

SOL003 - VNF Fault Management interface

Overview

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IMPORTANT

Please note that this file might be not aligned to the current version of the ETSI Group Specification it refers to. In case of discrepancies the published ETSI Group Specification takes precedence.

In clause 4.3.2 of ETSI GS NFV-SOL 003 v2.4.1, an attribute-based filtering mechanism is defined. This mechanism is currently not included in the corresponding OpenAPI design for this GS version. Changes to the attribute-based filtering mechanism are being considered in v2.5.1 of this GS for inclusion in the corresponding future ETSI NFV OpenAPI design. Please report bugs to <https://forge.etsi.org/rep/nfv/SOL002-SOL003/issues>

Version information

Version : 1.3.0-impl:etsi.org:ETSI_NFV_OpenAPI:1

License information

License : ETSI Forge copyright notice

License URL : <https://forge.etsi.org/etsi-forge-copyright-notice.txt>

Terms of service : null

URI scheme

BasePath : /vnffm/v1

Schemes : HTTPS

Consumes

- `application/json`

Produces

- `application/json`

External Docs

Description : ETSI GS NFV-SOL 003 V2.8.1

URL : https://www.etsi.org/deliver/etsi_gs/NFV-SOL/001_099/003/02.08.01_60/gs_NFV-SOL003v020801p.pdf

Paths

GET /alarms

Description

Get Alarm List. The API consumer can use this method to retrieve information about the alarm list. This method shall follow the provisions specified in the tables 7.4.2.3.2-1 and 7.4.2.3.2-2 for URI query parameters, request and response data structures, and response codes.

Parameters

Type	Name	Description	Schema
Header	Accept <i>required</i>	Content-Types that are acceptable for the response. Reference: IETF RFC 7231	string
Header	Authorization <i>optional</i>	The authorization token for the request. Reference: IETF RFC 7235	string
Header	Version <i>required</i>	Version of the API requested to use when responding to this request.	string
Query	filter <i>optional</i>	Attribute-based filtering expression according to clause 5.2 of ETSI GS NFV SOL 013. The VNFM shall support receiving this parameter as part of the URI query string. The NFVO may supply this parameter. The following attribute names shall be supported by the VNFM in the attribute-based filtering expression: id, managedObjectId, rootCauseFaultyResource/faultyResourceType, eventType, perceivedSeverity, probableCause.	string
Query	nextpage_opaque_marker <i>optional</i>	Marker to obtain the next page of a paged response. Shall be supported by the VNFM if the VNFM supports alternative 2 (paging) according to clause 5.4.2.1 of ETSI GS NFV-SOL 013 for this resource.	string

Responses

HTTP Code	Description	Schema
200	<p>200 OK Shall be returned when information about zero or more alarms has been queried successfully. The response body shall contain in an array the representations of zero or more alarms as defined in clause 7.5.2.4. If the "filter" URI parameter was supplied in the request, the data in the response body shall have been transformed according to the rules specified in clause 5.2.2 of ETSI GS NFV-SOL 013. If the VNFM supports alternative 2 (paging) according to clause 5.4.2.1 of ETSI GS NFV-SOL 013 for this resource, inclusion of the Link HTTP header in this response shall follow the provisions in clause 5.4.2.3 of ETSI GS NFV-SOL 013.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the request. Reference: IETF RFC 7231.</p> <p>Version (string) : Version of the API used in the response.</p> <p>Link (string) : Reference to other resources. Used for paging in the present document, see clause 4.7.2.1.</p>	Response 200

HTTP Code	Description	Schema
400	<p>400 BAD REQUEST 400 code can be returned in the following specified cases, the specific cause has to be proper specified in the "ProblemDetails" structure to be returned. If the request is malformed or syntactically incorrect (e.g. if the request URI contains incorrect query parameters or the payload body contains a syntactically incorrect data structure), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. If the response to a GET request which queries a container resource would be so big that the performance of the API producer is adversely affected, and the API producer does not support paging for the affected resource, it shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. If there is an application error related to the client's input that cannot be easily mapped to any other HTTP response code ("catch all error"), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and shall include in the "detail" attribute more information about the source of the problem. If the request contains a malformed access token, the API producer should respond with this response. The details of the error shall be returned in the WWW Authenticate HTTP header, as defined in IETF RFC 6750 and IETF RFC 7235. The ProblemDetails structure may be provided. The use of this HTTP error response code described above is applicable to the use of the OAuth 2.0 for the authorization of API requests and notifications, as defined in clauses 4.5.3.3 and 4.5.3.4.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 400</p>

HTTP Code	Description	Schema
401	<p>401 UNAUTHORIZED If the request contains no access token even though one is required, or if the request contains an authorization token that is invalid (e.g. expired or revoked), the API producer should respond with this response. The details of the error shall be returned in the WWW-Authenticate HTTP header, as defined in IETF RFC 6750 and IETF RFC 7235. The ProblemDetails structure may be provided.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 401</p>
403	<p>403 FORBIDDEN If the API consumer is not allowed to perform a particular request to a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided. It should include in the "detail" attribute information about the source of the problem, and may indicate how to solve it.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 403</p>

HTTP Code	Description	Schema
404	<p>404 NOT FOUND If the API producer did not find a current representation for the resource addressed by the URI passed in the request or is not willing to disclose that one exists, it shall respond with this response code. The "ProblemDetails" structure may be provided, including in the "detail" attribute information about the source of the problem, e.g. a wrong resource URI variable. This response code is not appropriate in case the resource addressed by the URI is a container resource which is designed to contain child resources, but does not contain any child resource at the time the request is received. For a GET request to an existing empty container resource, a typical response contains a 200 OK response code and a payload body with an empty array.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 404
405	<p>405 METHOD NOT ALLOWED If a particular HTTP method is not supported for a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 405
406	<p>406 NOT ACCEPTABLE If the "Accept" HTTP header does not contain at least one name of a content type that is acceptable to the API producer, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 406

HTTP Code	Description	Schema
422	<p>422 UNPROCESSABLE ENTITY If the payload body of a request contains syntactically correct data (e.g. well-formed JSON) but the data cannot be processed (e.g. because it fails validation against a schema), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. This error response code is only applicable for methods that have a request body.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 422</p>
500	<p>500 INTERNAL SERVER ERROR If there is an application error not related to the client's input that cannot be easily mapped to any other HTTP response code ("catch all error"), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and shall include in the "detail" attribute more information about the source of the problem.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 500</p>
503	<p>503 SERVICE UNAVAILABLE If the API producer encounters an internal overload situation of itself or of a system it relies on, it should respond with this response code, following the provisions in IETF RFC 7231 for the use of the "Retry-After" HTTP header and for the alternative to refuse the connection. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 503</p>

HTTP Code	Description	Schema
504	<p>504 GATEWAY TIMEOUT If the API producer encounters a timeout while waiting for a response from an upstream server (i.e. a server that the API producer communicates with when fulfilling a request), it should respond with this response code.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 504

Response 200

Name	Description	Schema
_links <i>required</i>	Links for this resource.	_links
ackState <i>required</i>	Acknowledgement state of the alarm. Permitted values: * UNACKNOWLEDGED * ACKNOWLEDGED.	enum (UNACKNOWLEDGED, ACKNOWLEDGED)
alarmAcknowledgedTime <i>optional</i>	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
alarmChangeTime <i>optional</i>	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
alarmClearedTime <i>optional</i>	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
alarmRaisedTime <i>required</i>	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
correlatedAlarmIds <i>optional</i>	List of identifiers of other alarms correlated to this fault.	< string > array

Name	Description	Schema
eventTime <i>required</i>	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
eventType <i>required</i>	The enumeration EventType represents those types of events that trigger an alarm. * COMMUNICATIONS_ALARM: An alarm of this type is associated with the procedure and/or process required conveying information from one point to another (ITU-T Recommendation X.733). * PROCESSING_ERROR_ALARM: An alarm of this type is associated with a software or processing fault (ITU-T Recommendation X.733). * ENVIRONMENTAL_ALARM: An alarm of this type is associated with a condition related to an enclosure in which the equipment resides (ITU-T Recommendation X.733). * QOS_ALARM: An alarm of this type is associated with degradation in the quality of a service (ITU-T Recommendation X.733). * EQUIPMENT_ALARM: An alarm of this type is associated with an equipment fault (ITU-T Recommendation X.733).	enum (COMMUNICATIONS_ALARM, PROCESSING_ERROR_ALARM, ENVIRONMENTAL_ALARM, QOS_ALARM, EQUIPMENT_ALARM)
faultDetails <i>optional</i>	Provides additional information about the fault.	< string > array
faultType <i>optional</i>	Additional information to clarify the type of the fault.	string
id <i>required</i>	An identifier with the intention of being globally unique.	string
isRootCause <i>required</i>	Attribute indicating if this fault is the root for other correlated alarms. If true, then the alarms listed in the attribute "correlatedAlarmIds" are caused by this fault.	boolean
managedObjectId <i>required</i>	An identifier with the intention of being globally unique.	string

