SOL003 - VNF Performance 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/bugzilla/buglist.cgi?component=Nfv-Openapis&list_id=61&product=NFV&resolution=

Version information

Version : 1.2.0-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 : /vnfpm/v1
Schemes : HTTPS

Consumes

- `application/json`

Produces

- `application/json`

External Docs

Description : ETSI GS NFV-SOL 003 V2.5.1
URL : https://www.etsi.org/deliver/etsi_gs/NFV-SOL/001_099/003/02.05.01_60/gs_nfv-sol003v020501p.pdf

Paths

Retrieve API version information

```
GET /api-versions
```

Description

The GET method reads API version information. This method shall follow the provisions specified in table 4.6.3.3.3.2-1 for request and response data structures, and response codes. URI query parameters are not supported.

Parameters

Type	Name	Description	Schema
Header	**Version** *optional*	Version of the API requested to use when responding to this request.	string

Responses

HTTP Code	Description	Schema
200	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. **Headers** : `Content-Type` (string) : The MIME type of the body of the response. `Version` (string) : The used API version.	Response 200

HTTP Code	Description	Schema
400	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. **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.	Response 400

HTTP Code	Description	Schema
401	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. **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.	Response 401
403	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. **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.	Response 403

HTTP Code	Description	Schema
404	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. **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.	Response 404
405	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. **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.	Response 405
406	406 NOT ACCEPTABLE If the "Accept" 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. **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.	Response 406

HTTP Code	Description	Schema
413	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. **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.	Response 413
414	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. **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.	Response 414
416	416 RANGE NOT SATISFIABLE **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.	Response 416

HTTP Code	Description	Schema
422	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. **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.	Response 422
429	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. **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.	Response 429

HTTP Code	Description	Schema
500	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. **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.	Response 500
503	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. **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.	Response 503
504	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. **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.	Response 504

Response 200

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

apiVersions

Name	Description	Schema
isDeprecated *optional*	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 *optional*	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
version *required*	Identifies a supported version. The value of the version attribute shall be a version identifier as specified in clause 4.6.1.	string

Response 400

Name	Description	Schema
detail *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 /pm_jobs

Description

Create PM Job

The POST method creates a PM job.

Parameters

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

CreatePmJobRequest

Name	Description	Schema
criteria *required*	Criteria of the collection of performance information.	criteria
objectInstanceIds *optional*	Identifiers of the VNF instances for which performance information is requested to be collected.	< string > array

criteria

Name	Description	Schema
collectionPeriod *required*	Specifies the periodicity at which the producer will collect performance information. The unit shall be seconds. At the end of each reportingPeriod, the producer will inform the consumer about availability of the performance data collected for each completed collection period during this reportingPeriod. The reportingPeriod should be equal to or a multiple of the collectionPeriod. In the latter case, the performance data for the collection periods within one reporting period are reported together.	integer
performanceMetric *optional*	This defines the types of performance metrics for the specified object instances. Valid values are specified as "Measurement Name" values in clause 7.2 of ETSI GS NFV-IFA 027. At least one of the two attributes (performance metric or group) shall be present.	< string > array
performanceMetricGroup *optional*	Group of performance metrics. A metric group is a pre-defined list of metrics, known to the producer that it can decompose to individual metrics. Valid values are specified as "Measurement Group" values in clause 7.2 of ETSI GS NFV-IFA 027. At least one of the two attributes (performance metric or group) shall be present.	< string > array
reportingBoundary *optional*	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
reportingPeriod *required*	Specifies the periodicity at which the producer will report to the consumer. about performance information. The unit shall be seconds. At the end of each reportingPeriod, the producer will inform the consumer about availability of the performance data collected for each completed collection period during this reportingPeriod. The reportingPeriod should be equal to or a multiple of the collectionPeriod. In the latter case, the performance data for the collection periods within one reporting period are reported together.	integer

Responses

HTTP Code	Description	Schema
201	201 CREATED The PM job was created successfully. The response body shall contain a representation of the created PM job resource. The HTTP response shall include a "Location" HTTP header that points to the created PM job resource. **Headers** : `Location` (string (url)) : The resource URI of the created PM Job. `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.	Response 201

HTTP Code	Description	Schema
400	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. **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.	Response 400

HTTP Code	Description	Schema
401	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. **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.	Response 401
403	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. **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.	Response 403
405	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. **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.	Response 405

HTTP Code	Description	Schema
406	406 NOT ACCEPTABLE If the "Accept" 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. **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.	Response 406
500	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. **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.	Response 500
503	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. **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.	Response 503

Response 201

Name	Description	Schema
_links *optional*	Links for this resource.	_links
criteria *required*	Criteria of the collection of performance information.	criteria
id *required*	An identifier with the intention of being globally unique.	string
objectInstanceIds *required*	Identifiers of the VNF instances for which performance information is collected.	< string > array
reports *optional*	Information about available reports collected by this PM job.	reports

