an attribute:

- Mandatory attribute,
- Mandatory attribute if the optional parent attribute is present,
- 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. CREATE, 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. RETRIEVE, LIST, CREATE), 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. retrieveTroubleTicket.commandRequest {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.

ServiceOrder Resource Mandatory Attributes

Mandatory attribute when parent is present	Rule
@type	M
id	M (in response messages)
orderDate	M (in response messages)
state	M (in response messages)
topicRef	M
errorMessage (if present)	
@type	M
errorMessage.serviceOrderItem (if present)	
@type	M
externalReference (if present)	
@type	M
name	M
topicRef	M
jeopardyAlert (if present)	
@type	M
jeopardyAlert.serviceOrderItem (if present)	
@type	M
milestone (if present)	
@type	M
milestone.serviceOrderItem (if present)	
@type	M
note (if present)	
@type	M
orderCharacteristic (if present)	
@type	M
name	M
orderCharacteristic.characteristicRelationship (if present)	
@type	M
id	M
relationshipType	M
orderRelationship (if present)	
@type	M

Mandatory attribute when parent is present		Rule
	id	M
	relationshipType	M
	topicRef	M
orderSpecification (if present)		
	@type	M
	id	M
	topicRef	M
relatedParty (if present)		
	@type	M
	role	M
relatedParty.partyOrPartyRole (if present)		
	@type	M
	id	M
	topicRef	M
serviceOrderItem (if present)		
	action	M
	id	M
	service	M
serviceOrderItem.appointment (if present)		
	@type	M
	id	M
	topicRef	M
serviceOrderItem.errorMessage (if present)		
	@type	M
serviceOrderItem.modifyPath (if present)		
	op	M
	path	M
serviceOrderItem.service (if present)		
	@type	M
	id	M
	serviceDate	M
	topicRef	M
serviceOrderItem.service.externalIdentifier (if present)		

Mandatory attribute when parent is present		Rule
	@type	M
	id	M
serviceOrderItem.service.feature (if present)		
	@type	M
	name	M
serviceOrderItem.service.feature.featureCharacteristic (if present)		
	@type	M
	name	M
serviceOrderItem.service.feature.featureCharacteristic.characteristicRelationship (if present)		
	@type	M
	id	M
	relationshipType	M
serviceOrderItem.service.feature.featureRelationship (if present)		
	@type	M
	id	M
	relationshipType	M
	topicRef	M
serviceOrderItem.service.feature.policyConstraint (if present)		
	@type	M
	id	M
	topicRef	M
serviceOrderItem.service.intent (if present)		
	@type	M
	expression	M
	id	M
	name	M
	topicRef	M
serviceOrderItem.service.intent.attachment (if present)		
	@type	M
	attachmentType	M

Mandatory attribute when parent is present		Rule
	id	M
	contentType	M
	topicRef	M
serviceOrderItem.service.intent.characteristic (if present)		
	@type	M
	name	M
serviceOrderItem.service.intent.characteristic.characteristicRelationship (if present)		
	@type	M
	id	M
	relationshipType	M
serviceOrderItem.service.intent.expression (if present)		
	@type	M
serviceOrderItem.service.intent.intentRelationship (if present)		
	@referredType	M
	@type	M
	id	M
	relationshipType	M
	topicRef	M
serviceOrderItem.service.intent.intentRelationship.associationSpec (if present)		
	@type	M
	id	M
	topicRef	M
serviceOrderItem.service.intent.intentSpecification (if present)		
	@type	M
	id	M
	topicRef	M
serviceOrderItem.service.intent.relatedParty (if present)		
	@type	M
	role	M
serviceOrderItem.service.intent.relatedParty.partyOrPartyRole (if present)		

Mandatory attribute when parent is present		Rule
	@type	M
	id	M
	topicRef	M
serviceOrderItem.service.note (if present)		
	@type	M
serviceOrderItem.service.place (if present)		
	@type	M
	place	M
	role	M
serviceOrderItem.service.place.place (if present)		
	@type	M
	id	M
	topicRef	M
serviceOrderItem.service.place.place.calendar (if present)		
	@type	M
	status	M
serviceOrderItem.service.place.place.calendar.hourPeriod (if present)		
	@type	M
serviceOrderItem.service.place.place.countryCode (if present)		
	@type	M
	topicRef	M
serviceOrderItem.service.place.place.externalIdentifier (if present)		
	@type	M
	id	M
serviceOrderItem.service.place.place.geographicLocation (if present)		
	@type	M
	id	M
	topicRef	M
serviceOrderItem.service.place.place.geographicSubAddress (if present)		
	@type	M