Name	Description	Schema
perceivedSeverity <i>required</i>	Indicates the relative level of urgency for operator attention. * CRITICAL: The Critical severity level indicates that a service affecting condition has occurred and an immediate corrective action is required. Such a severity can be reported, for example, when a managed object becomes totally out of service and its capability needs to be restored (ITU-T Recommendation X.733). * MAJOR: The Major severity level indicates that a service affecting condition has developed and an urgent corrective action is required. Such a severity can be reported, for example, when there is a severe degradation in the capability of the managed object and its full capability needs to be restored (ITU-T Recommendation X.733). * MINOR: The Minor severity level indicates the existence of a non-service affecting fault condition and that corrective action should be taken in order to prevent a more serious (for example, service affecting) fault. Such a severity can be reported, for example, when the detected alarm condition is not currently degrading the capacity of the managed object (ITU-T Recommendation X.733). * WARNING: The Warning severity level indicates the detection of a potential or impending service affecting fault, before any significant effects have been felt. Action should be taken to further diagnose (if necessary) and correct the problem in order to prevent it from becoming a more serious service affecting fault (ITU-T Recommendation X.733). * INDETERMINATE: The Indeterminate severity level indicates that the severity level cannot be determined (ITU-T Recommendation X.733). * CLEARED: The Cleared severity level indicates the clearing of one or more previously reported alarms. This alarm clears all alarms for this managed object that have the same Alarm type, Probable cause and Specific problems (if given) (ITU-T Recommendation X.733).	enum (CRITICAL, MAJOR, MINOR, WARNING, INDETERMINATE, CLEARED)
probableCause <i>required</i>	Information about the probable cause of the fault.	string
rootCauseFaultyResources <i>optional</i>	This type represents the faulty virtual resources that have a negative impact on a VNF.	rootCauseFaultyResource
vnfcInstances <i>optional</i>	Identifiers of the affected VNFC instances. Each identifier references the "id" attribute in a "VnfcInfo" structure. Shall be present if the alarm affects at least one VNFC instance.	< string > array

links

Name	Description	Schema
objectInstance <i>optional</i>	This type represents a link to a resource using an absolute URI.	objectInstance
self <i>required</i>	This type represents a link to a resource using an absolute URI.	self

objectInstance

Name	Description	Schema
href <i>required</i>	String formatted according to IETF RFC 3986.	string

self

Name	Description	Schema
href <i>required</i>	String formatted according to IETF RFC 3986.	string

rootCauseFaultyResource

Name	Description	Schema
faultyResource <i>required</i>	This type represents the information that allows addressing a virtualised resource that is used by a VNF instance. Information about the resource is available from the VIM.	faultyResource
faultyResourceType <i>required</i>	The enumeration FaultyResourceType represents those types of faulty resource.	enum (COMPUTE, STORAGE, NETWORK)

faultyResource

Name	Description	Schema
resourceId <i>required</i>	An identifier maintained by the VIM or other resource provider. It is expected to be unique within the VIM instance.	string

Name	Description	Schema
resourceProviderId <i>optional</i>	An identifier with the intention of being globally unique.	string
vimConnectionId <i>optional</i>	An identifier with the intention of being globally unique.	string
vimLevelResourceType <i>optional</i>	The value set of the "vimLevelResourceType" attribute is within the scope of the VIM or the resource provider and can be used as information that complements the ResourceHandle. This value set is different from the value set of the "type" attribute in the ResourceDefinition (refer to clause 9.5.3.2 in SOL003).	string

Response 400

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 401

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 403

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 404

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 405

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 406

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 422

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 500

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 503

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 504

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

GET /alarms/{alarmId}

Description

The API consumer can use this method to read an individual alarm. This method shall follow the provisions specified in the tables 7.4.3.3.2-1 and 7.4.3.3.2-2 for URI query parameters, request and response data structures, and response codes.

Parameters

Type	Name	Description	Schema
Header	Accept <i>required</i>	Content-Types that are acceptable for the response. Reference: IETF RFC 7231	string
Header	Authorization <i>optional</i>	The authorization token for the request. Reference: IETF RFC 7235	string
Header	Content-Type <i>required</i>	The MIME type of the body of the request. Reference: IETF RFC 7231	string
Header	Version <i>required</i>	Version of the API requested to use when responding to this request.	string
Path	alarmId <i>required</i>	Identifier of the alarm. This identifier can be retrieved from the "id" attribute of the "alarm" attribute in the AlarmNotification or AlarmClearedNotification. It can also be retrieved from the "id" attribute of the applicable array element in the payload body of the response to a GET request to the "Alarms" resource.	string

Responses

HTTP Code	Description	Schema
200	<p>200 OK Shall be returned when information about an individual alarm has been read successfully. The response body shall contain a representation of the individual alarm</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the request. Reference: IETF RFC 7231.</p>	Response 200

HTTP Code	Description	Schema
400	<p>400 BAD REQUEST 400 code can be returned in the following specified cases, the specific cause has to be proper specified in the "ProblemDetails" structure to be returned. If the request is malformed or syntactically incorrect (e.g. if the request URI contains incorrect query parameters or the payload body contains a syntactically incorrect data structure), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. If the response to a GET request which queries a container resource would be so big that the performance of the API producer is adversely affected, and the API producer does not support paging for the affected resource, it shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. If there is an application error related to the client's input that cannot be easily mapped to any other HTTP response code ("catch all error"), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and shall include in the "detail" attribute more information about the source of the problem. If the request contains a malformed access token, the API producer should respond with this response. The details of the error shall be returned in the WWW Authenticate HTTP header, as defined in IETF RFC 6750 and IETF RFC 7235. The ProblemDetails structure may be provided. The use of this HTTP error response code described above is applicable to the use of the OAuth 2.0 for the authorization of API requests and notifications, as defined in clauses 4.5.3.3 and 4.5.3.4.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 400</p>

HTTP Code	Description	Schema
401	<p>401 UNAUTHORIZED If the request contains no access token even though one is required, or if the request contains an authorization token that is invalid (e.g. expired or revoked), the API producer should respond with this response. The details of the error shall be returned in the WWW-Authenticate HTTP header, as defined in IETF RFC 6750 and IETF RFC 7235. The ProblemDetails structure may be provided.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 401</p>
403	<p>403 FORBIDDEN If the API consumer is not allowed to perform a particular request to a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided. It should include in the "detail" attribute information about the source of the problem, and may indicate how to solve it.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 403</p>

HTTP Code	Description	Schema
404	<p>404 NOT FOUND If the API producer did not find a current representation for the resource addressed by the URI passed in the request or is not willing to disclose that one exists, it shall respond with this response code. The "ProblemDetails" structure may be provided, including in the "detail" attribute information about the source of the problem, e.g. a wrong resource URI variable. This response code is not appropriate in case the resource addressed by the URI is a container resource which is designed to contain child resources, but does not contain any child resource at the time the request is received. For a GET request to an existing empty container resource, a typical response contains a 200 OK response code and a payload body with an empty array.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 404
405	<p>405 METHOD NOT ALLOWED If a particular HTTP method is not supported for a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 405
406	<p>406 NOT ACCEPTABLE If the "Accept" HTTP header does not contain at least one name of a content type that is acceptable to the API producer, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 406

HTTP Code	Description	Schema
422	<p>422 UNPROCESSABLE ENTITY If the payload body of a request contains syntactically correct data (e.g. well-formed JSON) but the data cannot be processed (e.g. because it fails validation against a schema), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. This error response code is only applicable for methods that have a request body.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 422</p>
500	<p>500 INTERNAL SERVER ERROR If there is an application error not related to the client's input that cannot be easily mapped to any other HTTP response code ("catch all error"), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and shall include in the "detail" attribute more information about the source of the problem.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 500</p>
503	<p>503 SERVICE UNAVAILABLE If the API producer encounters an internal overload situation of itself or of a system it relies on, it should respond with this response code, following the provisions in IETF RFC 7231 for the use of the "Retry-After" HTTP header and for the alternative to refuse the connection. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 503</p>

HTTP Code	Description	Schema
504	<p>504 GATEWAY TIMEOUT If the API producer encounters a timeout while waiting for a response from an upstream server (i.e. a server that the API producer communicates with when fulfilling a request), it should respond with this response code.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 504

Response 200

Name	Description	Schema
_links <i>required</i>	Links for this resource.	_links
ackState <i>required</i>	Acknowledgement state of the alarm. Permitted values: * UNACKNOWLEDGED * ACKNOWLEDGED.	enum (UNACKNOWLEDGED, ACKNOWLEDGED)
alarmAcknowledgedTime <i>optional</i>	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
alarmChangeTime <i>optional</i>	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
alarmClearedTime <i>optional</i>	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
alarmRaisedTime <i>required</i>	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
correlatedAlarmIds <i>optional</i>	List of identifiers of other alarms correlated to this fault.	< string > array

Name	Description	Schema
eventTime <i>required</i>	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
eventType <i>required</i>	The enumeration EventType represents those types of events that trigger an alarm. * COMMUNICATIONS_ALARM: An alarm of this type is associated with the procedure and/or process required conveying information from one point to another (ITU-T Recommendation X.733). * PROCESSING_ERROR_ALARM: An alarm of this type is associated with a software or processing fault (ITU-T Recommendation X.733). * ENVIRONMENTAL_ALARM: An alarm of this type is associated with a condition related to an enclosure in which the equipment resides (ITU-T Recommendation X.733). * QOS_ALARM: An alarm of this type is associated with degradation in the quality of a service (ITU-T Recommendation X.733). * EQUIPMENT_ALARM: An alarm of this type is associated with an equipment fault (ITU-T Recommendation X.733).	enum (COMMUNICATIONS_ALARM, PROCESSING_ERROR_ALARM, ENVIRONMENTAL_ALARM, QOS_ALARM, EQUIPMENT_ALARM)
faultDetails <i>optional</i>	Provides additional information about the fault.	< string > array
faultType <i>optional</i>	Additional information to clarify the type of the fault.	string
id <i>required</i>	An identifier with the intention of being globally unique.	string
isRootCause <i>required</i>	Attribute indicating if this fault is the root for other correlated alarms. If true, then the alarms listed in the attribute "correlatedAlarmIds" are caused by this fault.	boolean
managedObject id <i>required</i>	An identifier with the intention of being globally unique.	string

