Dell EMC PowerStore

REST API Developers Guide

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DELL EMC

Notes, cautions, and warnings

NOTE: A NOTE indicates important information that helps you make better use of your product.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

Contents

Additional Resources

As part of an improvement effort, revisions of the software and hardware are periodically released. Some functions that are described in this document are not supported by all versions of the software or hardware currently in use. The product release notes provide the most up-to-date information about product features. Contact your technical support professional if a product does not function properly or does not function as described in this document.

Where to get help

Support, product, and licensing information can be obtained as follows:

- **Product information**

  For product and feature documentation or release notes, go to the PowerStore Documentation page at www.dell.com/powerstoredocs.
- **Troubleshooting**

  For information about products, software updates, licensing, and service, go to www.dell.com/support and locate the appropriate product support page.
- **Technical support**

  For technical support and service requests, go to www.dell.com/support and locate the **Service Requests** page. To open a service request, you must have a valid support agreement. Contact your Sales Representative for details about obtaining a valid support agreement or to answer any questions about your account.

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Overview

The PowerStore Management REST API

The PowerStore Management REST API is a set of resources (objects), operations, and attributes that provide interactive, scripted, and programmatic management control of the PowerStore cluster. Here are some examples of what you can do with the REST API:

- Provision new cluster components, such as appliances and volumes.
- Configure replication destinations and sessions, and rules.
- Fail over and fail back an appliance.
- Create snapshots for backup purposes.
- Gather metrics to use for historical analysis.
- Gather configuration information and logs to use for auditing and trending analysis.

For more information about PowerStore Management REST API functionality, see Reference content on page 41. Reference materials are also available on the appliance in several formats:

- Swagger UI—`https://<cluster management ip address>/swaggerui`
- JSON—`https://<cluster management ip address>/api/rest/openapi.json`

The REST API uses a Representational State Transfer (REST) architecture style to expose data. Using a REST API provides the following advantages:

- Presents a single, consistent interface for managing PowerStore clusters.
- Requires no additional tools, other than standard web browsers or command-line HTTP tools, such as wGET and cURL. For complex interactions, clients can use any procedural programming language, such as C++ or Java, or scripting language, such as Perl or Python, to make calls to the REST API.
- Uses well-known HTTP conventions in a standard manner to interact with the appliance.
- Is easy to transport in the network. REST API traffic looks and acts like standard HTTP network traffic, and requires no special ports open in the firewall or special settings in the switches.

The REST API connection is secured with SSL. The same authentication is used for the REST API and GUI.

Resource-oriented architecture and REST

REST is a client/server architectural style that uses the HTTP protocol in a simple, effective, way. REST is based on the following principles:

- Application state and functionality are organized into resources. Resources represent physical things, such as a specific appliance. Resources also represent logical things, such as a specific alert, or collections of entities, such as the volumes or virtual disks in the system.
- Each resource has a unique Universal Resource Identifier (URI), and each resource instance has a unique ID. For example, you can identify the alert collection with this path component: `/api/rest/alert`, and you can identify the alert instance that has an ID of 00c0d863-8a13-4e98-ba06-c4c3f6da615f with this URI: `/api/rest/alert/00c0d863-8a13-4e98-ba06-c4c3f6da615f`.
- Resources share a uniform interface between the client and server through standard HTTP protocol operations. The PowerStore Management REST API uses the HTTP `GET` operation to retrieve data about a resource collection or resource instance, `PATCH` to modify a resource instance, `POST` to create a resource instance, and `DELETE` to delete a resource instance. The REST API also uses `POST` for a limited set of other operations to implement resource-specific actions. Thus, an application can interact with a resource by knowing the URI pattern, resource identifier, and action required.
- Communication between the client and server occurs through HTTP requests and responses. In the PowerStore Management REST API, requests and responses represent resource data using JavaScript Object Notation (JSON).
- Each request is stateless, which means that the server does not store application state information. Instead, client requests contain all the necessary information to service the request.
- Resources in a REST API are self-documenting. A response from the server contains information about the requested resource in the form of attribute names and values.

JSON data exchange format

JavaScript Object Notation (JSON) is a text-based, platform-independent data-exchange format that is easy for humans and machines to read and write. It consists of two structures:

- A set of name:value pairs enclosed by curly brackets.
- A list of values enclosed by square brackets. This structure is used when the value in a name:value pair is an array.

The value in a name can be a simple value, such as a string or a number, or it can be either of the structures above (a list of name:value pairs in curly brackets, or a list of values in square brackets).

The following example shows part of a response body for a `GET dns` collection request in JSON format. In this content, the value for the addresses attribute is a list structure:

```
[
  {
    "id": "DNS1",
    "addresses":
    [
      "10.244.53.108",
      "10.244.53.109"
    ]
  }
]
```

For more information about JSON, see json.org.

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REST request components

HTTP request headers

The following table describes the HTTP request headers used by the PowerStore Management REST API. The API uses these headers in standard ways.

HTTP header	Value	Description
`Accept:`	`application/json`	Format of the body content desired in the response. All requests use `Accept: application/json`, which is the default and only value accepted.
`Content-Type:`	`application/json`	Body content type of the request. This is optional because it is the default and only supported value.
`Accept-Language:`	`en-US`	Requested locale will be mapped to an available language. Only `en-US` is supported.
`DELL-EMC-TOKEN:`	Valid CSRF token value from authenticated GET request	Before issuing any REST call which changes the state of the object (such as `POST`, `PATCH` or `DELETE`) send a `GET` request to receive a CSRF token as response header named `DELL-EMC-TOKEN`. Use the value of token from the response header obtained from the GET call as a Header value in the subsequent calls for this session.
`Range:`	`<first>-<last>`	For `GET` calls only. Part of paging support. Requests rows first through last (optional) of the result set.

URI patterns

Basic URI patterns

The following table describes the basic URI patterns that the PowerStore Management REST API supports:

Table 1. Basic patterns in the REST API

URI pattern	HTTP Operations	Description
Collection type resource URI `/api/rest/<resource_type>`	`GET`	Retrieves a list of instances for the specified resource type.
	`POST`	Creates a new instance of the specified resource type, using data specified in the request body, if allowed.
Instance resource URI `/api/rest/<resource_type>/<id>`	`GET`	Retrieves the specified resource instance.
	`PATCH`	Modifies the specified resource instance, if allowed.
	`DELETE`	Deletes the specified resource instance, if allowed.

Table 1. Basic patterns in the REST API(continued)

URI pattern	HTTP Operations	Description
Instance action URI `/api/rest/<resourceType>/<id>/<action>`	`POST`	Performs the operation specified by `<action>` for the specified resource instance.
Class-level action URI `/api/rest/<resource_type>/<action>`	`POST`	Performs the operation specified by `<action>` for the specified non-singleton resource type.

NOTE: URI parameters cannot contain slashes (/) or other special characters.

Examples

Retrieving all instances of the storage_container resource type

```
GET /api/rest/storage_container
```

Retrieving storage_container instance 70b37e07-b7fb-4e69-83ea-928680c4dc31

```
GET api/rest/storage_container/70b37e07-b7fb-4e69-83ea-928680c4dc31
```

Creating a new storage container instance

```
POST /api/rest/storage_container
```

Deleting storage container instance 70b37e07-b7fb-4e69-83ea-928680c4dc31

```
DELETE /api/rest/storage_container/70b37e07-b7fb-4e69-83ea-928680c4dc31
```

Modifying storage container instance 70b37e07-b7fb-4e69-83ea-928680c4dc31

```
PATCH /api/rest/storage_container/70b37e07-b7fb-4e69-83ea-928680c4dc31
```

Mounting storage container instance 70b37e07-b7fb-4e69-83ea-928680c4dc31

```
POST /api/rest/storage_container/70b37e07-b7fb-4e69-83ea-928680c4dc31/mount
```

Exchanging SSL certificates with another PowerStore appliance

```
POST /api/rest/x509_certificate/exchange
```

Request parameters

The PowerStore Management REST API supports the following request parameters:

Request parameter	Applicable request types	Description
`select`	Collection and instance queries	Specifies a comma-separated list of attributes to return in a response. If you do not use this parameter, a query returns the `id` attribute only. For more information, see Specifying the attributes to return in a query response on page 25.
`<filter expression>`	Collection queries	Filters the response data against a set of criteria. Only matching resource instances are returned. Filtering is case insensitive. For more information, see Filtering response data on page 26.

Request parameter	Applicable request types	Description
`order`	Collection queries	Specifies how to sort response data. You can sort response data in ascending or descending order based on one of the following: • The attributes of the queried resource type. • The attributes of a resource type that is embedded in the primary resource type or related through a foreign key. • A computed attribute. For more information, see Sorting response data on page 28.
`async`	Most non-GET requests	Setting this parameter to `true (?async=true)` runs the request in the background. Most active management requests (ones that attempt to change the configuration) support this option. By default, requests are run synchronously. For more information, see Working with asynchronous requests on page 39.

To use request parameters, append the parameters to the request URI. The first request parameter appended to the URI begins with a ? character. Subsequent request parameters appended to the URI begin with a & character. You can combine request parameters and can use them in any order.

Examples

Using the `select` request parameter

The following request uses a `select` request parameter to return the values for the `id`, `severity`, and `description` attributes for all alert instances.

Request	`GET https://1.2.3.4/api/rest/alert?select=id,severity,description_l10n`
Response	[{ "id":"014f999e-96d8-4f85-853c-c6a0e2569088", "severity":"Minor", "description_l10n":"Cluster license installation failed due to Fail to obtain license file. The trial period will expire on 2019-11-27 18:47:26.985, after which no new storage provisioning will be allowed." }, { "id":"2d3cc48d-0296-4d15-afb9-252061cf7df9", "severity":"Minor", "description_l10n":"Bus 0 enclosure 0 LCCA is initializing." }, { "id":"37583ff1-b0fe-41f2-9b3d-e5e5d2e5e525", "severity":"Info", "description_l10n":"The remote system <undefined> volume discovery or refresh has failed." }, . . .

Using a filter expression

The following request uses a filter expression to return the values for `alert` instances that have the `severity` attribute set to **`Info`**:

Request	`GET https://1.2.3.4/api/rest/alert?select=id,severity&severity=eq.Info`

Response	<pre>[
	  {
	  "id":"37583ff1-b0fe-41f2-9b3d-e5e5d2e5e525",
	  "severity":"Info"
	  },
	  {
	  "id":"63d21fb9-897d-4d07-983f-0478436755b6",
	  "severity":"Info"
	  },
	  {
	  "id":"ab9175c4-1ded-473e-b22d-63ac1154937f",
	  "severity":"Info"
	  }
	.
	.
	.</pre>

Using the `order` request parameter

The following request uses an order expression to sort `alert` instances by `severity`:

Request	<pre>GET https://1.2.3.4/api/rest/alert?select=id,severity&order=severity</pre>

Response	<pre>[
	  {
	  "id":"37583ff1-b0fe-41f2-9b3d-e5e5d2e5e525",
	  "severity":"Info"
	  },
	  {
	  "id":"63d21fb9-897d-4d07-983f-0478436755b6",
	  "severity":"Info"
	  },
	  {
	  "id":"ab9175c4-1ded-473e-b22d-63ac1154937f",
	  "severity":"Info"
	  },
	  {
	  "id":"014f999e-96d8-4f85-853c-c6a0e2569088",
	  "severity":"Minor"
	  },
	  {
	  "id":"2d3cc48d-0296-4d15-afb9-252061cf7df9",
	  "severity":"Minor"
	  },
	  {
	]</pre>

Using the `is_async` request parameter

The following asynchronous request deletes a `local_user` instance. The request returns the job ID:

Request	<pre>DELETE https://1.2.3.4/api/rest/local_user/4?is_async=true</pre>

Response	<pre>{
	  "id": "1ed0d49e-101b-4b8a-85dc-886f907e8070"
	}</pre>

REST requests

A JSON request body for the REST API consists of a collection of name:value pairs for a single resource type. The request body has the following syntax:

- For number or boolean values:

```
{
    <attributeName1>:<value1>,
    <attributeName2>:<value2>,
    .
    .
    .
}
```

- For IP, string, or datetime values:

```
{
    <attributeName1>:"<value1>",
    <attributeName2>:"<value2>",
    .
    .
    .
}
```

For example, the request body for a create request for the `local_user` resource type could contain the following values:

```
{
    "name": "user1",
    "password": "myPassword"
    "role_id": "operator"
 }
```

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REST responses

Response components

Each response to a REST API request consists of a response header, HTTP status code (in the response header), and JSON response body, if applicable:

- The response header contains metadata about the response being sent.
- The HTTP status code in the response header indicates whether a request is successful or unsuccessful.
  - An HTTP status code in the `2xx` family, such as `200 OK` or `201 Created`, indicates a correctly processed request.
  - An HTTP status code in the `4xx` family indicates an error in the request. For example, a 400 status code indicates a badly formed request, and a 401 status code indicates an authorization error.
  - An HTTP status code in the `5xx` family indicates a server failure. For example a 500 status code indicates an internal server error, and a 503 status code indicates that the REST service is temporarily unavailable.
- The JSON response body varies according to the request type and whether a request was successful. For example, a collection response body is returned in response to a successful `GET` collection request, and an instance response body is returned in response to an instance request.

HTTP response headers

A response from the REST API always includes HTTP response headers that contain metadata about the response being sent. The following HTTP headers appear in every REST API response:

Table 2. HTTP response headers in the REST API

HTTP header	Description
Content-Type	This header is set to `application/json`, although it can be `application/zip`, `document/text`, or `application/binary`.
Content-Length	This header refers to the byte length of the HTTP body.
Set-Cookie	The login session ticket (`auth_cookie`) is returned in the first request of the session and required for all subsequent requests, unless you pass the user ID and password with each request. Because the API uses cookie-based authentication, the HTTP client must support cookies in order to use the API. For more information, see Connecting and authenticating.
DELL-EMC-TOKEN	Before issuing any REST call which changes the state of the object (such as `POST`, `PATCH` or `DELETE`) send a `GET` request to receive a CSRF token as response header named `DELL-EMC-TOKEN`. Use the value of token from the response header obtained from the GET call as a Header value in the subsequent calls for this session.
Content-Range	Paginated responses contain this header, which indicates how many instances were successful and how many were returned.

HTTP status codes

Every response to a REST API request includes an HTTP status code, which indicates whether the request was successful. If requests are unsuccessful (that is, if they return `4xx` and `5xx` HTTP status codes) the system returns a message entity that describes the problem.

The following table describes the HTTP status codes that apply to the REST API:

Table 3. HTTP status codes in the REST API

Status code	Name	Applies to	Description
200	OK	All of the following: • GET requests • Action PATCH requests with output data • Action POST requests with output data	Successful request. For a GET request, the response body contains the requested resource. For an action POST and PATCH request, the response body contains the output arguments.
201	Created	POST requests for creating resources	Successful request. The response body contains the id attribute only.
202	Accepted	Asynchronous POST, PATCH, and DELETE requests	Request is in process. The response body is the ID of the job resource instance executing the request.
204	No Content	Non-GET requests.	Successful request. There is no body content in the response.
206	Partial Content	GET requests	Successful request. The response body contains a partial response. Used for pagination of a long response.
400	Bad Request	All requests	Problem with request intercepted before execution. The system detected a problem with the request and did not proceed. The request may have a badly formed URI or badly formed parameters, headers, or body content.
401	Unauthorized	All requests	Authentication error. The username and password combination or the auth-cookie sent with the request are not valid.
403	Forbidden	All requests	Authorization error. The role of the authenticated user does not have the privilege required to perform the requested operation.
404	Not Found	All requests	Resource does not exist. This can be caused by an invalid ID in an instance URI.
405	Method Not Allowed	All requests	Specified resource does not support the request's operation. For example, requesting a DELETE on a hardware resource can cause this error.
416	Range Not Satisfiable	GET requests	The specified range of items is invalid. The value of the Range header or the URL parameters limit or offset, or both, are invalid.
422	Unprocessable Entity	Non-GET requests	Error during execution of the request. The response body contains an error message that describes the problem with the request.

Table 3. HTTP status codes in the REST API(continued)

Status code	Name	Applies to	Description
			Example causes: • The system is out of space. • A range error occurred. • There are inconsistent properties on a `POST` or `PATCH`
500	`Internal Server Error`	All requests	Internal error.
503	`Service Unavailable`	All requests	The REST service is temporarily unavailable. Wait and try the request again.

JSON collection response body

A JSON collection response body occurs in response to a `GET` collection request that results in a `200 OK` or a `206 Partial Content` HTTP status code. For collections with fewer than 100 elements, the response body for a collection contains the identifier for all instances in the resource type collection. The response is a JSON array of zero or more instances. Each instance in the response has one or more attribute name-value pairs. The returned name-value pairs are determined by the `select` URI parameter, which defaults to the `id` attribute. You can specify which attributes to return for each instance by using the `select` query parameter. You can specify which instances are returned by filtering the data using an attribute expression as a query parameter.

Example

GET collection response for an event

The following example illustrates the components of a collection resource. It shows a collection resource returned in response to a `GET` collection request for the `event` resource type. In this example, the query returns the `id` and `severity` of each event in the appliance. Spaces outside the quoted strings are used for readability, and are not significant.

Request	`GET https://1.2.3.4/api/rest/event?select=id,severity`
Response	List of all instances in the specified collection that meet the request criteria. The response includes attribute values as a set of name:value pairs for each returned instance: `[ { "id": "0a739865-a233-4ef0-ae20-6ed014ad06fe", "severity": "Minor" }, { "id": "51c0db9e-1d2b-4289-97b7-f361d67f7807", "severity": "Minor" }, . . . ]`

JSON instance response body

A JSON instance response occurs in response to a `GET` instance request that results in a `200 Success` HTTP status code. By default, this response body contains only the identifier of the requested resource instance. Use the `select` request parameter to specify the additional attribute values to return.

Example

GET instance response for an event

The following example illustrates an instance resource. It shows an instance resource returned in response to a `GET` instance request for the `event` resource type with an identifier of 299a2f56-fea7-4e85-af0d-992294526911. Spaces outside the quoted strings are used for readability, and are not significant.

Request	`GET https://1.2.3.4/api/rest/event/299a2f56-fea7-4e85-af0d-992294526911?select=id,severity`
Response	`{ "id": "299a2f56-fea7-4e85-af0d-992294526911", "severity": "Info" }`

JSON create response body

A JSON create response body occurs in response to a `POST` operation for create that results in a `201 Created` HTTP return code. This response body contains the `id` attribute for the new resource.

Example

Create response for a local_user

The following examples illustrate the components of a minimal instance resource. It shows a minimal instance resource returned in response to a successful `POST` request for creating a new local_user resource. The request body contains the arguments used to populate the new resource.

Request	`POST https://1.2.3.4/api/rest/local_user`
Request body	`{ "name": "User1", "password": "myPassword", "role_id": "1" }`
Response	`{ "id": "4" }`

Response with no body

A response with no body occurs in response to a `DELETE` request that results in a `204 No Content` status code. In this circumstance, response headers are returned with the empty response body. A response with no body also occurs in response to an action `POST` request that does not have output data. This response with no body also occurs in response to a successful synchronous `DELETE` instance request that does not have output data and that results in a `204 No Content` status code.

JSON job response body

A JSON response body occurs in response to an asynchronous request that results in a `202 Accepted` HTTP return code. This response body contains the job id. You can query the `job` resource instance to find out whether the job completed and to get the response to the asynchronous request. For a description of the `job` resource type, see the job topic in the Reference content on page 41.

Example

Deletion response for a local_user

The following example returns a job resource instance in response to a successful asynchronous `DELETE` request.

Request	`DELETE https://1.2.3.4/api/rest/local_user/4?is_async=true`

Response	<pre>{
	  "id": "476c903a-1bc2-4370-9a4b-426594ed9604"
	}</pre>

Error response

An error response is returned in response to an unsuccessful request; that is, a request that returns a 4xx or 5xx HTTP status code. Unlike the response bodies returned by successful requests, an error response cannot be queried independently.

For a description of the error response attributes, see the Reference content on page 41.

Example

Error response for a `POST` request

The following example returns an error response in response to an unsuccessful `POST` request:

Request	`POST https://1.2.3.4/api/rest/volume_group/257f2597-7c11-46c9-8941-3793e1cb2baa/refresh`

Request body	<pre>{
	"from_object_id": "22f3bf53-ad83-4466-8e5e-5b0fade650da"
	}</pre>

Response	<pre>{
	  "messages":[
	    {
	      "code": "0xE0A070020007",
	      "severity": "Error",
	      "message_l10n": "Family mismatch for snapshot target
	257f2597-7c11-46c9-8941-3793e1cb2baa and source 22f3bf53-
	ad83-4466-8e5e-5b0fade650da.",
	      "arguments": [
	        "257f2597-7c11-46c9-8941-3793e1cb2baa",
	        "22f3bf53-ad83-4466-8e5e-5b0fade650da"
	      ]
	    }
	  ]
	}</pre>

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JSON encodings

JSON base value encodings

The following table shows the JSON encodings for each base type:

NOTE: A property that has no value appears as the type `null`.

Type name	JSON definition	Format after "<name>":	Example	Notes
short	type: integer format: int16	<int value>	"drive_count":600	N/A
integer	type: integer format: int32	<int value>	"answer": 42	N/A
long	type: integer format: int64	<int value>	"size": 123456789	N/A
float	type: number format: float	<float value>	"progress": 99.9	N/A
double	type: number format: double	<float value>	"throughput": 123456.78	N/A
string	type: string	<string value>	"description":"some text"	Use \ to escape the quote (") and control characters.
byte	type: string format: byte	<base64 encoded character string>	"bitmask":"c3VyZS4="	Base64 encoded byte sequence.
binary	type: string format: binary	<octet sequence string>	"checksum": "1a2b3c4d1234dcba"	Hex encoded byte sequence.
boolean	type: boolean	true|false	"force":true	Case insensitive.
date	type: string format: date	"yyyy-mm-dd"	"expiration_date": "2020-02-02"	As defined by full-date - RFC3339.
timestamp	type: string format: timestamp	"hh:mm:ss[.sss]"	"daily_start_time": "03:30:00"	As defined by partial-time - RFC3339.
date-time	type: string format: date-time	yyyy-mm-ddThh:mm:ss[.sss]Z	"updated": "2015-07-14T18:21:32.621Z"	As defined by full-date - RFC3339. All times are expressed in UTC time. The optional [.sss] contains fractional milliseconds.
password	type: string	<string value>	"password":"wordpass"	This is a string in the API and may be presented differently by

Type name	JSON definition	Format after "<name>":	Example	Notes
	format: password			a client (to hide typed input). This is handled differently on the server (for example, the values are not logged).
ip-address	type: string format: ip-address	String containing an IPv4 address, IPv6 address, or host name.	"mgmtAddr":"128.222.1.2"	In this API, some attributes support IPv4 only, while others support both IPv4 and IPv6. Some attributes also support DNS names. The help topics for individual resource types in the Reference content on page 41 indicate which IP address options are supported by that resource type.
URI	type: string format: uri	"<url in a string>"	"href": "https:/foo.com/bar.jsp"	N/A
embedded	type: string format:	{ "<propName>":<value1>, … }	" health": { "value":0, "description": "OK", "resolution":"" }	In this example, health is an embedded type with three attributes: value, description, and resolution.
enum	type: string format:	<string value>	"severity":"Error"	Enumeration values are single token strings. Each enumeration is defined in the Reference content on page 41.
id	type: string format:	<string value>	"id":"123"	<id> value of the referenced resource instance.

JSON list encoding

A JSON list is a list of values with the following format:

```
[ <value1>, <value2>, <value3>,...]
```

where:

- Square brackets enclose the list.
- Commas separate each value.
- <value> can be another list or any of the base value encoding formats.

JSON lists can be empty.

Examples

An empty list

```
"addresses":[ ]
```

A list with one value

```
"addresses":["1.2.3.4"]
```

A list with three values

```
"addresses":["1.2.3.4","5.6.7.8","4.3.2.1"]
```

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Managing a REST API session

Connecting and authenticating

All requests to the REST API must be authenticated. The REST API uses the standard HTTP Basic access authentication mechanism to authenticate REST requests. The same users are valid for REST or GUI access.

To log in to the REST API server, use the following request components:

Header	`Accept: application/json`
	`Content-Type: application/json (if the request has a non-empty request body)`
	`Authorization: <base 64 encoding of username and password>`

Operation	`GET`, `PATCH`, `POST`, or `DELETE`
URI pattern	URI pattern for one of the requests listed in the Operation section

NOTE: To avoid exposure to a cross-site request forgery (CSRF), requests other than `GET` require the `DELL-EMC-TOKEN` header. Before issuing any REST call which changes the state of the object (such as `POST`, `PATCH` or `DELETE`), send a `GET` request to receive a CSRF token. Use the value of token from the response header that is obtained from the `GET` call as a Header value in the subsequent calls for this session.

