

TM Forum Specification

Test Case Management API Conformance Profile

TMF704B

Team Approved Date: 27-Jan-2021

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

Notice

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TABLE OF CONTENTS

Notice	2
TABLE OF CONTENTS	3
INTRODUCTION - API DESCRIPTION	4
RESOURCE MODEL CONFORMANCE	5
API MANDATORY RESOURCES	5
General Notes on Resource Attribute Conformance	5
NonFunctionalTestModel Resource Mandatory Attributes	6
TestCase Resource Mandatory Attributes	6
TestSuite Resource Mandatory Attributes	7
API OPERATIONS CONFORMANCE	8
NonFunctionalTestModel Mandatory Operations	8
TestCase Mandatory Operations	8
TestSuite Mandatory Operations	8
API GET OPERATION CONFORMANCE	9
Definitions for Filter	9
GET /nonFunctionalTestModel?fields=...&{filtering}	9
GET /nonFunctionalTestModel/{id}?fields=...&{filtering}	9
GET /testCase?fields=...&{filtering}	9
GET /testCase/{id}?fields=...&{filtering}	10
GET /testSuite?fields=...&{filtering}	10
GET /testSuite/{id}?fields=...&{filtering}	10
API POST OPERATION CONFORMANCE	11
POST /nonFunctionalTestModel	11
POST /testCase	11
POST /testSuite	11
ACKNOWLEDGEMENTS	13
Release History	13
Version History	13

INTRODUCTION - API DESCRIPTION

This API provides a standardized mechanism for the management of test artifacts related to functional and non-functional test specification. These include Test Cases, Test Suites, and Non-functional Test Models.

RESOURCE MODEL CONFORMANCE

API MANDATORY RESOURCES

The following table indicates the mandatory resources for this API.

Resource Name	Comment
NonFunctionalTestModel	Mandatory unless the TestCase or the TestSuite resource is present
TestCase	Mandatory unless the NonFunctionalTestModel or the TestSuite resource is present
TestSuite	Mandatory unless the NonFunctionalTestModel or the TestCase resource is present

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.

NonFunctionalTestModel Resource Mandatory Attributes

Mandatory attribute when parent is present	Rule
description	M
href	M (in response messages)
id	M (in response messages)
nonFunctionalTestModelDefinition	M
version	M
relatedParty (if present)	Array of RelatedPartyWithContactInfo
@referredType	M
attribute.characteristic (if present)	
name	M
value	M

TestCase Resource Mandatory Attributes

Mandatory attribute when parent is present	Rule
description	M
href	M (in response messages)
id	M (in response messages)
testCaseDefinition	M
version	M
relatedParty (if present)	Array of RelatedPartyWithContactInfo
@referredType	M
attribute.characteristic (if present)	
name	M

Mandatory attribute when parent is present		Rule
	value	M

TestSuite Resource Mandatory Attributes

Mandatory attribute when parent is present		Rule
	description	M
	href	M (in response messages)
	id	M (in response messages)
	testSuiteDefinition	M
	version	M
	relatedParty (if present)	Array of RelatedPartyWithContactInfo
	@referredType	M
	attribute.characteristic (if present)	
	name	M
	value	M

API OPERATIONS CONFORMANCE

For every single resource the following tables includes mandatory operations.

NonFunctionalTestModel Mandatory Operations

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

Uniform API Operation
GET
POST

TestCase Mandatory Operations

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

Uniform API Operation
GET
POST

TestSuite Mandatory Operations

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

Uniform API Operation
GET
POST

API GET OPERATION CONFORMANCE

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

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

Definitions for Filter

The following definitions apply to all the GET operations:

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

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

This operation list or find NonFunctionalTestModel entities

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

Filtering on sub-resources is optional for all compliance levels

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

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

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

Filtering on sub-resources is optional for all compliance levels

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

This operation list or find TestCase entities

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

Filtering on sub-resources is optional for all compliance levels

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

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

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

Filtering on sub-resources is optional for all compliance levels

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

This operation list or find TestSuite entities

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

Filtering on sub-resources is optional for all compliance levels

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

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

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

Filtering on sub-resources is optional for all compliance levels

API POST OPERATION CONFORMANCE

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

POST	Mandatory/Optional
Status Code 201 if resource created	M

POST /nonFunctionalTestModel

This operation creates a NonFunctionalTestModel entity.

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

Mandatory Attributes	Rule
description	
nonFunctionalTestModelDefinition	
version	

POST /testCase

This operation creates a TestCase entity.

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

Mandatory Attributes	Rule
description	
testCaseDefinition	
version	

POST /testSuite

This operation creates a TestSuite entity.

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

Mandatory Attributes	Rule
description	
testSuiteDefinition	
version	

ACKNOWLEDGEMENTS

Release History

Release Status	Date	Release led by:	Description
Pre-production	29-Jan-2021	Pierre Gauthier, TM Forum pgauthier@tmforum.org Edward Pershwitz, ITEA Technologies edward.pershwitz@iteatechnologies.com	First Release of the Document.

Version History

Release Status	Date	Release led by:	Description
4.0.0	29-Jan-2021	Alan Pope, TM Forum	Final edits prior to publication