_links

Name	Description	Schema
objects *optional*	Links for this resource.	objects
self *required*	This type represents a link to a resource using an absolute URI. It shall comply with the provisions defined in table 4.4.1.3-1.	self

objects

Name	Description	Schema
objects *optional*	Links to resources representing the VNF instances for which performance information is collected. Shall be present if the VNF instance information is accessible as a resource.	< objects > array
self *required*	This type represents a link to a resource using an absolute URI. It shall comply with the provisions defined in table 4.4.1.3-1.	self

objects

Name	Description	Schema
href *required*	String formatted according to IETF RFC 3986.	string

self

Name	Description	Schema
href *required*	String formatted according to IETF RFC 3986.	string

self

Name	Description	Schema
href *required*	String formatted according to IETF RFC 3986.	string

criteria

Name	Description	Schema
collectionPeriod *required*	Specifies the periodicity at which the producer will collect performance information. The unit shall be seconds. At the end of each reportingPeriod, the producer will inform the consumer about availability of the performance data collected for each completed collection period during this reportingPeriod. The reportingPeriod should be equal to or a multiple of the collectionPeriod. In the latter case, the performance data for the collection periods within one reporting period are reported together.	integer
performanceMetric *optional*	This defines the types of performance metrics for the specified object instances. Valid values are specified as "Measurement Name" values in clause 7.2 of ETSI GS NFV-IFA 027. At least one of the two attributes (performance metric or group) shall be present.	< string > array
performanceMetricGroup *optional*	Group of performance metrics. A metric group is a pre-defined list of metrics, known to the producer that it can decompose to individual metrics. Valid values are specified as "Measurement Group" values in clause 7.2 of ETSI GS NFV-IFA 027. At least one of the two attributes (performance metric or group) shall be present.	< string > array

Name	Description	Schema
reportingBoundary *optional*	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
reportingPeriod *required*	Specifies the periodicity at which the producer will report to the consumer. about performance information. The unit shall be seconds. At the end of each reportingPeriod, the producer will inform the consumer about availability of the performance data collected for each completed collection period during this reportingPeriod. The reportingPeriod should be equal to or a multiple of the collectionPeriod. In the latter case, the performance data for the collection periods within one reporting period are reported together.	integer

reports

Name	Description	Schema
expiryTime *optional*	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
fileSize *optional*	The size of the report file in bytes, if known.	integer
href *required*	The Uri where the report can be obtained.	string (url)
readyTime *required*	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)

Response 400

Name	Description	Schema
detail *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 /pm_jobs

Description

Query PM Job

The client can use this method to retrieve information about PM jobs.

Parameters

Type	Name	Description	Schema
Header	**Accept** *required*	Content-Types that are acceptable for the response. Reference: IETF RFC 7231	string
Header	**Authorization** *optional*	The authorization token for the request. Reference: IETF RFC 7235	string
Header	**Version** *required*	Version of the API requested to use when responding to this request.	string
Query	**all_fields** *optional*	Include all complex attributes in the response. See clause 4.3.3 for details. The VNFM shall support this parameter.	string
Query	**exclude_default** *optional*	Indicates to exclude the following complex attributes from the response. See clause 4.3.3 for details. The VNFM shall support this parameter. The following attributes shall be excluded from the PmJob structure in the response body if this parameter is provided, or none of the parameters "all_fields," "fields", "exclude_fields", "exclude_default" are provided: - Reports	string
Query	**exclude_fields** *optional*	Complex attributes to be excluded from the response. See clause 4.3.3 for details. The VNFM should support this parameter.	string
Query	**fields** *optional*	Complex attributes to be included into the response. See clause 4.3.3 for details. The VNFM should support this parameter.	string
Query	**filter** *optional*	Attribute-based filtering expression according to clause 4.3.2. 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 PmJob and in data types referenced from it shall be supported by the VNFM in the filter expression.	string
Query	**nextpage_opaque_marker** *optional*	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 4.7.2.1 for this resource.	string

Responses

HTTP Code	Description	Schema
200	200 OK Information about zero or more PM jobs was queried successfully. The response body shall contain in an array representations of zero or more PM jobs, as defined in clause 6.5.2.7. If the VNFM supports alternative 2 (paging) according to clause 4.7.2.1 for this resource, inclusion of the Link HTTP header in this response shall follow the provisions in clause 4.7.2.3. **Headers** : `Content-Type` (string) : The MIME type of the body of the request. Reference: IETF RFC 7231. `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. `Link` (string) : Reference to other resources. Used for paging in the present document, see clause 4.7.2.1.	< Response 200 > array

HTTP Code	Description	Schema
400	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. **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.	Response 400

HTTP Code	Description	Schema
401	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. **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.	Response 401
403	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. **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.	Response 403
405	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. **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.	Response 405

HTTP Code	Description	Schema
406	406 NOT ACCEPTABLE If the "Accept" 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. **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.	Response 406
500	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. **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.	Response 500
503	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. **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.	Response 503

Response 200

Name	Description	Schema
_links *optional*	Links for this resource.	_links
criteria *required*	Criteria of the collection of performance information.	criteria
id *required*	An identifier with the intention of being globally unique.	string
objectInstanceIds *required*	Identifiers of the VNF instances for which performance information is collected.	< string > array
reports *optional*	Information about available reports collected by this PM job.	reports