Mandatory attribute when parent is present		Rule
	topicRef	M
serviceOrderItem.service.place.place.geographicSubAddresses.subUnit (if present)		
	@type	M
	subUnitNumber	M
	subUnitType	M
serviceOrderItem.service.place.place.relatedParty (if present)		
	@type	M
	role	M
serviceOrderItem.service.place.place.relatedParty.partyOrPartyRole (if present)		
	@type	M
	id	M
	topicRef	M
serviceOrderItem.service.place.place.siteRelationship (if present)		
	@type	M
	id	M
	relationshipType	M
	topicRef	M
serviceOrderItem.service.relatedEntity (if present)		
	@type	M
	entity	M
	role	M
serviceOrderItem.service.relatedEntity.entity (if present)		
	@type	M
	id	M
	topicRef	M
serviceOrderItem.service.relatedParty (if present)		
	@type	M
	role	M
serviceOrderItem.service.relatedParty.partyOrPartyRole (if present)		
	@type	M

Mandatory attribute when parent is present		Rule
	id	M
	topicRef	M
serviceOrderItem.service.serviceCharacteristic (if present)		
	@type	M
	name	M
serviceOrderItem.service.serviceCharacteristic.characteristicRelationship (if present)		
	@type	M
	id	M
	relationshipType	M
serviceOrderItem.service.serviceOrderItem (if present)		
	@type	M
serviceOrderItem.service.serviceRelationship (if present)		
	@type	M
	relationshipType	M
serviceOrderItem.service.serviceRelationship.serviceRelationshipCharacteristic (if present)		
	@type	M
	name	M
serviceOrderItem.service.serviceRelationship.serviceRelationshipCharacteristic.characteristicRelationship (if present)		
	@type	M
	id	M
	relationshipType	M
serviceOrderItem.service.serviceSpecification (if present)		
	@type	M
	id	M
	topicRef	M
serviceOrderItem.service.supportingResource (if present)		
	@type	M
	id	M
	topicRef	M
serviceOrderItem.serviceOrderItemRelationship (if present)		

Mandatory attribute when parent is present		Rule
	@type	M
serviceOrderItem.serviceOrderItemRelationship.orderItem (if present)		
	@type	M
serviceOrderItem.state (if present)		
	@type	M
	topicRef	M

Notification Model Conformance

There are no mandatory notifications for this API.

API Operations Conformance

For every single resource, the following tables include mandatory operations.

Operation

Every operation consists of two parts:

- REQUEST: Publish a message on a 'commandRequest' channel.
- RESPONSE: Subscribe to the corresponding 'commandReply' channel to receive the response.

Prefix

All channel names are defined with a "{prefix}" parameter.

Let's take the example of {prefix}.tmfapi.ServiceOrder.v5.retrieveServiceOrder.commandRequest.

This topic name consists of two pieces:

1. a optional prefix **{prefix}**
2. a constant: **tmfapi.ServiceOrder.v5.retrieveServiceOrder.commandRequest**

Your application may support this channel both with and without a prefix, but the constant must always be present.

Without the prefix, the channel name is:

tmfapi.ServiceOrder.v5.retrieveServiceOrder.commandRequest

However, some organisations may prefix the channel name for administrative purposes, say to denote the name of a company, department, etc. When using a prefix, say 'acme' for a company named 'Acme Telecom', the channel name is:

acme.tmfapi.ServiceOrder.v5.retrieveServiceOrder.commandRequest

ServiceOrder Mandatory Operations

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

Uniform API Operation	Comment
RETRIEVE	Retrieve a ServiceOrder given it's id
LIST	Retrieve a list of ServiceOrders
CREATE	Create a ServiceOrder

RETRIEVE Operation Conformance

ServiceOrder

This operation retrieves a ServiceOrder entity.

Channels

REQUEST CHANNEL	{prefix}.serviceOrdering.v5.retrieveServiceOrder.commandRequest
REPLY CHANNEL	{prefix}.serviceOrdering.v5.retrieveServiceOrder.commandReply

Note: See the API Operations Conformance section above for more details on the request and reply channels.

Request Message Schema

Payload

The parameters for this operation are to be sent as headers.

Headers

Property		Mandatory/Optional
X-Correlation-Id		M
Reply-Channel		M
Parameters		M
	id	M
	fields	
Query-Filters		

Response Message Schema

Payload

The Payload is is a ServiceOrder resource entity.

Headers

Property	Mandatory/Optional
X-Correlation-Id	M
Status-Code	M

Property	Mandatory/Optional
X-Request-Channel	M

Expected Status Codes:

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

Definitions for Filter

- **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 request. Several elements can be applied to the filtered search as part of the 'filters' parameter. 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 RETRIEVE request payload can include the fields 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.