Name	Description	Schema
perceivedSeverity <i>required</i>	Indicates the relative level of urgency for operator attention. * CRITICAL: The Critical severity level indicates that a service affecting condition has occurred and an immediate corrective action is required. Such a severity can be reported, for example, when a managed object becomes totally out of service and its capability needs to be restored (ITU-T Recommendation X.733). * MAJOR: The Major severity level indicates that a service affecting condition has developed and an urgent corrective action is required. Such a severity can be reported, for example, when there is a severe degradation in the capability of the managed object and its full capability needs to be restored (ITU-T Recommendation X.733). * MINOR: The Minor severity level indicates the existence of a non-service affecting fault condition and that corrective action should be taken in order to prevent a more serious (for example, service affecting) fault. Such a severity can be reported, for example, when the detected alarm condition is not currently degrading the capacity of the managed object (ITU-T Recommendation X.733). * WARNING: The Warning severity level indicates the detection of a potential or impending service affecting fault, before any significant effects have been felt. Action should be taken to further diagnose (if necessary) and correct the problem in order to prevent it from becoming a more serious service affecting fault (ITU-T Recommendation X.733). * INDETERMINATE: The Indeterminate severity level indicates that the severity level cannot be determined (ITU-T Recommendation X.733). * CLEARED: The Cleared severity level indicates the clearing of one or more previously reported alarms. This alarm clears all alarms for this managed object that have the same Alarm type, Probable cause and Specific problems (if given) (ITU-T Recommendation X.733).	enum (CRITICAL, MAJOR, MINOR, WARNING, INDETERMINATE, CLEARED)
probableCause <i>required</i>	Information about the probable cause of the fault.	string
rootCauseFaultyResources <i>optional</i>	This type represents the faulty virtual resources that have a negative impact on a VNF.	rootCauseFaultyResource
vnfcInstances <i>optional</i>	Identifiers of the affected VNFC instances. Each identifier references the "id" attribute in a "VnfcInfo" structure. Shall be present if the alarm affects at least one VNFC instance.	< string > array

links

Name	Description	Schema
objectInstance <i>optional</i>	This type represents a link to a resource using an absolute URI.	objectInstance
self <i>required</i>	This type represents a link to a resource using an absolute URI.	self

objectInstance

Name	Description	Schema
href <i>required</i>	String formatted according to IETF RFC 3986.	string

self

Name	Description	Schema
href <i>required</i>	String formatted according to IETF RFC 3986.	string

rootCauseFaultyResource

Name	Description	Schema
faultyResource <i>required</i>	This type represents the information that allows addressing a virtualised resource that is used by a VNF instance. Information about the resource is available from the VIM.	faultyResource
faultyResourceType <i>required</i>	The enumeration FaultyResourceType represents those types of faulty resource.	enum (COMPUTE, STORAGE, NETWORK)

faultyResource

Name	Description	Schema
resourceId <i>required</i>	An identifier maintained by the VIM or other resource provider. It is expected to be unique within the VIM instance.	string

Name	Description	Schema
resourceProviderId <i>optional</i>	An identifier with the intention of being globally unique.	string
vimConnectionId <i>optional</i>	An identifier with the intention of being globally unique.	string
vimLevelResourceType <i>optional</i>	The value set of the "vimLevelResourceType" attribute is within the scope of the VIM or the resource provider and can be used as information that complements the ResourceHandle. This value set is different from the value set of the "type" attribute in the ResourceDefinition (refer to clause 9.5.3.2 in SOL003).	string

Response 400

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 401

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 403

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 404

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 405

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 406

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 422

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 500

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 503

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 504

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

PATCH /alarms/{alarmId}

Description

Acknowledge Alarm. This method modifies an "Individual alarm" resource. This method shall follow the provisions specified in the tables 7.4.3.3.4-1 and 7.4.3.3.4-2 for URI query parameters, request and response data structures, and response codes.

Parameters

Type	Name	Description	Schema
Header	Accept <i>required</i>	Content-Types that are acceptable for the response. Reference: IETF RFC 7231	string
Header	Authorization <i>optional</i>	The authorization token for the request. Reference: IETF RFC 7235	string
Header	Content-Type <i>required</i>	The Content-Type header shall be set to "application/merge-patch+json" according to IETF RFC 7396.	enum (application/merge-patch+json)
Header	Version <i>required</i>	Version of the API requested to use when responding to this request.	string
Path	alarmId <i>required</i>	Identifier of the alarm. This identifier can be retrieved from the "id" attribute of the "alarm" attribute in the AlarmNotification or AlarmClearedNotification. It can also be retrieved from the "id" attribute of the applicable array element in the payload body of the response to a GET request to the "Alarms" resource.	string
Body	AlarmModifications <i>required</i>	The VNF creation parameters	AlarmModifications

AlarmModifications

Name	Description	Schema
ackState <i>required</i>	New value of the "ackState" attribute in "Alarm". Permitted values: * ACKNOWLEDGED * UNACKNOWLEDGED	enum (ACKNOWLEDGED, UNACKNOWLEDGED)

Responses

HTTP Code	Description	Schema
200	<p>200 OK Shall be returned when the request has been accepted and completed. The response body shall contain attribute modifications for an "Individual alarm" resource (see clause 7.5.2.4).</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the request. Reference: IETF RFC 7231.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p>	<p>Response 200</p>

HTTP Code	Description	Schema
400	<p>400 BAD REQUEST 400 code can be returned in the following specified cases, the specific cause has to be proper specified in the "ProblemDetails" structure to be returned. If the request is malformed or syntactically incorrect (e.g. if the request URI contains incorrect query parameters or the payload body contains a syntactically incorrect data structure), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. If the response to a GET request which queries a container resource would be so big that the performance of the API producer is adversely affected, and the API producer does not support paging for the affected resource, it shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. If there is an application error related to the client's input that cannot be easily mapped to any other HTTP response code ("catch all error"), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and shall include in the "detail" attribute more information about the source of the problem. If the request contains a malformed access token, the API producer should respond with this response. The details of the error shall be returned in the WWW Authenticate HTTP header, as defined in IETF RFC 6750 and IETF RFC 7235. The ProblemDetails structure may be provided. The use of this HTTP error response code described above is applicable to the use of the OAuth 2.0 for the authorization of API requests and notifications, as defined in clauses 4.5.3.3 and 4.5.3.4.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 400</p>

HTTP Code	Description	Schema
401	<p>401 UNAUTHORIZED If the request contains no access token even though one is required, or if the request contains an authorization token that is invalid (e.g. expired or revoked), the API producer should respond with this response. The details of the error shall be returned in the WWW-Authenticate HTTP header, as defined in IETF RFC 6750 and IETF RFC 7235. The ProblemDetails structure may be provided.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 401</p>
403	<p>403 FORBIDDEN If the API consumer is not allowed to perform a particular request to a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided. It should include in the "detail" attribute information about the source of the problem, and may indicate how to solve it.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 403</p>

HTTP Code	Description	Schema
404	<p>404 NOT FOUND If the API producer did not find a current representation for the resource addressed by the URI passed in the request or is not willing to disclose that one exists, it shall respond with this response code. The "ProblemDetails" structure may be provided, including in the "detail" attribute information about the source of the problem, e.g. a wrong resource URI variable. This response code is not appropriate in case the resource addressed by the URI is a container resource which is designed to contain child resources, but does not contain any child resource at the time the request is received. For a GET request to an existing empty container resource, a typical response contains a 200 OK response code and a payload body with an empty array.</p> <p>Headers : Content-Type (string) : The MIME type of the body of the response. WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token. Version (string) : Version of the API used in the response.</p>	Response 404
405	<p>405 METHOD NOT ALLOWED If a particular HTTP method is not supported for a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers : Content-Type (string) : The MIME type of the body of the response. WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token. Version (string) : Version of the API used in the response.</p>	Response 405
406	<p>406 NOT ACCEPTABLE If the "Accept" HTTP header does not contain at least one name of a content type that is acceptable to the API producer, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers : Content-Type (string) : The MIME type of the body of the response. WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token. Version (string) : Version of the API used in the response.</p>	Response 406

HTTP Code	Description	Schema
409	<p>409 CONFLICT</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 409
412	<p>412 PRECONDITION FAILED Error: A precondition given in an HTTP request header is not fulfilled. Typically, this is due to an ETag mismatch, indicating that the resource was modified by another entity. The response body should contain a ProblemDetails structure, in which the "detail" attribute should convey more information about the error.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 412
422	<p>422 UNPROCESSABLE ENTITY If the payload body of a request contains syntactically correct data (e.g. well-formed JSON) but the data cannot be processed (e.g. because it fails validation against a schema), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. This error response code is only applicable for methods that have a request body.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 422

HTTP Code	Description	Schema
500	<p>500 INTERNAL SERVER ERROR If there is an application error not related to the client's input that cannot be easily mapped to any other HTTP response code ("catch all error"), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and shall include in the "detail" attribute more information about the source of the problem.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 500
503	<p>503 SERVICE UNAVAILABLE If the API producer encounters an internal overload situation of itself or of a system it relies on, it should respond with this response code, following the provisions in IETF RFC 7231 for the use of the "Retry-After" HTTP header and for the alternative to refuse the connection. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 503
504	<p>504 GATEWAY TIMEOUT If the API producer encounters a timeout while waiting for a response from an upstream server (i.e. a server that the API producer communicates with when fulfilling a request), it should respond with this response code.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 504

Response 200

Name	Description	Schema
ackState <i>required</i>	New value of the "ackState" attribute in "Alarm". Permitted values: * ACKNOWLEDGED * UNACKNOWLEDGED	enum (ACKNOWLEDGED, UNACKNOWLEDGE D)

Response 400

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 401

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 403

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 404

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 405

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 406

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 409

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 412

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 422

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 500

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 503

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 504

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

POST /api_versions

Description

This method is not supported. When this method is requested on this resource, the API producer shall return a "405 Method Not Allowed" response

Parameters

Type	Name	Description	Schema
Header	Version <i>optional</i>	Version of the API requested to use when responding to this request.	string

Responses

HTTP Code	Description	Schema
405	<p>405 METHOD NOT ALLOWED If a particular HTTP method is not supported for a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 405

Response 405

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

GET /api_versions

Description

The GET method reads API version information. This method shall follow the provisions specified in table 4.6.3.3.2-1 for request and response data structures, and response codes. URI query parameters are not supported.