The server returns the following in response to a successful login:

- A `200 OK` HTTP status code.
- `auth_cookie` header, which is required to authenticate all subsequent requests, unless you resubmit the user ID and password with each request. It is also required for logging out of the session.

  NOTE: Once the `auth_cookie` value is set, a browser automatically sets the cookie value for each request.

If the authentication fails, the server returns a `401 Unauthorized` HTTP status code.

Obtaining login session information

Query the `login_session` resource type to find out basic information about the current session. The following table describes the information that is returned in response to a successful query of the `login_session` resource type:

Attribute	Description
`id`	The unique identifier of the `login_session` resource instance.
`user`	Information about the user logged into this session defined by the `local_user` resource type.
`role_ids`	Roles for the user who is logged into this session defined by the `role` resource type.
`idle_timeout`	Number of seconds after last use until this session expires.
`is_password_change_required`	Indicates whether the password must be changed in order to use this session created for the built-in admin account. The values are: • `true` - Password must be changed. • `false` - Password does not need to be changed. For information about changing the password for a local user, see the Help topic for the `local_user` resource type in the Reference content on page 41.

Attribute	Description
`is_built_in_user`	Indicates whether the user is a system-defined user, such as **`admin`**.

Example login session information

```
[
  {
    "id":"85d0dbfc-d364-47b9-ad90-0fe03efdf860",
    "user"1",
    "role_ids":["1"],
    "idle_timeout":36000,
    "is_password_change_required":false,
    "is_built_in_user":true
  }
]
```

Logging out of the REST API session

Use the following request components to log out of an existing REST API session:

Header	`Accept: application/json`
	`Content-Type: application/json`
	`Authorization: <auth_cookie>`

Operation	`POST`
URI pattern	`https://1.2.3.4/api/rest/logout`

The server returns a `204 No Content` HTTP status code and an empty response body in response to a successful logout.

6

Querying a resource

Pagination

When you query a resource, the server limits the size of the returned collection by default. This collection is limited to the number of instances up to a specified pagination limit, which defaults to 100. If the requested collection has fewer instances than this limit, the response contains the status code `200 OK` and all requested instances in its body.

When the requested collection is larger than the limit, the response status code changes to `206 (Partial Content)`. The response body contains only the partial collection with a size equal to the pagination limit.

Also, a special header `Content-Range` is added. This header contains information about how many items were returned, their position in the whole collection, and the total size of the collection. For example, `0-99/1000` indicates that first 100 items were returned out of 1000.

Pagination parameters and ordering

You can control the number and position of the returned partial collection by using pagination parameters and ordering. Pagination parameters can be passed as a URL parameters `limit` and `offset`, or in a request header `Range`, which specifies indexes of the first and last items in the total collection to return. <add a link to the section about ordering>

Parameter	Type	Description
`offset`	`integer`	Use this parameter to specify what the first item in the returned collection. The default is 0.
`limit`	`integer`	The maximum number of entries that the query returns.

The default pagination limit is 100; you can enter values from 1 to 2000. If 0 or less is entered as the value of the `limit`, the response is the status code `416 Range Not Satisfiable`. A response to a request with a valid `limit` parameter contains results up to the specified maximum number of items. If you specify a larger value, the server changes the limit to 2000.

When you limit the number of returned instances, by default, the first instances from the collection are returned based on the ordering. To get a partial collection starting from an index other than 0, use the URL parameter `offset`. Its default value is 0; other valid values are positive integers up to the total size of the collection. Invalid offset values cause the response status code `416 Range Not Satisfiable`.

Another way that you can request a specific range of items from a collection is to specify the first and last index of the instances of the partial collection using the request header `Range`. For example, a request with the header `Range: "100-199"` retrieves the second batch of 100 items in the collection.

Retrieving data for multiple occurrences in a collection

To retrieve data for multiple occurrences of a resource type, use the following request components:

Headers	`Accept: application/json` `Authorization: <auth_cookie>`
Operation	`GET`

URI pattern	`/api/rest/<resource_type>` where *<resource_type>* is the resource type for the collection you want to return. For additional functionality, such as filtering instances, you can append one or more request parameters to the URI.
Body	Empty.

If the request succeeds, the server returns a `200 OK` HTTP status code and a collection resource in the response body. If the request does not succeed, the server returns a 4xx or 5xx HTTP status code and an error response. If there are no instances in a collection, the server returns a `200 OK` HTTP status code and an empty body containing only `[]`.

By default, the response to a `GET` collection request includes only the unique identifier for each instance of the specified resource type. You can use the following request parameters to customize the returned data:

Request parameters	Description
`select`	Requests data for a specified set of attributes.
`order`	Specifies how to sort the response data.
`<attribute expression>`	Filters the response data against a set of criteria. Only matching resource instances are returned. Filtering is case insensitive.
`limit`	Limits the maximum number of items in the returned collection (1-2000).
`offset`	Provides an index of the first returned instance.

Retrieving data for all alerts in the system

The following request returns information about all alerts in the system. The `select` parameter specifies that the values for the `id`, `severity`, and `description` attributes should be returned. This example shows three returned instances:

Header	`Accept: application/json`
Request	`GET https://1.2.3.4/api/rest/alert?select=id,event_code,severity,description_l10n`
Request body	Empty.
Response body	`[{ "id":"014f999e-96d8-4f85-853c-c6a0e2569088", "severity":"Minor", "description_l10n":"Cluster license installation failed due to Fail to obtain license file. The trial period will expire on 2019-11-27 18:47:26.985, after which no new storage provisioning will be allowed." }, { "id":"2d3cc48d-0296-4d15-afb9-252061cf7df9", "severity":"Minor", "description_l10n":"Bus 0 enclosure 0 LCCA is initializing." }, { "id":"37583ff1-b0fe-41f2-9b3d-e5e5d2e5e525", "severity":"Info", "description_l10n":"The remote system <undefined> volume discovery or refresh has failed." }]`

Retrieving data for a specified resource instance

To retrieve data for a specified resource instance, use the following request components:

Headers	`Accept: application/json` `Authorization: <auth_cookie>`
Operation	`GET`
URI pattern	`/api/rest/<resource_type>/<id>` where: • *<resource_type>* is the resource type of the desired instance. • *<id>* is the unique identifier of the desired instance. For additional functionality, such as returning specific attributes, you can append one or more request parameters to the URI.
Body	Empty.

If the request succeeds, the server returns a `200 OK` HTTP status code and an instance resource in the response body. If the request does not succeed, the server returns a 4xx or 5xx HTTP status code and a message entity in the response body.

By default, the response to a `GET` instance request includes only the unique identifier (id attribute) of the specified resource instance. You can use the following request parameters to customize what data is returned:

Request parameter	Description
`select`	Requests data for a specified set of attributes.

Example

The following request returns the values for the `id`, `name`, and `serial_number` attributes for the `appliance` resource instance that has an id of `J8WRPD2`.

Header	`Accept: application/json`
Request	`GET https://1.2.3.4/api/rest/appliance/J8WRPD2?select=id,name,service_tag`

Response body	`{`
	`  "id": "J8WRPD2",`
	`  "name": "H2025-appliance-1",`
	`  "service_tag": "J8WRPD2"`
	`}`

Specifying the attributes to return in a query response

Use the `select` request parameter in a collection query to specify the set of attributes to return in a response. If you do not use this parameter, a query will return the `id` attribute only.

When you use the `select` request parameter, you can refer to attributes in a related resource type, as described in the Syntax section below.

Syntax

As the first parameter on the request URI: `?select=<attr1>,<attr2>,<attr3>...`

As a subsequent parameter on the request URI: `&select=<attr1>,<attr2>,<attr3>...`

where the attributes whose values you want to retrieve are listed in a comma-separated list.

You can use nested notation syntax (<reference_attribute_name>(<attr1?,<attr2>...)) in a select expression to return the values of attributes from related resource types. A related resource type is a resource type that is either referred to explicitly in the definition of the target resource type or embedded in the target resource type.

Considerations

The following considerations apply to using the select parameter:

- If a select request is made for an attribute that is not defined on the resource type, the server returns a 400 Bad Request error.
- If an attribute has a valid, empty string value, the server returns the value as <attribute>:"".
- Although a response normally contains only the requested attributes, this is not guaranteed. You should therefore be prepared to ignore unrequested properties.

Retrieving the name and create_time for a local_user

The following request retrieves values for the name and create_time attributes in the local_user resource collection:

Headers	`Accept: application/json` `Authorization: <auth_cookie>`
Request	`GET https://1.2.3.4/api/rest/local_user?select=name,role_id`

Response body	`[`
	`  {`
	`  "name": "admin",`
	`  "role_id": "1"`
	`  },`
	`  {`
	`  "name": "stadmin",`
	`  "role_id": "2"`
	`  },`
	`  {`
	`  "name": "vmadmin",`
	`  "role_id": "4"`
	`  }`
	`]`

Filtering response data

Use one or more filter expressions in a request parameter to specify matching criteria for a list of resources returned by a collection query. A filter expression works like an SQL WHERE clause. You specify a filter expression composed of boolean predicates, and the expression is applied against the attribute values of the requested resource type. Only those instances that cause the filter expression to evaluate to true are returned in the query response. The system ANDs together multiple filter expressions.

Filter expressions use operators such as gt, gte, lt, and lte. The interpretation of these operators is type-dependent. For example, gt used with datetime attributes means the date value to the right of gt must be more recent than the date value to the left of gt.

Filtering is case insensitive for any property called name.

Using a filter expression can save bandwidth, because the server removes extra data before returning data to the client. However a filter expression does not reduce the amount of work the server performs to answer the request.

NOTE: Complex requests can be slow or can fail.

Syntax

As the first parameter on the request URI: ?<attribute_name>=<filter_expr>

As a subsequent parameter on the request URI: &<attribute_name>=<filter_expr>

where <filter_expr> is defined by the following syntax :

`[not.]<operator>.<filter value>` You can use nested notation syntax `(<reference_attribute_name>(<attr1>,<attr2>...))` in a `filter` expression to filter by attributes from a related resource type.

NOTE: Some resource types and attributes do not support filtering, which is indicated in their descriptions.

You can also filter by attributes that are not requested in the select URL parameter. A related resource type is a resource type that is either referred to explicitly in the definition of the target resource type or embedded in the target resource type.

Supported operators

Comparator	Description	Applicable data types	Example
`eq`	Equal. Returns true when the expression on the left of `eq` equals the expression on the right.	All	`?role_id=eq.3` True if the value of `role_id` is `Operator`.
`gt`	Greater than. Returns true when the expression on the left of `=eq` is greater than the expression on the right.	All	`?low_value=gt.5` True if the value of `low_value` is greater than 5.
`gte`	Greater than or equal. Returns true when the expression on the left of `=eq` is greater than or equal to the expression on the right.	All	`?software_version=gte.5.3` True if the value of `software_version` is greater than or equal to 5.3.
`lt`	Less than Returns true when the expression on the left of `=eq` is less than the expression on the right.	All	`?modify_time=lt.2018-05-07T17:56:28.859+00:00` True if the value of `modify_time` is earlier than 2018-05-07T17:56:28.859+00:00.
`lte`	Less than or equal. Returns true when the expression on the left of `=eq` is less than or equal to the expression on the right.	All	`?modify_time=lte.2018-05-07T17:56:28.859+00:00` True if the value of `modify_time` is 2018-05-07T17:56:28.859+00:00 or earlier.
`neq`	Not equal. Returns true when the expression on the left of `=eq` is not equal to the expression on the right.	All	`?role_id=neq.3` True if the value of `role_id` is anything other than `Operator`.
`ilike`	Case-insensitive substring match. Returns true when the expression on the left of `=eq`, including its case, matches the expression on the right. Use `*` for a wildcard.	String	`?name=ilike.User*` True if the value of `name` starts with `User`.
`in`	One of a list of values. Returns true when the expression on the left of `=eq` matches any value in the comma-separated list on the right.	All	`?role_id=in.(operator,administrator,service)` True if the value of `role_id` is `Operator`, `Administrator`, or `VM Administrator`.
`is`	Checks for exact equality to null, true, or false values.	null (All), true, false (Boolean)	`?description=is.null`
`cs`	Contains.	List of any type	`?supported_speeds=cs.{1_Gbps,10_Gbps}`

Comparator	Description	Applicable data types	Example
			True if the `speeds` array contains 1 Gbps and 10 Gbps.
`cd`	Contained in.	List of any type	`?server_addresses=cd.{"1.2.3.4","5.6.7.8"}` True if the values in the server addresses list are all either 1.2.3.4 or 5.6.7.8.
`not`	Negates the operator that follows.	All	`?resource_type=not.in.(Operator,Administrator,VM Administrator)` True if the value of `role_id` is not Operator, Administrator, or VM Administrator.
`and`	All the conditions in the parentheses that follow must be true in order for the request to evaluate as true. **NOTE: The default for multiple filters is to AND them, so the use of `and` is optional unless you are using both `and` and `or` in the filter expression.**	All	`?and=(size.gt.50,performance_policy_id.eq.default_high)` True if the value of `size` is greater than 50 MB and the value of `performance_policy` is High.
`or`	At least one of the conditions in the parentheses that follow must be true in order for the request to evaluate as true.	All	`?or=(size.gt.50,performance_policy_id.eq.default_high)` True if either the value of `size` is greater than 50 MB or the value of `performance_policy` is High or both.

Sorting response data

Use the `order` request parameter to specify sort criteria for one attribute in a list of resources returned by a collection query. The `order` parameter works like an SQL Order By clause. You can specify one of these sort orders for the attribute:

- `asc`: (Default) Sorts the response data in ascending order.
- `desc`: Sorts the response data in descending order.

Sorting is case insensitive for any property called `name`.

Syntax

As the first parameter on the request URI: `?order=<order_expr>`

As a subsequent parameter on the request URI: `&order=<order_expr>`

where `<order_expr>` is defined by the following syntax:

`prop_expr1[.asc|.desc],[prop_expr2[.asc|.desc]...`

where:

- `prop_expr1` and `prop_expr2` are attribute names that are defined for the resource being queried.
- `asc` and `desc` are case insensitive.

Retrieving values for all alerts, sorted by state

The following request retrieves values for the `id`, `description`, and `alert_state` attributes for all alert instances and sorts this information by `alert_state` in ascending order.

Headers	`Accept: application/json` `Authorization: <auth_cookie>`
Request	`GET https://1.2.3.4/api/rest/alert?select=id,description_l10n,state&order=state`

Response body	<pre>[
	  {
	  "id": "1bf5e114-b476-492b-a37e-7d9c1b38e7b9",
	  "description_l10n": "Firmware version of the rights DAE PSU is no_errors.
	Current firmware version is 09.16s.",
	  "state": "Active"
	  },
	  {
	  "id": "27f6caef-219a-406c-ad74-2ab801e56b19",
	  "description_l10n": "Firmware version of the tops DAE Controller is no_errors.
	Current firmware version is 2.30.0s.",
	  "state": "Active"
	  },
	  {
	  "id": "0ed1b64a-91aa-444e-a832-cec924e41850",
	  "description_l10n": "Port state was changed from downs to ups.",
	  "state": "Cleared"
	  },
	  {
	  "id": "d406b80d-db51-4853-a835-23ed5512ae0d",
	  "description_l10n": "Port state was changed from downs to ups.",
	  "state": "Cleared"
	  }
	]</pre>

Including data from a related resource type in a query

You can extend the scope of a collection query to retrieve data from a related resource type. The REST model describes two kinds of relations:

- A referenced resource type
- An embedded resource type

Referenced resource types

A referenced resource type describes an instance of a linked object type. This resource type is declared in the REST model as a reference to an object (for a many-to-one relation) or an array of objects (for a one-to-many or many-to-many relation). To return information about instances and their related instances, use the following syntax in the `select` parameter to specify the desired attributes from the related resource type:

```
...<attribute1>,<attribute2>,<related_resource> (id,related_attribute2, related_attribute3...)
```

If you omit the list of parameters, only the `select` attribute and its value are returned for the referenced object:

```
...<attribute1>,<attribute2>,<related_resource>
```

Examples

The following queries use the `select` request parameter to return information about nodes and their related appliances.

Returning specified parameters for the appliance related to each node

Headers	`Accept: application/json` `Authorization: <auth_cookie>`
Request	`https://1.2.3.4/api/rest/node?select=id,name,appliance(id,name)`

Response body	`[`
	`  {`
	`  "id":"N1",`
	`  "name":"H0112-appliance-1-node-A",`
	`  "appliance":`
	`  {`
	`  "id":"A1",`
	`  "name":"H0112-appliance-1"`
	`  }`
	`  },`
	`  {`
	`  "id":"N2",`
	`  "name":"H0112-appliance-1-node-B",`
	`  "appliance":`
	`  {`
	`  "id":"A1",`
	`  "name":"H0112-appliance-1"`
	`  }`
	`  }`
	`]`

Returning only the id parameter for the appliance related to each node

Headers	`Accept: application/json` `Authorization: <auth_cookie>`
Request	`https://1.2.3.4/api/rest/node?select=id,name,appliance`

Response body	`[`
	`  {`
	`  "id":"N1",`
	`  "name":"H0112-appliance-1-node-A",`
	`  "appliance":`
	`  {`
	`  "id":"A1"`
	`  }`
	`  },`
	`  {`
	`  "id":"N2",`
	`  "name":"H0112-appliance-1-node-B",`
	`  "appliance":`
	`  {`
	`  "id":"A1"`
	`  }`
	`  }`
	`]`

Returning specified parameters for all nodes related to an appliance

Headers	`Accept: application/json` `Authorization: <auth_cookie>`

Request	`https://1.2.3.4/api/rest/appliance?select=id,name,nodes(id,name)`

Response body	<pre>[
	  {
	  "id":"A1",
	  "name":"H0112-appliance-1",
	  "nodes":
	  [
	  {
	  "id":"N1",
	  "name":"H0112-appliance-1-node-A"
	  },
	  {
	  "id":"N2",
	  "name":"H0112-appliance-1-node-B"
	  }
	  ]
	  }
	]</pre>

Returning only the id parameter for all nodes related to an appliance

Headers	<pre>Accept: application/json
	Authorization: <auth_cookie></pre>

Request	`https://1.2.3.4/api/rest/appliance?select=id,name,nodes`

Response body	<pre>[
	  {
	  "id":"A1",
	  "name":"H0112-appliance-1",
	  "nodes":
	  [
	  {
	  "id":"N1"
	  },
	  {
	  "id":"N2"
	  }
	  ]
	  }
	]</pre>

Embedded resource types

An embedded resource type describes an instance of nested objects. This resource type is declared in the REST model as a reference to an object or an array of objects with a special note in its description field.

- Embedded resources cannot be queried without a parent object.
- Embedded resources always return all fields. These objects do not allow the user to select which fields to return.

Use the following syntax in the `select` parameter to query an embedded resource type:

```
...<attribute1>,<attribute2>,<embedded_resource>
```

NOTE: Extending the scope of a collection query is not supported for all resources. Resources that do not support this functionality include a note in their description stating: `Filtering on the fields of this embedded resource is not supported.`

Example

Querying the protection data information for a volume

Headers	`Accept: application/json` `Authorization: <auth_cookie>`
Request	`https://1.2.3.4/api/rest/volume?select=id,protection_data`

Response body	<pre>[
	  {
	  "id":"3f6208d1-b325-4901-9fc1-9e82d943b857",
	  "protection_data":
	  {
	  "family_id": "3f6208d1-b325-4901-9fc1-9e82d943b857",
	  "parent_id": null,
	  "source_id": null,
	  "creator_type": "User",
	  "copy_signature": null,
	  "source_timestamp": null,
	  "creator_type_l10n": "User",
	  "is_app_consistent": null,
	  "created_by_rule_id": null,
	  "created_by_rule_name": null,
	  "expiration_timestamp": null
	  }
	  },
	  {
	  "id":"9d102db7-048d-4d24-85c2-28c7a5fc91ee",
	  "protection_data":
	  {
	  "family_id": "9d102db7-048d-4d24-85c2-28c7a5fc91ee",
	  "parent_id": null,
	  "source_id": null,
	  "creator_type": "User",
	  "copy_signature": null,
	  "source_timestamp": null,
	  "creator_type_l10n": "User",
	  "is_app_consistent": null,
	  "created_by_rule_id": null,
	  "created_by_rule_name": null,
	  "expiration_timestamp": null
	  }
	  },
	  {
	  "id":"f0480b0f-cc6f-431b-9e18-e4b39b2b13e1",
	  "protection_data":
	  {
	  "family_id": "f0480b0f-cc6f-431b-9e18-e4b39b2b13e1",
	  "parent_id": null,
	  "source_id": null,
	  "creator_type": "User",
	  "copy_signature": null,
	  "source_timestamp": null,
	  "creator_type_l10n": "User",
	  "is_app_consistent": null,
	  "created_by_rule_id": null,
	  "created_by_rule_name": null,
	  "expiration_timestamp": null
	  }
	  }
	]</pre>

7

Creating other types of requests

Creating a resource instance

To create a resource instance, use the following request components:

Headers	`Accept: application/json`
	`Content-Type: application/json`
	`Authorization: <auth_cookie>`

Operation	`POST`
URI pattern	`/api/rest/<resource_type>` where *<resource_type>* is the resource type of the instance you want to create.

Body	`{`
	`"argument1":<value>,`
	`"argument2":<value>,`
	`"argument3":<value>`
	`.`
	`.`
	`.`
	`}`
	where the comma-separated list contains all required arguments and any optional arguments. Use double quotes around a `string`, `date-time`, or `ip-address` value.

NOTE: The unique identifier of the new instance is generated automatically by the server.

If the request succeeds, it returns a `201 Created` HTTP status code and a create response body. This resource contains the `id` attribute for the new resource. If the request does not succeed, the server returns a `4xx` or `5xx` HTTP status code and a message entity in the response body.

Creating a local_user

The following request creates an instance of the `local_user` resource type.

Headers	`Accept: application/json`
	`Content-Type: application/json`
	`Authorization: <auth_cookie>`

Request	`POST https://1.2.3.4/api/rest/local_user`

Request body	`{`
	`"name": "User1",`
	`"password": "myPassword",`
	`"role_id": "1"`
	`}`

Response body	<pre>{
	  "id": "4"
	}</pre>

Modifying a resource instance

To modify a resource instance, use the following request components:

Headers	<pre>Accept: application/json
	Content-Type: application/json
	Authorization: <auth_cookie></pre>

Operation	PATCH
URI pattern	<pre>/api/rest/<resource_type>/<id></pre> where: • <resource_type> is the resource type of the instance you want to modify. • <id> is the unique identifier of the instance you want to modify. There are three varieties of PATCH operations: • "<attribute>": "new_value" replaces the existing value of the specified attribute with the new value. • "add_<attribute>": ["<new_value1>", "<new_value2>", ...] This only applies to list-type attributes, and adds the specified values to an existing list of values. • "remove_<attribute>": ["<existing value1>", "<existing_value2>"...] This only applies to list-type attributes, and removes the specified values from an existing list of values. The Reference content on page 41 documents which varieties of PATCH are supported for each resource type. For additional functionality, such as making the request an asynchronous request, you can append one or more request parameters to the URI.

Body	<pre>{
	  "argument1":<value>,
	  "argument2":<value>,
	  .
	  .
	  .
	}</pre>
	where the comma-separated list contains all required arguments and any optional arguments. Use double quotes around a string, date-time, or ip-address value.

If the request succeeds, it returns a 204 No Content HTTP status code and an empty response body. If the request does not succeed, the server returns a 4xx or 5xx HTTP status code in the response header and a message entity in the response body.

Examples

Replacing existing values in a volume group

The following request modifies the name and description values for the volume_group resource instance that has an id of ad09bfa8-f8d8-41b5-96a9-c15c9ebdf214:

Headers	<pre>Accept: application/json
	Content-Type: application/json
	Authorization: <auth_cookie></pre>

Request	`PATCH https://1.2.3.4/api/rest/volume_group/ad09bfa8-f8d8-41b5-96a9-c15c9ebdf214`

Request body	<pre>{
	  "name":"Storage resources for Marketing",
	  "description":"Volumes for storing competitive analaysis information"
	}</pre>

Response body	Empty.

