

API PROFILE TEMPLATE



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Notice

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Executive Summary

The following document is meant to be used as a template for capturing API requirements. This material is used as an input for the creation of TMF RESTful specifications.

1. Introduction

< Please provide an introduction. This material will be used in the generation of the documentation for the API.

Clearly state the purpose of the interface. >

2. Summary

< Please provide a Summary of the API. This will also be used in the generation of the API documentation. The summary should describe the capabilities of the API>

3. Use Cases

< Please provide a list of the use cases related to the use of this API. This will help in scoping the API. >

3.1. <Use case>

<Please provide a description of the Use Case and its relationship with the API capabilities.>

4. Requirements

< Please provide a list of the requirements related to the use of this API. This will help in scoping the API operations further later. This basically provides the high level description for the operations supported by the API. The detailed operation description in term of the exact data, exception and the rest is done later in the document.

>

4.1. <Requirement name>

- Please provide a description of the interface requirements and its relationship with the API capabilities.
- Identify at a high level the API capabilities like Query, Update , Notify etc...
- Use the table below as a template to describe your API requirement.

For example the Export by Graph requirement

Export by Graph	<p><u>Export by Graph</u></p> <p>The Interface supports the capability for a Requesting System to query the Target System in order to return an identified set of attributes and their values associated to multiple Managed Object of interest as follows:</p> <ul style="list-style-type: none"> • The Requesting System specifies: Export control parameters <p>Entities of interest (mandatory):</p> <p>“Origin Object” (optional): the identifier of a Managed Object</p> <p>“Scope” :</p> <ul style="list-style-type: none"> ➤ “Target Object” (optional): a Managed Object different from the “Origin
-----------------	---

	<p>Object” or</p> <ul style="list-style-type: none"> ➤ “Target Type” (optional): an Object Class Name ➤ “Distance” (mandatory): an Integer value <p>“Association Names” (optional) a list of Association Names</p> <p>“Entity Type Names” (optional) a list of Object Class Names of the Information Model supported by the Target System.</p> <p>Attributes of interest</p> <ul style="list-style-type: none"> • Returned results
Source	TR189 R_TMF_GQ_II_0014 for more details on the execution of the operation.

5. Information Model

- Please provide a summary of the information entities used by the API.
- For each of them describe the attributes supported by the Entities.

5.1.<Entity>

<Provide a short description or a link to the documentation where the entity is defined>

5.1.1. <Entity Attributes>

<Provide a table describing the entity attributes. For each attribute indicate what is the type , the multiplicity and if the attribute is optional or mandatory. If you prefer you can use an XML Schema or a JSON representation.>

For example :

name	datatype	properties	description
ID	String	<ul style="list-style-type: none"> - multiplicity is 1 - unique - mandatory - AVC enabled 	A unique identifier for a catalog.
type	String	<ul style="list-style-type: none"> - multiplicity is 0..1 - unique - optional - AVC enabled 	A categorization of an entry in the catalog such as web or book.
validFor	TimePeriod	<ul style="list-style-type: none"> - multiplicity is 1 - unique - mandatory - AVC enabled 	The period of time during which the catalog is applicable.
name	String	<ul style="list-style-type: none"> - multiplicity is 1 - unique - mandatory - AVC enabled 	A word or phrase by which a catalog is known and distinguished from other catalogs.

5.1.2. Associations

Describe all associations relative to that entity. The associations will be used to add endpoints to this entity to navigate the relationship.

For example:

Relationship attribute	datatype	properties	description
catalogSpecification	CatalogSpecification	<ul style="list-style-type: none"> - multiplicity is 0..1 - aggregation is none - navigable - unique - optional - association is CatalogSpecDescribes 	
characteristicValue	CharacteristicValue	<ul style="list-style-type: none"> - multiplicity is * - aggregation is none - navigable - unique - optional - association is CharacteristicValueDescribes 	

6. Association Classes

Please provide a summary of the Associations used by the API.

For each them describe the endpoints and if required the attributes supported by the associations.

6.1. <Association>

<Provide a short description or a link to the documentation where the association is defined>

For example : CharValueUseRelationship

“A aggregation, migration, substitution, dependency, or exclusivity relationship between/among CharacteristicSpecValues.”

Use the table below to describe the endpoints of the association.