_links

Name	Description	Schema
objects *optional*	Links for this resource.	objects
self *required*	This type represents a link to a resource using an absolute URI. It shall comply with the provisions defined in table 4.4.1.3-1.	self

objects

Name	Description	Schema
objects *optional*	Links to resources representing the VNF instances for which performance information is collected. Shall be present if the VNF instance information is accessible as a resource.	< objects > array
self *required*	This type represents a link to a resource using an absolute URI. It shall comply with the provisions defined in table 4.4.1.3-1.	self

objects

Name	Description	Schema
href *required*	String formatted according to IETF RFC 3986.	string

self

Name	Description	Schema
href *required*	String formatted according to IETF RFC 3986.	string

self

Name	Description	Schema
href *required*	String formatted according to IETF RFC 3986.	string

criteria

Name	Description	Schema
collectionPeriod *required*	Specifies the periodicity at which the producer will collect performance information. The unit shall be seconds. At the end of each reportingPeriod, the producer will inform the consumer about availability of the performance data collected for each completed collection period during this reportingPeriod. The reportingPeriod should be equal to or a multiple of the collectionPeriod. In the latter case, the performance data for the collection periods within one reporting period are reported together.	integer
performanceMetric *optional*	This defines the types of performance metrics for the specified object instances. Valid values are specified as "Measurement Name" values in clause 7.2 of ETSI GS NFV-IFA 027. At least one of the two attributes (performance metric or group) shall be present.	< string > array
performanceMetricGroup *optional*	Group of performance metrics. A metric group is a pre-defined list of metrics, known to the producer that it can decompose to individual metrics. Valid values are specified as "Measurement Group" values in clause 7.2 of ETSI GS NFV-IFA 027. At least one of the two attributes (performance metric or group) shall be present.	< string > array

Name	Description	Schema
reportingBoundary *optional*	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
reportingPeriod *required*	Specifies the periodicity at which the producer will report to the consumer. about performance information. The unit shall be seconds. At the end of each reportingPeriod, the producer will inform the consumer about availability of the performance data collected for each completed collection period during this reportingPeriod. The reportingPeriod should be equal to or a multiple of the collectionPeriod. In the latter case, the performance data for the collection periods within one reporting period are reported together.	integer

reports

Name	Description	Schema
expiryTime *optional*	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
fileSize *optional*	The size of the report file in bytes, if known.	integer
href *required*	The Uri where the report can be obtained.	string (url)
readyTime *required*	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)

Response 400

Name	Description	Schema
detail *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 /pm_jobs/{pmJobId}

Description

Query PM Job

The client can use this method for reading an individual PM job.

Parameters

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

Responses

HTTP Code	Description	Schema
200	200 OK Information about an individual PM job was queried successfully. The response body shall contain a representation of the PM job resource. **Headers** : `Content-Type` (string) : The MIME type of the body of the request. Reference: IETF RFC 7231. `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.	Response 200

HTTP Code	Description	Schema
400	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. **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.	Response 400

HTTP Code	Description	Schema
401	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. **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.	Response 401
403	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. **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.	Response 403
405	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. **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.	Response 405

HTTP Code	Description	Schema
406	406 NOT ACCEPTABLE If the "Accept" 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. **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.	Response 406
500	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. **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.	Response 500
503	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. **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.	Response 503

Response 200

Name	Description	Schema
_links *optional*	Links for this resource.	_links
criteria *required*	Criteria of the collection of performance information.	criteria
id *required*	An identifier with the intention of being globally unique.	string
objectInstanceIds *required*	Identifiers of the VNF instances for which performance information is collected.	< string > array
reports *optional*	Information about available reports collected by this PM job.	reports

_links

Name	Description	Schema
objects *optional*	Links for this resource.	objects
self *required*	This type represents a link to a resource using an absolute URI. It shall comply with the provisions defined in table 4.4.1.3-1.	self

objects

Name	Description	Schema
objects *optional*	Links to resources representing the VNF instances for which performance information is collected. Shall be present if the VNF instance information is accessible as a resource.	< objects > array
self *required*	This type represents a link to a resource using an absolute URI. It shall comply with the provisions defined in table 4.4.1.3-1.	self

objects

Name	Description	Schema
href *required*	String formatted according to IETF RFC 3986.	string

self

Name	Description	Schema
href *required*	String formatted according to IETF RFC 3986.	string

self

Name	Description	Schema
href *required*	String formatted according to IETF RFC 3986.	string

criteria

Name	Description	Schema
collectionPeriod *required*	Specifies the periodicity at which the producer will collect performance information. The unit shall be seconds. At the end of each reportingPeriod, the producer will inform the consumer about availability of the performance data collected for each completed collection period during this reportingPeriod. The reportingPeriod should be equal to or a multiple of the collectionPeriod. In the latter case, the performance data for the collection periods within one reporting period are reported together.	integer
performanceMetric *optional*	This defines the types of performance metrics for the specified object instances. Valid values are specified as "Measurement Name" values in clause 7.2 of ETSI GS NFV-IFA 027. At least one of the two attributes (performance metric or group) shall be present.	< string > array
performanceMetricGroup *optional*	Group of performance metrics. A metric group is a pre-defined list of metrics, known to the producer that it can decompose to individual metrics. Valid values are specified as "Measurement Group" values in clause 7.2 of ETSI GS NFV-IFA 027. At least one of the two attributes (performance metric or group) shall be present.	< string > array

Name	Description	Schema
reportingBoundary *optional*	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
reportingPeriod *required*	Specifies the periodicity at which the producer will report to the consumer. about performance information. The unit shall be seconds. At the end of each reportingPeriod, the producer will inform the consumer about availability of the performance data collected for each completed collection period during this reportingPeriod. The reportingPeriod should be equal to or a multiple of the collectionPeriod. In the latter case, the performance data for the collection periods within one reporting period are reported together.	integer

reports

Name	Description	Schema
expiryTime *optional*	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
fileSize *optional*	The size of the report file in bytes, if known.	integer
href *required*	The Uri where the report can be obtained.	string (url)
readyTime *required*	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)

Response 400

Name	Description	Schema
detail *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 /pm_jobs/{pmJobId}

Description

Delete PM Job

This method terminates an individual PM job.