Parameters

Type	Name	Description	Schema
Header	Version <i>optional</i>	Version of the API requested to use when responding to this request.	string

Responses

HTTP Code	Description	Schema
200	<p>200 OK API version information was read successfully. The response body shall contain 4.4 API version information, as defined in clause 4.4.1.13.</p> <p>Headers : Content-Type (string) : The MIME type of the body of the response. Version (string) : The used API version.</p>	Response 200
400	<p>400 BAD REQUEST 400 code can be returned in the following specified cases, the specific cause has to be proper specified in the "ProblemDetails" structure to be returned. If the request is malformed or syntactically incorrect (e.g. if the request URI contains incorrect query parameters or the payload body contains a syntactically incorrect data structure), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. If the response to a GET request which queries a container resource would be so big that the performance of the API producer is adversely affected, and the API producer does not support paging for the affected resource, it shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. If there is an application error related to the client's input that cannot be easily mapped to any other HTTP response code ("catch all error"), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and shall include in the "detail" attribute more information about the source of the problem. If the request contains a malformed access token, the API producer should respond with this response. The details of the error shall be returned in the WWW Authenticate HTTP header, as defined in IETF RFC 6750 and IETF RFC 7235. The ProblemDetails structure may be provided. The use of this HTTP error response code described above is applicable to the use of the OAuth 2.0 for the authorization of API requests and notifications, as defined in clauses 4.5.3.3 and 4.5.3.4.</p> <p>Headers : Content-Type (string) : The MIME type of the body of the response. WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token. Version (string) : Version of the API used in the response.</p>	Response 400

HTTP Code	Description	Schema
401	<p>401 UNAUTHORIZED If the request contains no access token even though one is required, or if the request contains an authorization token that is invalid (e.g. expired or revoked), the API producer should respond with this response. The details of the error shall be returned in the WWW-Authenticate HTTP header, as defined in IETF RFC 6750 and IETF RFC 7235. The ProblemDetails structure may be provided.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 401</p>
403	<p>403 FORBIDDEN If the API consumer is not allowed to perform a particular request to a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided. It should include in the "detail" attribute information about the source of the problem, and may indicate how to solve it.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 403</p>

HTTP Code	Description	Schema
404	<p>404 NOT FOUND If the API producer did not find a current representation for the resource addressed by the URI passed in the request or is not willing to disclose that one exists, it shall respond with this response code. The "ProblemDetails" structure may be provided, including in the "detail" attribute information about the source of the problem, e.g. a wrong resource URI variable. This response code is not appropriate in case the resource addressed by the URI is a container resource which is designed to contain child resources, but does not contain any child resource at the time the request is received. For a GET request to an existing empty container resource, a typical response contains a 200 OK response code and a payload body with an empty array.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 404</p>
406	<p>406 NOT ACCEPTABLE If the "Accept" HTTP header does not contain at least one name of a content type that is acceptable to the API producer, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 406</p>

HTTP Code	Description	Schema
413	<p>413 PAYLOAD TOO LARGE If the payload body of a request is larger than the amount of data the API producer is willing or able to process, it shall respond with this response code, following the provisions in IETF RFC 7231 for the use of the "Retry-After" HTTP header and for closing the connection. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 413
414	<p>414 URI TOO LONG If the request URI of a request is longer than the API producer is willing or able to process, it shall respond with this response code. This condition can e.g. be caused by passing long queries in the request URI of a GET request. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 414
416	<p>416 Range Not Satisfiable</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 416

HTTP Code	Description	Schema
422	<p>422 UNPROCESSABLE ENTITY If the payload body of a request contains syntactically correct data (e.g. well-formed JSON) but the data cannot be processed (e.g. because it fails validation against a schema), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. This error response code is only applicable for methods that have a request body.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 422</p>
429	<p>429 TOO MANY REQUESTS If the API consumer has sent too many requests in a defined period of time and the API producer is able to detect that condition ("rate limiting"), the API producer shall respond with this response code, following the provisions in IETF RFC 6585 [17] for the use of the "Retry-After" HTTP header. The "ProblemDetails" structure shall be provided and shall include in the "detail" attribute more information about the source of the problem. The period of time and allowed number of requests are configured within the API producer by means outside the scope of the present document.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 429</p>

HTTP Code	Description	Schema
500	<p>500 INTERNAL SERVER ERROR If there is an application error not related to the client's input that cannot be easily mapped to any other HTTP response code ("catch all error"), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and shall include in the "detail" attribute more information about the source of the problem.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 500
503	<p>503 SERVICE UNAVAILABLE If the API producer encounters an internal overload situation of itself or of a system it relies on, it should respond with this response code, following the provisions in IETF RFC 7231 for the use of the "Retry-After" HTTP header and for the alternative to refuse the connection. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 503
504	<p>504 GATEWAY TIMEOUT If the API producer encounters a timeout while waiting for a response from an upstream server (i.e. a server that the API producer communicates with when fulfilling a request), it should respond with this response code.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 504

Response 200

Name	Description	Schema
apiVersions <i>required</i>	Version(s) supported for the API signaled by the uriPrefix attribute.	< apiVersions > array
uriPrefix <i>required</i>	Specifies the URI prefix for the API, in the following form {apiRoot}/{apiName}/{apiMajorVersion}/.	string

apiVersions

Name	Description	Schema
isDeprecated <i>optional</i>	If such information is available, this attribute indicates whether use of the version signaled by the version attribute is deprecated (true) or not (false). A deprecated version is still supported by the API producer but is recommended not to be used any longer. When a version is no longer supported, it does not appear in the response body.	boolean
retirementDate <i>optional</i>	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
version <i>required</i>	Identifies a supported version. The value of the version attribute shall be a version identifier as specified in clause 9.1 (SOL013).	string

Response 400

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 401

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 403

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 404

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 406

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 413

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 414

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 416

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 422

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 429

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 500

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 503

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 504

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

PUT /api_versions

Description

This method is not supported. When this method is requested on this resource, the API producer shall return a "405 Method Not Allowed" response

Parameters

Type	Name	Description	Schema
Header	Version <i>optional</i>	Version of the API requested to use when responding to this request.	string

Responses

HTTP Code	Description	Schema
405	<p>405 METHOD NOT ALLOWED If a particular HTTP method is not supported for a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 405

Response 405

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

DELETE /api_versions

Description

This method is not supported. When this method is requested on this resource, the API producer shall return a "405 Method Not Allowed" response

Parameters

Type	Name	Description	Schema
Header	Version <i>optional</i>	Version of the API requested to use when responding to this request.	string

Responses

HTTP Code	Description	Schema
405	<p>405 METHOD NOT ALLOWED If a particular HTTP method is not supported for a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 405

Response 405

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

PATCH /api_versions

Description

This method is not supported. When this method is requested on this resource, the API producer shall return a "405 Method Not Allowed" response

Parameters

Type	Name	Description	Schema
Header	Version <i>optional</i>	Version of the API requested to use when responding to this request.	string

Responses

HTTP Code	Description	Schema
405	<p>405 METHOD NOT ALLOWED If a particular HTTP method is not supported for a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 405

Response 405

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

POST /subscriptions

Description

Subscribe. The POST method creates a new subscription. This method shall follow the provisions specified in the tables 7.4.4.3.1-1 and 7.4.4.3.1-2 for URI query parameters, request and response data structures, and response codes. As the result of successfully executing this method, a new "Individual subscription" resource as defined in clause 7.4.5 shall have been created. This method shall not trigger any notification. Creation of two "Individual subscription" resources with the same callback URI and the same filter can result in performance degradation and will provide duplicates of notifications to the NFVO, and might make sense only in very rare use cases. Consequently, the VNFM may either allow creating a new "Individual subscription" resource if another "Individual subscription" resource with the same filter and callback URI already exists (in which case it shall return the "201 Created" response code), or may decide to not create a duplicate "Individual subscription" resource (in which case it shall return a "303 See Other" response code referencing the existing "Individual subscription" resource with the same filter and callback URI).

Parameters

Type	Name	Description	Schema
Header	Accept <i>required</i>	Content-Types that are acceptable for the response. Reference: IETF RFC 7231	string
Header	Authorization <i>optional</i>	The authorization token for the request. Reference: IETF RFC 7235	string
Header	Content-Type <i>required</i>	The MIME type of the body of the request. Reference: IETF RFC 7231	string
Header	Version <i>required</i>	Version of the API requested to use when responding to this request.	string
Body	FmSubscriptionRequest <i>required</i>	The VNF creation parameters	FmSubscriptionRequest