Adding additional volumes to a volume group

The following request adds two volumes to the`volume_group` resource instance that has an `id` of `ad09bfa8-f8d8-41b5-96a9-c15c9ebdf214`:

Headers	<pre>Accept: application/json
	Content-Type: application/json
	Authorization: <auth_cookie></pre>

Request	`PATCH https://1.2.3.4/api/rest/volume_group/ad09bfa8-f8d8-41b5-96a9-c15c9ebdf214`

Request body	<pre>{
	  "add_volume_ids":["2b2e4948-5f23-495e-8e72-e26c5734c83f",
	  "6eaaa9bd-70e7-4b5f-9aca-fd2731d3c176"]
	}</pre>

Response body	Empty.

Removing volumes from a volume group

The following request removes two volumes from the `volume_group` resource instance that has an `id` of `ad09bfa8-f8d8-41b5-96a9-c15c9ebdf214`:

Headers	<pre>Accept: application/json
	Content-Type: application/json
	Authorization: <auth_cookie></pre>

Request	`PATCH https://1.2.3.4/api/rest/volume_group/ad09bfa8-f8d8-41b5-96a9-c15c9ebdf214`

Request body	<pre>{
	  "remove_volume_ids":["2b2e4948-5f23-495e-8e72-e26c5734c83f",
	  "6eaaa9bd-70e7-4b5f-9aca-fd2731d3c176"]
	}</pre>

Response body	Empty.

Deleting a resource instance

To delete a resource instance, use the following request components:

Headers	`Accept: application/json`
	`Authorization: <auth_cookie>`
	
	If a resource type has request arguments for the `DELETE` operation, you must also use the following header:
	
	`Content-Type: application/json`

Operation	`DELETE`
URI pattern	`/api/rest/<resource_type>/<id>` where: • `<resource_type>` is the resource type of the instance you want to delete. • `<id>` is the unique identifier of the instance you want to delete. For additional functionality, such as making the request an asynchronous request, you can append one or more request parameters to the URI.
Body	For most resource types, the body of a `DELETE` request is empty. However, if a resource type has request arguments for the `DELETE` operation, they are passed as a comma-separated list of standard JSON name:value pairs.

If the request succeeds, it returns a `204 No Content` HTTP status code and an empty response body. If the request does not succeed, the server returns a 4xx or 5xx HTTP status code in the response header and a message entity in the response body.

Deleting a volume_group instance

The following request deletes the `volume_group` instance that has an `id` of `23772434-6373-4748-aa1a-f4197475812a`:

Headers	`Accept: application/json`
	`Content-Type: application/json`
	`Authorization: <auth_cookie>`

Request	`DELETE https://1.2.3.4/api/rest/volume_group/23772434-6373-4748-aa1a-f4197475812a`
Request body	Empty.
Response body	Empty.

Performing an instance-level resource-specific action

Some resource types have operations that let you perform resource-specific actions on resource instances beyond the standard delete and modify actions. For example, you can use the `volume` resource type's `refresh` operation to refresh the contents of a volume from another volume in the same family.

To perform a resource-specific action on a resource instance, use the following request components:

Headers	For operations without request arguments:
	
	`Accept: application/json`
	`Authorization: <auth_cookie>`

	For operations with request arguments:
	`Accept: application/json`
	`Content-Type: application/json`
	`Authorization: <auth_cookie>`

Operation	`POST`
URI pattern	`/api/rest/<resource_type>/<id>/<action_name>` where: • `<resource_type>` is the resource type of the instance for which you want to perform an action. • `<id>` is the unique identifier of the instance for which you want to perform an action. • `<action_name>` is the action that you want to perform. For additional functionality, such as making the request an asynchronous request, you can append one or more request parameters to the URI.

Body	For operations without request arguments:
	Empty.
	For operations with input data:
	`{`
	`"argument1":<value>,`
	`"argument2":<value>,`
	`.`
	`.`
	`.`
	`}`
	where the comma-separated list contains all required arguments and any optional arguments. Use double quotes around a `string`, `date-time`, or `ip-address` value.

The success response for an instance-level resource-specific action differs depending on whether the action performed has output data:

- For actions that do not have output data, a successful request returns a `204 No Content` HTTP status code and an empty response body.
- For actions that have output data, a successful request returns a `200 OK` HTTP status code, and the body has the specified out attributes in an instance resource response body.

If the request does not succeed, the server returns a 4xx or 5xx HTTP status code in the response header and a message entity in the response body.

Creating a snapshot of a specified volume

The following request creates a snapshot of the `volume` instance that has an `id` of `a47a6bc8-ad32-4e07-bd51-15adc831dfee`:

Headers	`Accept: application/json`
	`Content-Type: application/json`
	`Authorization: <auth_cookie>`

Request	`POST /api/rest/volume/a47a6bc8-ad32-4e07-bd51-15adc831dfee/snapshot`

Request body	(Optional)
	`{`
	`"description": "DB copy before application upgrade"`
	`}`

Response body	<pre>{
	  "id": "57cdb822-490e-4755-b8b3-99bb779b1472"
	}</pre>

Performing a class-level action

Some resource types have operations that let you perform class-level actions. For example, exchanging SSL certificates with another PowerStore appliance.

To perform a class-level action, use the following request components:

Headers	For operations without request arguments:
	<pre>Accept: application/json
	Authorization: <auth_cookie></pre>
	For operations with request arguments:
	<pre>Accept: application/json
	Content-Type: application/json
	Authorization: <auth_cookie></pre>

Operation	`POST`
URI pattern	<pre>/api/rest/<resource_type>/<action_name></pre> where: • `<resource_type>` is the resource type of the class for which you want to perform an action. • `<action_name>` is the action you want to perform. For additional functionality, such as making the request an asynchronous request, you can append one or more request parameters to the URI.

Body	For operations without request arguments:
	Empty.
	For operations with input data:
	<pre>{
	  "argument1":<value>,
	  "argument2":<value>,
	  .
	  .
	  .
	}</pre>
	where the comma-separated list contains all required arguments and any optional arguments. Use double quotes around a `string`, `date-time`, or `ip-address` value.

The success response for an class-level action differs depending on whether the action performed has output data:

- For actions that do not have output data, a successful request returns a `204 No Content` HTTP status code and an empty response body.
- For actions that have output data, a successful request returns a `200 OK` HTTP status code, and the body will have the specified out attributes in a class response body.

If the request does not succeed, the server returns a 4xx or 5xx HTTP status code in the response header and a message entity in the response body.

Exchanging SSL certificates

The following request exchanges SSL certificates with another PowerStore appliance:

Headers	`Accept: application/json`
	`Content-Type: application/json`
	`Authorization: <auth_cookie>`

Request	`POST /api/rest/x509_certificate/exchange`

Request body	`{`
	`  "service": "Management_HTTP",`
	`  "address": "10.244.53.108",`
	`  "port": 8080,`
	`  "username": "user1",`
	`  "password": "myPassword"`
	`}`

Response body	Empty.

Working with asynchronous requests

By default, all REST API requests are synchronous, which means that the client/server connection stays open until the request completes and the response is returned.

Alternatively, you can make any active management request (one that changes the system rather than just querying it) into an asynchronous request by adding URL parameter is_async=true to the request URL. Asynchronous requests can be more reliable than synchronous requests. With an asynchronous request, you start a job, and the server returns an associated job resource instance almost immediately. You can query the job resource instance when convenient to get the HTTP response code and response body for the request. If you create a synchronous request and the network connection is lost, or the REST client or server goes down while the request is processing, there is no way to obtain the request status when it does eventually complete.

Syntax

As the first parameter on the request URI:

```
?is_async=true
```

As a subsequent parameter on the request URI:

```
&is_async=true
```

Usage

The following considerations apply to asynchronous requests:

- A valid asynchronous request returns a `202 Accepted` HTTP status code and a minimal `job` resource instance in the response body.
- An invalid asynchronous request returns immediately with the appropriate error code in the response header and a message entity in the response body.

To view the status of an asynchronous request, retrieve data for the appropriate `job` resource instance. For example, if an asynchronous `PATCH local_user` user request returns a `job` resource instance with an `id` of `1b6df699-7083-4440-912c-22e2ed89c530`, you can use an instance query to retrieve the asynchronous request data from this `job` resource. Query at least the `state` and `response_body` attributes. If the `state` is `Completed` or `Failed`, the `response_body` contains the error response.

Creating an asynchronous request

The following example uses the is_async=true request parameter on a request to modify an `volume_group` instance.

Headers	`Accept: application/json`
	`Content-Type: application/json`
	`Authorization: <auth_cookie>`

Request	`PATCH https://1.2.3.4/api/rest/volume_group/e436abe3-d78e-4d1d-a349-349368803c59?is_async=true`
Request body	`{ "description": "Storage resources for the Finance department" }`
Response body	`{ "id": "1b6df699-7083-4440-912c-22e2ed89c530" }`

Viewing an asynchronous request

The following example shows the `job` instance that is associated with the request that is shown above:

Headers	`Accept: application/json`
	`Content-Type: application/json`
	`Authorization: <auth_cookie>`

Request	`GET https://1.2.3.4/api/rest/job/1b6df699-7083-4440-912c-22e2ed89c530?select=id,description_l10n,state,response_body`
Request body	Empty.
Response body	`{ "id": "1b6df699-7083-4440-912c-22e2ed89c530", "description_l10n": "Modify a volume group.", "state": "COMPLETED", "response_body": null }`

8

Reference content

This section describes the resource types, methods, and attributes in the PowerStore Management REST API, along with other API information such as datatypes and enumerations.

Reference materials are also available on the appliance in several formats:

- Swagger UI—`https://<cluster management ip address>/swaggerui`
- JSON—`https://<cluster management ip address>/api/rest/openapi.json`

Resources

alert

Use these resource types to manage events and alerts in the system.

GET /alert

Description

Query all alerts.

Responses

HTTP Code	Description	Schema
200	Success	< alert_instance > array
206	Partial content of alert instance objects	< alert_instance > array

GET /alert/{id}

Description

Query a specific alert.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the alert.	string

Responses

HTTP Code	Description	Schema
200	Success	alert_instance
404	Not Found	error_response

PATCH /alert/{id}

Description

Modify an alert. acknowledged_severity parameter, if included, will cause the request to fail when the alert's severity is higher than the acknowledged_severity parameter value. acknowledged_severity is ignored when is_acknowledged is set to false.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the specific alert.	string
Body	**alert_modify** *required*		alert_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `application/json`

Produces

- `application/json`

appliance

Manage appliances

GET /appliance

Description

Query the appliances in a cluster.

Responses

HTTP Code	Description	Schema
200	Success	< appliance_instance > array
206	Partial content of appliance instance objects	< appliance_instance > array

GET /appliance/{id}

Description

Query a specific appliance in a cluster.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the appliance.	string

Responses

HTTP Code	Description	Schema
200	Success	appliance_instance
404	Not found	error_response

Consumes

- `application/json`

Produces

- `application/json`

PATCH /appliance/{id}

Description

Modify an appliance's name.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the appliance.	string
Body	**body** *required*		appliance_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Argument	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `application/json`

Produces

- `application/json`

POST /appliance/{id}/forecast

Description

Forecast capacity usage for an appliance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique id of the appliance.	string
Body	**body** *required*		appliance_forecast

Responses

HTTP Code	Description	Schema
200	Success	< appliance_forecast_response > array
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `application/json`

POST /appliance/{id}/time_to_full

Description

Returns information about when an appliance is forecast to reach 100% capacity usage.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique id of the appliance.	string
Body	**body** *required*		appliance_time_to_full

Responses

HTTP Code	Description	Schema
200	Success	appliance_time_to_full_response
204	Success	No Content

HTTP Code	Description	Schema
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `application/json`

audit_event

Use this resource type to query audit log information.

GET /audit_event

Description

Query audit log entries.

Responses

HTTP Code	Description	Schema
200	OK	< audit_event_instance > array
206	Partial content of audit event instance objects	< audit_event_instance > array

Produces

- `application/json`

bond

Use these resource types to manage the cluster-wide configuration of virtual IP ports, bonds, and virtual Ethernet ports.

GET /bond

Description

Query bond configurations.

Responses

HTTP Code	Description	Schema
200	Success	< bond_instance > array
206	Partial content of bond instance objects	< bond_instance > array

GET /bond/{id}

Description

Query a specific bond configuration.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the bond configuration.	string

Responses

HTTP Code	Description	Schema
200	Success	bond_instance
404	Not Found	error_response

Consumes

- `application/json`

Produces

- `application/json`

chap_config

CHAP is enabled (or not) identically cluster-wide for all iSCSI targets. For both single and mutual CHAP authentication modes, the common username and password for all targets on the cluster are

set here. For mutual mode, each initiator also has a CHAP username and password set. Changing the cluster CHAP mode disrupts all iSCSI connections, and will disable connections that are not completely and correctly configured. For example, an initiator without a valid CHAP username and password will lose connectivity to the target if mutual model is enable here. Both the settings here, and the settings on the initiators can be modified while CHAP mode is in disabled mode.

GET /chap_config

Description

Query the list of (one) CHAP configuration settings objects. This resource type collection query does not support filtering, sorting or pagination

Responses

HTTP Code	Description	Schema
200	Success	< chap_config_instance > array
206	Partial content of chap config instance objects	< chap_config_instance > array

GET /chap_config/{id}

Description

Query the CHAP configuration settings object.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	The id of the CHAP configuration object (always "0").	string

Responses

HTTP Code	Description	Schema
200	Success	chap_config_instance
404	Not Found	error_response

PATCH /chap_config/{id}

Description

Modify the CHAP configuration settings object. To enable either Single or Mutual CHAP modes, the username and password must already be set, or included in the same request as the new mode.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	The id of the CHAP configuration object (always "0").	string
Body	**body** *required*		chap_config_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

cluster

Manage clusters

GET /cluster

Description

Get details about the cluster. This resource type collection query does not support filtering, sorting or pagination

Responses

HTTP Code	Description	Schema
200	Success	< cluster_instance > array
206	Partial content of cluster instance objects	< cluster_instance > array

Produces

- `application/json`

GET /cluster/{id}

Description

Get details about the cluster. This does not support the following standard query functionality: property selection, and nested query embedding.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	ID of the cluster.	string

Responses

HTTP Code	Description	Schema
200	Success	cluster_instance
404	Not Found	error_response

Produces

- `application/json`

PATCH /cluster/{id}

Description

Modify cluster properties, such as physical MTU.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the cluster.	string
Body	**body** *optional*		cluster_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `application/json`

Produces

- `application/json`

POST /cluster/{id}/forecast

Description

Forecast capacity usage for the cluster.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique id of the cluster.	string
Body	**body** *required*		cluster_forecast

Responses

HTTP Code	Description	Schema
200	Success	< cluster_forecast_response > array
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `application/json`

POST /cluster/{id}/time_to_full

Description

Returns information about when the cluster is forecast to reach 100% capacity usage.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique id of the cluster	string
Body	**body** *required*		cluster_time_to_full

Responses

HTTP Code	Description	Schema
200	Successful operation.	cluster_time_to_full_response
204	Success	No Content
400	Invalid Request	error_response

HTTP Code	Description	Schema
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `application/json`

discovered_initiator

List initiators currently connected to the cluster that are not associated with an initiator group or host.

GET /discovered_initiator

Description

Returns connected initiators that are not associated with a host. This resource type collection query does not support filtering, sorting or pagination

Responses

HTTP Code	Description	Schema
200	Success	< discovered_initiator_instance > array
206	Partial content of discovered initiator instance objects	< discovered_initiator_instance > array

Produces

- `application/json`

dns

Manage DNS and NTP settings for the cluster.

GET /dns

Description

Query DNS settings for a cluster.

Responses

HTTP Code	Description	Schema
200	Success	< dns_instance > array
206	Partial content of dns instance objects	< dns_instance > array

GET /dns/{id}

Description

Query a specific DNS setting.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the DNS setting.	string

Responses

HTTP Code	Description	Schema
200	Success	dns_instance
404	Not Found	error_response

Consumes

- `application/json`

Produces

- `application/json`

PATCH /dns/{id}

Description

Modify a DNS setting.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the DNS setting.	string
Body	**body** *required*		dns_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `application/json`

Produces

- `application/json`

email_notify_destination

Use these resource types to configure outgoing SMTP and email notifications.

GET /email_notify_destination

Description

Query all email notification destinations.

Responses

HTTP Code	Description	Schema
200	Success	< email_notify_destination_instance > array
206	Partial content of email notify destination instance objects	< email_notify_destination_instance > array

POST /email_notify_destination

Description

Add an email address to receive notifications.

Parameters

Type	Name	Description	Schema
Body	**body** *required*	Email address to receive notifications.	email_notify_destination_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /email_notify_destination/{id}

Description

Query a specific email notification destination.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the email notification destination.	string

Responses

HTTP Code	Description	Schema
200	Success	email_notify_destination_instance
404	Not Found	error_response

DELETE /email_notify_destination/{id}

Description

Delete an email notification destination.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the email notification destination.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /email_notify_destination/{id}

Description

Modify an email notification destination.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the email notification destination.	string
Body	**body** *required*	Email address to receive notifications.	email_notify_destination_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /email_notify_destination/{id}/test

Description

Send a test email to an email address.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the email notification destination.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response

HTTP Code	Description	Schema
422	Operation Failed	error_response

eth_port

This is the REST API for cluster-wide retrieval and configuration of Ethernet front-end ports.

GET /eth_port

Description

Get Ethernet front-end port configuration for all cluster nodes.

Responses

HTTP Code	Description	Schema
200	Success	< eth_port_instance > array
206	Partial content of eth port instance objects	< eth_port_instance > array

GET /eth_port/{id}

Description

Get Ethernet front-end port configuration by instance identifier.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Ethernet front-end port instance identifier.	string

Responses

HTTP Code	Description	Schema
200	Success	eth_port_instance

HTTP Code	Description	Schema
404	Not Found	error_response

PATCH /eth_port/{id}

Description

Change the properties of the front-end port. Note that setting the port's requested speed may not cause the port speed to change immediately. In cases where the SFP is not inserted or the port is down the requested speed will be set but the current_speed will still show the old value until the SFP is able to change speed. By default, the partner port speed on the other node in the appliance is set to the same requested speed. If the requested speed is not supported by the partner port it is left unchanged.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the port.	string
Body	**body** *required*		eth_port_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

event

Use these resource types to manage events and alerts in the system.

GET /event

Description

Returns all events in the database.

Responses

HTTP Code	Description	Schema
200	An array of events	< event_instance > array
206	Partial content of event instance objects	< event_instance > array

GET /event/{id}

Description

Get event by Event Id.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Event Id	string

Responses

HTTP Code	Description	Schema
200	Event Object	event_instance
404	Not Found	error_response

fc_port

Use this resource type to retrieve information about Fibre Channel (FC) front-end ports and to set their connection speeds.

GET /fc_port

Description

Query the FC front-end port configurations for all cluster nodes.

Responses

HTTP Code	Description	Schema
200	Success	< fc_port_instance > array
206	Partial content of fc port instance objects	< fc_port_instance > array

GET /fc_port/{id}

Description

Query a specific FC front-end port configuration.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the FC front-end port.	string

Responses

HTTP Code	Description	Schema
200	Success	fc_port_instance
404	Not Found	error_response

PATCH /fc_port/{id}

Description

Modify an FC front-end port's speed. Setting the port's requested speed might not cause the port speed to change immediately. In cases where the Small Form-Factor Pluggable (SFP) is not inserted or the port is down, the requested speed is set, but the current_speed attribute shows the old value until the SFP is able to change speed. By default, the partner port speed on the other node in the appliance is set to the same requested speed. If the requested speed is not supported by the partner port, it is left unchanged.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the FC front-end port.	string
Body	**body** *required*		fc_port_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request.	error_response
404	Not Found	error_response
422	Operation Failed	error_response

file_dns

Use these resources to configure the Domain Name System (DNS) settings for a NAS server. One DNS settings object may be configured per NAS server. A DNS is a hierarchical system responsible for converting domain names to their corresponding IP addresses. A NAS server's DNS settings should allow DNS resolution of all names within an SMB server's domain in order for the SMB protocol to operate normally within an Active Directory domain. The DNS default port is 53.

GET /file_dns

Description

Query of the DNS settings of NAS Servers.

Responses

HTTP Code	Description	Schema
200	Success.	< file_dns_instance > array

HTTP Code	Description	Schema
206	Partial content of file dns instance objects	< file_dns_instance > array

POST /file_dns

Description

Create a new DNS Server configuration for a NAS Server. Only one object can be created per NAS Server.

Parameters

Type	Name	Schema
Body	**body** *required*	file_dns_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /file_dns/{id}

Description

Query a specific DNS settings object of a NAS Server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the DNS object.	string

Responses

HTTP Code	Description	Schema
200	Success	file_dns_instance
404	Not Found	error_response

DELETE /file_dns/{id}

Description

Delete DNS settings of a NAS Server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the DNS object.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /file_dns/{id}

Description

Modify the DNS settings of a NAS Server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the DNS object.	string

Type	Name	Description	Schema
Body	**body** *required*		file_dns_modify

Responses

HTTP Code	Description	Schema
204	Success.	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

file_ftp

Use these resources to configure one File Transfer Protocol (FTP) server per NAS server. One FTP server can be configured per NAS server to have both secure and unsecure services running. By default when an FTP server is created, the unsecure service will be running. FTP is a standard network protocol used to transfer files from one host to another host over a TCP-based network, such as the Internet. For secure transmission that encrypts the username, password, and content, FTP is secured with SSH (SFTP). SFTP listens on port 22. You can activate an FTP server and SFTP server independently on each NAS server. The FTP and SFTP clients are authenticated using credentials defined on a Unix name server (such as an NIS server or an LDAP server) or a Windows domain. Windows user names need to be entered using the 'username@domain' or 'domain\\username' formats. Each secure and unsecure service must have a home directory defined in the name server that must be accessible on the NAS server. FTP also allows clients to connect as anonymous users.

GET /file_ftp

Description

Query FTP/SFTP instances.

Responses

HTTP Code	Description	Schema
200	Success	< file_ftp_instance > array

HTTP Code	Description	Schema
206	Partial content of file ftp instance objects	< file_ftp_instance > array

POST /file_ftp

Description

Create an FTP/SFTP server.

Parameters

Type	Name	Schema
Body	**body** *required*	file_ftp_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /file_ftp/{id}

Description

Query a specific FTP/SFTP server for its settings.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the FTP/SFTP Server object.	string

Responses

HTTP Code	Description	Schema
200	Success	file_ftp_instance
404	Not Found	error_response

DELETE /file_ftp/{id}

Description

Delete an FTP/SFTP Server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the FTP/SFTP Server object.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /file_ftp/{id}

Description

Modify an FTP/SFTP server settings.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the FTP/SFTP Server object.	string
Body	**body** *required*		file_ftp_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

file_interface

Information about File network interfaces in the storage system. These interfaces control access to Windows (CIFS) and UNIX/Linux (NFS) file storage.

GET /file_interface

Description

Query file interfaces.

Responses

HTTP Code	Description	Schema
200	Success	< file_interface_instance > array
206	Partial content of file interface instance objects	< file_interface_instance > array

POST /file_interface

Description

Create a file interface.

Parameters

Type	Name	Schema
Body	**body** *required*	file_interface_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /file_interface/{id}

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the file interface.	string

Responses

HTTP Code	Description	Schema
200	Success	file_interface_instance
404	Not Found	error_response

DELETE /file_interface/{id}

Description

Delete a file interface.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the file interface.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /file_interface/{id}

Description

Modify the settings of a file interface.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the file interface.	string
Body	**body** *required*		file_interface_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

file_interface_route

Use these resources to manage static IP routes, including creating, modifying, and deleting these routes.

A route determines where to send a packet next so it can reach its final destination. A static route is set explicitly and does not automatically adapt to the changing network infrastructure. A route is

defined by an interface, destination IP address range and an IP address of a corresponding gateway.

Note: IP routes connect an interface (IP address) to the larger network through gateways. Without routes and gateway specified, the interface is no longer accessible outside of its immediate subnet. As a result, network shares and exports associated with the interface are no longer available to clients outside their immediate subnet.

GET /file_interface_route

Description

Query file interface routes.

Responses

HTTP Code	Description	Schema
200	Success	< file_interface_route_instance > array
206	Partial content of file interface route instance objects	< file_interface_route_instance > array

POST /file_interface_route

Description

Create and configure a new file interface route. There are 3 route types Subnet, Default, and Host.

- The default route establishes a static route to a default gateway. To create a default route, provide only the default gateway IP address.
- The host route establishes a static route to a specific host. To create a host route, provide the IP address of the specific host in the destination field, and the gateway.
- The subnet route establishes a static route to a particular subnet. To create a subnet route, provide the IP address of the target subnet in the destination, the prefix length for that subnet, and the gateway.