Parameters

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

Responses

HTTP Code	Description	Schema
204	204 NO CONTENT The PM job was deleted successfully. The response body shall be empty. **Headers** : `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.	No Content

HTTP Code	Description	Schema
400	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. **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.	Response 400

HTTP Code	Description	Schema
401	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. **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.	Response 401
403	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. **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.	Response 403
405	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. **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.	Response 405

HTTP Code	Description	Schema
406	406 NOT ACCEPTABLE If the "Accept" 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. **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.	Response 406
500	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. **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.	Response 500
503	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. **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.	Response 503

Response 400

Name	Description	Schema
detail *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 /pm_jobs/{pmJobId}/reports/{reportId}

Description

The client can use this method for reading an individual performance report.

Parameters

Type	Name	Description	Schema
Header	**Accept** *required*	Content-Types that are acceptable for the response. Reference: IETF RFC 7231	string
Header	**Authorization** *optional*	The authorization token for the request. Reference: IETF RFC 7235	string
Header	**Version** *required*	Version of the API requested to use when responding to this request.	string
Path	**pmJobId** *required*	Identifier of the PM job.	string
Path	**reportId** *required*	Identifier of the performance report.	string

Responses

HTTP Code	Description	Schema
200	200 OK Information of an individual performance report was read successfully. The response body shall contain a representation of the performance report resource. **Headers** : `Content-Type` (string) : The MIME type of the body of the request. Reference: IETF RFC 7231. `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.	Response 200

HTTP Code	Description	Schema
400	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. **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.	Response 400

HTTP Code	Description	Schema
401	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. **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.	Response 401
403	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. **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.	Response 403
405	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. **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.	Response 405

HTTP Code	Description	Schema
406	406 NOT ACCEPTABLE If the "Accept" 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. **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.	Response 406
500	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. **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.	Response 500
503	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. **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.	Response 503

Response 200

Name	Description	Schema
entries *optional*	List of performance information entries. Each performance report entry is for a given metric of a given object (i.e. VNF instance), but can include multiple collected values.	< entries > array

entries

Name	Description	Schema
objectInstanceId *required*	An identifier with the intention of being globally unique.	string
objectType *required*	Defines the object type for which performance information is reported (i.e. VNF type). The string value shall be set to the vnfdId of the VNF instance to which the performance information relates.	string
performanceMetric *required*	Name of the metric collected. This attribute shall contain the related "Measurement Name" value as defined in clause 7.2 of ETSI GS NFV-IFA 027.	string
performanceValues *optional*	List of performance values with associated timestamp.	< performanceValues > array
subObjectInstanceId *optional*	An identifier that is unique for the respective type within a VNF instance, but may not be globally unique.	string

performanceValues

Name	Description	Schema
timeStamp *required*	Date-time stamp. Representation: String formatted according to IETF RFC 3339.	string (date-time)
value *optional*	Value of the metric collected. The type of this attribute shall correspond to the related "Measurement Unit" as defined in clause 7.2. of ETSI GS NFV-IFA 027.	object

Response 400

Name	Description	Schema
detail *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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. Creation of two subscription resources with the same callbackURI 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 subscription resource if another subscription resource with the same filter and callbackUri already exists (in which case it shall return the “201 Created” response code), or may decide to not create a duplicate subscription resource (in which case it shall return a “303 See Other” response code referencing the existing subscription resource with the same filter and callbackUri).

Parameters

Type	Name	Description	Schema
Header	**Accept** *required*	Content-Types that are acceptable for the response. Reference: IETF RFC 7231	string
Header	**Authorization** *optional*	The authorization token for the request. Reference: IETF RFC 7235	string
Header	**Content-Type** *required*	The MIME type of the body of the request. Reference: IETF RFC 7231	string
Header	**Version** *required*	Version of the API requested to use when responding to this request.	string
Body	**PmSubscriptionRequest** *required*	Details of the subscription to be created.	PmSubscriptionRequest

PmSubscriptionRequest

Name	Description	Schema
authentication *optional*		authentication
callbackUri *required*	The URI of the endpoint to send the notification to.	string (url)
filter *optional*	This type represents a filter that can be used to subscribe for notifications related to performance management events.	filter

authentication

Name	Description	Schema
authType *required*	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 *optional*	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 *optional*	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 *optional*	Password to be used in HTTP Basic authentication. Shall be present if it has not been provisioned out of band.	string