FmSubscriptionRequest

Name	Description	Schema
authentication <i>optional</i>		authentication

Name	Description	Schema
callbackUri <i>required</i>	String formatted according to IETF RFC 3986.	string
filter <i>optional</i>	This type represents a subscription filter related to notifications about VNF faults. At a particular nesting level in the filter structure, the following applies: All attributes shall match in order for the filter to match (logical "and" between different filter attributes). If an attribute is an array, the attribute shall match if at least one of the values in the array matches (logical "or" between the values of one filter attribute).	filter

authentication

Name	Description	Schema
authType <i>required</i>	Defines the types of Authentication / Authorization which the API consumer is willing to accept when receiving a notification. Permitted values: * BASIC: In every HTTP request to the notification endpoint, use HTTP Basic authentication with the client credentials. * OAUTH2_CLIENT_CREDENTIALS: In every HTTP request to the notification endpoint, use an OAuth 2.0 Bearer token, obtained using the client credentials grant type. * TLS_CERT: Every HTTP request to the notification endpoint is sent over a mutually authenticated TLS session, i.e. not only the server is authenticated, but also the client is authenticated during the TLS tunnel setup.	< enum (BASIC, OAUTH2_CLIENT_CREDENTIALS, TLS_CERT) > array
paramsBasic <i>optional</i>	Parameters for authentication/authorization using BASIC. Shall be present if authType is "BASIC" and the contained information has not been provisioned out of band. Shall be absent otherwise.	paramsBasic
paramsOauth2ClientCredentials <i>optional</i>	Parameters for authentication/authorization using OAUTH2_CLIENT_CREDENTIALS. Shall be present if authType is "OAUTH2_CLIENT_CREDENTIALS" and the contained information has not been provisioned out of band. Shall be absent otherwise.	paramsOauth2ClientCredentials

paramsBasic

Name	Description	Schema
password <i>optional</i>	Password to be used in HTTP Basic authentication. Shall be present if it has not been provisioned out of band.	string
userName <i>optional</i>	Username to be used in HTTP Basic authentication. Shall be present if it has not been provisioned out of band.	string

paramsOAuth2ClientCredentials

Name	Description	Schema
clientId <i>optional</i>	Client identifier to be used in the access token request of the OAuth 2.0 client credentials grant type. Shall be present if it has not been provisioned out of band. The clientId and clientPassword passed in a subscription shall not be the same as the clientId and clientPassword that are used to obtain authorization for API requests. Client credentials may differ between subscriptions. The value of clientPassword should be generated by a random process.	string
clientPassword <i>optional</i>	Client password to be used in the access token request of the OAuth 2.0 client credentials grant type. Shall be present if it has not been provisioned out of band. The clientId and clientPassword passed in a subscription shall not be the same as the clientId and clientPassword that are used to obtain authorization for API requests. Client credentials may differ between subscriptions. The value of clientPassword should be generated by a random process.	string
tokenEndpoint <i>optional</i>	String formatted according to IETF RFC 3986.	string

filter

Name	Description	Schema
eventTypes <i>optional</i>	Match VNF alarms with an event type listed in this attribute.	< enum (COMMUNICATIONS_ALARM, PROCESSING_ERROR_ALARM, ENVIRONMENTAL_ALARM, QOS_ALARM, EQUIPMENT_ALARM) > array
faultyResourceTypes <i>optional</i>	Match VNF alarms with a faulty resource type listed in this attribute.	< enum (COMPUTE, STORAGE, NETWORK) > array
notificationTypes <i>optional</i>	Match particular notification types. Permitted values: * AlarmNotification * AlarmClearedNotification * AlarmListRebuiltNotification The permitted values of the "notificationTypes" attribute are spelled exactly as the names of the notification types to facilitate automated code generation systems.	< enum (AlarmNotification, AlarmClearedNotification, AlarmListRebuiltNotification) > array
perceivedSeverities <i>optional</i>	Match VNF alarms with a perceived severity listed in this attribute.	< enum (CRITICAL, MAJOR, MINOR, WARNING, INDETERMINATE, CLEARED) > array
probableCauses <i>optional</i>	Match VNF alarms with a probable cause listed in this attribute.	< string > array
vnfInstanceSubscriptionFilter <i>optional</i>	This type represents subscription filter criteria to match VNF instances.	vnfInstanceSubscriptionFilter

vnfInstanceSubscriptionFilter

Name	Description	Schema
vnfInstanceIds <i>optional</i>	If present, match VNF instances with an instance identifier listed in this attribute. The attributes "vnfInstanceIds" and "vnfInstanceNames" are alternatives to reference to particular VNF Instances in a filter. They should not be used both in the same filter instance, but one alternative should be chosen.	< string > array
vnfInstanceNames <i>optional</i>	If present, match VNF instances with a VNF Instance Name listed in this attribute. The attributes "vnfInstanceIds" and "vnfInstanceNames" are alternatives to reference to particular VNF Instances in a filter. They should not be used both in the same filter instance, but one alternative should be chosen.	< string > array
vnfProductsFromProviders <i>optional</i>	If present, match VNF instances that belong to VNF products from certain providers. The attributes "vnfdIds" and "vnfProductsFromProviders" are alternatives to reference to VNF instances that are based on certain VNFDs in a filter. They should not be used both in the same filter instance, but one alternative should be chosen.	< vnfProductsFromProviders > array
vnfdIds <i>optional</i>	If present, match VNF instances that were created based on a VNFD identified by one of the vnfdId values listed in this attribute. The attributes "vnfdIds" and "vnfProductsFromProviders" are alternatives to reference to VNF instances that are based on certain VNFDs in a filter. They should not be used both in the same filter instance, but one alternative should be chosen.	< string > array

vnfProductsFromProviders

Name	Description	Schema
vnfProducts <i>optional</i>	If present, match VNF instances that belong to VNF products with certain product names, from one particular provider.	< vnfProducts > array
vnfProvider <i>required</i>	Name of the VNF provider to match.	string

vnfProducts

Name	Description	Schema
versions <i>optional</i>	If present, match VNF instances that belong to VNF products with certain versions and a certain product name, from one particular provider.	< versions > array
vnfProductName <i>required</i>	Name of the VNF product to match.	string

versions

Name	Description	Schema
vnfSoftwareVersion <i>required</i>	A version.	string
vnfdVersions <i>optional</i>	If present, match VNF instances that belong to VNF products with certain VNFD versions, a certain software version and a certain product name, from one particular provider.	< string > array

Responses

HTTP Code	Description	Schema
201	<p>201 CREATED Shall be returned when the subscription has been created successfully. The response body shall contain a representation of the created "Individual subscription" resource. The HTTP response shall include a "Location:" HTTP header that points to the created "Individual subscription" resource.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the request. Reference: IETF RFC 7231.</p> <p>Location (string (url)) : The resource URI of the created subscription resource.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p>	Response 201

HTTP Code	Description	Schema
303	<p>303 See Other</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	No Content
400	<p>400 BAD REQUEST 400 code can be returned in the following specified cases, the specific cause has to be proper specified in the "ProblemDetails" structure to be returned. If the request is malformed or syntactically incorrect (e.g. if the request URI contains incorrect query parameters or the payload body contains a syntactically incorrect data structure), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. If the response to a GET request which queries a container resource would be so big that the performance of the API producer is adversely affected, and the API producer does not support paging for the affected resource, it shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. If there is an application error related to the client's input that cannot be easily mapped to any other HTTP response code ("catch all error"), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and shall include in the "detail" attribute more information about the source of the problem. If the request contains a malformed access token, the API producer should respond with this response. The details of the error shall be returned in the WWW Authenticate HTTP header, as defined in IETF RFC 6750 and IETF RFC 7235. The ProblemDetails structure may be provided. The use of this HTTP error response code described above is applicable to the use of the OAuth 2.0 for the authorization of API requests and notifications, as defined in clauses 4.5.3.3 and 4.5.3.4.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 400

HTTP Code	Description	Schema
401	<p>401 UNAUTHORIZED If the request contains no access token even though one is required, or if the request contains an authorization token that is invalid (e.g. expired or revoked), the API producer should respond with this response. The details of the error shall be returned in the WWW-Authenticate HTTP header, as defined in IETF RFC 6750 and IETF RFC 7235. The ProblemDetails structure may be provided.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 401</p>
403	<p>403 FORBIDDEN If the API consumer is not allowed to perform a particular request to a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided. It should include in the "detail" attribute information about the source of the problem, and may indicate how to solve it.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 403</p>

HTTP Code	Description	Schema
404	<p>404 NOT FOUND If the API producer did not find a current representation for the resource addressed by the URI passed in the request or is not willing to disclose that one exists, it shall respond with this response code. The "ProblemDetails" structure may be provided, including in the "detail" attribute information about the source of the problem, e.g. a wrong resource URI variable. This response code is not appropriate in case the resource addressed by the URI is a container resource which is designed to contain child resources, but does not contain any child resource at the time the request is received. For a GET request to an existing empty container resource, a typical response contains a 200 OK response code and a payload body with an empty array.</p> <p>Headers : Content-Type (string) : The MIME type of the body of the response. WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token. Version (string) : Version of the API used in the response.</p>	Response 404
405	<p>405 METHOD NOT ALLOWED If a particular HTTP method is not supported for a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers : Content-Type (string) : The MIME type of the body of the response. WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token. Version (string) : Version of the API used in the response.</p>	Response 405
406	<p>406 NOT ACCEPTABLE If the "Accept" HTTP header does not contain at least one name of a content type that is acceptable to the API producer, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers : Content-Type (string) : The MIME type of the body of the response. WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token. Version (string) : Version of the API used in the response.</p>	Response 406

HTTP Code	Description	Schema
422	<p>422 UNPROCESSABLE ENTITY If the payload body of a request contains syntactically correct data (e.g. well-formed JSON) but the data cannot be processed (e.g. because it fails validation against a schema), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. This error response code is only applicable for methods that have a request body.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 422
500	<p>500 INTERNAL SERVER ERROR If there is an application error not related to the client's input that cannot be easily mapped to any other HTTP response code ("catch all error"), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and shall include in the "detail" attribute more information about the source of the problem.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 500
503	<p>503 SERVICE UNAVAILABLE If the API producer encounters an internal overload situation of itself or of a system it relies on, it should respond with this response code, following the provisions in IETF RFC 7231 for the use of the "Retry-After" HTTP header and for the alternative to refuse the connection. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 503

HTTP Code	Description	Schema
504	<p>504 GATEWAY TIMEOUT If the API producer encounters a timeout while waiting for a response from an upstream server (i.e. a server that the API producer communicates with when fulfilling a request), it should respond with this response code.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 504