Parameters

Type	Name	Schema
Body	**body** *required*	file_interface_route_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /file_interface_route/{id}

Description

Query a specific file interface route for details.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the file interface route object.	string

Responses

HTTP Code	Description	Schema
200	Success	file_interface_route_instance
404	Not Found	error_response

DELETE /file_interface_route/{id}

Description

Delete file interface route.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the file interface route object.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /file_interface_route/{id}

Description

Modify file interface route settings.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the file interface route object.	string
Body	**body** *optional*		file_interface_route_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

file_kerberos

Use these resources to manage the Kerberos service for a NAS server. One Kerberos service object may be configured per NAS Server. Kerberos is a distributed authentication service designed to provide strong authentication with secret-key cryptography. It works on the basis of "tickets" that allow nodes communicating over a non-secure network to prove their identity in a secure manner. When configured to act as a secure NFS server, the NAS Server uses the RPCSEC_GSS security

framework and Kerberos authentication protocol to verify users and services. You can configure a secure NFS environment for a multiprotocol NAS Server or one that supports Unix-only shares. In this environment, user access to NFS file systems is granted based on Kerberos principal names.

GET /file_kerberos

Description

Query of the Kerberos service settings of NAS Servers.

Responses

HTTP Code	Description	Schema
200	Success.	< file_kerberos_instance > array
206	Partial content of file kerberos instance objects	< file_kerberos_instance > array

POST /file_kerberos

Description

Create a Kerberos configuration. The operation will fail if a Kerberos configuration already exists.

Parameters

Type	Name	Schema
Body	**body** *required*	file_kerberos_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /file_kerberos/{id}

Description

Query a specific Kerberos service settings of a NAS Server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Kerberos service object.	string

Responses

HTTP Code	Description	Schema
200	Success	file_kerberos_instance
404	Not Found	error_response

DELETE /file_kerberos/{id}

Description

Delete Kerberos configuration of a NAS Server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the Kerberos service object.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /file_kerberos/{id}

Description

Modify the Kerberos service settings of a NAS Server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the Kerberos service object.	string
Body	**body** *required*		file_kerberos_modify

Responses

HTTP Code	Description	Schema
204	Success.	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /file_kerberos/{id}/upload_keytab

Description

A keytab file is required for secure NFS service with a Linux or Unix Kerberos Key Distribution Center (KDC). The keytab file can be generated using the KDC server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the Kerberos service object.	string
FormData	**body** *optional*		file

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `multipart/form-data`

GET /file_kerberos/{id}/download_keytab

Description

Download previously uploaded keytab file for secure NFS service.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the Kerberos service object.	string

Responses

HTTP Code	Description	Schema
200	Ok	file_kerberos_keytab_file
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `application/binary`

file_ldap

Use these resources to manage the Lightweight Directory Access Protocol (LDAP) settings for the NAS Server. You can configure one LDAP settings object per NAS Server. LDAP is an application protocol for querying and modifying directory services running on TCP/IP networks. LDAP provides central management for network authentication and authorization operations by helping to centralize user and group management across the network. A NAS Server can use LDAP as a Unix Directory Service to map users, retrieve netgroups, and build a Unix credential. When an initial LDAP configuration is applied, the system checks for the type of LDAP server. It can be an Active Directory schema or an RFC 2307 schema.

GET /file_ldap

Description

List LDAP Service instances.

Responses

HTTP Code	Description	Schema
200	Success	< file_ldap_instance > array
206	Partial content of file ldap instance objects	< file_ldap_instance > array

POST /file_ldap

Description

Create an LDAP service on a NAS Server. Only one LDAP Service object can be created per NAS Server.

Parameters

Type	Name	Description	Schema
Body	**body** *required*	Name of the LDAP service to create.	file_ldap_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /file_ldap/{id}

Description

Query a specific NAS Server's LDAP settings object.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the LDAP settings object.	string

Responses

HTTP Code	Description	Schema
200	Success	file_ldap_instance
404	Not Found	error_response

DELETE /file_ldap/{id}

Description

Delete a NAS Server's LDAP settings.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	LDAP settings object Id.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /file_ldap/{id}

Description

Modify a NAS Server's LDAP settings object.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the LDAP settings object id.	string
Body	**body** *required*		file_ldap_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /file_ldap/{id}/upload_config

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the LDAP settings object.	string

Type	Name	Description	Schema
FormData	**body** *required*		file

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `multipart/form-data`

GET /file_ldap/{id}/download_config

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the LDAP settings object.	string

Responses

HTTP Code	Description	Schema
200	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `document/text`

POST /file_ldap/{id}/upload_certificate

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the LDAP settings object.	string
FormData	**body** *required*		file

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `multipart/form-data`

GET /file_ldap/{id}/download_certificate

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the LDAP settings object.	string

Responses

HTTP Code	Description	Schema
200	Success	No Content
404	Not Found	error_response

HTTP Code	Description	Schema
422	Operation Failed	error_response

Produces

- `document/text`

file_ndmp

The Network Data Management Protocol (NDMP) provides a standard for backing up file servers on a network. NDMP allows centralized applications to back up file servers that run on various platforms and platform versions. NDMP reduces network congestion by isolating control path traffic from data path traffic, which permits centrally managed and monitored local backup operations. Storage systems support NDMP v2-v4 over the network. Direct-attach NDMP is not supported. This means that the tape drives need to be connected to a media server, and the NAS server communicates with the media server over the network. NDMP has an advantage when using multiprotocol file systems because it backs up the Windows ACLs as well as the UNIX security information.

GET /file_ndmp

Description

List configured NDMP service instances.

Responses

HTTP Code	Description	Schema
200	Success	< file_ndmp_instance > array
206	Partial content of file ndmp instance objects	< file_ndmp_instance > array

POST /file_ndmp

Description

Add an NDMP service configuration to a NAS server. Only one NDMP service object can be configured per NAS server.

Parameters

Type	Name	Schema
Body	**body** *required*	file_ndmp_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /file_ndmp/{id}

Description

Query an NDMP service configuration instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NDMP service object.	string

Responses

HTTP Code	Description	Schema
200	Success	file_ndmp_instance
404	Not Found	error_response

DELETE /file_ndmp/{id}

Description

Delete an NDMP service configuration instance of a NAS Server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NDMP service object.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /file_ndmp/{id}

Description

Modify an NDMP service configuration instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NDMP service object.	string
Body	**body** *required*		file_ndmp_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

file_nis

Use these resources to manage the Network Information Service (NIS) settings object for a NAS Server. One NIS settings object may be configured per NAS server. NIS consists of a directory service protocol for maintaining and distributing system configuration information, such as user and group information, hostnames, and such. The port for NIS Service is 111.

GET /file_nis

Description

Query the NIS settings of NAS Servers.

Responses

HTTP Code	Description	Schema
200	Success.	< file_nis_instance > array
206	Partial content of file nis instance objects	< file_nis_instance > array

POST /file_nis

Description

Create a new NIS Service on a NAS Server. Only one NIS Setting object can be created per NAS Server.

Parameters

Type	Name	Schema
Body	**body** *required*	file_nis_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response

HTTP Code	Description	Schema
422	Operation Failed	error_response

GET /file_nis/{id}

Description

Query a specific NIS settings object of a NAS Server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NIS object.	string

Responses

HTTP Code	Description	Schema
200	Success	file_nis_instance
404	Not Found	error_response

DELETE /file_nis/{id}

Description

Delete NIS settings of a NAS Server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NIS object.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content

HTTP Code	Description	Schema
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /file_nis/{id}

Description

Modify the NIS settings of a NAS Server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NIS object.	string
Body	**body** *required*		file_nis_modify

Responses

HTTP Code	Description	Schema
204	Success.	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

file_system

Manage NAS file systems.

GET /file_system

Description

List file systems.

Responses

HTTP Code	Description	Schema
200	Success	< file_system_instance > array
206	Partial content of file system instance objects	< file_system_instance > array

POST /file_system

Description

Create a file system.

Parameters

Type	Name	Schema
Body	**body** *required*	file_system_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /file_system/{id}

Description

Query a specific file system.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	File system id.	string

Responses

HTTP Code	Description	Schema
200	Success	file_system_instance
404	Not Found	error_response

DELETE /file_system/{id}

Description

Delete a file system.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	File system id.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /file_system/{id}

Description

Modify a file system.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	File system id.	string
Body	**body** *required*		file_system_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /file_system/{id}/clone

Description

Create a clone of a file system.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	File system id.	string
Body	**body** *required*		file_system_clone

Responses

HTTP Code	Description	Schema
200	Created	file_system_clone_response

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /file_system/{id}/snapshot

Description

Create a snapshot of a file system.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	File system id.	string
Body	**body** *optional*		file_system_snapshot

Responses

HTTP Code	Description	Schema
200	Created	file_system_snapshot_response
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /file_system/{id}/refresh

Description

Refresh a snapshot of a file system. The content of the snapshot is replaced with the current content of the parent file system.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	File system snapshot id.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /file_system/{id}/restore

Description

Restore from a snapshot of a file system.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	File system snapshot id.	string
Body	**body** *optional*		file_system_restore

Responses

HTTP Code	Description	Schema
200	Success (with backup snapshot)	file_system_restore_response
204	Success (without backup snapshot)	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /file_system/{id}/refresh_quota

Description

Refresh the actual content of tree and user quotas objects.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	File system id.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

file_tree_quota

Tree quota settings in the storage system. A tree quota instance represents a quota limit applied to a specific directory tree in a file system.

GET /file_tree_quota

Description

List tree quota instances.

Responses

HTTP Code	Description	Schema
200	Success	< file_tree_quota_instance > array
206	Partial content of file tree quota instance objects	< file_tree_quota_instance > array

POST /file_tree_quota

Description

Create a tree quota instance.

Parameters

Type	Name	Schema
Body	**body** *required*	file_tree_quota_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /file_tree_quota/{id}

Description

Query a tree quota instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the tree quota.	string

Responses

HTTP Code	Description	Schema
200	Success	file_tree_quota_instance
404	Not Found	error_response

DELETE /file_tree_quota/{id}

Description

Delete a tree quota instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the tree quota.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /file_tree_quota/{id}

Description

Modify a tree quota instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the tree quota.	string
Body	**body** *required*		file_tree_quota_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /file_tree_quota/{id}/refresh

Description

Refresh the cache with the actual value of the tree quota.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the tree quota.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response

HTTP Code	Description	Schema
422	Operation Failed	error_response

file_user_quota

User quota settings in the storage system. A user quota instance represents a quota limit applied to a user within a quota tree or a filesystem.

GET /file_user_quota

Description

List user quota instances.

Responses

HTTP Code	Description	Schema
200	Success	< file_user_quota_instance > array
206	Partial content of file user quota instance objects	< file_user_quota_instance > array

POST /file_user_quota

Description

Create a user quota instance.

Parameters

Type	Name	Schema
Body	**body** *required*	file_user_quota_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /file_user_quota/{id}

Description

Query a user quota instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the file user quota.	string

Responses

HTTP Code	Description	Schema
200	Success	file_user_quota_instance
404	Not Found	error_response

PATCH /file_user_quota/{id}

Description

Modify a user quota instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the file user quota.	string
Body	**body** *required*		file_user_quota_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /file_user_quota/{id}/refresh

Description

Refresh the cache with the actual value of the user quota.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the file user quota.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

file_virus_checker

Use these resource types to manage the virus checker service of a NAS server. A virus checker instance is created each time the anti-virus service is enabled on a NAS server. A configuration file (named viruschecker.conf) needs to be uploaded before enabling the anti-virus service. The cluster supports third-party anti-virus servers that perform virus scans and reports back to the storage system. For example, when an SMB client creates, moves, or modifies a file, the NAS server invokes the anti-virus server to scan the file for known viruses. During the scan any access to this file is

blocked. If the file does not contain a virus, it is written to the file system. If the file is infected, corrective action (fixed, removed or placed in quarantine) is taken as defined by the anti-virus server. You can optionally set up the service to scan the file on read access based on last access of the file compared to last update of the third-party anti-virus date.

GET /file_virus_checker

Description

Query all virus checker settings of the NAS Servers.

Responses

HTTP Code	Description	Schema
200	Success	< file_virus_checker _instance > array
206	Partial content of file virus checker instance objects	< file_virus_checker _instance > array

POST /file_virus_checker

Description

Add a new virus checker setting to a NAS Server. Only one instance can be created per NAS Server. Workflow to enable the virus checker settings on the NAS Server is as follows: \n 1. Create a virus checker instance on NAS Server. 2. Download template virus checker configuration file. 3. Edit the configuration file with virus checker configuration details. 4. Upload the configuration file. 5. Enable the virus checker on the NAS Server.

Parameters

Type	Name	Schema
Body	**body** *required*	file_virus_checker_create

Responses

HTTP Code	Description	Schema
201	Created	create_response

HTTP Code	Description	Schema
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /file_virus_checker/{id}

Description

Query a specific virus checker setting of a NAS Server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the virus checker instance.	string

Responses

HTTP Code	Description	Schema
200	Success	file_virus_checker_instance
404	Not Found	error_response

DELETE /file_virus_checker/{id}

Description

Delete virus checker settings of a NAS Server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the virus checker instance.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /file_virus_checker/{id}

Description

Modify the virus checker settings of a NAS Server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the virus checker instance.	string
Body	**body** *required*		file_virus_checker_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /file_virus_checker/{id}/upload_config

Description

Upload a virus checker configuration file containing the virus checker configuration settings.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the virus checker instance.	string
FormData	**body** *optional*	Upload virus checker configuration file.	file

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `multipart/form-data`

GET /file_virus_checker/{id}/download_config

Description

Download a virus checker configuration file containing the template or the actual (if already uploaded) virus checker configuration settings.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the virus checker instance.	string

Responses

HTTP Code	Description	Schema
200	Ok	No Content
404	Not Found	error_response

HTTP Code	Description	Schema
422	Operation Failed	error_response

Produces

- `document/text`

hardware

This provides the hardware component inventory of the system.

GET /hardware

Description

List hardware components.

Responses

HTTP Code	Description	Schema
200	Success	< hardware_instance > array
206	Partial content of hardware instance objects	< hardware_instance > array

Produces

- `application/json`

GET /hardware/{id}

Description

Get a specific hardware component instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique id of hardware component to get.	string

Responses

HTTP Code	Description	Schema
200	Success	hardware_instance
404	Not Found	error_response

Produces

- `application/json`

PATCH /hardware/{id}

Description

Modify a hardware instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	The hardware component to modify.	string
Body	**body** *required*		hardware_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `application/json`

Produces

- `application/json`

POST /hardware/{id}/drive_repurpose

Description

A drive that has been used in a different appliance will be locked for use only in that appliance. This operation will allow a locked drive to be used in the current appliance. All data on the drive will become unrecoverable. It will fail if the drive is not locked to a different appliance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Identifier of the drive to repurpose.	string
Body	**body** *required*	Fields required to repurpose the specified drive.	hardware_drive_repurpose

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `application/json`

host

Manage hosts that access the cluster.

GET /host

Description

List host information.

Responses

HTTP Code	Description	Schema
200	Success	< host_instance > array
206	Partial content of host instance objects	< host_instance > array

Produces

- `application/json`

POST /host

Description

Add a host.

Parameters

Type	Name	Schema
Body	**body** *required*	host_create

Responses

HTTP Code	Description	Schema
201	Success	create_response
400	Invalid Input	error_response
422	Operation Failed	error_response

Consumes

- `application/json`

Produces

- `application/json`

GET /host/{id}

Description

Get details about a specific host by id.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique id of the host.	string

Responses

HTTP Code	Description	Schema
200	Success	host_instance
404	Not Found	error_response

Produces

- `application/json`

DELETE /host/{id}

Description

Delete a host. Delete fails if host is attached to a volume or consistency group.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique id of the host.	string
Body	**body** *optional*		host_delete

Responses

HTTP Code	Description	Schema
204	Success	No Content

HTTP Code	Description	Schema
400	Invalid Input	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `application/json`

PATCH /host/{id}

Description

Operation that can be performed are modify name, modify description, remove initiator(s) from host, add initiator(s) to host, update existing initiator(s) with chap username/password. This will only support one of add, remove and update initiator operations in a single request.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique id of the host.	string
Body	**body** *required*		host_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Input	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `application/json`

POST /host/{id}/attach

Description

Attach host to volume.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique id of the host.	string
Body	**body** *required*		host_attach

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Input	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `application/json`

POST /host/{id}/detach

Description

Detach host from volume.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique id of the host.	string
Body	**body** *required*		host_detach

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Input	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `application/json`

host_group

Manage host groups. A host group is a mechanism to provision hosts and volumes to be consistent across the Cyclone cluster. Operations that can be performed include, creating or deleting a host group, modifying host group(i.e. adding or removing hosts from a host group).

GET /host_group

Description

List host groups.

Responses

HTTP Code	Description	Schema
200	Success	< host_group_instance > array
206	Partial content of host group instance objects	< host_group_instance > array

Produces

- `application/json`

POST /host_group

Description

Create a host group.

Parameters

Type	Name	Schema
Body	**body** *required*	host_group_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Operation Failed	error_response
422	Operation Failed	error_response

Consumes

- `application/json`

Produces

- `application/json`

GET /host_group/{id}

Description

Get details about a specific host group.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique id of the host group.	string

Responses

HTTP Code	Description	Schema
200	Success	host_group_instance
404	Not Found	error_response

Produces

- `application/json`

DELETE /host_group/{id}

Description

Delete a host group. Delete fails if host group is attached to a volume.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique id of the host group.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `application/json`

PATCH /host_group/{id}

Description

Operations that can be performed are modify name, remove host(s) from host group, add host(s) to host group. Modify request will only support either a add_host(s) or remove_host(s) at a time along with modifying host name

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique id of the host group.	string
Body	**body** *required*		host_group_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Operation Failed	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `application/json`

POST /host_group/{id}/attach

Description

Attach host group to volume.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique id of the host group.	string
Body	**body** *required*		host_group_attach

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Input	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `application/json`

POST /host_group/{id}/detach

Description

Detach host group from volume.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique id of the host group.	string
Body	**body** *required*		host_group_detach

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Input	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `application/json`

host_virtual_volume_mapping

Virtual volume mapping details.

GET /host_virtual_volume_mapping

Description

Query associations between a virtual volume and the host(s) it is attached to.

Responses

HTTP Code	Description	Schema
200	Success	< host_virtual_volume_mapping_instance > array
206	Partial content of host virtual volume mapping instance objects	< host_virtual_volume_mapping_instance > array

GET /host_virtual_volume_mapping/{id}

Description

Query a specific virtual volume mapping.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the virtual volume mapping.	string

Responses

HTTP Code	Description	Schema
200	Success	host_virtual_volume_mapping_instance

HTTP Code	Description	Schema
404	Not Found	error_response

host_volume_mapping

Storage cluster REST API definition.

GET /host_volume_mapping

Description

Query associations between a volume and the host or host group it is attached to.

Responses

HTTP Code	Description	Schema
200	Success	< host_volume_mapping_instance > array
206	Partial content of host volume mapping instance objects	< host_volume_mapping_instance > array

GET /host_volume_mapping/{id}

Description

Query a specific host volume mapping.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the host volume mapping.	string

Responses

HTTP Code	Description	Schema
200	Success	host_volume_mapping_instance
404	Not Found	error_response

import_host_initiator

Use these resource types to manage import host initiators. Once import host is configured, host initiators can be queried and corresponding mapped volumes can be imported.

GET /import_host_initiator

Description

Query import host initiators.

Responses

HTTP Code	Description	Schema
200	Success	< import_host_initiator_instance > array
206	Partial content of import host initiator instance objects	< import_host_initiator_instance > array

GET /import_host_initiator/{id}

Description

Query a specific import host initiator instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the import host initiator to query.	string

Responses

HTTP Code	Description	Schema
200	Success	import_host_initiator_instance
404	Not Found	error_response

import_host_system

Use these resource types to manage import host systems. Import host enables communication with multipathing software on the host system to perform import operations. While configuring the import_host_system if the host is not present a new Host will be created. If Host is already present, the same Host will be updated with the import_host_system details. Also, import_host_system supports FC and ISCSI connections between Host and source arrays. So for a single import_host_system which supports both FC and ISCSI; there would be two Hosts entries for representing the FC and iSCSI connections.

GET /import_host_system

Description

Query import host systems that are attached to volumes.

Responses

HTTP Code	Description	Schema
200	Success	< import_host_system_instance > array
206	Partial content of import host system instance objects	< import_host_system_instance > array

POST /import_host_system

Description

Add an import host system so that it can be mapped to a volume. Before mapping an import host system, ensure that a host agent is installed. Host agents can be installed on Linux, Windows, and ESXi host systems only. While adding import_host_system if Host is not present a new Host shall be

created. If Host is already present, the same Host will be updated with the import_host_system details.

Parameters

Type	Name	Description	Schema
Body	**request** *required*	Request parameters.	import_host_system_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /import_host_system/{id}

Description

Query a specific import host system instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the import host system to query.	string

Responses

HTTP Code	Description	Schema
200	Success	import_host_system_instance
404	Not Found	error_response

DELETE /import_host_system/{id}

Description

Delete an import host system. You cannot delete an import host system if there are import sessions active in the system referencing the import host system instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the import host system	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

POST /import_host_system/{id}/refresh

Description

Refresh the details of a specific import host system. Use this operation when there is a change to the import host or import host volumes.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the import host system for which to refresh details.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response

HTTP Code	Description	Schema
422	Operation Failed	error_response

import_host_volume

Use these resource types to manage import host volumes. Host volumes are source storage volumes that are mapped to the host systems for application access. Once import host is configured, host volumes can be queried and then corresponding volumes can be imported.

GET /import_host_volume

Description

Query import host volumes.

Responses

HTTP Code	Description	Schema
200	Success	< import_host_volume_instance > array
206	Partial content of import host volume instance objects	< import_host_volume_instance > array

GET /import_host_volume/{id}

Description

Query a specific import host volume instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the import host volume to query.	string

Responses

HTTP Code	Description	Schema
200	Success	import_host_volume_instance
404	Not Found	error_response

import_psgroup

Use these resource types to discover the Peer Storage Group (PS Group) volumes that can be imported to PowerStore.

GET /import_psgroup

Description

Query PS Group storage arrays.

Responses

HTTP Code	Description	Schema
200	Success	< import_psgroup_instance > array
206	Partial content of import psgroup instance objects	< import_psgroup_instance > array

GET /import_psgroup/{id}

Description

Query a specific PS Group storage array.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the PS Group.	string

Responses

HTTP Code	Description	Schema
200	Success	import_psgroup_instance
404	Not Found	error_response

POST /import_psgroup/{id}/discover

Description

Discover the importable volumes and snapshot schedules in the PS Group.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the PS Group.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

import_psgroup_volume

Use these resource types to discover the Peer Storage Group (PS Group) volumes that can be imported to PowerStore.

GET /import_psgroup_volume

Description

Query PS Group volumes.

Responses

HTTP Code	Description	Schema
200	Success	< import_psgroup_volume_instance > array
206	Partial content of import psgroup volume instance objects	< import_psgroup_volume_instance > array

GET /import_psgroup_volume/{id}

Description

Query a specific PS Group volume.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the PS Group volume.	string

Responses

HTTP Code	Description	Schema
200	Success	import_psgroup_volume_instance
404	Not Found	error_response

POST /import_psgroup_volume/{id}/import_snapshot_schedules

Description

Return the snapshot schedules for a PS Group volume.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the PS Group volume.	string

Responses

HTTP Code	Description	Schema
200	Success	import_psgroup_volume_import_snapshot_schedules_response
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

import_session

Use the import_session resource type to initiate and manage the migration of volumes and consistency groups from a heritage Dell EMC storage system to a PowerStore storage system. The import is non-disruptive to hosts that access the volume during the import. The import process runs as a background job. Clients should poll the job status until the import completes. Note: In these descriptions, LUNs are referred to as volumes and storage arrays are referred to as storage systems.

GET /import_session

Description

Query import sessions.

Responses

HTTP Code	Description	Schema
200	Success	< import_session_instance > array

HTTP Code	Description	Schema
206	Partial content of import session instance objects	< import_session_instance > array

POST /import_session

Description

Create a new import session. The source storage system and hosts that access the volumes or consistency groups must be added prior to creating an import session. The volumes or consistency groups must be in a migration-ready state.

