

TM Forum Specification

Event Management API Conformance Profile

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INTRODUCTION - API DESCRIPTION

The Event Management API provides a standardized client interface to the enterprise event management system for creating, managing and receiving service-related events to (indicatively) drive automation workflows, notify other service providers of service outages and SLA violations, trigger Trouble Ticket creation, and enable more complex orchestration scenarios between management systems. The Event Management API can also be used to convey business level Events in support of other processes.

RESOURCE MODEL CONFORMANCE

API MANDATORY RESOURCES

The following table indicates the mandatory resources for this API.

Resource Name	Comment
Hub	
Event	
Topic	

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.

HUB RESOURCE MANDATORY ATTRIBUTES

Mandatory attribute when parent is present	Rule
callback	M
id	M

EVENT RESOURCE MANDATORY ATTRIBUTES

Mandatory attribute when parent is present	Rule
@type	M
event	M
eventId	M
eventTime	M
eventType	M
href	M
id	M
reportingSystem (if present)	
id	M
source (if present)	See conditions for EntityRef at reportingSystem
analyticCharacteristic (if present)	Array of Characteristic
name	M
value	M
	See conditions for Any at event
relatedParty (if present)	Array of RelatedParty
@referredType	M
id	M

TOPIC RESOURCE MANDATORY ATTRIBUTES

Mandatory attribute when parent is present	Rule
href	M
id	M
name	M

API OPERATIONS CONFORMANCE

For every single resource the following tables includes mandatory operations.

HUB MANDATORY OPERATIONS

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

Uniform API Operation
GET
POST

EVENT MANDATORY OPERATIONS

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

Uniform API Operation
POST

TOPIC MANDATORY OPERATIONS

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

Uniform API Operation
GET

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 sub properties. The tables below show which attributes need to be supported in top-level or contained resources.

GET /TOPIC?FIELDS=...&{FILTERING}

This operation list or find Topic 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 /TOPIC/{ID}?FIELDS=...&{FILTERING}

This operation retrieves a Topic 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 /TOPIC/{TOPICID}/HUB?FIELDS=...&{FILTERING}

This operation list or find Hub 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 /TOPIC/{TOPICID}/EVENT?FIELDS=...&{FILTERING}

This operation list or find Event 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 /TOPIC/{TOPICID}/HUB/{ID}?FIELDS=...&{FILTERING}

This operation retrieves a Hub 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 /TOPIC/{TOPICID}/EVENT/{ID}?FIELDS=...&{FILTERING}

This operation retrieves an Event 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 /HUB

Sets the communication endpoint address the service instance must use to deliver information about its health state, execution state, failures and metrics.

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

Mandatory Attributes	Rule
callback	

POST /TOPIC

This operation creates a Topic entity.

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

Mandatory Attributes	Rule
name	

POST /TOPIC/{TOPICID}/HUB

This operation creates a Hub entity.

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

Mandatory Attributes	Rule
callback	

POST /TOPIC/{TOPICID}/EVENT

This operation creates an Event entity.

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

Mandatory Attributes	Rule
event	
evnetId	
eventType	

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