Name	Description	Schema
userName *optional*	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 *optional*	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 *optional*	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 *optional*	String formatted according to IETF RFC 3986.	string

filter

Name	Description	Schema
notificationTypes *optional*	Match particular notification types. Permitted values: * ThresholdCrossedNotification * PerformanceInformationAvailableNotification The permitted values of the "notificationTypes" attribute are spelled exactly as the names of the notification types to facilitate automated code generation systems.	enum (ThresholdCrossedNotification, PerformanceInformationAvailableNotification)
vnfInstanceSubscriptionFilter *optional*	This type represents subscription filter criteria to match VNF instances.	vnfInstanceSubscriptionFilter

vnfInstanceSubscriptionFilter

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

vnfProducts

Name	Description	Schema
versions *optional*	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 *required*	Name of the VNF product to match.	string

versions

Name	Description	Schema
vnfSoftwareVersion *required*	A version.	string
vnfdVersions *optional*	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	201 CREATED The subscription was created successfully. A representation of the created subscription resource shall be returned in the response body. The HTTP response shall include a "Location" HTTP header that contains the resource URI of the created subscription resource. **Headers** : `Location` (string (url)) : The resource URI of the created VNF instance. `Content-Type` (string) : The MIME type of the body of the request. Reference: IETF RFC 7231. `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.	Response 201

HTTP Code	Description	Schema
303	+ **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.	No Content
400	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. **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.	Response 400

HTTP Code	Description	Schema
401	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. **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.	Response 401
403	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. **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.	Response 403
405	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. **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.	Response 405

HTTP Code	Description	Schema
406	406 NOT ACCEPTABLE If the "Accept" 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. **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.	Response 406
500	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. **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.	Response 500
503	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. **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.	Response 503

Response 201

Name	Description	Schema
_links *required*	Links to resources related to this resource.	_links
callbackUri *required*	The URI of the endpoint to send the notification to.	string (url)
filter *optional*	This type represents a filter that can be used to subscribe for notifications related to performance management events.	filter
id *required*	An identifier with the intention of being globally unique.	string

_links

Name	Description	Schema
self *required*	This type represents a link to a resource using an absolute URI. It shall comply with the provisions defined in table 4.4.1.3-1.	self

self

Name	Description	Schema
href *required*	String formatted according to IETF RFC 3986.	string

filter

Name	Description	Schema
notificationTypes *optional*	Match particular notification types. Permitted values: * ThresholdCrossedNotification * PerformanceInformationAvailableNotification The permitted values of the "notificationTypes" attribute are spelled exactly as the names of the notification types to facilitate automated code generation systems.	enum (ThresholdCrossedNotification, PerformanceInformationAvailableNotification)
vnfInstanceSubscriptionFilter *optional*	This type represents subscription filter criteria to match VNF instances.	vnfInstanceSubscriptionFilter

vnfInstanceSubscriptionFilter

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

vnfProducts

Name	Description	Schema
versions *optional*	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 *required*	Name of the VNF product to match.	string

versions

Name	Description	Schema
vnfSoftwareVersion *required*	A version.	string
vnfdVersions *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 client can use this method to query the list of active subscriptions to Performance management

notifications subscribed by the client.

Parameters

Type	Name	Description	Schema
Header	**Accept** *required*	Content-Types that are acceptable for the response. Reference: IETF RFC 7231	string
Header	**Authorization** *optional*	The authorization token for the request. Reference: IETF RFC 7235	string
Header	**Version** *required*	Version of the API requested to use when responding to this request.	string
Query	**filter** *optional*	Attribute-based filtering expression according to clause 4.3.2. 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 PmSubscription and in data types referenced from it shall be supported by the VNFM in the filter expression.	string
Query	**nextpage_opaque_marker** *optional*	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 4.7.2.1 for this resource.	string

Responses

HTTP Code	Description	Schema
200	200 OK The list of subscriptions was 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 PM subscriptions as defined in 6.5.2.3. If the VNFM supports alternative 2 (paging) according to clause 4.7.2.1 for this resource, inclusion of the Link HTTP header in this response shall follow the provisions in clause 4.7.2.3. **Headers** : `Content-Type` (string) : The MIME type of the body of the request. Reference: IETF RFC 7231. `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. `Link` (string) : Reference to other resources. Used for paging in the present document, see clause 4.7.2.1.	< Response 200 > array

HTTP Code	Description	Schema
400	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. **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.	Response 400

HTTP Code	Description	Schema
401	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. **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.	Response 401
403	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. **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.	Response 403
405	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. **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.	Response 405

HTTP Code	Description	Schema
406	406 NOT ACCEPTABLE If the "Accept" 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. **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.	Response 406
500	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. **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.	Response 500
503	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. **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.	Response 503

Response 200

Name	Description	Schema
_links *required*	Links to resources related to this resource.	_links
callbackUri *required*	The URI of the endpoint to send the notification to.	string (url)
filter *optional*	This type represents a filter that can be used to subscribe for notifications related to performance management events.	filter
id *required*	An identifier with the intention of being globally unique.	string

_links

Name	Description	Schema
self *required*	This type represents a link to a resource using an absolute URI. It shall comply with the provisions defined in table 4.4.1.3-1.	self

self

Name	Description	Schema
href *required*	String formatted according to IETF RFC 3986.	string

filter

Name	Description	Schema
notificationTypes *optional*	Match particular notification types. Permitted values: * ThresholdCrossedNotification * PerformanceInformationAvailableNotification The permitted values of the "notificationTypes" attribute are spelled exactly as the names of the notification types to facilitate automated code generation systems.	enum (ThresholdCrossedNotification, PerformanceInformationAvailableNotification)
vnfInstanceSubscriptionFilter *optional*	This type represents subscription filter criteria to match VNF instances.	vnfInstanceSubscriptionFilter

vnfInstanceSubscriptionFilter

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

vnfProducts

Name	Description	Schema
versions *optional*	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 *required*	Name of the VNF product to match.	string

versions

Name	Description	Schema
vnfSoftwareVersion *required*	A version.	string
vnfdVersions *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 client can use this method for reading an individual subscription about Performance

management notifications subscribed by the client.