Parameters

Type	Name	Schema
Body	**body** *required*	import_session_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /import_session/{id}

Description

Query a specific session.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the import session	string

Responses

HTTP Code	Description	Schema
200	Success	import_session_instance
404	Not Found	error_response

DELETE /import_session/{id}

Description

Delete an import session that is in a Completed, Failed, or Cancelled state. Delete removes the historical record of the import. To stop active import sessions, use the Cancel operation. You can delete the import session after cancelling it.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the import session	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /import_session/{id}

Description

Modify the scheduled date and time of the specified import session.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the import session.	string

Type	Name	Description	Schema
Body	**body** *required*		import_session_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /import_session/{id}/cutover

Description

Commit an import session that is in a Ready_For_Cutover state. When the import session is created with the automatic_cutover attribute set to false, you must use the Cutover operation to complete the import. Until the cutover is complete, PowerStore forwards IO to the source volume to keep it in sync with all host IOs. You can cancel the import during this state if you want to continue using the source volume.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of an import session	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response

HTTP Code	Description	Schema
422	Operation Failed	error_response

POST /import_session/{id}/cancel

Description

Cancel an active import session. Cancel is allowed when the import is in a Scheduled, Queued, Copy_In_Progress, or Ready_For_Cutover state. After a successful cancellation, the host is mapped to original source volume, all paths are cleaned up, and the import state is Cancelled. The import can be attempted again in the future. In most cases, the Cancel operation gracefully rolls back the import based on the source and host error responses. Use the force option to stop the import job irrespective of whether the storage system or hosts have issues. When the force option is true, the import process tries to reach out to the source and host to gracefully terminate the import. If either are not reachable or if the request fails, the import is terminated without rolling back.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the import session	string
Body	**body** *optional*		import_session_cancel

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /import_session/{id}/pause

Description

Pauses an ongoing import session. When this occurs, the background data copy stops, but IO to the source still occurs. Pause is only supported when the import job is in a in Copy_In_Progress state.

You can resume or cancel the paused import.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the import session	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /import_session/{id}/resume

Description

Resumes the paused import session. The background data copy continues from where it was stopped. Resume is only applicable when the import in a Paused state.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the import session	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response

HTTP Code	Description	Schema
422	Operation Failed	error_response

POST /import_session/{id}/cleanup

Description

Clean up an import session that is in Cleanup_Required state and requires user intervention to revert the source volume to its pre-import state as part of the recovery procedure to restore host IO operations.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the import session.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

import_storage_center

Use these resource types to discover the Storage Center (SC) volumes and consistency groups that can be imported to PowerStore.

GET /import_storage_center

Description

Query SC arrays.

Responses

HTTP Code	Description	Schema
200	Success	< import_storage_center_instance > array
206	Partial content of import storage center instance objects	< import_storage_center_instance > array

GET /import_storage_center/{id}

Description

Query a specific SC array.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the SC array.	string

Responses

HTTP Code	Description	Schema
200	Success	import_storage_center_instance
404	Not Found	error_response

POST /import_storage_center/{id}/discover

Description

Discover the importable volumes and snapshot profiles in the SC array.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the SC array.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

import_storage_center_consistency_group

Use these resource types to discover the Storage Center (SC) volumes and consistency groups that can be imported to PowerStore.

GET /import_storage_center_consistency_group

Description

Query SC consistency groups.

Responses

HTTP Code	Description	Schema
200	Success	< import_storage_center_consistency_group_instance > array
206	Partial content of import storage center consistency group instance objects	< import_storage_center_consistency_group_instance > array

GET /import_storage_center_consistency_group/{id}

Description

Query a specific SC consistency group.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the SC consistency group.	string

Responses

HTTP Code	Description	Schema
200	Success	import_storage_center_consistency_group_instance
404	Not Found	error_response

POST /import_storage_center_consistency_group/{id}/import_snapshot_profiles

Description

Return the snapshot profiles of an SC consistency group.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the SC consistency group.	string

Responses

HTTP Code	Description	Schema
200	Success	import_storage_center_consistency_group_import_snapshot_profiles_response

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed.	error_response

import_storage_center_volume

Use these resource types to discover the Storage Center (SC) volumes that can be imported to PowerStore.

GET /import_storage_center_volume

Description

Query SC volumes.

Responses

HTTP Code	Description	Schema
200	Success	< import_storage_center_volume_instance > array
206	Partial content of import storage center volume instance objects	< import_storage_center_volume_instance > array

GET /import_storage_center_volume/{id}

Description

Query a specific SC volume.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the SC volume.	string

Responses

HTTP Code	Description	Schema
200	Success	import_storage_center_volume_instance
404	Not Found	error_response

POST /import_storage_center_volume/{id}/import_snapshot_profiles

Description

Return the snapshot profiles of an SC volume.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the SC volume.	string

Responses

HTTP Code	Description	Schema
200	Success	import_storage_center_volume_import_snapshot_profiles_response
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed.	error_response

import_unity

Use this resource type to discover the Unity system that is a source storage system for import

GET /import_unity

Description

Query Unity storage systems.

Responses

HTTP Code	Description	Schema
200	Success	< import_unity_instance > array
206	Partial content of import unity instance objects	< import_unity_instance > array

GET /import_unity/{id}

Description

Query a specific Unity storage system.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the Unity storage system.	string

Responses

HTTP Code	Description	Schema
200	Success	import_unity_instance
404	Not Found	error_response

POST /import_unity/{id}/discover

Description

Discover the importable volumes and consistency groups in the Unity storage system.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the Unity storage system.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

import_unity_consistency_group

Use this resource type to discover the Unity consistency groups that can be imported to PowerStore.

GET /import_unity_consistency_group

Description

Query Unity consistency groups.

Responses

HTTP Code	Description	Schema
200	Success	< import_unity_consistency_group_instance > array

HTTP Code	Description	Schema
206	Partial content of import unity consistency group instance objects	< import_unity_consistency_group_instance > array

GET /import_unity_consistency_group/{id}

Description

Query a specific Unity consistency group.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the Unity consistency group.	string

Responses

HTTP Code	Description	Schema
200	Success	import_unity_consistency_group_instance
404	Not Found	error_response

POST /import_unity_consistency_group/{id}/import_snapshot_schedules

Description

Return the snapshot schedules associated with the specified Unity consistency group.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the Unity consistency group.	string

Responses

HTTP Code	Description	Schema
200	Success	import_unity_consistency_group_import_snapshot_schedules_response
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

import_unity_volume

Use this resource type to discover the Unity volumes that can be imported to PowerStore.

GET /import_unity_volume

Description

Query Unity volumes.

Responses

HTTP Code	Description	Schema
200	Success	< import_unity_volume_instance > array
206	Partial content of import unity volume instance objects	< import_unity_volume_instance > array

GET /import_unity_volume/{id}

Description

Query a specific Unity volume.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the Unity volume.	string

Responses

HTTP Code	Description	Schema
200	Success	import_unity_volume_instance
404	Not Found	error_response

POST /import_unity_volume/{id}/import_snapshot_schedules

Description

Return the snapshot schedules associated with the specified Unity volume.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the Unity volume.	string

Responses

HTTP Code	Description	Schema
200	Success	import_unity_volume_import_snapshot_schedules_response
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

import_vnx_array

Use these resource types to discover the VNX storage system that can be imported to PowerStore.

GET /import_vnx_array

Description

Query VNX storage systems.

Responses

HTTP Code	Description	Schema
200	Success	< import_vnx_array _instance > array
206	Partial content of import vnx array instance objects	< import_vnx_array _instance > array

GET /import_vnx_array/{id}

Description

Query a specific VNX storage system.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of a VNX storage system.	string

Responses

HTTP Code	Description	Schema
200	Success	import_vnx_array _instance
404	Not Found	error_response

POST /import_vnx_array/{id}/discover

Description

Discover the importable volumes and consistency groups in a VNX storage system.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the VNX storage system.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

import_vnx_consistency_group

Use this resource type to show the VNX consistency groups that can be imported to PowerStore.

GET /import_vnx_consistency_group

Description

Query VNX consistency groups.

Responses

HTTP Code	Description	Schema
200	Success	< import_vnx_consistency_group_instance > array

HTTP Code	Description	Schema
206	Partial content of import vnx consistency group instance objects	< import_vnx_consistency_group_instance > array

GET /import_vnx_consistency_group/{id}

Description

Query a specific VNX consistency group.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of a VNX consistency group.	string

Responses

HTTP Code	Description	Schema
200	Success	import_vnx_consistency_group_instance
404	Not Found	error_response

import_vnx_volume

Use this resource type to show the VNX volumes and that can be imported to PowerStore.

GET /import_vnx_volume

Description

Query VNX volumes.

Responses

HTTP Code	Description	Schema
200	Success	< import_vnx_volume_instance > array
206	Partial content of import vnx volume instance objects	< import_vnx_volume_instance > array

GET /import_vnx_volume/{id}

Description

Query a specific VNX volume.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the VNX volume.	string

Responses

HTTP Code	Description	Schema
200	Success	import_vnx_volume_instance
404	Not Found	error_response

ip_pool_address

Use these resource types to scale and reconfigure the IP networks in a cluster.

GET /ip_pool_address

Description

Query configured IP addresses.

Responses

HTTP Code	Description	Schema
200	Success	< ip_pool_address_instance > array
206	Partial content of ip pool address instance objects	< ip_pool_address_instance > array

GET /ip_pool_address/{id}

Description

Query a specific IP address.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of a configured IP address.	string

Responses

HTTP Code	Description	Schema
200	Success	ip_pool_address_instance
404	Not Found	error_response

Consumes

- `application/json`

Produces

- `application/json`

ip_port

Use these resource types to manage the cluster-wide configuration of virtual IP ports, bonds, and virtual Ethernet ports.

GET /ip_port

Description

Query IP port configurations.

Responses

HTTP Code	Description	Schema
200	Success	< ip_port_instance > array
206	Partial content of ip port instance objects	< ip_port_instance > array

GET /ip_port/{id}

Description

Query a specific IP port configuration.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the IP port.	string

Responses

HTTP Code	Description	Schema
200	Success	ip_port_instance
404	Not Found	error_response

Consumes

- `application/json`

Produces

- `application/json`

PATCH /ip_port/{id}

Description

Modify IP port parameters.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the IP port.	string
Body	**body** *optional*		ip_port_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `application/json`

Produces

- `application/json`

job

Use this resource type for tracking an operation's progress and status.

GET /job

Description

Query jobs.

Responses

HTTP Code	Description	Schema
200	An array of jobs	< job_instance > array
206	Partial content of job instance objects	< job_instance > array

GET /job/{id}

Description

Query a specific job.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique id of the job.	string

Responses

HTTP Code	Description	Schema
200	A single job.	job_instance
404	Not Found	error_response

keystore_archive

Use this resource to generate and download an encryption keystore archive file.

POST /keystore_archive/regenerate

Description

Creates a new encryption keystore archive file to replace the existing archive file, which includes the individual keystore backup files from each appliance in the cluster. Once complete, the command response includes a Uniform Resource Identifier, which can be used in a subsequent GET request to download the keystore backup archive file. This request is valid only on systems where Data at Rest Encryption is enabled and is applicable only on systems that support Data at Rest Encryption.

Responses

HTTP Code	Description	Schema
200	Success	keystore_archive_regenerate_response
204	Success	No Content
400	Invalid request	error_response
422	Operation Failed	error_response

Produces

- `application/json`

GET /keystore_archive/{filename}

Description

Download a keystore backup archive file that was previously generated by a successful /api/rest/keystore_archive/regenerate POST command. This resource type collection query does not support filtering, sorting or pagination

Parameters

Type	Name	Description	Schema
Path	**filename** *required*	Filename is the last component in the URI path and becomes the filename of the downloaded file.	string

Responses

HTTP Code	Description	Schema
200	Success	keystore_archive_instance
404	Not Found.	error_response

Consumes

- `application/json`

Produces

- `application/zip`

license

Use this resource type to view and manage the software license for the cluster.

Licenses are normally automatically retrieved when the system is configured. If the system cannot reach the DellEMC Software Licensing Central, it will retry daily during the 30-day trial period. After the trial period, the system will continue to operate but no new provisioning operations will be allowed.

When an appliance is added to the cluster, the process starts over, and the cluster license will need to be updated, either automatically, or manually if network connectivity to the Software Licensing Central is not available.

If the system lacks network connectivity to reach the Software Licensing Central, an alert will be raised that indicates when the trial period will expire. For sites that do not allow connection to the Software Licensing Central, there is an alternate mechanism to license the cluster: 1. Get the license activation file from the system. 2. Log on to the DellEMC Software Licensing Central as a customer and provide the activation file. You will receive a license file back. 3. Upload the license file to the system.

GET /license

Description

Query license information for the cluster. There is always one license instance.

Responses

HTTP Code	Description	Schema
200	Success	< license_instance > array
206	Partial content of license instance objects	< license_instance > array

GET /license/{id}

Description

Query the specific license information for the cluster.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the license information instance.	string

Responses

HTTP Code	Description	Schema
200	Success	license_instance
404	Not Found	error_response

POST /license/upload

Description

Upload a software license to install the license on the cluster.

Parameters

Type	Name	Description	Schema
FormData	**license_file** *optional*	The file to upload containing the software license to install the license on the cluster.	file

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
422	Operation Failed	error_response

Consumes

- `multipart/form-data`

POST /license/retrieve

Description

Retrieve the license directly from the DellEMC Software Licensing Central. This runs automatically when the cluster is configured, and if it fails, once per day during the trial period. This allows a manual attempt, normally after attempting to correct the network connectivity issue preventing the automatic retrieval.

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
422	Operation Failed	error_response

local_user

Use this resource type to manage local user accounts.

GET /local_user

Description

Query all local user account instances. This resource type collection query does not support filtering, sorting or pagination

Responses

HTTP Code	Description	Schema
200	Success	< local_user_instance > array
206	Partial content of local user instance objects	< local_user_instance > array

POST /local_user

Description

Create a new local user account. Any existing local user with either an administrator or a security administrator role can create a new local user account. By default, a new local_user account is NOT

locked.

Parameters

Type	Name	Schema
Body	**body** *required*	local_user_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /local_user/{id}

Description

Query a specific local user account instance using an unique identifier.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the local user account.	string

Responses

HTTP Code	Description	Schema
200	Success	local_user_instance
404	Not Found	error_response

DELETE /local_user/{id}

Description

Delete a local user account instance using the unique identifier. You cannot delete the default "admin" account or the account you are currently logged into. Any local user account with Administrator or Security Administrator role can delete any other local user account except the default "admin" account.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the local user account to be deleted.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /local_user/{id}

Description

Modify a property of a local user account using the unique identifier. You cannot modify the default "admin" user account.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the local user account to be modified.	string
Body	**body** *required*		local_user_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content

HTTP Code	Description	Schema
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

login_session

Use these resource types to manage sessions, roles, and system security configurations.

GET /login_session

Description

Obtain the login session for the current user. This resource type collection query does not support filtering, sorting or pagination

Responses

HTTP Code	Description	Schema
200	Success	< login_session_instance > array
206	Partial content of login session instance objects	< login_session_instance > array

Produces

- `application/json`

logout

Use these resource types to manage sessions, roles, and system security configurations.

POST /logout

Description

Log out the current user.

Responses

HTTP Code	Description	Schema
201	Success	create_response
204	Success	No Content
400	Invalid request	error_response
422	Operation Failed	error_response

Produces

- `application/json`

maintenance_window

Use this resource type to manage the maintenance window configuration for each appliance. The maintenance window allows you to set a time period during which alerts do not generate any notifications. After the specified interval (1-48 hours), the maintenance window will get automatically disabled and any alerts that are still outstanding will generate notifications. Specifically, anything that would have generated a notification but didn't do so because of the maintenance window and that remains outstanding after the window closes, will result in a notification when the window is disabled.

GET /maintenance_window

Description

Query the maintenance window configurations.

Responses

HTTP Code	Description	Schema
200	Success	< maintenance_window_instance > array
206	Partial content of maintenance window instance objects	< maintenance_window_instance > array

GET /maintenance_window/{id}

Description

Query one appliance maintenance window configuration.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the maintenance window configuration.	string

Responses

HTTP Code	Description	Schema
200	Success	maintenance_window_instance
404	Not Found	error_response

PATCH /maintenance_window/{id}

Description

Configure maintenance window.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the maintenance window configuration.	string
Body	**body** *required*		maintenance_window_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response

HTTP Code	Description	Schema
404	Not Found	error_response
422	Operation Failed	error_response

metrics

REST APIs Use these resource types to query historical metric data.

POST /metrics/generate

Description

Retrieves metrics for specified type.

Parameters

Type	Name	Schema
Body	**body** *required*	metrics_generate

Responses

HTTP Code	Description	Schema
200	Success	< metrics_generate_response > array
204	Success	No Content
400	Invalid Request	error_response
422	Operation Failed	error_response

Produces

- `application/json`

migration_recommendation

The system produces migration recommendations periodically or upon request, based on capacity usage and recent performance. A recommendation can then be implemented using the

create_migration_sessions action, performing any necessary rescans on attached hosts, and then using start_migration_sessions.

GET /migration_recommendation

Description

Get migration recommendations.

Responses

HTTP Code	Description	Schema
200	Migration recommendation objects	< migration_recommendation_instance > array
206	Partial content of migration recommendation instance objects	< migration_recommendation_instance > array

POST /migration_recommendation

Description

Generate a recommendation for redistributing storage utilization between appliances.

Parameters

Type	Name	Schema
Body	**body** *required*	migration_recommendation_create

Responses

HTTP Code	Description	Schema
201	Success	create_response
400	Invalid request	error_response
422	Invalid Request	error_response

GET /migration_recommendation/{id}

Description

Get a single migration recommendation.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique ID of the migration recommendation.	string

Responses

HTTP Code	Description	Schema
200	Success	migration_recommendation_instance
404	Not found	error_response

DELETE /migration_recommendation/{id}

Description

Delete a migration recommendation.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique ID of the migration recommendation.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Invalid Request	error_response

POST /migration_recommendation/{id}/create_migration_sessions

Description

Create the migration sessions to implement a migration recommendation. If the response contains a list of hosts to rescan, those hosts must be rescanned before starting the sessions or the host(s) may lose access to the data when the migration completes.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique ID of the migration recommendation.	string

Responses

HTTP Code	Description	Schema
200	Success	migration_recommendation_create_migration_sessions_response
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Invalid Request	error_response

POST /migration_recommendation/{id}/start_migration_sessions

Description

Start previously created migration sessions for recommendation. Ensure that any rescans specified in the create_migration_sessions response have been done before using this to start the sessions. Failure to do may result in data unavailability and/or data loss.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique ID of the migration recommendation.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Invalid Request	error_response

migration_session

Manage migration sessions.

GET /migration_session

Description

Query migration sessions.

Responses

HTTP Code	Description	Schema
200	Success	< migration_session _instance > array

POST /migration_session

Description

Create a new migration session. For virtual volumes (vVols), the background copy is completed during this phase and the ownership of the vVol is transferred to the new appliance. For volumes and application groups, a migration session is created in this phase and no background copy is performed until either the sync or cutover operation is invoked. There are no interruptions to any services during this phase.

Parameters

Type	Name	Description	Schema
Body	**body** *required*	Parameters to create a migration session.	migration_session_create

Responses

HTTP Code	Description	Schema
201	Created	migration_session_create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

Produces

- `application/json`

GET /migration_session/{id}

Description

Query a specific migration session.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the migration session.	string

Responses

HTTP Code	Description	Schema
200	Success	< migration_session_instance > array
404	Not Found	error_response

DELETE /migration_session/{id}

Description

Delete a migration session. With the force option, a migration session can be deleted regardless of its state. All background activity is canceled before deleting the session.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the migration session.	string
Body	**body** *optional*	Parameters for a deletion.	migration_session_delete

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /migration_session/{id}/pause

Description

Pause a migration session. Only migration sessions in the synchronizing state can be paused.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the migration session.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /migration_session/{id}/resume

Description

Resume a paused migration session. You cannot resume a migration session in the failed state.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the migration session.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /migration_session/{id}/sync

Description

Synchronize a migration session. During this phase, the majority of the background copy is completed and there are no interruptions to any services. Sync can be run multiple times to reduce the amount of data that must be copied during the cutover.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the migration session.	string
Body	**body** *required*	Parameters for synchronizing a migration session.	migration_session_sync

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /migration_session/{id}/cutover

Description

Final phase of the migration, when ownership of the volume, vVol, or volume group is transferred to the new appliance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the migration session.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response

HTTP Code	Description	Schema
422	Operation Failed	error_response

nas_server

Use these resource types to manage NAS servers. NAS servers are software components used to transfer data and provide the connection ports for hosts to access file-based storage resources. NAS servers are independent from each other.

GET /nas_server

Description

Query all NAS servers.

Responses

HTTP Code	Description	Schema
200	Success	< nas_server_instance > array
206	Partial content of nas server instance objects	< nas_server_instance > array

POST /nas_server

Description

Create a NAS server.

Parameters

Type	Name	Schema
Body	**body** *required*	nas_server_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /nas_server/{id}

Description

Query a specific NAS server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string

Responses

HTTP Code	Description	Schema
200	Success	nas_server_instance
404	Not Found	error_response

DELETE /nas_server/{id}

Description

Delete a NAS server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string
Body	**body** *optional*		nas_server_delete

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /nas_server/{id}

Description

Modify the settings of a NAS server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string
Body	**body** *required*		nas_server_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /nas_server/{id}/ping

Description

Ping destination from NAS server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string
Body	**body** *required*		nas_server_ping

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /nas_server/{id}/upload/passwd

Description

Upload NAS server passwd file.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string
FormData	**body** *optional*	Upload NAS server passwd file.	file

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response

HTTP Code	Description	Schema
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `multipart/form-data`

GET /nas_server/{id}/download/passwd

Description

Download a NAS server passwd file containing template or the actual (if already uploaded) passwd details.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string

Responses

HTTP Code	Description	Schema
200	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `document/text`

POST /nas_server/{id}/upload/hosts

Description

Upload NAS server host file.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string
FormData	**body** *optional*	Upload NAS server host file.	file

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `multipart/form-data`

GET /nas_server/{id}/download/hosts

Description

Download an NAS server host file containing template/actual(if already uploaded) host details.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string

Responses

HTTP Code	Description	Schema
200	Success	No Content
404	Not Found	error_response

HTTP Code	Description	Schema
422	Operation Failed	error_response

Produces

- `document/text`

POST /nas_server/{id}/upload/group

Description

Upload NAS server group file.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string
FormData	**body** *optional*	Upload NAS server group file.	file

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `multipart/form-data`

GET /nas_server/{id}/download/group

Description

Download a NAS server group file containing the template or the actual (if already uploaded) group details.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string

Responses

HTTP Code	Description	Schema
200	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `document/text`

POST /nas_server/{id}/upload/netgroup

Description

Upload the NAS server netgroup file.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string
FormData	**body** *optional*	Upload the NAS server netgroup file.	file

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response

HTTP Code	Description	Schema
422	Operation Failed	error_response

Consumes

- `multipart/form-data`

GET /nas_server/{id}/download/netgroup

Description

Download an NAS server netgroup file containing the template or the actual (if already uploaded) netgroup details.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string

Responses

HTTP Code	Description	Schema
200	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `document/text`

POST /nas_server/{id}/upload/nsswitch

Description

Upload the NAS server nsswitch file.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string
FormData	**body** *optional*	Upload the NAS server nsswitch file.	file

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `multipart/form-data`

GET /nas_server/{id}/download/nsswitch

Description

Download a NAS server nsswitch file containing the template or the actual (if already uploaded) nsswitch configuration settings.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string

Responses

HTTP Code	Description	Schema
200	Success	No Content
404	Not Found	error_response

HTTP Code	Description	Schema
422	Operation Failed	error_response

Produces

- `document/text`

POST /nas_server/{id}/upload/homedir

Description

Upload the NAS server homedir file.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string
FormData	**body** *optional*	Upload the NAS server homedir file.	file

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `multipart/form-data`

GET /nas_server/{id}/download/homedir

Description

Download a NAS server homedir file containing the template or the actual (if already uploaded) homedir configuration settings.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string

Responses

HTTP Code	Description	Schema
200	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `document/text`

POST /nas_server/{id}/upload/ntxmap

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string
FormData	**body** *optional*	Upload the NAS server ntxmap file.	file

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `multipart/form-data`

GET /nas_server/{id}/download/ntxmap

Description

Download an NAS server ntxmap file containing the template or the actual (if already uploaded) ntxmap configuration settings.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string

Responses

HTTP Code	Description	Schema
200	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `document/text`

POST /nas_server/{id}/update_user_mappings

Description

Fix the user mappings for all file systems associated with the NAS server. This process updates file ownership on the NAS server’s file systems to reflect changes to users' SIDs. A new UID/GID will be obtained from a Unix Directory Service for the user name of the object owner. A user mapping report is also generated. This operation can take a significant amount of time, depending of the size of the file systems.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

GET /nas_server/{id}/download/user_mapping_report

Description

Download the report generated by the update_user_mappings action.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NAS server.	string

Responses

HTTP Code	Description	Schema
200	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `document/text`

network

Use these resource types to scale and reconfigure the IP networks in a cluster.