Response 201

Name	Description	Schema
_links <i>required</i>	Links for this resource.	_links
callbackUri <i>required</i>	String formatted according to IETF RFC 3986.	string
filter <i>optional</i>	This type represents a subscription filter related to notifications about VNF faults. At a particular nesting level in the filter structure, the following applies: All attributes shall match in order for the filter to match (logical "and" between different filter attributes). If an attribute is an array, the attribute shall match if at least one of the values in the array matches (logical "or" between the values of one filter attribute).	filter
id <i>required</i>	An identifier with the intention of being globally unique.	string

_links

Name	Description	Schema
self <i>required</i>	This type represents a link to a resource using an absolute URI.	self

self

Name	Description	Schema
href <i>required</i>	String formatted according to IETF RFC 3986.	string

filter

Name	Description	Schema
eventTypes <i>optional</i>	Match VNF alarms with an event type listed in this attribute.	< enum (COMMUNICATIONS_ALARM, PROCESSING_ERROR_ALARM, ENVIRONMENTAL_ALARM, QOS_ALARM, EQUIPMENT_ALARM) > array
faultyResourceTypes <i>optional</i>	Match VNF alarms with a faulty resource type listed in this attribute.	< enum (COMPUTE, STORAGE, NETWORK) > array
notificationTypes <i>optional</i>	Match particular notification types. Permitted values: * AlarmNotification * AlarmClearedNotification * AlarmListRebuiltNotification The permitted values of the "notificationTypes" attribute are spelled exactly as the names of the notification types to facilitate automated code generation systems.	< enum (AlarmNotification, AlarmClearedNotification, AlarmListRebuiltNotification) > array
perceivedSeverities <i>optional</i>	Match VNF alarms with a perceived severity listed in this attribute.	< enum (CRITICAL, MAJOR, MINOR, WARNING, INDETERMINATE, CLEARED) > array
probableCauses <i>optional</i>	Match VNF alarms with a probable cause listed in this attribute.	< string > array
vnfInstanceSubscriptionFilter <i>optional</i>	This type represents subscription filter criteria to match VNF instances.	vnfInstanceSubscriptionFilter

vnfInstanceSubscriptionFilter

Name	Description	Schema
vnfInstanceIds <i>optional</i>	If present, match VNF instances with an instance identifier listed in this attribute. The attributes "vnfInstanceIds" and "vnfInstanceNames" are alternatives to reference to particular VNF Instances in a filter. They should not be used both in the same filter instance, but one alternative should be chosen.	< string > array
vnfInstanceNames <i>optional</i>	If present, match VNF instances with a VNF Instance Name listed in this attribute. The attributes "vnfInstanceIds" and "vnfInstanceNames" are alternatives to reference to particular VNF Instances in a filter. They should not be used both in the same filter instance, but one alternative should be chosen.	< string > array
vnfProductsFromProviders <i>optional</i>	If present, match VNF instances that belong to VNF products from certain providers. The attributes "vnfdIds" and "vnfProductsFromProviders" are alternatives to reference to VNF instances that are based on certain VNFDs in a filter. They should not be used both in the same filter instance, but one alternative should be chosen.	< vnfProductsFromProviders > array
vnfdIds <i>optional</i>	If present, match VNF instances that were created based on a VNFD identified by one of the vnfdId values listed in this attribute. The attributes "vnfdIds" and "vnfProductsFromProviders" are alternatives to reference to VNF instances that are based on certain VNFDs in a filter. They should not be used both in the same filter instance, but one alternative should be chosen.	< string > array

vnfProductsFromProviders

Name	Description	Schema
vnfProducts <i>optional</i>	If present, match VNF instances that belong to VNF products with certain product names, from one particular provider.	< vnfProducts > array
vnfProvider <i>required</i>	Name of the VNF provider to match.	string

vnfProducts

Name	Description	Schema
versions <i>optional</i>	If present, match VNF instances that belong to VNF products with certain versions and a certain product name, from one particular provider.	< versions > array
vnfProductName <i>required</i>	Name of the VNF product to match.	string

versions

Name	Description	Schema
vnfSoftwareVersion <i>required</i>	A version.	string
vnfdVersions <i>optional</i>	If present, match VNF instances that belong to VNF products with certain VNFD versions, a certain software version and a certain product name, from one particular provider.	< string > array

Response 400

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 401

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 403

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 404

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 405

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 406

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 422

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 500

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 503

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 504

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

GET /subscriptions

Description

Query Subscription Information

The API consumer can use this method to retrieve the list of active subscriptions for VNF alarms subscribed by the API consumer. It can be used e.g. for resynchronization after error situations.

Parameters

Type	Name	Description	Schema
Header	Accept <i>required</i>	Content-Types that are acceptable for the response. Reference: IETF RFC 7231	string
Header	Authorization <i>optional</i>	The authorization token for the request. Reference: IETF RFC 7235	string
Header	Content-Type <i>required</i>	The MIME type of the body of the request. Reference: IETF RFC 7231	string
Header	Version <i>required</i>	Version of the API requested to use when responding to this request.	string
Query	filter <i>optional</i>	Attribute-based filtering expression according to clause 5.2 of ETSI GS NFV-SOL 013. The VNFM shall support receiving this parameter as part of the URI query string. The NFVO may supply this parameter. All attribute names that appear in the FmSubscription and in data types referenced from it shall be supported by the VNFM in the filter expression.	string

Type	Name	Description	Schema
Query	nextpage_opaque_marker <i>optional</i>	Marker to obtain the next page of a paged response. Shall be supported by the VNFM if the VNFM supports alternative 2 (paging) according to clause 5.4.2.1 of ETSI GS NFV-SOL 013 for this resource.	string

Responses

HTTP Code	Description	Schema
200	<p>200 OK Shall be returned when the list of subscriptions has been queried successfully. The response body shall contain in an array the representations of all active subscriptions of the functional block that invokes the method, i.e. zero or more representations of FM subscriptions as defined in clause 7.5.2.3. If the "filter" URI parameter was supplied in the request, the data in the response body shall have been transformed according to the rules specified in clause 5.2.2 of ETSI GS NFV-SOL 013. If the VNFM supports alternative 2 (paging) according to clause 5.4.2.1 of ETSI GS NFV-SOL 013 for this resource, inclusion of the Link HTTP header in this response shall follow the provisions in clause 5.4.2.3 of ETSI GS NFV-SOL 013.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the request. Reference: IETF RFC 7231.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p> <p>Link (string) : Reference to other resources. Used for paging in the present document, see clause 4.7.2.1.</p>	Response 200

HTTP Code	Description	Schema
400	<p>400 BAD REQUEST 400 code can be returned in the following specified cases, the specific cause has to be proper specified in the "ProblemDetails" structure to be returned. If the request is malformed or syntactically incorrect (e.g. if the request URI contains incorrect query parameters or the payload body contains a syntactically incorrect data structure), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. If the response to a GET request which queries a container resource would be so big that the performance of the API producer is adversely affected, and the API producer does not support paging for the affected resource, it shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. If there is an application error related to the client's input that cannot be easily mapped to any other HTTP response code ("catch all error"), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and shall include in the "detail" attribute more information about the source of the problem. If the request contains a malformed access token, the API producer should respond with this response. The details of the error shall be returned in the WWW Authenticate HTTP header, as defined in IETF RFC 6750 and IETF RFC 7235. The ProblemDetails structure may be provided. The use of this HTTP error response code described above is applicable to the use of the OAuth 2.0 for the authorization of API requests and notifications, as defined in clauses 4.5.3.3 and 4.5.3.4.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 400</p>

HTTP Code	Description	Schema
401	<p>401 UNAUTHORIZED If the request contains no access token even though one is required, or if the request contains an authorization token that is invalid (e.g. expired or revoked), the API producer should respond with this response. The details of the error shall be returned in the WWW-Authenticate HTTP header, as defined in IETF RFC 6750 and IETF RFC 7235. The ProblemDetails structure may be provided.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 401</p>
403	<p>403 FORBIDDEN If the API consumer is not allowed to perform a particular request to a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided. It should include in the "detail" attribute information about the source of the problem, and may indicate how to solve it.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 403</p>

HTTP Code	Description	Schema
404	<p>404 NOT FOUND If the API producer did not find a current representation for the resource addressed by the URI passed in the request or is not willing to disclose that one exists, it shall respond with this response code. The "ProblemDetails" structure may be provided, including in the "detail" attribute information about the source of the problem, e.g. a wrong resource URI variable. This response code is not appropriate in case the resource addressed by the URI is a container resource which is designed to contain child resources, but does not contain any child resource at the time the request is received. For a GET request to an existing empty container resource, a typical response contains a 200 OK response code and a payload body with an empty array.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 404
405	<p>405 METHOD NOT ALLOWED If a particular HTTP method is not supported for a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 405
406	<p>406 NOT ACCEPTABLE If the "Accept" HTTP header does not contain at least one name of a content type that is acceptable to the API producer, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 406

HTTP Code	Description	Schema
422	<p>422 UNPROCESSABLE ENTITY If the payload body of a request contains syntactically correct data (e.g. well-formed JSON) but the data cannot be processed (e.g. because it fails validation against a schema), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. This error response code is only applicable for methods that have a request body.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 422</p>
500	<p>500 INTERNAL SERVER ERROR If there is an application error not related to the client's input that cannot be easily mapped to any other HTTP response code ("catch all error"), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and shall include in the "detail" attribute more information about the source of the problem.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 500</p>
503	<p>503 SERVICE UNAVAILABLE If the API producer encounters an internal overload situation of itself or of a system it relies on, it should respond with this response code, following the provisions in IETF RFC 7231 for the use of the "Retry-After" HTTP header and for the alternative to refuse the connection. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 503</p>

HTTP Code	Description	Schema
504	<p>504 GATEWAY TIMEOUT If the API producer encounters a timeout while waiting for a response from an upstream server (i.e. a server that the API producer communicates with when fulfilling a request), it should respond with this response code.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 504