6.1.1. Endpoints

name	datatype	properties	description
_entitySpecCharValueUseRelationship1	EntitySpecCharValueUse	<ul style="list-style-type: none"> - multiplicity is * - aggregation is none - navigable - unique - optional - association is EntitySpecCharValueUseRelationship 	
_entitySpecCharValueUseRelationship	EntitySpecCharValueUse	<ul style="list-style-type: none"> - multiplicity is * - aggregation is none - navigable - unique - optional - association is EntitySpecCharValueUseRelationship 	

6.1.2. Attributes

Use the table below to describe the attributes of the association.

name	datatype	properties	description
charValueRelationshipType	String	<ul style="list-style-type: none"> - multiplicity is 0..1 - unique - optional 	A categorization of the relationship between values, such as aggregation, migration, substitution, dependency, exclusivity. A categorization of the relationship, such as aggregation, migration, substitution, dependency, exclusivity.
validFor	TimePeriod	<ul style="list-style-type: none"> - multiplicity is 0..1 - unique - optional 	The period for which the relationship is applicable. The period for which the relationship is applicable.

7. Notifications

- Provide a description of the Event Types supported by the API.
- For each event type provide a description of the Event attributes.

7.1. <Event Type>

Provide a description of the Event Type .

For example: ServiceCandidateAVC

*This is an attribute value change notification generated from the entity
org.tmforum.tip.service.spec.cat.ServiceCandidate*

Use the table below to describe the Event attributes.

name	datatype	properties	description
ID	String	- multiplicity is 0..1 - optional	A unique identifier for the ServiceCandidate.
name	String	- multiplicity is 0..1 - optional	A word or phrase that a ServiceCandidate is known and distinguished from other ServiceCandidate.
description	String	- multiplicity is 0..1 - optional	A narrative that explains the ServiceCandidate.
validFor	TimePeriod	- multiplicity is 0..1 - optional	The period of time during which the ServiceCandidate is applicable.
status	String	- multiplicity is 0..1 - optional	The condition at which the ServiceCandidate exists such as planned, active and Obsolete.

8. Service Interfaces

- Provide a description of the API in term of Service Interfaces.
- A Service Interface represents a logical grouping of capabilities.
- Each Service Interface will be translated in REST to a specific URI or API
- For each Interface try to group the requirements relative to CRUD and TASKS (long running transactions etc...)
- Try to be as specific as possible regarding the filtering requirements.

For example 2 Service interfaces available for Catalog Management are:

- ProductCatalog
- ServiceCatalog

8.1. <ServiceInterfaceName>

- Description : Provide a short description of the interface and its capabilities
- Operations: Provide a list of the operations supported by the interface
- Managed entities: Provide a list of the Managed Entities in scope of the interface
- Notifications: Provide a list of the event types supported by this interface.

8.2. <OperationName>

- For each operation describes the input and output parameters, if the operation is mandatory or optional. If the operation is extendable or not.
- Also describe the exceptions raised by the interface.

Please use the following table to describe the input and output arguments.

name	datatype	properties	description
objectToGet	ProductCategory	-input parameter -multiplicity is 1 -unique -passed by Id -mandatory	object to get, identified by EntityIdentifier
selectedAttributesNames	String	-input parameter -multiplicity is 0..* -unique	selected attribute names
object	ProductCategory	-output parameter -multiplicity is 1 -unique -passed by value -mandatory	object returned by value

9. Administrative Appendix

This Appendix provides additional background material about the TM Forum and this document. In general, sections may be included or omitted as desired, however a Document History must always be included.

9.1. Document History

9.1.1. Version History

<This section records the changes between this and the previous document version as it is edited by the team concerned. Note: this is an incremental number which does not have to match the release number and used for change control purposes only>

Version Number	Date Modified	Modified by:	Description of changes
1.0	DD/MMM/YY	<<name>>	Description e.g. first issue of document

9.1.2. Release History

< This section records the changes between this and the previous Official document release. The release number is the 'Marketing' number which this version of the document is first being assigned to >

Release Number	Date Modified	Modified by:	Description of changes
<<1.0>>	18/06/2013	<<Pierre Gauthier John Wilmes>	Description e.g. first issue of document

9.2. Company Contact Details

Company	Team Member Representative
Include all involved companies adding lines as necessary.	Name Title Email Phone Fax

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9.3. Acknowledgments

This document was prepared by the members of the TM Forum <<team name>> team:

- Name, Company, Editor
- Name, Company, position if appropriate (e.g. team leader)

Additional input was provided by the following people:

- Name, Company