GET /network

Description

Query the IP network configurations of the cluster.

Responses

HTTP Code	Description	Schema
200	Success	< network_instance > array
206	Partial content of network instance objects	< network_instance > array

GET /network/{id}

Description

Query a specific IP network configuration.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the IP network.	string

Responses

HTTP Code	Description	Schema
200	Success	network_instance
404	Not Found	error_response

Consumes

- `application/json`

Produces

- `application/json`

PATCH /network/{id}

Description

Modify IP network parameters, such as gateways, netmasks, VLAN identifiers, and IP addresses.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the IP network.	string
Body	**body** *optional*		network_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `application/json`

Produces

- `application/json`

POST /network/{id}/replace

Description

Reconfigure cluster management network settings from IPv4 to IPv6 or vice versa.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the IP network.	string

Type	Name	Description	Schema
Body	**body** *required*		network_replace

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `application/json`

Produces

- `application/json`

POST /network/{id}/scale

Description

Add IP ports for use by the storage network, or remove IP ports so they can no longer be used. At least one IP port must be configured for use by the storage network.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the IP network.	string
Body	**body** *optional*		network_scale

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `application/json`

Produces

- `application/json`

nfs_export

NFS Exports use the NFS protocol to provide an access point for configured Linux/Unix hosts or IP subnets to access file_systems or file_snapshots.

GET /nfs_export

Description

List NFS Exports.

Responses

HTTP Code	Description	Schema
200	Success	< nfs_export_instance > array
206	Partial content of nfs export instance objects	< nfs_export_instance > array

POST /nfs_export

Description

Create an NFS Export for a Snapshot.

Parameters

Type	Name	Schema
Body	**body** *required*	nfs_export_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /nfs_export/{id}

Description

Get NFS Export properties.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	NFS Export object id.	string

Responses

HTTP Code	Description	Schema
200	Success	nfs_export_instance
404	Not Found	error_response

DELETE /nfs_export/{id}

Description

Delete NFS Export.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	NFS Export object id.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /nfs_export/{id}

Description

Modify NFS Export Properties.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	NFS Export object id.	string
Body	**body** *required*		nfs_export_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

nfs_server

Use these resource types to manage NFS servers. One NFS server may be configured per NAS server. At least one NFS share must be created from an NFS server before an NFS client can connect to the storage resources. NFS servers can support the NFSv3 and NFSv4 protocols. The default protocol is NFSv3. It is enabled when the NFS server is created and remains active until the NFS server is deleted.

GET /nfs_server

Description

Query all NFS Servers.

Responses

HTTP Code	Description	Schema
200	Success.	< nfs_server_instance > array
206	Partial content of nfs server instance objects	< nfs_server_instance > array

POST /nfs_server

Description

Create an NFS server.

Parameters

Type	Name	Schema
Body	**body** *required*	nfs_server_create

Responses

HTTP Code	Description	Schema
201	Created	create_response

HTTP Code	Description	Schema
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /nfs_server/{id}

Description

Query settings of an NFS server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NFS server.	string

Responses

HTTP Code	Description	Schema
200	Success	nfs_server_instance
404	Not Found	error_response

DELETE /nfs_server/{id}

Description

Delete an NFS server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NFS server.	string
Body	**body** *optional*		nfs_server_delete

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /nfs_server/{id}

Description

Modify NFS server settings.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NFS server.	string
Body	**body** *required*		nfs_server_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /nfs_server/{id}/join

Description

Join the secure NFS server to the NAS server's AD domain, which is necessary for Secure NFS.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NFS server.	string
Body	**body** *required*		nfs_server_join

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /nfs_server/{id}/unjoin

Description

Unjoin the secure NFS server from the NAS server's Active Directory domain. If you unjoin with secure NFS exports active, exports will be unavailable to the clients.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NFS server.	string
Body	**body** *required*		nfs_server_unjoin

Responses

HTTP Code	Description	Schema
204	Success	No Content

HTTP Code	Description	Schema
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

node

Use this resource type to retrieve information about nodes in a cluster.

GET /node

Description

Query the nodes in a cluster.

Responses

HTTP Code	Description	Schema
200	Success	< node_instance > array
206	Partial content of node instance objects	< node_instance > array

GET /node/{id}

Description

Query a specific node in a cluster.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the node.	string

Responses

HTTP Code	Description	Schema
200	Success	node_instance
404	Not found	error_response

Consumes

- `application/json`

Produces

- `application/json`

ntp

Manage DNS and NTP settings for the cluster.

GET /ntp

Description

Query NTP settings for a cluster.

Responses

HTTP Code	Description	Schema
200	Success	< ntp_instance > array
206	Partial content of ntp instance objects	< ntp_instance > array

GET /ntp/{id}

Description

Query a specific NTP setting.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NTP setting.	string

Responses

HTTP Code	Description	Schema
200	Success	ntp_instance
404	Not Found	error_response

PATCH /ntp/{id}

Description

Modify NTP settings.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the NTP setting.	string
Body	**body** *required*		ntp_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Consumes

- `application/json`

Produces

- `application/json`

performance_rule

Information about performance rules that can be use in performance policies applied to volumes and volume groups.

GET /performance_rule

Description

Get performance rules.

Responses

HTTP Code	Description	Schema
200	OK	< performance_rule_instance > array
206	Partial content of performance rule instance objects	< performance_rule_instance > array

Produces

- `application/json`

GET /performance_rule/{id}

Description

Get a performance rule by id.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Performance Rule id.	string

Responses

HTTP Code	Description	Schema
200	OK	performance_rule_instance

HTTP Code	Description	Schema
404	The performance_rule does not exist.	error_response

Produces

- `application/json`

physical_switch

Manage physical switches settings for the cluster.

GET /physical_switch

Description

Query physical switches settings for a cluster.

Responses

HTTP Code	Description	Schema
200	Success	< physical_switch_instance > array
206	Partial content of physical switch instance objects	< physical_switch_instance > array

POST /physical_switch

Description

Create a physical switch settings.

Parameters

Type	Name	Schema
Body	**body** *required*	physical_switch_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /physical_switch/{id}

Description

Query a specific physical switch settings.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the physical switch settings.	string

Responses

HTTP Code	Description	Schema
200	Success	physical_switch_instance
404	Not Found	error_response

DELETE /physical_switch/{id}

Description

Delete the physical switch settings.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the physical switch settings.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /physical_switch/{id}

Description

Modify a physical switch settings.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the physical switch settings.	string
Body	**body** *optional*		physical_switch_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

policy

Use this resource type to manage protection policies and to view information about performance policies.

Note: Performance policies are predefined for high, low, and medium performance. They cannot be added to or changed.

GET /policy

Description

Query protection and performance policies.

The following REST query is an example of how to retrieve protection policies along with their rules and associated resources:

https://{{cluster_ip}}/api/rest/policy?select=name,id,type,replication_rules(id,name,rpo,remote_system(id,name,management_address)),snapshot_rules(id,name,interval,time_of_day,days_of_week),volume(id,name),volume_group(id,name)&type=eq.Protection

The following REST query is an example of how to retrieve performance policies along with their associated resources:

https://{{cluster_ip}}/api/rest/policy?select=name,id,type,volume(id,name),volume_group(id,name)&type=eq.Performance

Responses

HTTP Code	Description	Schema
200	Success	< policy_instance > array
206	Partial content of policy instance objects	< policy_instance > array

POST /policy

Description

Create a new protection policy. Protection policies can be assigned to volumes or volume groups. When a protection policy is assigned to a volume or volume group:

- If the policy is associated with one or more snapshot rules, scheduled snapshots are created based on the schedule specified in each snapshot rule.
- If the policy is associated with a replication rule, a replication session is created and synchronized based on the schedule specified in the replication rule.

Parameters

Type	Name	Schema
Body	**body** *required*	policy_create

Responses

HTTP Code	Description	Schema
201	Success	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /policy/{id}

Description

Query a specific policy.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the policy.	string

Responses

HTTP Code	Description	Schema
200	Success	policy_instance
404	Not Found	error_response

DELETE /policy/{id}

Description

Delete a protection policy.

Protection policies that are used by any storage resources can not be deleted.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the protection policy to be deleted.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /policy/{id}

Description

Modify a protection policy.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the policy to be modified.	string
Body	**body** *optional*		policy_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

remote_system

Information about remote storage systems that connect to the local PowerStore system. The system uses the configuration to access and communicate with the remote system for management and data transfer communications. For example, to use remote replication, create a configuration that specifies the remote system to use as the destination for the replication session.

The PowerStore local system can establish a remote system relationship with different types of remote storage systems for replication remote protection and import use-cases. Refer to the RemoteSystemTypeEnum specification for a list of system types supported. **NOTE** Before creating a remote system relationship with PowerStore remote systems, first establish a Certificate Based Trust between the local and remote PowerStore systems using the **verify** and **exchange** operations on the **x509_certificate** resource type.

GET /remote_system

Description

Query remote systems.

Responses

HTTP Code	Description	Schema
200	Success	< remote_system_instance > array
206	Partial content of remote system instance objects	< remote_system_instance > array

POST /remote_system

Description

Create a new remote system relationship. The type of remote system being connected requires different parameter sets. For PowerStore remote system relationships, include the following parameters:

- Management address - Either an IPv4 or IPv6 address. FQDN is not supported.
- Type of remote system
- Data network latency type

For PowerStore remote system relationships, the relationship is created in both directions. Remote protection policies can be configured using the PowerStore remote system instance on either of the systems. This enables remote replication for storage resources in either direction. The data connections take into account whether Challenge Handshake Authentication Protocol (CHAP) is enabled on local and remote PowerStore systems.

For non-PowerStore remote system relationships, include the following parameters:

- Management address - Either an IPv4 or IPv6 address. FQDN is not supported.
- Type of remote system

- Name
- Description
- Remote administrator credentials
- iSCSI address - IPv4 address
- CHAP mode for discovery or session
- CHAP secrets details

After the remote system relationship is created, the local system can communicate with the remote system, and open data connections for data transfer.

Parameters

Type	Name	Description	Schema
Body	**body** *required*	Parameters to create a remote system.	remote_system_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /remote_system/{id}

Description

Query a remote system instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the remote system.	string

Responses

HTTP Code	Description	Schema
200	Success	remote_system_instance
404	Not Found	error_response

DELETE /remote_system/{id}

Description

Delete a remote system. Deleting the remote system deletes the management and data connections established with the remote system. You cannot delete a remote system if there are active import sessions, or if there are remote protection policies active in the system referencing the remote system instance.

For PowerStore remote systems, the relationship is deleted in both directions if the remote system is up and connectable. You cannot delete a PowerStore remote system if there is no management connectivity between the local and remore systems. Only the local end of the relationship is deleted. Manually log in to the remote PowerStore system and remove the relationship.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the remote system.	string
Body	**body** *optional*	Parameters to delete a remote system.	remote_system_delete

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /remote_system/{id}

Description

Modify a remote system instance. The list of valid parameters depends on the type of remote system.

For PowerStore remote system relationships:

- Description
- Management address - An IPv4 or IPv6 address. FQDN is not supported.

For non-PowerStore remote system relationships:

- Name
- Description
- Management address - An IPv4 address. FQDN is not supported.
- Remote administrator credentials
- iSCSI address - An IPv4 address.

After modifying the remote session instance, the system reestablishes the data connections as needed.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the remote system.	string
Body	**body** *required*	Parameters to modify the remote system.	remote_system_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /remote_system/{id}/verify

Description

Verify and update the remote system instance.

Detects changes in the local and remote systems and reestablishes data connections, also taking the Challenge Handshake Authentication Protocol (CHAP) settings into account.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the remote system.	string
Body	**body** *optional*	Parameters to verify a remote system.	remote_system_verify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

replication_rule

Use this resource type to manage the replication rules that are used in protection policies.

GET /replication_rule

Description

Query all replication rules.

Responses

HTTP Code	Description	Schema
200	Success	< replication_rule_instance > array
206	Partial content of replication rule instance objects	< replication_rule_instance > array

POST /replication_rule

Description

Create a new replication rule.

Parameters

Type	Name	Schema
Body	**body** *required*	replication_rule_create

Responses

HTTP Code	Description	Schema
201	Success	create_response
400	Invalid request	error_response
422	Operation Failed	error_response

GET /replication_rule/{id}

Description

Query a specific replication rule.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the replication rule.	string

Responses

HTTP Code	Description	Schema
200	Success	replication_rule_instance
404	Not Found	error_response

DELETE /replication_rule/{id}

Description

Delete a replication rule.

Deleting a rule is not permitted, if the rule is associated with a protection policy that is currently applied to a storage resource.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the replication rule.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /replication_rule/{id}

Description

Modify a replication rule.

If the rule is associated with a policy that is currently applied to a storage resource, the modified rule is immediately applied to the associated storage resource.

Changing the remote_system_id is not permitted, if the rule is part of a policy that is currently applied to a storage resource. To change the remote system associated with a replication rule, do

either of the following:

```
Remove the protection policy association from the relevant storage resources, modify
the replication rule, and then associate the storage resources with the relevant
protection policies.
    Remove the replication rule from the protection policies that use it, modify the
replication rule,
    and then associate it back with the relevant protection policies.
```

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the replication rule.	string
Body	**body** *optional*		replication_rule_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

replication_session

Use this resource type to manage replication sessions for storage resources in the system. Replication sessions operate on volume and volume_group resource types. Replication sessions are created and deleted through protection policies on the storage resources.

In addition to copying data, the replication session synchronizes configuration changes on source resource and replicates user and scheduled snapshots to destination system.

Replication sessions provide disaster recovery failover, reprotect and failback capabilities. As a result:

- The downtime-associated cost of a system failure is minimized.
- The recovery process from a disaster is facilitated.

Replication sessions also provides pause and resume capabilities, to allow for production or disaster recovery-side maintenance requirements.

Destination storage resources are in replication destination mode, which disables any write access to the destination resource. Any operations such as resizing the volume, restoring the snapshot, or changing membership for a volume group on the resource are not allowed.

On the source end, volumes can be expanded, and volume group membership changes are allowed during any states of a replication session.

GET /replication_session

Description

Query replication sessions.

Responses

HTTP Code	Description	Schema
200	Success	< replication_session_instance > array
206	Partial content of replication session instance objects	< replication_session_instance > array

GET /replication_session/{id}

Description

Query a replication session instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the replication session.	string

Responses

HTTP Code	Description	Schema
200	Success	replication_session_instance
404	Not Found	error_response

POST /replication_session/{id}/sync

Description

Synchronize the destination resource with changes on source resource from the previous synchronization cycle. Synchronization happens either automatically according to a set schedule, or manually. User and scheduler-created snapshots are synchronized from the source system to the destination system while maintaining block sharing efficiency.

Also synchronizes any size changes, membership changes, or both, on the source resource. At the end of the synchronization cycle, the destination resource reflects the state as it was when synchronization began. Any size changes, membership changes, or both, to source resource done during the synchronization cycle are replicated in next synchronization cycle.

Synchronization is allowed when the replication session is in the following states:

- OK
- System_Paused

During synchronization, you can take the following actions:

- Planned failover from the source system
- Failover from the destination system
- Pause replication sessions from the source or destination system
- Delete a replication session by removing a protection policy

Synchronization failure places the replication session in a System_Paused state. When the system recovers, the replication session continues from the same point as when the system paused, using the restart address.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the replication session.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /replication_session/{id}/pause

Description

Pause a replication session instance. You can pause a replication session when you need to modify the source or destination system. For example, you can pause the replication session to take the source or destination system down for maintenance.

The session can be paused when it is in the following states:

OK

Remembers the replication session state before pausing, and resumes to OK state

Synchronizing

Remembers the restart address before pausing, and resumes from the restart address

System_Paused

Remembers the restart address before pausing, and resumes from the restart address as recorded when the system entered the System_Paused state

In case of loss of network connectivity between two sites, the replication session is paused only on the local system where it is issued. Pause the replication session again to pause both sites. The following operations are not allowed while only the replication session on the local system is paused:

- Resume
- Sync
- Planned Failover

The following operations are allowed while only the replication session on the local system is paused:

Pause

Use to place both sites into the **Paused** state

Failover

Use to get production access from the disaster recovery site

- Delete the replication session by removing the protection policy on the storage resource

The following system operations may also pause, and subsequently resume, a replication session:

- Non-disruptive upgrade
- Intra-cluster migration

Leaving replication session in a paused state results in change accumulations on the source system, and consume more storage on the source system. Resuming a replication session that has been paused for a long time can result in long synchronization times.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the replication session.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /replication_session/{id}/resume

Description

Resume a replication session instance that is paused. Resuming the replication session schedules a synchronization cycle if the session was in the following states when the session was paused:

- Synchronizing
- System_Paused

When only the replication session on the local system is paused, resuming the session pauses both sites.

You cannot resume replication sessions paused by the system. The following system operations may

also pause, and subsequently resume, a replication session.

- Paused_for_NDU
- Paused_for_Migration

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the replication session.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /replication_session/{id}/failover

Description

Fail over a replication session instance. Failing over the replication session changes the role of the destination system. After a failover, the original destination system becomes the source system, and production access is enabled for hosts and applications for recovery. Failovers can be planned or unplanned.

Planned failovers are issued from the source system and are indicated by setting the is_planned parameter to true. When you fail over a replication session from the source system, the destination system is fully synchronized with the source to ensure that there is no data loss. During a planned failover, stop I/O operations for any applications and hosts. If a synchronization error occurs during a planned failover, the replication session enters the System_Paused state. You cannot pause a replication session during a planned failover. The following operations can be performed during planned failover:

- Unplanned failover
- Delete the replication session by removing the protection policy on the storage resource

After a planned failover, the replication session is in an inactive state. You can use the reprotect action to synchronize the destination storage resource, and then resume the replication session. The auto-reprotect feature can also be used after a planned failover by using the reverse

parameter, which activates the session in the reverse direction.

Unplanned failures are events such as source system failure or an event on the source system that leads to downtime for production access.

Unplanned failovers are issued from the destination system, and are indicated by setting the is_planned parameter to false. Unplanned failovers provide production access to the original destination resource from a preview synchronized point-in-time snapshot referred to as replication common-base. After an unplanned failover, you can restore the system from any point-in-time snapshots on the new source resource. Unplanned failovers place the original source resource into destination mode once it reestablishes a connection to the source system. You can use the reprotect action to synchronize the destination storage resource, and then resume the replication session.

After the replication session has failed over, you can resize the volume group or change the volume group membership on the new source resource.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the replication session.	string
Body	**body** *optional*		replication_session_failover

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /replication_session/{id}/reprotect

Description

Reprotect a replication session instance. Activates the replication session and starts synchronization. This can only be used when the session is in the has been failed over.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the replication session.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

role

Use these resource types to manage sessions, roles, and system security configurations.

GET /role

Description

Query roles. This resource type collection query does not support filtering, sorting or pagination

Responses

HTTP Code	Description	Schema
200	Success	< role_instance > array
206	Partial content of role instance objects	< role_instance > array

Produces

- `application/json`

GET /role/{id}

Description

Query a specific role.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the role.	string

Responses

HTTP Code	Description	Schema
200	Success	role_instance
404	Not Found	error_response

Produces

- `application/json`

sas_port

Use this resource type to retrieve information about SAS ports.

GET /sas_port

Description

Query the SAS port configuration for all cluster nodes.

Responses

HTTP Code	Description	Schema
200	Success	< sas_port_instance > array
206	Partial content of sas port instance objects	< sas_port_instance > array

GET /sas_port/{id}

Description

Query a specific SAS port configuration.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the SAS port.	string

Responses

HTTP Code	Description	Schema
200	Success	sas_port_instance
404	Not Found	error_response

security_config

system security configuration

GET /security_config

Description

Query system security configurations. This resource type collection query does not support filtering, sorting or pagination

Responses

HTTP Code	Description	Schema
200	Success	< security_config_instance > array
206	Partial content of security config instance objects	< security_config_instance > array

Produces

- application/json

GET /security_config/{id}

Description

Query a specific system security configuration.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the system security configuration.	string

Responses

HTTP Code	Description	Schema
200	Success	security_config_instance
404	Not Found	error_response

Produces

- application/json

service_config

Manage the service configuration for each appliance.

- 'SSH Access' - Manage the ability for the service user to remotely connect to the nodes in an appliance using SSH.

GET /service_config

Description

Query the service configuration instances for the cluster. This resource type collection query does not support filtering, sorting or pagination

Responses

HTTP Code	Description	Schema
200	Success	< service_config_instance > array
206	Partial content of service config instance objects	< service_config_instance > array

GET /service_config/{id}

Description

Query the service configuration instances for an appliance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the instance.	string

Responses

HTTP Code	Description	Schema
200	Success	service_config_instance
404	Not Found	error_response

PATCH /service_config/{id}

Description

Modify the service configuration for an appliance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the instance.	string

Type	Name	Description	Schema
Body	**body** *required*		service_config_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

service_user

Use this resource type to manage the service user account. The system includes the default service_user account with the username 'service'. The service user account cannot authenticate through the REST, CLI, or graphical user interfaces. You cannot create more service user accounts or delete the default service user account. During the intial configuration, along with the default admin user account, a password change for the service user account is also required.

```
Only the default service_user account can log in via SSH. Ensure that SSH is enabled
on the system for the service_user to log in. SSH can be enabled or disabled using the
service_config modify operation.
```

GET /service_user

Description

Query the service user account instance. This resource type collection query does not support filtering, sorting or pagination

Responses

HTTP Code	Description	Schema
200	Success	< service_user_instance > array

HTTP Code	Description	Schema
206	Partial content of service user instance objects	< service_user_instance > array

Produces

- `application/json`

GET /service_user/{id}

Description

Query the service user account using the unique identifier.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the service user.	string

Responses

HTTP Code	Description	Schema
200	Success	service_user_instance
404	Not Found	error_response

Produces

- `application/json`

PATCH /service_user/{id}

Description

Modify the properties of the service user account.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the service user account.	string
Body	**body** *required*		service_user_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `application/json`

smb_server

Use these resource types to manage Server Message Block (SMB) servers. SMB is a protocol for sharing files and communications abstractions such as named pipes and mail slots between computers. Most usage of SMB involves computers running Microsoft Windows, but it is commonly supported on other types of systems as well. SMB was formerly known as Common Internet File System (CIFS). An SMB server must be created on a NAS server before SMB shares can be created on the file systems on that NAS server. An SMB server can be created as a standalone server or as a server that belongs to an Active Directory domain (often a Window domain). In that case, DNS must be enabled on the NAS server. The credentials of an administrator of the domain are required to join that domain. An NTP server must be defined also, to prevent authentication errors caused by unsynchronized clocks. Each NAS server supports a maximum of one SMB server.

GET /smb_server

Description

Query all SMB servers.

Responses

HTTP Code	Description	Schema
200	Success	< smb_server_instance > array
206	Partial content of smb server instance objects	< smb_server_instance > array

POST /smb_server

Description

Create an SMB server.

Parameters

Type	Name	Schema
Body	**body** *required*	smb_server_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /smb_server/{id}

Description

Query settings of a specific SMB server.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the SMB server.	string

Responses

HTTP Code	Description	Schema
200	Success	smb_server_instance
404	Not Found	error_response

DELETE /smb_server/{id}

Description

Delete a SMB server. The SMB server must not be joined to a domain to be deleted.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the SMB server.	string
Body	**body** *optional*		smb_server_delete

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /smb_server/{id}

Description

Modify an SMB server's settings.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the SMB server.	string
Body	**body** *required*		smb_server_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /smb_server/{id}/join

Description

Join the SMB server to an Active Directory domain.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the SMB server.	string
Body	**body** *required*		smb_server_join

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response

HTTP Code	Description	Schema
404	Not Found	error_response
422	Operation Failed	error_response

POST /smb_server/{id}/unjoin

Description

Unjoin the SMB server from an Active Directory domain.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the SMB server.	string
Body	**body** *required*		smb_server_unjoin

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

smb_share

SMB Shares use the SMB protocol to provide an access point for configured Windows hosts to access file system storage. The system uses Active Directory to authenticate user and user group access to the Share.

GET /smb_share

Description

List SMB shares.

Responses

HTTP Code	Description	Schema
200	Success	< smb_share_instance > array
206	Partial content of smb share instance objects	< smb_share_instance > array

POST /smb_share

Description

Create an SMB share.