Response 200

Name	Description	Schema
_links <i>required</i>	Links for this resource.	_links
callbackUri <i>required</i>	String formatted according to IETF RFC 3986.	string
filter <i>optional</i>	This type represents a subscription filter related to notifications about VNF faults. At a particular nesting level in the filter structure, the following applies: All attributes shall match in order for the filter to match (logical "and" between different filter attributes). If an attribute is an array, the attribute shall match if at least one of the values in the array matches (logical "or" between the values of one filter attribute).	filter
id <i>required</i>	An identifier with the intention of being globally unique.	string

_links

Name	Description	Schema
self <i>required</i>	This type represents a link to a resource using an absolute URI.	self

self

Name	Description	Schema
href <i>required</i>	String formatted according to IETF RFC 3986.	string

filter

Name	Description	Schema
eventTypes <i>optional</i>	Match VNF alarms with an event type listed in this attribute.	< enum (COMMUNICATIONS_ALARM, PROCESSING_ERROR_ALARM, ENVIRONMENTAL_ALARM, QOS_ALARM, EQUIPMENT_ALARM) > array
faultyResourceTypes <i>optional</i>	Match VNF alarms with a faulty resource type listed in this attribute.	< enum (COMPUTE, STORAGE, NETWORK) > array
notificationTypes <i>optional</i>	Match particular notification types. Permitted values: * AlarmNotification * AlarmClearedNotification * AlarmListRebuiltNotification The permitted values of the "notificationTypes" attribute are spelled exactly as the names of the notification types to facilitate automated code generation systems.	< enum (AlarmNotification, AlarmClearedNotification, AlarmListRebuiltNotification) > array
perceivedSeverities <i>optional</i>	Match VNF alarms with a perceived severity listed in this attribute.	< enum (CRITICAL, MAJOR, MINOR, WARNING, INDETERMINATE, CLEARED) > array
probableCauses <i>optional</i>	Match VNF alarms with a probable cause listed in this attribute.	< string > array
vnfInstanceSubscriptionFilter <i>optional</i>	This type represents subscription filter criteria to match VNF instances.	vnfInstanceSubscriptionFilter

vnfInstanceSubscriptionFilter

Name	Description	Schema
vnfInstanceIds <i>optional</i>	If present, match VNF instances with an instance identifier listed in this attribute. The attributes "vnfInstanceIds" and "vnfInstanceNames" are alternatives to reference to particular VNF Instances in a filter. They should not be used both in the same filter instance, but one alternative should be chosen.	< string > array
vnfInstanceNames <i>optional</i>	If present, match VNF instances with a VNF Instance Name listed in this attribute. The attributes "vnfInstanceIds" and "vnfInstanceNames" are alternatives to reference to particular VNF Instances in a filter. They should not be used both in the same filter instance, but one alternative should be chosen.	< string > array
vnfProductsFromProviders <i>optional</i>	If present, match VNF instances that belong to VNF products from certain providers. The attributes "vnfdIds" and "vnfProductsFromProviders" are alternatives to reference to VNF instances that are based on certain VNFDs in a filter. They should not be used both in the same filter instance, but one alternative should be chosen.	< vnfProductsFromProviders > array
vnfdIds <i>optional</i>	If present, match VNF instances that were created based on a VNFD identified by one of the vnfdId values listed in this attribute. The attributes "vnfdIds" and "vnfProductsFromProviders" are alternatives to reference to VNF instances that are based on certain VNFDs in a filter. They should not be used both in the same filter instance, but one alternative should be chosen.	< string > array

vnfProductsFromProviders

Name	Description	Schema
vnfProducts <i>optional</i>	If present, match VNF instances that belong to VNF products with certain product names, from one particular provider.	< vnfProducts > array
vnfProvider <i>required</i>	Name of the VNF provider to match.	string

vnfProducts

Name	Description	Schema
versions <i>optional</i>	If present, match VNF instances that belong to VNF products with certain versions and a certain product name, from one particular provider.	< versions > array
vnfProductName <i>required</i>	Name of the VNF product to match.	string

versions

Name	Description	Schema
vnfSoftwareVersion <i>required</i>	A version.	string
vnfdVersions <i>optional</i>	If present, match VNF instances that belong to VNF products with certain VNFD versions, a certain software version and a certain product name, from one particular provider.	< string > array

Response 400

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 401

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 403

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 404

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 405

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 406

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 422

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 500

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 503

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 504

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

GET /subscriptions/{subscriptionId}

Description

Query Subscription Information. The API consumer can use this method for reading an individual subscription for VNF alarms subscribed by the API consumer. This method shall follow the provisions specified in the tables 7.4.5.3.2-1 and 7.4.5.3.2-2 for URI query parameters, request and response data structures, and response codes.

Parameters

Type	Name	Description	Schema
Header	Accept <i>required</i>	Content-Types that are acceptable for the response. Reference: IETF RFC 7231	string
Header	Authorization <i>optional</i>	The authorization token for the request. Reference: IETF RFC 7235	string
Header	Content-Type <i>required</i>	The MIME type of the body of the request. Reference: IETF RFC 7231	string
Header	Version <i>required</i>	Version of the API requested to use when responding to this request.	string
Path	subscriptionId <i>required</i>	Identifier of this subscription. This identifier can be retrieved from the resource referenced by the "Location" HTTP header in the response to a POST request creating a new "Individual subscription" resource. It can also be retrieved from the "id" attribute in the payload body of that response.	string

Responses

HTTP Code	Description	Schema
200	<p>200 OK The operation has completed successfully. The response body shall contain a representation of the subscription resource.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the request. Reference: IETF RFC 7231.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 200</p>

HTTP Code	Description	Schema
400	<p>400 BAD REQUEST 400 code can be returned in the following specified cases, the specific cause has to be proper specified in the "ProblemDetails" structure to be returned. If the request is malformed or syntactically incorrect (e.g. if the request URI contains incorrect query parameters or the payload body contains a syntactically incorrect data structure), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. If the response to a GET request which queries a container resource would be so big that the performance of the API producer is adversely affected, and the API producer does not support paging for the affected resource, it shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. If there is an application error related to the client's input that cannot be easily mapped to any other HTTP response code ("catch all error"), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and shall include in the "detail" attribute more information about the source of the problem. If the request contains a malformed access token, the API producer should respond with this response. The details of the error shall be returned in the WWW Authenticate HTTP header, as defined in IETF RFC 6750 and IETF RFC 7235. The ProblemDetails structure may be provided. The use of this HTTP error response code described above is applicable to the use of the OAuth 2.0 for the authorization of API requests and notifications, as defined in clauses 4.5.3.3 and 4.5.3.4.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 400</p>

HTTP Code	Description	Schema
401	<p>401 UNAUTHORIZED If the request contains no access token even though one is required, or if the request contains an authorization token that is invalid (e.g. expired or revoked), the API producer should respond with this response. The details of the error shall be returned in the WWW-Authenticate HTTP header, as defined in IETF RFC 6750 and IETF RFC 7235. The ProblemDetails structure may be provided.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 401</p>
403	<p>403 FORBIDDEN If the API consumer is not allowed to perform a particular request to a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided. It should include in the "detail" attribute information about the source of the problem, and may indicate how to solve it.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 403</p>

HTTP Code	Description	Schema
404	<p>404 NOT FOUND If the API producer did not find a current representation for the resource addressed by the URI passed in the request or is not willing to disclose that one exists, it shall respond with this response code. The "ProblemDetails" structure may be provided, including in the "detail" attribute information about the source of the problem, e.g. a wrong resource URI variable. This response code is not appropriate in case the resource addressed by the URI is a container resource which is designed to contain child resources, but does not contain any child resource at the time the request is received. For a GET request to an existing empty container resource, a typical response contains a 200 OK response code and a payload body with an empty array.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 404</p>
405	<p>405 METHOD NOT ALLOWED If a particular HTTP method is not supported for a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 405</p>
406	<p>406 NOT ACCEPTABLE If the "Accept" HTTP header does not contain at least one name of a content type that is acceptable to the API producer, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 406</p>

HTTP Code	Description	Schema
422	<p>422 UNPROCESSABLE ENTITY If the payload body of a request contains syntactically correct data (e.g. well-formed JSON) but the data cannot be processed (e.g. because it fails validation against a schema), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. This error response code is only applicable for methods that have a request body.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 422</p>
500	<p>500 INTERNAL SERVER ERROR If there is an application error not related to the client's input that cannot be easily mapped to any other HTTP response code ("catch all error"), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and shall include in the "detail" attribute more information about the source of the problem.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 500</p>
503	<p>503 SERVICE UNAVAILABLE If the API producer encounters an internal overload situation of itself or of a system it relies on, it should respond with this response code, following the provisions in IETF RFC 7231 for the use of the "Retry-After" HTTP header and for the alternative to refuse the connection. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 503</p>

HTTP Code	Description	Schema
504	<p>504 GATEWAY TIMEOUT If the API producer encounters a timeout while waiting for a response from an upstream server (i.e. a server that the API producer communicates with when fulfilling a request), it should respond with this response code.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 504

Response 200

Name	Description	Schema
_links <i>required</i>	Links for this resource.	_links
callbackUri <i>required</i>	String formatted according to IETF RFC 3986.	string
filter <i>optional</i>	This type represents a subscription filter related to notifications about VNF faults. At a particular nesting level in the filter structure, the following applies: All attributes shall match in order for the filter to match (logical "and" between different filter attributes). If an attribute is an array, the attribute shall match if at least one of the values in the array matches (logical "or" between the values of one filter attribute).	filter
id <i>required</i>	An identifier with the intention of being globally unique.	string