Parameters

Type	Name	Description	Schema
Header	**Accept** *required*	Content-Types that are acceptable for the response. Reference: IETF RFC 7231	string
Header	**Authorization** *optional*	The authorization token for the request. Reference: IETF RFC 7235	string
Header	**Version** *required*	Version of the API requested to use when responding to this request.	string
Path	**subscriptionId** *required*	This identifier can be retrieved from the resource referenced by the "Location" HTTP header in the response to a POST request creating a new 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	200 OK The subscription was read successfully. The response body shall contain a representation of the subscription resource. **Headers** : `Content-Type` (string) : The MIME type of the body of the request. Reference: IETF RFC 7231. `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.	Response 200

HTTP Code	Description	Schema
400	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. **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.	Response 400

HTTP Code	Description	Schema
401	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. **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.	Response 401
403	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. **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.	Response 403
405	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. **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.	Response 405

HTTP Code	Description	Schema
406	406 NOT ACCEPTABLE If the "Accept" 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. **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.	Response 406
500	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. **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.	Response 500
503	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. **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.	Response 503

Response 200

Name	Description	Schema
_links *required*	Links to resources related to this resource.	_links
callbackUri *required*	The URI of the endpoint to send the notification to.	string (url)
filter *optional*	This type represents a filter that can be used to subscribe for notifications related to performance management events.	filter
id *required*	An identifier with the intention of being globally unique.	string

_links

Name	Description	Schema
self *required*	This type represents a link to a resource using an absolute URI. It shall comply with the provisions defined in table 4.4.1.3-1.	self

self

Name	Description	Schema
href *required*	String formatted according to IETF RFC 3986.	string

filter

Name	Description	Schema
notificationTypes *optional*	Match particular notification types. Permitted values: * ThresholdCrossedNotification * PerformanceInformationAvailableNotification The permitted values of the "notificationTypes" attribute are spelled exactly as the names of the notification types to facilitate automated code generation systems.	enum (ThresholdCrossedNotification, PerformanceInformationAvailableNotification)
vnfInstanceSubscriptionFilter *optional*	This type represents subscription filter criteria to match VNF instances.	vnfInstanceSubscriptionFilter

vnfInstanceSubscriptionFilter

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

vnfProducts

Name	Description	Schema
versions *optional*	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 *required*	Name of the VNF product to match.	string

versions

Name	Description	Schema
vnfSoftwareVersion *required*	A version.	string
vnfdVersions *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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.

Parameters

Type	Name	Description	Schema
Header	**Authorization** *optional*	The authorization token for the request. Reference: IETF RFC 7235	string
Header	**Version** *required*	Version of the API requested to use when responding to this request.	string
Path	**subscriptionId** *required*	This identifier can be retrieved from the resource referenced by the "Location" HTTP header in the response to a POST request creating a new 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	204 NO CONTENT The subscription resource was deleted successfully. The response body shall be empty. **Headers** : `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.	No Content

HTTP Code	Description	Schema
400	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. **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.	Response 400

HTTP Code	Description	Schema
401	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. **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.	Response 401
403	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. **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.	Response 403
405	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. **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.	Response 405

HTTP Code	Description	Schema
406	406 NOT ACCEPTABLE If the "Accept" 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. **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.	Response 406
500	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. **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.	Response 500
503	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. **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.	Response 503

Response 400

Name	Description	Schema
detail *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 /thresholds

Description

Create Threshold

The POST method can be used by the client to create a threshold.

Parameters

Type	Name	Description	Schema
Header	**Accept** *required*	Content-Types that are acceptable for the response. Reference: IETF RFC 7231	string
Header	**Authorization** *optional*	The authorization token for the request. Reference: IETF RFC 7235	string
Header	**Content-Type** *required*	The MIME type of the body of the request. Reference: IETF RFC 7231	string
Header	**Version** *required*	Version of the API requested to use when responding to this request.	string
Body	**CreateThresholdRequest** *required*	Request parameters to create a threshold resource.	CreateThresholdRequest

CreateThresholdRequest

Name	Description	Schema
criteria *required*	This type represents criteria that define a threshold.	criteria
objectInstanceId *required*	An identifier with the intention of being globally unique.	string

criteria

Name	Description	Schema
performanceMetric *required*	Defines the performance metric associated with the threshold. Valid values are specified as "Measurement Name" values in clause 7.2 of ETSI GS NFV-IFA 027.	string
simpleThresholdDetails *optional*	Details of a simple threshold. Shall be present if thresholdType="SIMPLE".	simpleThresholdDetails
thresholdType *required*	Type of threshold. This attribute determines which other attributes are present in the data structure. Permitted values: * SIMPLE: Single-valued static threshold In the present document, simple thresholds are defined. The definition of additional threshold types is left for future specification.	enum (SIMPLE)

simpleThresholdDetails

Name	Description	Schema
hysteresis *required*	The hysteresis of the threshold. Shall be represented as a non-negative floating point number. A notification with crossing direction "UP" will be generated if the measured value reaches or exceeds "thresholdValue" + "hysteresis". A notification with crossing direction "DOWN" will be generated if the measured value reaches or undercuts "thresholdValue" - "hysteresis". The hysteresis is defined to prevent storms of threshold crossing notifications. When processing a request to create a threshold, implementations should enforce a suitable minimum value for this attribute (e.g. override the value or reject the request).	integer
thresholdValue *required*	The threshold value. Shall be represented as a floating point number.	integer