Parameters

Type	Name	Schema
Body	**body** *required*	smb_share_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /smb_share/{id}

Description

Get an SMB Share.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	SMB Share object id.	string

Responses

HTTP Code	Description	Schema
200	Success	smb_share_instance
404	Not Found	error_response

DELETE /smb_share/{id}

Description

Delete an SMB Share.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	SMB Share object id.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /smb_share/{id}

Description

Modify SMB share properties.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	SMB share object id.	string
Body	**body** *optional*		smb_share_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

smtp_config

Use these resource types to configure outgoing SMTP and email notifications.

GET /smtp_config

Description

Query the SMTP configuration. There is always exactly one smtp_config instance.

Responses

HTTP Code	Description	Schema
200	Success	< smtp_config_instance > array
206	Partial content of smtp config instance objects	< smtp_config_instance > array

GET /smtp_config/{id}

Description

Query the specific SMTP configuration.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the SMTP configuration.	string

Responses

HTTP Code	Description	Schema
200	Success	smtp_config_instance
404	Not Found	error_response

PATCH /smtp_config/{id}

Description

Configure the outgoing SMTP information.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the SMTP configuration.	string
Body	**body** *required*		smtp_config_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response

HTTP Code	Description	Schema
404	Not Found	error_response
422	Operation Failed	error_response

POST /smtp_config/{id}/test

Description

Test the SMTP configuration.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the SMTP configuration.	string
Body	**body** *required*	Test operation request body.	smtp_config_test

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

snapshot_rule

Use this resource type to manage snapshot rules that are used in protection policies.

GET /snapshot_rule

Description

Query all snapshot rules.

Responses

HTTP Code	Description	Schema
200	Success	< snapshot_rule_instance > array
206	Partial content of snapshot rule instance objects	< snapshot_rule_instance > array

POST /snapshot_rule

Description

Create a new snapshot rule.

Parameters

Type	Name	Schema
Body	**body** *required*	snapshot_rule_create

Responses

HTTP Code	Description	Schema
201	Success	create_response
400	Invalid request	error_response
422	Operation Failed	error_response

GET /snapshot_rule/{id}

Description

Query a specific snapshot rule.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the snapshot rule.	string

Responses

HTTP Code	Description	Schema
200	Success	snapshot_rule_instance
404	Not Found	error_response

DELETE /snapshot_rule/{id}

Description

Delete a snapshot rule

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the snapshot rule.	string
Body	**body** *optional*		snapshot_rule_delete

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /snapshot_rule/{id}

Description

Modify a snapshot rule.

If the rule is associated with a policy that is currently applied to a storage resource, the modified rule is immediately applied to that associated storage resource.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the snapshot rule.	string
Body	**body** *optional*		snapshot_rule_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

software_installed

Software upgrade functionality. Only one upgrade can be active at a time.

GET /software_installed

Description

Query the software that is installed on each appliance. The output returns a list of JSON objects representing the software that is installed on each appliance and one entry representing the common software installed version that is supported for all appliances in the cluster.

Responses

HTTP Code	Description	Schema
200	Success	< software_installed_instance > array

HTTP Code	Description	Schema
206	Partial content of software installed instance objects	< software_installed _instance > array

GET /software_installed/{id}

Description

Query a specific item from the list of installed software.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the installed software to query.	string

Responses

HTTP Code	Description	Schema
200	Success	software_installed _instance
404	Not Found	error_response

software_package

Software upgrade functionality. Only one upgrade can be active at a time.

GET /software_package

Description

Query the software packages that are known by the cluster. The output returns a list of JSON objects representing the packages.

Responses

HTTP Code	Description	Schema
200	Success.	< software_package _instance > array
206	Partial content of software package instance objects	< software_package _instance > array

POST /software_package

Description

Push a software package file from the client to the cluster. When successfully uploaded and verified, the result is a software_package in the downloaded state, ready to install.

Parameters

Type	Name	Description	Schema
FormData	**upload_file** *optional*	Name of the software package file to upload.	file

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid request	error_response
422	Operation Failed	error_response

Consumes

- `multipart/form-data`

Produces

- `application/json`

GET /software_package/{id}

Description

Query a specific software package.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the software package to query.	string

Responses

HTTP Code	Description	Schema
200	Success	software_package_instance
404	Not Found	error_response

DELETE /software_package/{id}

Description

Delete the specified software package from the cluster. This operation may take some time to complete.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the software package to delete.	string

Responses

HTTP Code	Description	Schema
202	Accepted	job_response
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

POST /software_package/{id}/install

Description

Start a software upgrade background job for the specified appliance within the cluster. If an appliance is not specified, the upgrade is performed on all appliances in the cluster.

Only specify a subset of appliances to upgrade if the time required to upgrade the entire cluster does not fit within a desired maintenance window. When upgrading a subset of appliances, you must adhere to the following ordering rules:

- The primary appliance must always be upgraded first.
- The secondary appliance, which is used as the cluster management database fail-over target, must be upgraded second.
- After the primary and secondary appliances are upgraded, any remaining appliances in the cluster may be upgraded. By default, the process upgrades the appliances in the order they were added to the cluster if possible.

Because this operation takes a long time to complete, using the "is_async flag" is recommended. If the "is_reboot_required" flag is set to true, the primary appliance reboots before the install completes and the operation cannot return synchronously.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the instance.	string
Body	**body** *optional*		software_package_install

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /software_package/{id}/puhc

Description

Run the pre-upgrade health check for a software package. This operation may take some time to respond.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the software package.	string
Body	**body** *optional*		software_package_install

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

storage_container

Manage storage containers. A storage container is a logical grouping of related storage objects in a cluster. A storage container corresponds to a vVol datastore in vCenter and is used to group related vVols and track the amount of space that is used/free.

GET /storage_container

Description

List storage containers.

Responses

HTTP Code	Description	Schema
200	Success	< storage_container _instance > array
206	Partial content of storage container instance objects	< storage_container _instance > array

Produces

- `application/json`

POST /storage_container

Description

Create a virtual volume (vVol) storage container.

Parameters

Type	Name	Schema
Body	**body** *required*	storage_container_create

Responses

HTTP Code	Description	Schema
201	Success	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

Produces

- `application/json`

GET /storage_container/{id}

Description

Query a specific instance of storage container.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Storage container ID.	string

Responses

HTTP Code	Description	Schema
200	Success	storage_container_instance
404	Not Found	error_response

Produces

- `application/json`

DELETE /storage_container/{id}

Description

Delete a storage container.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Storage container ID.	string
Body	**body** *optional*	Options to delete storage_container.	storage_container_delete

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response

HTTP Code	Description	Schema
422	Operation Failed	error_response

Produces

- `application/json`

PATCH /storage_container/{id}

Description

Modify a storage container.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Storage container ID.	string
Body	**body** *required*	Fields to update.	storage_container_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

Produces

- `application/json`

POST /storage_container/{id}/mount

Description

Mount a storage container as a vVol datastore in vCenter.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Storage container ID.	string
Body	**body** *optional*		storage_container_mount

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /storage_container/{id}/unmount

Description

Unmount a storage container, which removes the vVol datastore from vCenter.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Storage container ID.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response

HTTP Code	Description	Schema
422	Operation Failed	error_response

vcenter

Use this resource type to manage vCenter instances. Registered vCenter enables discovering of virtual machines, managing virtual machine snapshots, automatic mounting of storage container and other functionality that requires communication with vCenter. In Unified+ deployments, the one vCenter instance residing in the PowerStore cluster will be prepopulated here and cannot be deleted, nor may any other vCenters be added. For Unified deployments, one external vCenter may be configured if desired.

GET /vcenter

Description

Query registered vCenters.

Responses

HTTP Code	Description	Schema
200	Success	< vcenter_instance > array
206	Partial content of vcenter instance objects	< vcenter_instance > array

POST /vcenter

Description

Add a vCenter. Not allowed in Unified+ deployments.

Parameters

Type	Name	Schema
Body	**body** *optional*	vcenter_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /vcenter/{id}

Description

Query a specific vCenter instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the vCenter to query.	string

Responses

HTTP Code	Description	Schema
200	Success	vcenter_instance
404	Not Found	error_response

DELETE /vcenter/{id}

Description

Delete a registered vCenter. Deletion of vCenter disables functionality that requires communication with vCenter. Not allowed in Unified+ deployments.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the vCenter to delete.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /vcenter/{id}

Description

Modify a vCenter settings.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the vCenter to modify.	string
Body	**body** *optional*		vcenter_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

veth_port

Use these resource types to manage the cluster-wide configuration of virtual IP ports, bonds, and virtual Ethernet ports.

GET /veth_port

Description

Query virtual Ethernet port configurations.

Responses

HTTP Code	Description	Schema
200	Success	< veth_port_instance > array
206	Partial content of veth port instance objects	< veth_port_instance > array

GET /veth_port/{id}

Description

Query a specific virtual Ethernet port configuration.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the virtual Ethernet port.	string

Responses

HTTP Code	Description	Schema
200	Success	veth_port_instance
404	Not Found	error_response

Consumes

- `application/json`

Produces

- `application/json`

virtual_machine

Use this resource type to retrieve cached information from vCenter about virtual machines (VMs) that use storage from the cluster or to create a snapshot of a VM.

GET /virtual_machine

Description

Query virtual machines that use storage from the cluster.

Responses

HTTP Code	Description	Schema
200	Success	< virtual_machine_instance > array
206	Partial content of virtual machine instance objects	< virtual_machine_instance > array

GET /virtual_machine/{id}

Description

Query a specific virtual machine instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the virtual machine to query.	string

Responses

HTTP Code	Description	Schema
200	Success	virtual_machine_instance
404	Not Found	error_response

DELETE /virtual_machine/{id}

Description

Delete a virtual machine snapshot. This operation cannot be used on a base virtual machine or virtual machine template.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the virtual machine snapshot to delete.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /virtual_machine/{id}

Description

Modify a virtual machine. This operation cannot be used on virtual machine snapshots or templates.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the virtual machine to modify.	string
Body	**body** *optional*		virtual_machine_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content

HTTP Code	Description	Schema
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /virtual_machine/{id}/snapshot

Description

Create a snapshot of a virtual machine. This operation cannot be used on a virtual machine snapshot or template.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the virtual machine to create a snapshot of.	string
Body	**body** *optional*		virtual_machine_snapshot

Responses

HTTP Code	Description	Schema
200	Success	virtual_machine_snapshot_response
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

virtual_volume

Information about virtual volumes, which are managed through vCenter.

GET /virtual_volume

Description

Get virtual volumes.

Responses

HTTP Code	Description	Schema
200	Success	< virtual_volume_instance > array
206	Partial content of virtual volume instance objects	< virtual_volume_instance > array

GET /virtual_volume/{id}

Description

Get a specific virtual volume.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Id of the virtual volume.	string

Responses

HTTP Code	Description	Schema
200	Success	virtual_volume_instance
404	Not Found	vvol_error_response

DELETE /virtual_volume/{id}

Description

Delete a virtual volume.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the virtual volume to delete.	string
Body	**body** *optional*	Options to delete a virtual volume.	virtual_volume_delete

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

volume

Manage volumes, including snapshots and clones of volumes.

GET /volume

Description

Query volumes that are provisioned on the appliance.

Responses

HTTP Code	Description	Schema
200	Success	< volume_instance > array
206	Partial content of volume instance objects	< volume_instance > array

POST /volume

Description

Create a volume on the appliance.

Parameters

Type	Name	Schema
Body	**body** *required*	volume_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid Request	error_response
422	Operation Failed	error_response

GET /volume/{id}

Description

Query a specific volume instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the volume to query.	string

Responses

HTTP Code	Description	Schema
200	Success	volume_instance
404	Not Found	error_response

DELETE /volume/{id}

Description

Delete a volume.

- A volume which is attached to a host or host group or is a member of a volume group cannot be deleted.

- A volume which has protection policies attached to it cannot be deleted.
- A volume which has snapshots that are part of a snapset cannot be deleted.
- Clones of a deleted production volume or a clone are not deleted.
- Snapshots of the volume are deleted along with the volume being deleted.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the volume to delete.	string

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Operation Failed	error_response

PATCH /volume/{id}

Description

Modify the parameters of a volume.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the volume to modify.	string
Body	**body** *required*		volume_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content

HTTP Code	Description	Schema
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /volume/{id}/snapshot

Description

Create a snapshot of a volume or a clone. The source id of the snapshot is the id of source volume or clone. The source time is the time when the snapshot is created.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the volume or clone to create a snapshot of.	string
Body	**body** *optional*		volume_snapshot

Responses

HTTP Code	Description	Schema
200	Success	volume_snapshot_response
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /volume/{id}/clone

Description

Create a clone of a volume or snapshot.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the volume or snapshot to create a clone of.	string
Body	**body** *optional*		volume_clone

Responses

HTTP Code	Description	Schema
200	Success	volume_clone_response
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /volume/{id}/refresh

Description

Refresh the contents of the target volume from another volume in the same family. By default, a backup snapshot of the target volume is not created before the refresh is attempted. To create a snapshot before refreshing, set **create_backup_snap** to true. If a snapshot is taken, the response includes the resulting snapshot id; otherwise it is empty. If a custom profile is not specified, the profile for the backup snapshot is automatically generated. The automatically generated profile only provides the name as an automatically generated, unique value. Other optional parameters are not specified. When a volume is refreshed, the source_time is the source_time of the volume from which it is refreshed.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of volume for which to refresh contents.	string
Body	**body** *required*		volume_refresh

Responses

HTTP Code	Description	Schema
200	Success	volume_refresh_response
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /volume/{id}/restore

Description

Restore a volume from a snapshot. A primary or clone volume can only be restored from one of its immediate snapshots. By default, a backup snapshot of the target snapshot is created before the restore is attempted. To skip creating a snapshot before restoring, set create_backup_snap to false. If a snapshot is taken, the response includes the resulting snapshot id; otherwise it is empty. If a custom profile is not specified, the profile for the backup snapshot is automatically generated. The automatically generated profile only provides the name as an automatically generated, unique value. Other optional parameters are not specified. When a volume is restored, the source_time is the source_time of the snapshot from which it is restored.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the volume to restore.	string
Body	**body** *required*		volume_restore

Responses

HTTP Code	Description	Schema
200	Success	volume_restore_response
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /volume/{id}/attach

Description

Attach a volume to a host or host group.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of volume to attach.	string
Body	**body** *required*		volume_attach

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

POST /volume/{id}/detach

Description

Detach a volume from a host or host group.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of volume to detach.	string
Body	**body** *required*		volume_detach

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
404	Not Found	error_response
422	Operation Failed	error_response

volume_group

Manage volume_groups. A volume_group is a group of related volumes treated as a single unit. It can optionally be write-order consistent.

GET /volume_group

Description

Query all volume groups, including snapshot sets and clones of volume groups.

Responses

HTTP Code	Description	Schema
200	Success	< volume_group_instance > array
206	Partial content of volume group instance objects	< volume_group_instance > array

POST /volume_group

Description

Create a new volume group. The resulting volume group will have a type of Primary.

Parameters

Type	Name	Schema
Body	**body** *required*	volume_group_create

Responses

HTTP Code	Description	Schema
201	Created	create_response
400	Invalid request	error_response
422	Invalid Request	error_response

GET /volume_group/{id}

Description

Query a specific volume group, snapshot set, or clone.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the volume group.	string

Responses

HTTP Code	Description	Schema
200	Success	volume_group_instance
404	Not Found	error_response

DELETE /volume_group/{id}

Description

Delete a volume group, snapshot set, or clone. Before you try deleting a volume group, snapshot set, or clone, ensure that you first detach it from all hosts. Note the following:

- When a volume group or clone is deleted, all related snapshot sets will also be deleted.
- When a snapshot set is deleted, all of its constituent snapshots will also be deleted.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the volume group.	string
Body	**body** *optional*		volume_group_delete

Responses

HTTP Code	Description	Schema
204	Success	No Content
404	Not Found	error_response
422	Invalid Request	error_response

PATCH /volume_group/{id}

Description

Modify a volume group, snapshot set, or clone.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the volume group.	string
Body	**body** *optional*		volume_group_modify

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Invalid Request	error_response

POST /volume_group/{id}/add_members

Description

Add member volumes to an existing primary or clone volume group. This cannot be used to add members to a snapshot set. Members cannot be added to a volume group that is acting as the destination in a replication session.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the volume group.	string
Body	**body** *required*		volume_group_add_members

Responses

HTTP Code	Description	Schema
204	Success	No Content

HTTP Code	Description	Schema
400	Invalid request	error_response
404	Not Found	error_response
422	Invalid Request	error_response

POST /volume_group/{id}/remove_members

Description

Remove members from an existing primary or clone volume group. This cannot be used to remove members from a snapshot set. Members cannot be removed from a volume group that is a acting as the destination in a replication session.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the volume group.	string
Body	**body** *required*		volume_group_remove_members

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Invalid Request	error_response

POST /volume_group/{id}/snapshot

Description

Create a new snapshot set for a volume group. When a snapshot of a volume group is created, the resultant snapshot volume group is referred to as a "snapshot set" and it represents a point-in-time copy of the members in the volume group. The snapshot set will be created on the same appliance

as the source volume group. A snapshot of a volume group will result in a new volume group of **Snapshot** type. The snapshot set will belong to the same family as the source volume group. When the source of a snapshot operation is a primary or clone volume group,

- **source_id** of the snapshot set will be set to the identifier of the source volume group.
- **source_time** of the snapshot set will be set to the time at which the snapshot set will be created.

The **is_write_order_consistent** property of the source volume group determines whether the snapshot set will be write-order consistent.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the volume group.	string
Body	**body** *required*		volume_group_snapshot

Responses

HTTP Code	Description	Schema
200	Success	volume_group_snapshot_response
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Invalid Request	error_response

POST /volume_group/{id}/clone

Description

Clone a volume group. The clone volume group will be created on the same appliance as the source volume group. A clone of a volume group will result in a new volume group of **Clone** type. The clone will belong to the same family as the source volume group. When the source of a clone operation is a either primary or clone volume group,

- **source_id** will be set to the identifier of the source volume group.
- **source_time** will be set to the time at which the clone will be created.

When the source of a clone operation is a snapshot set,

- **source_id** will be set to the source_id of the source snapshot set.
- **source_time** will be set to the source_time of the source snapshot set.

The clone volume group will inherit the value of the **is_write_order_consistent** property from the source volume group. A clone of a snapshot set is modeled as a clone of the snapshot set's source, created at the same time instant as when the source snapshot set was created.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the volume group.	string
Body	**body** *required*		volume_group_clone

Responses

HTTP Code	Description	Schema
200	Success	volume_group_clone_response
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Invalid Request	error_response

POST /volume_group/{id}/restore

Description

Restore a volume group from a snapshot set. A primary or a clone volume group can only be restored from one of its immediate snapshot sets. A backup snapshot set of the target volume group will be created before restore is attempted. This behavior can be overridden by setting the **create_backup_snap** property to false. The profile for the backup snapshot set will be auto-generated unless a custom profile is specified. The auto-generated profile only initializes the name to an auto-generated, unique value. Other optional parameters are not specified. Restore operation is only supported if there are no membership changes between the target volume group and source snapshot set. You can restore a volume group even when the sizes of the volumes in the target

volume group have changed. This represents a case where the target volumes have been modified over time, but you want to revert them back to their old state captured in the source snapshot set. When a volume group is restored,

- **source_time** is set to the **source_time** of the snapshot set it is being restored from.

A volume group that is acting as the destination in a replication session cannot be restored.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the volume group.	string
Body	**body** *required*		volume_group_restore

Responses

HTTP Code	Description	Schema
200	Success	volume_group_restore_response
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Invalid Request	error_response

POST /volume_group/{id}/refresh

Description

Refresh the contents of a volume group (the target volume group) from another volume group in the same family. A backup snapshot set of the target volume group will be created before refresh is attempted. This behavior can be overridden by setting the **create_backup_snap** property to false. The profile for the backup snapshot set will be auto-generated, unless a custom profile is specified. The auto-generated profile only initializes the name to an auto-generated, unique value. Other optional parameters are not specified. The table below outlines supported modes of operation and resulting updates to **source_id** and **source_time** attributes of **protection_data**. |Target volume group|Source volume group|New source_id|New source_time| |-|-|-|-| |Primary (P1) |Clone (C1)|id of clone (C1)|Current time| |Primary (P1) |snapshot set (C1S1) of clone (C1)|id of source snapshot set (C1S1)|source_time of source snapshot set (C1S1)| |Clone (C1) |Primary (P1)|id of

primary (P1)|Current time| |Clone (C1) |snapshot set (S1) of primary (P1)|id of source snapshot set (S1)|source_time of source snapshot set (S1)| |Clone (C1) |Clone (C2)|id of source clone(C2)|Current time| |Clone (C1) |snapshot set (C2S1) of clone (C2)|id of source snapshot set (C2S1)|source_time of source snapshot set (C2S1)| Refresh operation is only supported if there are no membership changes between the source and target volume groups of the refresh operation. You can refresh a volume group even when the sizes of the volumes in the target volume group have changed. This represents a case where the source volumes have been modified over time and you want to refresh the target to the new state of the source volume group. A volume group that is acting as the destination in a replication session cannot be refreshed.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the volume group.	string
Body	**body** *required*		volume_group_refresh

Responses

HTTP Code	Description	Schema
200	Success	volume_group_refresh_response
204	Success	No Content
400	Invalid request	error_response
404	Not Found	error_response
422	Invalid Request	error_response

x509_certificate

Use these resource types to manage SSL/TLS certificates. The X509 Certificate service is part of the credential store services. An X509 Certificate in this service represents a certificate chain, composed of the certificate of each individual member in ordered sequence. If the X509 Certificate is used as a server certificate or client certificate, it also includes the private key.

GET /x509_certificate

Description

Query to list X509 Certificates instances. This resource type collection query does not support filtering, sorting or pagination

Responses

HTTP Code	Description	Schema
200	Success	< x509_certificate_instance > array
206	Partial content of x 509 certificate instance objects	< x509_certificate_instance > array

Produces

- `application/json`

GET /x509_certificate/{id}

Description

Query a specific X509 Certificate instance.

Parameters

Type	Name	Description	Schema
Path	**id** *required*	Unique identifier of the X509 Certificate.	string

Responses

HTTP Code	Description	Schema
200	Success	x509_certificate_instance
404	Not Found	error_response

Produces

- `application/json`

POST /x509_certificate/exchange

Description

Exchange certificates between two clusters. Add CA certificates to the trust store of each cluster and assign roles to the client certificates. After this process, certificate-based authentication can be used for communication between clusters. This exchange REST API can only be triggered with service Replication_HTTP.

Parameters

Type	Name	Description	Schema
Body	**body** *required*	Request body.	x509_certificate_exchange

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
422	Operation Failed	error_response

Produces

- `application/json`

POST /x509_certificate/decommission

Description

Decommission x509 certificates for one service type (currently only Replication_HTTP is supported) of one scope (for example remote system)

Parameters

Type	Name	Description	Schema
Body	**body** *required*	Request body.	x509_certificate_decommission

Responses

HTTP Code	Description	Schema
204	Success	No Content
400	Invalid Request	error_response
422	Operation Failed	error_response

Produces

- `application/json`

Definitions

ActivePathEnum

Active path of the import host volume. Valid values are:

None
: No active path available.

Source
: Current IO path is set to source.

Destination
: Current IO path is set to destination.

Type : enum (None, Source, Destination)

AlertStateEnum

Alert State Enum with values - Active and Cleared.

Type : enum (ACTIVE, CLEARED)

ArrayTypeEnum

Product type of the storage system. Valid values are:

Unknown
: Product type is unknown to PowerStore.

SC
: Storage Center.

PS

Peer Storage Group.

VNX

VNX.

Unity

Unity.

Type : enum (Unknown, SC, PS, VNX, Unity)

AuditEventTypeEnum

Type of audit event.

Authentication

All the authentication events on the system.

Authorization

All the authorization events on the system.

Config

All the set operations on the system. Example: POST, PATCH, DELETE.

System

All the system level operations.

Logout

All the logging out events on the system.

Type : enum (Authentication, Authorization, Config, System, Logout)

BondingModeEnum

Bond mode.

LACP

Uses an IEEE 802.3ad dynamic link aggregation policy. Aggregation groups share the same speed and duplex settings. This mode transmits and receives network traffic on all slaves in the active aggregator.

Type : enum (LACP)

CGImportableCriteriaEnum

Consistency group import criteria. Values are:

Ready

The consistency group is ready for nondisruptive import.

Ready_For_Agentless_Import

The consistency group is ready for agentless import.

