

# **TM Forum Specification**

# TroubleTicketConformance Profile

TMF621B TBD August 2023

Release: TBD	Status: TBD
Version: 5.0.0	IPR Mode: RAND

© TM Forum 2023. All Rights Reserved.



## **NOTICE**

Copyright © TM Forum 2023. All Rights Reserved.

This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published, and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this section are included on all such copies and derivative works. However, this document itself may not be modified in any way, including by removing the copyright notice or references to TM FORUM, except as needed for the purpose of developing any document or deliverable produced by a TM FORUM Collaboration Project Team (in which case the rules applicable to copyrights, as set forth in the TM FORUM IPR Policy, must be followed) or as required to translate it into languages other than English.

The limited permissions granted above are perpetual and will not be revoked by TM FORUM or its successors or assigns.

This document and the information contained herein is provided on an "AS IS" basis and TM FORUM DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY OWNERSHIP RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Direct inquiries to the TM Forum office:

4 Century Drive, Suite 100 Parsippany, NJ 07054, USA Tel No. +1 973 944 5100 Fax No. +1 973 988 7196

TM Forum Web Page: www.tmforum.org



# **Table of Contents**

NOTICE
Introduction - API description
Resource Model Conformance
API Mandatory Resources
General Notes on Resource Attribute Conformance.
TroubleTicket Resource Mandatory Attributes
Notification Model Conformance
API Operations Conformance
TroubleTicket Mandatory Operations
API GET Operation Conformance
Definitions for Filter
GET /troubleTicket?fields=&{filtering}
GET /troubleTicket/{id}?fields=&{filtering}
API POST Operation Conformance
POST /troubleTicket?fields=&{filtering}
API PATCH Operation Conformance
PATCH /troubleTicket/{id}?fields=&{filtering}
API DELETE Operation Conformance
DELETE /troubleTicket/{id}
Acknowledgements
Release History
Version History 12



# **Introduction - API description**

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



## **Resource Model Conformance**

#### **API Mandatory Resources**

The following table indicates the mandatory resources for this API.

Resource Name	Comment
TroubleTicket	

#### **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. 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.



## **TroubleTicket Resource Mandatory Attributes**

Mandatory attribute when parent is present	Rule
description	M
href	M (in response messages)
severity	М
ticketType	М
@type	М
attachment (if present)	
attachmentType	M
id	М
mimeType	M
@type	M
channel (if present)	
id	М
@type	М
externalIdentifier (if present)	
id	М
@type	M
note (if present)	
@type	M
relatedEntity (if present)	
entity	M
relatedEntity.entity	
id	М
@type	М
role	М
@type	М
relatedParty (if present)	
role	М
@type	М
relatedParty.partyOrPartyRole (if present)	



Mandatory attribute when parent is present	Rule
id	М
@type	М
statusChangeHistory (if present)	
@type	M
troubleTicketCharacteristic (if present)	
name	M
@type	M
troubleTicketCharacteristic.characteristicRelationship (if present)	
id	M
relationshipType	M
@type	M
troubleTicketRelationship (if present)	
id	M
relationshipType	M
@type	М
troubleTicketSpecification (if present)	
id	М
@type	М



# **Notification Model Conformance**

There are no mandatory notifications for this API.



# **API Operations Conformance**

For every single resource the following tables includes mandatory operations.

## **TroubleTicket Mandatory Operations**

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

Uniform API Operation	Comment
GET	
POST	
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	М
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 /troubleTicket?fields=...&{filtering}

List or find TroubleTicket objects.

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 /troubleTicket/{id}?fields=...&{filtering}

This operation retrieves a TroubleTicket entity. Attribute selection 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 /troubleTicket?fields=...&{filtering}

This operation creates a TroubleTicket entity.

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

Mandatory Attribute	Rule
description	
severity	
ticketType	
@type	



# **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 /troubleTicket/{id}?fields=...&{filtering}

This operation updates partially a TroubleTicket entity.

Non Patchable Attribute	Rule
creationDate	
href	
id	
lastUpdate	
statusChangeDate	
@baseType	@baseType is immutable
@schemaLocation	@schemaLocation is immutable
@type	@type is immutable

Patchable Attribute	Rule
attachment	
channel	
description	
expectedResolutionDate	
externalldentifier	
name	
note	
priority	
relatedEntity	
relatedParty	
requestedResolutionDate	
resolutionDate	

© TM Forum 2023. All Rights Reserved.



Patchable Attribute	Rule
severity	
status	
statusChangeHistory	
statusChangeReason	
ticketType	
troubleTicketCharacteristic	
troubleTicketRelationship	
troubleTicketSpecification	



# **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 /troubleTicket/{id}**

This operation deletes a TroubleTicket entity.



# Acknowledgements

## **Release History**

Release Number	Date	Release led by:	Description

## **Version History**

Version Number	Date	Modified by	Description