LIST Operation Conformance

ServiceOrder

This operation retrieves an array of ServiceOrder entities. Attribute selection is enabled for all first level attributes.

Channels

REQUEST CHANNEL	{prefix}.serviceOrdering.v5.listServiceOrder.commandRequest
REPLY CHANNEL	{prefix}.serviceOrdering.v5.listServiceOrder.commandReply

Note: See the API Operations Conformance section above for more details on the request and reply channels.

Request Message Schema

Payload

The parameters for this operation are to be sent as headers.

Headers

Property		Mandatory/Optional
X-Correlation-Id		M
Reply-Channel		M
Parameters		M
	fields	
	offset	
	limit	
Query-Filters		

Response Message Schema

Payload

The Payload is is an array of ServiceOrder resource entities.

Headers

Property	Mandatory/Optional
X-Correlation-Id	M
Status-Code	M
X-Total-Count	
X-Result-Count	
X-Request-Channel	M

Expected Status Codes:

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

Definitions for Filter

- **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 request. Several elements can be applied to the filtered search as part of the 'filters' parameter. 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 RETRIEVE request payload can include the fields 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.

CREATE Operation Conformance

ServiceOrder

This operation creates a ServiceOrder entity.

Channels

REQUEST CHANNEL	{prefix}.serviceOrdering.v5.createServiceOrder.commandRequest
REPLY CHANNEL	{prefix}.serviceOrdering.v5.createServiceOrder.commandReply

Note: See the API Operations Conformance section above for more details on the request and reply channels.

Request Message Schema

Payload

The Payload is is a ServiceOrder FVO resource entity.

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

Mandatory Attribute	Rule
@type	
serviceOrderItem	Mandatory. Indicate at least one.
serviceOrderItem.action	
serviceOrderItem.id	
serviceOrderItem.service	
serviceOrderItem.service.@type	

Headers

Property		Mandatory/Optional
X-Correlation-Id		M
Reply-Channel		M
Parameters		M
	fields	

Response Message Schema

Payload

The Payload is is a ServiceOrder resource entity.

Headers

Property	Mandatory/Optional
X-Correlation-Id	M
Status-Code	M
X-Request-Channel	M

Expected Status Codes:

Status Code	Mandatory/Optional
201 if successful	M

PATCH Operation Conformance

ServiceOrder

This operation updates partially a ServiceOrder entity.

Channels

REQUEST CHANNEL	{prefix}.serviceOrdering.v5.patchServiceOrder.commandRequest
REPLY CHANNEL	{prefix}.serviceOrdering.v5.patchServiceOrder.commandReply

Note: See the API Operations Conformance section above for more details on the request and reply channels.

Request Message Schema

Payload

The Payload is is a ServiceOrder MVO resource entity.

Headers

Property		Mandatory/Optional
X-Correlation-Id		M
Reply-Channel		M
Parameters		M
	id	M
	fields	

Response Message Schema

Payload

The Payload is is a ServiceOrder resource entity.

Headers

Property		Mandatory/Optional
X-Correlation-Id		M
Status-Code		M
X-Request-Channel		M

Expected Status Codes:

Status Code	Mandatory/Optional
200 if successful	M

Patchable and Non Patchable Attributes:

Non Patchable Attribute	Rule
@baseType	
@schemaLocation	
@type	
errorMessage	
href	
id	
jeopardyAlert	
milestone	
orderDate	

Patchable Attribute	Rule
cancellationDate	
cancellationReason	
category	
completionDate	
description	
expectedCompletionDate	
externalReference	
note	
notificationContact	
orderCharacteristic	
orderRelationship	
orderSpecification	
priority	
relatedParty	
requestedCompletionDate	
requestedStartDate	
serviceOrderItem	

Patchable Attribute	Rule
startDate	
state	

DELETE Operation Conformance

ServiceOrder

This operation deletes a ServiceOrder entity.

Channels

REQUEST CHANNEL	{prefix}.serviceOrdering.v5.deleteServiceOrder.commandRequest
REPLY CHANNEL	{prefix}.serviceOrdering.v5.deleteServiceOrder.commandReply

Note: See the API Operations Conformance section above for more details on the request and reply channels.

Request Message Schema

Payload

The parameters for this operation are to be sent as headers.

Headers

Property		Mandatory/Optional
X-Correlation-Id		M
Reply-Channel		M
Parameters		M
	id	M

Response Message Schema

Payload

There is no Payload defined for this channel

Headers

Property		Mandatory/Optional
X-Correlation-Id		M
Status-Code		M
X-Request-Channel		M

Expected Status Codes:

Status Code	Mandatory/Optional
204 if successful	M

Acknowledgements

Release History

Release Number	Date	Release led by:	Description

Version History

Version Number	Date	Modified by	Description