_links

Name	Description	Schema
self <i>required</i>	This type represents a link to a resource using an absolute URI.	self

self

Name	Description	Schema
href <i>required</i>	String formatted according to IETF RFC 3986.	string

filter

Name	Description	Schema
eventTypes <i>optional</i>	Match VNF alarms with an event type listed in this attribute.	< enum (COMMUNICATIONS_ALARM, PROCESSING_ERROR_ALARM, ENVIRONMENTAL_ALARM, QOS_ALARM, EQUIPMENT_ALARM) > array
faultyResourceTypes <i>optional</i>	Match VNF alarms with a faulty resource type listed in this attribute.	< enum (COMPUTE, STORAGE, NETWORK) > array
notificationTypes <i>optional</i>	Match particular notification types. Permitted values: * AlarmNotification * AlarmClearedNotification * AlarmListRebuiltNotification The permitted values of the "notificationTypes" attribute are spelled exactly as the names of the notification types to facilitate automated code generation systems.	< enum (AlarmNotification, AlarmClearedNotification, AlarmListRebuiltNotification) > array
perceivedSeverities <i>optional</i>	Match VNF alarms with a perceived severity listed in this attribute.	< enum (CRITICAL, MAJOR, MINOR, WARNING, INDETERMINATE, CLEARED) > array
probableCauses <i>optional</i>	Match VNF alarms with a probable cause listed in this attribute.	< string > array
vnfInstanceSubscriptionFilter <i>optional</i>	This type represents subscription filter criteria to match VNF instances.	vnfInstanceSubscriptionFilter

vnfInstanceSubscriptionFilter

Name	Description	Schema
vnfInstanceIds <i>optional</i>	If present, match VNF instances with an instance identifier listed in this attribute. The attributes "vnfInstanceIds" and "vnfInstanceNames" are alternatives to reference to particular VNF Instances in a filter. They should not be used both in the same filter instance, but one alternative should be chosen.	< string > array
vnfInstanceNames <i>optional</i>	If present, match VNF instances with a VNF Instance Name listed in this attribute. The attributes "vnfInstanceIds" and "vnfInstanceNames" are alternatives to reference to particular VNF Instances in a filter. They should not be used both in the same filter instance, but one alternative should be chosen.	< string > array
vnfProductsFromProviders <i>optional</i>	If present, match VNF instances that belong to VNF products from certain providers. The attributes "vnfdIds" and "vnfProductsFromProviders" are alternatives to reference to VNF instances that are based on certain VNFDs in a filter. They should not be used both in the same filter instance, but one alternative should be chosen.	< vnfProductsFromProviders > array
vnfdIds <i>optional</i>	If present, match VNF instances that were created based on a VNFD identified by one of the vnfdId values listed in this attribute. The attributes "vnfdIds" and "vnfProductsFromProviders" are alternatives to reference to VNF instances that are based on certain VNFDs in a filter. They should not be used both in the same filter instance, but one alternative should be chosen.	< string > array

vnfProductsFromProviders

Name	Description	Schema
vnfProducts <i>optional</i>	If present, match VNF instances that belong to VNF products with certain product names, from one particular provider.	< vnfProducts > array
vnfProvider <i>required</i>	Name of the VNF provider to match.	string

vnfProducts

Name	Description	Schema
versions <i>optional</i>	If present, match VNF instances that belong to VNF products with certain versions and a certain product name, from one particular provider.	< versions > array
vnfProductName <i>required</i>	Name of the VNF product to match.	string

versions

Name	Description	Schema
vnfSoftwareVersion <i>required</i>	A version.	string
vnfdVersions <i>optional</i>	If present, match VNF instances that belong to VNF products with certain VNFD versions, a certain software version and a certain product name, from one particular provider.	< string > array

Response 400

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 401

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 403

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 404

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 405

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 406

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 422

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 500

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 503

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 504

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

DELETE /subscriptions/{subscriptionId}

Description

Terminate Subscription. This method terminates an individual subscription. This method shall follow the provisions specified in the tables 7.4.5.3.5-1 and 7.4.5.3.5-2 for URI query parameters, request and response data structures, and response codes. As the result of successfully executing this method, the "Individual subscription" resource shall not exist any longer. This means that no notifications for that subscription shall be sent to the formerly-subscribed API consumer. NOTE: Due to race conditions, some notifications might still be received by the formerly-subscribed API consumer for a certain time period after the deletion.

Parameters

Type	Name	Description	Schema
Header	Authorization <i>optional</i>	The authorization token for the request. Reference: IETF RFC 7235	string
Header	Version <i>required</i>	Version of the API requested to use when responding to this request.	string
Path	subscriptionId <i>required</i>	Identifier of this subscription. This identifier can be retrieved from the resource referenced by the "Location" HTTP header in the response to a POST request creating a new "Individual subscription" resource. It can also be retrieved from the "id" attribute in the payload body of that response.	string

Responses

HTTP Code	Description	Schema
204	<p>204 NO CONTENT Shall be returned when the "Individual subscription" resource has been deleted successfully. The response body shall be empty.</p> <p>Headers :</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	No Content

HTTP Code	Description	Schema
400	<p>400 BAD REQUEST 400 code can be returned in the following specified cases, the specific cause has to be proper specified in the "ProblemDetails" structure to be returned. If the request is malformed or syntactically incorrect (e.g. if the request URI contains incorrect query parameters or the payload body contains a syntactically incorrect data structure), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. If the response to a GET request which queries a container resource would be so big that the performance of the API producer is adversely affected, and the API producer does not support paging for the affected resource, it shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. If there is an application error related to the client's input that cannot be easily mapped to any other HTTP response code ("catch all error"), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and shall include in the "detail" attribute more information about the source of the problem. If the request contains a malformed access token, the API producer should respond with this response. The details of the error shall be returned in the WWW Authenticate HTTP header, as defined in IETF RFC 6750 and IETF RFC 7235. The ProblemDetails structure may be provided. The use of this HTTP error response code described above is applicable to the use of the OAuth 2.0 for the authorization of API requests and notifications, as defined in clauses 4.5.3.3 and 4.5.3.4.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 400</p>

HTTP Code	Description	Schema
401	<p>401 UNAUTHORIZED If the request contains no access token even though one is required, or if the request contains an authorization token that is invalid (e.g. expired or revoked), the API producer should respond with this response. The details of the error shall be returned in the WWW-Authenticate HTTP header, as defined in IETF RFC 6750 and IETF RFC 7235. The ProblemDetails structure may be provided.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 401</p>
403	<p>403 FORBIDDEN If the API consumer is not allowed to perform a particular request to a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided. It should include in the "detail" attribute information about the source of the problem, and may indicate how to solve it.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 403</p>

HTTP Code	Description	Schema
404	<p>404 NOT FOUND If the API producer did not find a current representation for the resource addressed by the URI passed in the request or is not willing to disclose that one exists, it shall respond with this response code. The "ProblemDetails" structure may be provided, including in the "detail" attribute information about the source of the problem, e.g. a wrong resource URI variable. This response code is not appropriate in case the resource addressed by the URI is a container resource which is designed to contain child resources, but does not contain any child resource at the time the request is received. For a GET request to an existing empty container resource, a typical response contains a 200 OK response code and a payload body with an empty array.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 404</p>
405	<p>405 METHOD NOT ALLOWED If a particular HTTP method is not supported for a particular resource, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 405</p>
406	<p>406 NOT ACCEPTABLE If the "Accept" HTTP header does not contain at least one name of a content type that is acceptable to the API producer, the API producer shall respond with this response code. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 406</p>

HTTP Code	Description	Schema
422	<p>422 UNPROCESSABLE ENTITY If the payload body of a request contains syntactically correct data (e.g. well-formed JSON) but the data cannot be processed (e.g. because it fails validation against a schema), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and should include in the "detail" attribute more information about the source of the problem. This error response code is only applicable for methods that have a request body.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 422</p>
500	<p>500 INTERNAL SERVER ERROR If there is an application error not related to the client's input that cannot be easily mapped to any other HTTP response code ("catch all error"), the API producer shall respond with this response code. The "ProblemDetails" structure shall be provided, and shall include in the "detail" attribute more information about the source of the problem.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 500</p>
503	<p>503 SERVICE UNAVAILABLE If the API producer encounters an internal overload situation of itself or of a system it relies on, it should respond with this response code, following the provisions in IETF RFC 7231 for the use of the "Retry-After" HTTP header and for the alternative to refuse the connection. The "ProblemDetails" structure may be omitted.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	<p>Response 503</p>

HTTP Code	Description	Schema
504	<p>504 GATEWAY TIMEOUT If the API producer encounters a timeout while waiting for a response from an upstream server (i.e. a server that the API producer communicates with when fulfilling a request), it should respond with this response code.</p> <p>Headers :</p> <p>Content-Type (string) : The MIME type of the body of the response.</p> <p>WWW-Authenticate (string) : Challenge if the corresponding HTTP request has not provided authorization, or error details if the corresponding HTTP request has provided an invalid authorization token.</p> <p>Version (string) : Version of the API used in the response.</p>	Response 504

Response 400

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 401

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 403

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 404

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 405

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 406

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 422

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer

Name	Description	Schema
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 500

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string

Name	Description	Schema
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 503

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)

Response 504

Name	Description	Schema
detail <i>required</i>	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance <i>optional</i>	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status <i>required</i>	The HTTP status code for this occurrence of the problem. The HTTP status code ([RFC7231], Section 6) generated by the origin server for this occurrence of the problem.	integer
title <i>optional</i>	A short, human-readable summary of the problem type. It should not change from occurrence to occurrence of the problem, except for purposes of localization. If type is given and other than "about:blank", this attribute shall also be provided. A short, human-readable summary of the problem type. It SHOULD NOT change from occurrence to occurrence of the problem, except for purposes of localization (e.g., using proactive content negotiation; see [RFC7231], Section 3.4).	string
type <i>optional</i>	A URI reference according to IETF RFC 3986 [5] that identifies the problem type. It is encouraged that the URI provides human-readable documentation for the problem (e.g. using HTML) when dereferenced. When this member is not present, its value is assumed to be "about:blank".	string (URI)