Responses

HTTP Code	Description	Schema
201	201 CREATED A threshold was created successfully. The response body shall contain a representation of the created threshold resource. The HTTP response shall include a "Location" HTTP header that contains the resource URI of the created threshold resource. **Headers** : `Location` (string (url)) : The resource URI of the created VNF instance. `Content-Type` (string) : The MIME type of the body of the request. Reference: IETF RFC 7231. `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.	Response 201

HTTP Code	Description	Schema
400	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. **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.	Response 400

HTTP Code	Description	Schema
401	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. **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.	Response 401
403	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. **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.	Response 403
405	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. **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.	Response 405

HTTP Code	Description	Schema
406	406 NOT ACCEPTABLE If the "Accept" 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. **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.	Response 406
500	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. **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.	Response 500
503	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. **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.	Response 503

Response 201

Name	Description	Schema
_links *required*	Links for this resource.	_links
criteria *required*	This type represents criteria that define a threshold.	criteria
id *required*	An identifier with the intention of being globally unique.	string
objectInstanceId *required*	An identifier with the intention of being globally unique.	string

_links

Name	Description	Schema
self *required*	This type represents a link to a resource using an absolute URI. It shall comply with the provisions defined in table 4.4.1.3-1.	self

self

Name	Description	Schema
href *required*	String formatted according to IETF RFC 3986.	string

criteria

Name	Description	Schema
performanceMetric *required*	Defines the performance metric associated with the threshold. Valid values are specified as "Measurement Name" values in clause 7.2 of ETSI GS NFV-IFA 027.	string
simpleThresholdDetails *optional*	Details of a simple threshold. Shall be present if thresholdType="SIMPLE".	simpleThresholdDetails

Name	Description	Schema
thresholdType *required*	Type of threshold. This attribute determines which other attributes are present in the data structure. Permitted values: * SIMPLE: Single-valued static threshold In the present document, simple thresholds are defined. The definition of additional threshold types is left for future specification.	enum (SIMPLE)

simpleThresholdDetails

Name	Description	Schema
hysteresis *required*	The hysteresis of the threshold. Shall be represented as a non-negative floating point number. A notification with crossing direction "UP" will be generated if the measured value reaches or exceeds "thresholdValue" + "hysteresis". A notification with crossing direction "DOWN" will be generated if the measured value reaches or undercuts "thresholdValue" - "hysteresis". The hysteresis is defined to prevent storms of threshold crossing notifications. When processing a request to create a threshold, implementations should enforce a suitable minimum value for this attribute (e.g. override the value or reject the request).	integer
thresholdValue *required*	The threshold value. Shall be represented as a floating point number.	integer

Response 400

Name	Description	Schema
detail *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 /thresholds

Description

Query Threshold

The client can use this method to query information about thresholds.

Parameters

Type	Name	Description	Schema
Header	**Accept** *required*	Content-Types that are acceptable for the response. Reference: IETF RFC 7231	string
Header	**Authorization** *optional*	The authorization token for the request. Reference: IETF RFC 7235	string
Header	**Version** *required*	Version of the API requested to use when responding to this request.	string
Query	**filter** *optional*	Attribute-based filtering expression according to clause 4.3.2. 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 Thresholds and in data types referenced from it shall be supported by the VNFM in the filter expression. NOTE: There are no attribute selectors defined for this resource as the threshold attributes with cardinality 0..1 or 0..N are not structurally complex in nature.	string
Query	**nextpage_opaque_marker** *optional*	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 4.7.2.1 for this resource.	string

Responses

HTTP Code	Description	Schema
200	200 OK Information about zero or more thresholds was queried successfully. The response body shall contain in an array representations of zero or more thresholds, as defined in 6.5.2.9. If the VNFM supports alternative 2 (paging) according to clause 4.7.2.1 for this resource, inclusion of the Link HTTP header in this response shall follow the provisions in clause 4.7.2.3. **Headers** : `Location` (string (url)) : The resource URI of the created VNF instance. `Content-Type` (string) : The MIME type of the body of the request. Reference: IETF RFC 7231. `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. `Link` (string) : Reference to other resources. Used for paging in the present document, see clause 4.7.2.1.	< Response 200 > array

HTTP Code	Description	Schema
400	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. **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.	Response 400

HTTP Code	Description	Schema
401	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. **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.	Response 401
403	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. **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.	Response 403
405	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. **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.	Response 405

HTTP Code	Description	Schema
406	406 NOT ACCEPTABLE If the "Accept" 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. **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.	Response 406
500	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. **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.	Response 500
503	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. **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.	Response 503

Response 200

Name	Description	Schema
_links *required*	Links for this resource.	_links
criteria *required*	This type represents criteria that define a threshold.	criteria
id *required*	An identifier with the intention of being globally unique.	string
objectInstanceId *required*	An identifier with the intention of being globally unique.	string

_links

Name	Description	Schema
self *required*	This type represents a link to a resource using an absolute URI. It shall comply with the provisions defined in table 4.4.1.3-1.	self

self

Name	Description	Schema
href *required*	String formatted according to IETF RFC 3986.	string

criteria

Name	Description	Schema
performanceMetric *required*	Defines the performance metric associated with the threshold. Valid values are specified as "Measurement Name" values in clause 7.2 of ETSI GS NFV-IFA 027.	string
simpleThresholdDetails *optional*	Details of a simple threshold. Shall be present if thresholdType="SIMPLE".	simpleThresholdDetails

Name	Description	Schema
thresholdType *required*	Type of threshold. This attribute determines which other attributes are present in the data structure. Permitted values: * SIMPLE: Single-valued static threshold In the present document, simple thresholds are defined. The definition of additional threshold types is left for future specification.	enum (SIMPLE)

simpleThresholdDetails

Name	Description	Schema
hysteresis *required*	The hysteresis of the threshold. Shall be represented as a non-negative floating point number. A notification with crossing direction "UP" will be generated if the measured value reaches or exceeds "thresholdValue" + "hysteresis". A notification with crossing direction "DOWN" will be generated if the measured value reaches or undercuts "thresholdValue" - "hysteresis". The hysteresis is defined to prevent storms of threshold crossing notifications. When processing a request to create a threshold, implementations should enforce a suitable minimum value for this attribute (e.g. override the value or reject the request).	integer
thresholdValue *required*	The threshold value. Shall be represented as a floating point number.	integer

Response 400

Name	Description	Schema
detail *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 /thresholds/{thresholdId}

Description

Query Threshold

The client can use this method for reading an individual threshold.

Parameters

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

Responses

HTTP Code	Description	Schema
200	200 OK Information about an individual threshold was queried successfully. The response body shall contain a representation of the threshold. **Headers** : `Content-Type` (string) : The MIME type of the body of the request. Reference: IETF RFC 7231. `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.	Response 200

HTTP Code	Description	Schema
400	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. **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.	Response 400

HTTP Code	Description	Schema
401	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. **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.	Response 401
403	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. **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.	Response 403
405	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. **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.	Response 405

HTTP Code	Description	Schema
406	406 NOT ACCEPTABLE If the "Accept" 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. **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.	Response 406
500	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. **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.	Response 500
503	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. **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.	Response 503

Response 200

Name	Description	Schema
_links *required*	Links for this resource.	_links
criteria *required*	This type represents criteria that define a threshold.	criteria
id *required*	An identifier with the intention of being globally unique.	string
objectInstanceId *required*	An identifier with the intention of being globally unique.	string

_links

Name	Description	Schema
self *required*	This type represents a link to a resource using an absolute URI. It shall comply with the provisions defined in table 4.4.1.3-1.	self

self

Name	Description	Schema
href *required*	String formatted according to IETF RFC 3986.	string

criteria

Name	Description	Schema
performanceMetric *required*	Defines the performance metric associated with the threshold. Valid values are specified as "Measurement Name" values in clause 7.2 of ETSI GS NFV-IFA 027.	string
simpleThresholdDetails *optional*	Details of a simple threshold. Shall be present if thresholdType="SIMPLE".	simpleThresholdDetails

Name	Description	Schema
thresholdType *required*	Type of threshold. This attribute determines which other attributes are present in the data structure. Permitted values: * SIMPLE: Single-valued static threshold In the present document, simple thresholds are defined. The definition of additional threshold types is left for future specification.	enum (SIMPLE)

simpleThresholdDetails

Name	Description	Schema
hysteresis *required*	The hysteresis of the threshold. Shall be represented as a non-negative floating point number. A notification with crossing direction "UP" will be generated if the measured value reaches or exceeds "thresholdValue" + "hysteresis". A notification with crossing direction "DOWN" will be generated if the measured value reaches or undercuts "thresholdValue" - "hysteresis". The hysteresis is defined to prevent storms of threshold crossing notifications. When processing a request to create a threshold, implementations should enforce a suitable minimum value for this attribute (e.g. override the value or reject the request).	integer
thresholdValue *required*	The threshold value. Shall be represented as a floating point number.	integer

Response 400

Name	Description	Schema
detail *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 /thresholds/{thresholdId}

Description

Delete Threshold

This method allows to delete a threshold.

Parameters

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

Responses

HTTP Code	Description	Schema
204	204 NO CONTENT The threshold was deleted successfully. The response body shall be empty. **Headers** : `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.	No Content

HTTP Code	Description	Schema
400	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. **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.	Response 400

HTTP Code	Description	Schema
401	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. **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.	Response 401
403	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. **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.	Response 403
405	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. **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.	Response 405

HTTP Code	Description	Schema
406	406 NOT ACCEPTABLE If the "Accept" 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. **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.	Response 406
500	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. **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.	Response 500
503	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. **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.	Response 503

Response 400

Name	Description	Schema
detail *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string

Name	Description	Schema
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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 *required*	A human-readable explanation specific to this occurrence of the problem.	string
instance *optional*	A URI reference that identifies the specific occurrence of the problem. It may yield further information if dereferenced.	string (URI)
status *required*	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 *optional*	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 *optional*	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)