In_Progress

Import is in progress.

Members_Not_Ready

The member or members of teh consistency group are not ready for import.

No_Members

There are no members in the consistency group.

Max_Members

The maximum number of members for a consistency group has been exceeded.

Not_In_Sync

The array must be refreshed.

Imported

Import is complete.

Incompatible_Firmware

The software version on the source array is not compatible.

Undetermined

The import status cannot be determined due to an internal error. Contact technical support.

Type : enum (Ready, In_Progress, Members_Not_Ready, No_Members, Max_Members, Not_In_Sync, Imported, Incompatible_Firmware, Undetermined)

CHAPModeEnum

Available CHAP modes that describe or set the iSCSI CHAP mode for the entire cluster.

Disabled

CHAP is not used in the cluster

Single

CHAP is being used to authenticate the initiator

Mutual

CHAP is used to authenticate both the initiator and target

Type : enum (Disabled, Single, Mutual)

ClusterStateEnum

Possible cluster states. * Unconfigured_Faulted - This is single appliance that is not in a cluster and Hardware is in faulted state. * Unconfigured - This is a single appliance that is not in a cluster. * Configured - Cluster is configured and operational. * Configuring - Cluster is in the process of initial setup. * Expanding - Appliance(s) are being added to the cluster. * Removing - Appliance(s) are being removed from the cluster. * Clustering_Failed - This is a single appliance that failed an attempt to join a cluster.

Type : enum (Unconfigured_Faulted, Unconfigured, Configuring, Configured, Expanding, Removing, Clustering_Failed)

CopySessionTypeEnum

Session types.

Type : enum (import_session, migration_session, replication_session)

DataConnectionStateEnum

Possible data connection states of a remote system:

OK
: Normal conditions.

Partial_Data_Connection_Loss
: Partial data connection loss.

Complete_Data_Connection_Loss
: Complete data connection loss.

Status_Not_Available
: Status not available.

No_Targets_Discovered
: No targets discovered.

Initializing
: Initializing

Type : enum (OK, Partial_Data_Connection_Loss, Complete_Data_Connection_Loss, Status_Not_Available, No_Targets_Discovered, Initializing)

DayOfWeekEnum

Days of the week. Valid values are:

Monday
Monday

Tuesday
Tuesday

Wednesday
Wednesday

Thursday
Thursday

Friday
Friday

Saturday
Saturday

Sunday
Sunday

Unknown
Day of week is unknown to PowerStore.

Type : enum (Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday, Unknown)

DaysOfWeekEnum

Days of the week.

Type : enum (Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday)

EthPortSpeedEnum

Supported Ethernet front-end port transmission speeds. For the current_speed attribute, these values show the current transmission speed on the port. For the requested_speed attribute, these values show the transmission speed set by the user. A requested speed of Auto means that the current speed value will be automatically detected. If this file is updated, also update FrontEndPortSpeedEnum.yaml

Auto
the speed value is automatically detected

10_Mbps
10 Megabits per second

100_Mbps
100 Megabits per second

1_Gbps

1 Gigabits per second

10_Gbps

10 Gigabits per second

25_Gbps

25 Gigabits per second

40_Gbps

40 Gigabits per second

Type : enum (Auto, 10_Mbps, 100_Mbps, 1_Gbps, 10_Gbps, 25_Gbps, 40_Gbps)

FcPortSpeedEnum

Possible Fibre Channel port speeds. For the current_speed attribute, these values show the current transmission speed on the port. For the requested_speed attribute, these values show the transmission speed set by the user. A requested speed of Auto means that the current speed value will be automatically detected. If this file is updated, also update FrontEndPortSpeedEnum.yaml

Auto

the speed value is automatically detected

4_Gbps

4 Gigabits per second

8_Gbps

8 Gigabits per second

16_Gbps

16 Gigabits per second

32_Gbps

32 Gigabits per second

Type : enum (Auto, 4_Gbps, 8_Gbps, 16_Gbps, 32_Gbps)

FileDNSTransportEnum

Transport used when connecting to the DNS Server:

UDP

DNS uses the UDP protocol (default)

TCP

DNS uses the TCP protocol

Type : enum (UDP, TCP)

FileInterfaceRoleEnum

Production

This type of network interface is used for all file protocols and services of a NAS server. This type of interface is inactive while a NAS server is in destination mode.

Backup

This type of network interface is used only for NDMP/NFS backup or disaster recovery testing. This type of interface is always active in all NAS server modes.

Type : enum (Production, Backup)

FileInterfaceRouteOperationalStatusEnum

File interface route Operational Status:

Ok

the route is working fine.

Invalid_IP_Version

source interfaces have a different IP protocol version than the route.

Invalid_Source_Interface

no source interfaces set up on the system.

Invalid_Gateway

source interfaces in a different subnet than the gateway.

Not_Operational

the route is not operational.

Type : enum (Ok, Invalid_IP_Version, Invalid_Source_Interface, Invalid_Gateway, Not_Operational)

FileLDAPAuthenticationTypeEnum

Authentication type for the LDAP server.

Anonymous

Anonymous authentication means no authentication occurs and the NAS Server uses an anonymous login to access the LDAP-based directory server.

Simple

Simple authentication means the NAS Server must provide a bind distinguished name and password to access the LDAP-based directory server.

Kerberos

Kerberos authentication means the NAS Server uses a KDC to confirm the identity when accessing the Active Directory.

Type : enum (Anonymous, Simple, Kerberos)

FileLDAPProtocolEnum

Indicates whether the LDAP protocol uses SSL for secure network communication. SSL encrypts data over the network and provides message and server authentication.

LDAP

LDAP protocol without SSL.

LDAPS

(Default) LDAP protocol with SSL. When you enable LDAPS, make sure to specify the appropriate LDAPS port (usually port 636) and to upload an LDAPS trust certificate to the LDAP server.

Type : enum (LDAP, LDAPS)

FileLDAPSchemaTypeEnum

LDAP server schema type.

RFC2307

OpenLDAP/iPlanet schema.

Microsoft

Microsoft Identity Management for UNIX (IDMU/SFU) schema.

Unknown

Unknown protocol.

Type : enum (RFC2307, Microsoft, Unknown)

FileQuotaStateEnum

State of the user quota or tree quota record period.

OK

No quota limits are exceeded.

Soft_Exceeded

Soft limit is exceeded, and grace period is not expired.

Soft_Exceeded_And_Expired

Soft limit is exceeded, and grace period is expired.

Hard_Reached

Hard limit is reached.

Type : enum (Ok, Soft_Exceeded, Soft_Exceeded_And_Expired, Hard_Reached)

FileSystemAccessPolicyEnum

File system security access policies. Each file system uses its access policy to determine how to reconcile the differences between NFS and SMB access control. Selecting an access policy determines which mechanism is used to enforce file security on the particular file system.

Native

Native Security.

UNIX

UNIX Security.

Windows

Windows Security.

Type : enum (Native, UNIX, Windows)

FileSystemFolderRenamePolicyEnum

File system folder rename policies for the file system with multiprotocol access enabled. These policies control whether the directory can be renamed from NFS or SMB clients when at least one file is opened in the directory, or in one of its child directories.

All_Allowed

All protocols are allowed to rename directories without any restrictions.

SMB_Forbidden

A directory rename from the SMB protocol will be denied if at least one file is opened in the directory or in one of its child directories.

All_Forbidden

Any directory rename request will be denied regardless of the protocol used, if at least one file is opened in the directory or in one of its child directories.

Type : enum (All_Allowed, SMB_Forbidden, All_Forbidden)

FileSystemLockingPolicyEnum

File system locking policies. These policy choices control whether the NFSv4 range locks are honored. Because NFSv3 is advisory by design, this policy specifies that the NFSv4 locking feature behaves like NFSv3 (advisory mode), for backward compatiblity with applications expecting an advisory locking scheme.

Advisory

No lock checking for NFS and honor SMB lock range only for SMB.

Mandatory

Honor SMB and NFS lock range.

Type : enum (Advisory, Mandatory)

FileSystemSnapshotAccessTypeEnum

Indicates whether the snapshot directory or protocol access is granted to the file system snapshot.

Snapshot

Snapshot access is via the .snapshot folder in the file system.

Protocol

Protocol access is via normal file shares. Protocol access is not provided by default - the NFS and/or SMB share must be created explicitly for the snapshot.

Type : enum (Snapshot, Protocol)

FileSystemSnapshotCreatorTypeEnum

Enumeration of possible snapshot creator types.

Scheduler

Created by a snapshot schedule.

User

Created by a user.

External_VSS

Created by Windows Volume Shadow Copy Service (VSS) to obtain an application consistent snapshot.

External_NDMP

Created by an NDMP backup operation.

External_Restore

Created as a backup snapshot before a snapshot restore.

External_Replication_Manager

Created by Replication Manager.

Snap_CLI

Created inband by SnapCLI.

AppSync

Created by AppSync.

Type : enum (Scheduler, User)

FileSystemTypeEnum

Primary

Normal file system or clone.

Snapshot

Snapshot of a file system.

Type : enum (Primary, Snapshot)

ForecastMetricTypeEnum

Metric type to be forecast.

Type : enum (Physical_Space_Used_One_Day)

ForecastTimeToFullStatusEnum

Type of alert indicated for object based on projected time to full.

`OK`

Time to full value is greater than 28 days. No alert indicated.

`Minor`

Time to full value is less than or equal to 28 days but greater than 14 days. Minor alert indicated.

`Major`

Time to full value is less than or equal to 14 days. Major alert indicated.

`None`

There is insufficient forecast data to project time to full to at least 28 days. No alert indicated, but available data cannot guarantee `OK` status.

Type : enum (OK, Minor, Major, None)

FrontEndPortConnectionTypeEnum

Type of connector supported by the port. Current values are:

Unknown

Unknown Connector

SC

Subscriber Connector

FC_Style1_Copper

Fibre Channel Style 1 Copper Connector

FC_Style2_Copper

Fibre Channel Style 1 Copper Connector

BNC_TNC

Bayonet/Threaded Neill-Concelman Connector

FC_Coaxial_Headers

Fibre Channel Coaxial Headers Connector

FiberJack

Fiber Jack Connector

LC

Lucent Connector

MT_RJ

Mechanical Transfer - Registered Jack Connector

MU

Multiple Optical Connector

SG

SG Connector

Optical_Pigtail

Optical Pigtail Connector

HSSDC_II

High Speed Serial Data Connector

Copper_Pigtail

Copper Pigtail Connector

RJ45

RJ45 Connector

No_Separable

No Separable Connector

MXC_2x16

MXC 2x16 Connector

Type : enum (Unknown, SC, FC_Style1_Copper, FC_Style2_Copper, BNC_TNC, FC_Coaxial_Headers, FiberJack, LC, MT_RJ, MU, SG, Optical_Pigtail, HSSDC_II, Copper_Pigtail, RJ45, No_Separable,

MXC_2x16)

HAOSTypeEnum

Operating system of the import host system. Valid values are:

Windows

Windows.

Linux

Linux.

ESXi

ESXi.

Unknown

Operating system of the host system is unknown to PowerStore.

Type : enum (Windows, Linux, ESXi, Unknown)

HardwareDriveEncryptionStatusEnum

Indicates whether the drive is currently encrypted or not. Available on the Drive hardware type. Current statuses are:

Not_Supported

Drive does not support encryption.

Supported_Unlocked

Drive supports encryption but is not configured.

Supported_Locked

Drive supports encryption and is locked.

Supported_Locked_Cluster_PIN

Drive supports encryption and is configured.

Supported_Locked_Out

Drive supports encryption and is locked out.

Supported_Locked_Foreign

Drive supports encryption and is locked with an unknown PIN.

Supported_Processing

Drive supports encryption and is being processed.

Disabled

Drive encryption is disabled.

Type : enum (Not_Supported, Supported_Unlocked, Supported_Locked, Supported_Locked_Cluster_PIN, Supported_Locked_Out, Supported_Locked_Foreign, Supported_Processing, Disabled)

HardwareDriveFIPSStatusEnum

FIPS compliance level. Available on the Drive hardware type. Current compliance levels are:

FIPS_Compliance_None

Drive has no FIPS compliance.

FIPS_Compliance_Level_1

Drive has Level 1 FIPS 140-2 compliance.

FIPS_Compliance_Level_2

Drive has Level 2 FIPS 140-2 compliance.

FIPS_Compliance_Invalid

Drive has invalid FIPS compliance.

Type : enum (FIPS_Compliance_None, FIPS_Compliance_Level_1, FIPS_Compliance_Level_2, FIPS_Compliance_Invalid)

HardwareDriveTypeEnum

Type of drive. Available on the Drive hardware type. Current types are:

- Unknown

SAS_SSD

SAS-connected SSD in an Expansion Enclosure.

NVMe_SCM

NVME-Connected Storage Class Memory.

NVMe_NVRAM

NVME-Connected Non-volatile RAM.

NVMe_SSD

NVME-Connected SSD.

Type : enum (Unknown, SAS_SSD, NVMe_SCM, NVMe_NVRAM, NVMe_SSD)

HardwareLifecycleStateEnum

Lifecycle state of the Hardware. Current values are:

Uninitialized

System is starting up.

Healthy

Hardware is healthy.

Initializing

System is starting up.

Failed

Hardware has failed.

Disconnected

Hardware was removed from the system.

Prepare_Failed

Transient state used during startup.

Trigger_Update

Transient state used during startup.

Empty

No hardware present in this location.

Type : enum (Uninitialized, Healthy, Initializing, Failed, Disconnected, Prepare_Failed, Trigger_Update, Empty)

HardwareSFPConnectorTypeEnum

Connector type. Available on the SFP hardware type. Current types are:

Unknown

Unknown Connector

SC

Subscriber Connector

FC_Style1_Copper

Fibre Channel Style 1 Copper Connector

FC_Style2_Copper

Fibre Channel Style 1 Copper Connector

BNC_TNC

Bayonet/Threaded Neill-Concelman Connector

FC_Coaxial_Headers

Fibre Channel Coaxial Headers Connector

FiberJack

Fiber Jack Connector

LC

Lucent Connector

MT_RJ

Mechanical Transfer - Registered Jack Connector

MU

Multiple Optical Connector

SG

SG Connector

Optical_Pigtail

Optical Pigtail Connector

HSSDC_II

High Speed Serial Data Connector

Copper_Pigtail

Copper Pigtail Connector

RJ45

RJ45 Connector

No_Separable

Non-seperable Connector

MXC_2x16

MXC 2x16 Connector

Type : enum (Unknown, SC, FC_Style1_Copper, FC_Style2_Copper, BNC_TNC, FC_Coaxial_Headers, FiberJack, LC, MT_RJ, MU, SG, Optical_Pigtail, HSSDC_II, Copper_Pigtail, RJ45, No_Separable, MXC_2x16)

HardwareSFPModeEnum

SFP mode. Available on the SFP hardware type. Current modes are:

Unknown

This SFP has unknown support.

Multi_Mode

This SFP supports multi-mode fiber.

Single_Mode

This SFP supports single-mode fiber.

Type : enum (Unknown, Multi_Mode, Single_Mode)

HardwareSFPSpeedEnum

Supported speed. Available on the SFP hardware type. Current supported speeds are:

Auto
Automatically selected link speed

4_Gbps
4 Gigabits per second

8_Gbps
8 Gigabits per second

16_Gbps
16 Gigabits per second

32_Gbps
32 Gigabits per second

10_Mbps
10 Megabits per second

100_Mbps
100 Megabits per second

1_Gbps
1 Gigabit per second

10_Gbps
10 Gigabits per second

25_Gbps
25 Gigabits per second

40_Gbps
40 Gigabits per second

Type : enum (Auto, 4_Gbps, 8_Gbps, 16_Gbps, 32_Gbps, 10_Mbps, 100_Mbps, 1_Gbps, 10_Gbps, 25_Gbps, 40_Gbps)

HardwareSFPSupportedProtocolEnum

Supported protocol. Available on the SFP hardware type. Current protocols are:

Unknown

This SFP has unknown protocol support.

FC

This SFP supports Fibre Channel.

Ethernet

This SFP supports Ethernet.

FC_Ethernet

This SFP supports Fibre Channel or Ethernet.

SAS

This SFP supports SAS for connections to Expansion Enclosures.

Type : enum (Unknown, FC, Ethernet, FC_Ethernet, SAS)

HardwareStatusLEDStateEnum

State of the status LED of the hardware. The LED is On when there is a hardware fault. Current values are:

Off

Hardware Status LED is turned off.

On

Hardware Status LED is turned on.

Type : enum (Off, On)

HardwareTypeEnum

The type of hardware component. Current types are:

Appliance

The System including the Base Enclosure and optional Expansion Enclosures.

Base_Enclosure

The enclosure containing 2 Nodes and 25 NVME drive slots.

Node

The component that contains the processors and DIMMs.

Expansion_Enclosure

The enclosures that contain additional SAS storage.

Power_Supply

The AC Power Supply that powers each Node.

IO_Module

The component that provides front-end I/O connectivity to each Node.

Link_Control_Card

The IO card that provides SAS Connectivity to the Expansion Enclosure.

SFP

The Small Form-factor Pluggable (SFP) that is used for networking.

Battery

The internal battery backup used by each Node.

DIMM

The memory sticks that are installed in each Node.

M2_Drive

The internal M.2 SATA drive used for Node boot and recovery.

Fan

The fan module that provides cooling to the Node.

Drive

The NVME drives installed in the Base Enclosure or the SAS drives installed in an Expansion Enclosure.

Type : enum (Appliance, Node, Base_Enclosure, Expansion_Enclosure, Power_Supply, IO_Module, Link_Control_Card, SFP, Battery, DIMM, M2_Drive, Fan, Drive)

HostAgentStatusEnum

Status of the import host system. Valid values are:

Unknown

Agent status is unknown.

Running

Agent is up and running.

Conflict_Detected

Agent detected that there are multiple MPIOs installed on the host and Destination Powerstore MPIO is not able to claim destination device as some other MPIO has already claimed it.

Version_Unsupported

Agent detected that the OS or any other dependent component does not satisfy the version as expected by the it.

Type : enum (Unknown, Running, Conflict_Detected, Version_Unsupported)

HostAgentTypeEnum

Type of import host system. Valid values are:

EQL
EQL MPIO.

Native_MPIO
Native MPIO.

Power_Path
POWER PATH MPIO.

Unknown
Type of host agent is unknown to PowerStore.

Type : enum (EQL, Native_MPIO, Power_Path, Unknown)

HostInitiatorProtocolTypeEnum

Protocol type of the import host initiator. Valid values are:

Other
Protocol type is other.

iSCSI
Protocol type is internet SCSI.

FC
Protocol type is Fibre Channel.

FCoE
Protocol type is Fibre Channel over Ethernet.

Unknown
Protocol type is unknown to PowerStore.

Type : enum (Other, iSCSI, FC, FCoE, Unknown)

ImportDestinationResourceTypeEnum

Storage resource type of the import destination. Values are: * volume - The destination resource of the import session is a volume. * volume_group - The destination resource of the import session is a volume group.

Type : enum (volume, volume_group)

ImportOperationStatusEnum

Migration state of the import host volume. Valid values are:

Import_Completed

Import operation was successful.

Cancel_Completed

Cancel operation was successful.

Import_Aborted

Aborted the ongoing import.

Cancel_Aborted

Aborted the ongoing cancel operation.

Cancel_Forced

Aborted the ongoing cancel operation.

None

Migration state is not known to PowerStore.

Type : enum (Import_Completed, Cancel_Completed, Import_Aborted, Cancel_Aborted, Cancel_Forced, None)

ImportPsgroupScheduleStatusEnum

Snapshot schedule status. Valid values are:

Enabled

Snapshot schedule is enabled.

Disabled

Snapshot schedule is disabled.

Expired

Snapshot schedule is expired.

Type : enum (Enabled, Disabled, Expired)

ImportPsgroupScheduleTypeEnum

Snapshot schedule frequency. Valid values are:

Once

Take snapshot only once.

Hourly

Take snapshot hourly.

Daily

Take snapshot on a daily basis.

Weekly

Take snapshot on a weekly basis.

Monthly

Take snapshot on a monthly basis.

Type : enum (Once, Hourly, Daily, Weekly, Monthly)

ImportSessionStateEnum

Import session states

Scheduled

Indicates that a user scheduled the import to run at a later time. The import remains in this state and waits until the schedule expires.

Paused

Indicates that the data copy between the source and destination volumes is paused.

Queued

Indicates that all imports are queued and run in a First In First Out (FIFO) order. This occurs when there are more active import sessions than supported.

In_Progress

Indicates that a queued import session is now in progress.

Mirror_Enabled

Indicates that an import session has completed setting up the entities required to import data from the source resource.

Ready_To_Start_Copy

Indicates that an import session is ready to start the data copy operation from the source resource.

Copy_In_Progress

Indicates that the data copy between the source and destination storage systems has started. The data copy runs as a background job and updates the import session percentage complete and estimated time left for the copy. Host IOs are pointed to PowerStore in this state. The import process keeps the source and destination volumes or consistency groups volume in sync by doing IO forwarding.

Ready_For_Cutover

Indicates that you can commit the import. The import process moves to this state after it successfully copies data from the source volume or consistency group.

Cutover_In_Progress

Indicates that the cutover of volumes that are part of a consistency group is in progress.

Import_Completed

Indicates that all operations completed successfully for a given import after a commit. In this state, the source volume is no longer mapped to the host and all stale paths are cleaned up.

Cancelled

Indicates that a user forcefully cancelled the import.

Failed

Indicates that there was an error during import. The appropriate error message is returned in the error_response object.

Cancel_Failed

Indicates that an attempt to cancel the import of a volume failed in a consistency group import.

Cancel_In_Progress

Indicates that a cancel is in progress.

Cleanup_In_Progress

Indicates that the import of one or more volumes in a consistency group failed. When this occurs, you must roll back the import of the other volumes of the consistency group by executing a Cancel operation on each volume.

Cleanup_Failed

Indicates that there was an error while cleaning up the consistency group.

Invalid

Indicates that an import session is in an unexpected state.

Cleanup_Required

Indicates that there was an error while cleaning up the import or consistency group that requires user intervention to bring back host applications.

Import_Completed_With_Errors

Indicates that there was a mirror failure for one or more members while committing a consistency group due to which members were partially committed.The failed members were cancelled.

Import_Cutover_Incomplete

Indicates that one or more members couldn’t be committed successfully resulting in partial commit of the consistency group. Commit should be tried again on the consistency group.

Type : enum (Scheduled, Paused, Queued, In_Progress, Mirror_Enabled, Ready_To_Start_Copy, Copy_In_Progress, Ready_For_Cutover, Cutover_In_Progress, Import_Completed, Cancelled, Failed, Cancel_Failed, Cancel_In_Progress, Cleanup_In_Progress, Cleanup_Failed, Invalid, Cleanup_Required, Import_Completed_With_Errors, Import_Cutover_Incomplete)

ImportStatusEnum

Migration state of the volume. Valid values are:

None

Volume is not migrated.

Normal

Volume state is normal.

Prepared

Volume is prepared for migration.

Disabled_For_IO

Volume is disabled for IO from host.

In_Progress

Volume migration is in progress.

Completed

Volume is migrated.

Aborted

Volume migration is aborted

Unknown

Volume migration state is unknown to PowerStore.

Type : enum (None, Normal, Prepared, Disabled_For_IO, In_Progress, Aborted, Completed, Unknown)

InitiatorProtocolTypeEnum

Protocol type of the host initiator.

iSCSI

An iSCSI initiator.

FC

A Fibre Channel initiator.

Type : enum (iSCSI, FC)

IoPriorityEnum

The I/O priority for quality of service rules.

Type : enum (Low, Medium, High)

IpPortUsageEnum

IP port usages.

Management
Can be used for the public management network.

ISCSI
Can be used for the public storage network.

ISCSI_Default
Is used for default storage connections and cannot be uscaled.

External_Replication
Can be used for the external data mobility traffic.

Type : enum (Management, ISCSI, ISCSI_Default, External_Replication)

IpPurposeTypeEnum

Network IP address purpose.

Type : enum (Mgmt_Cluster_Floating, Mgmt_Appliance_Floating, Mgmt_Node_CoreOS, Mgmt_Node_Host, ICM_Cluster_Floating, ICM_Appliance_Floating, ICM_Node_CoreOS, Storage_Global, Storage_Iscsi_Initiator, Storage_Iscsi_Target, Storage_Cluster_Floating, ICD_Node, SDNAS_Cluster_Floating, SDNAS_Node, SDNAS_Node_Serviceability, VMotion, Unused)

IpVersionTypeEnum

IP protocol version.

Type : enum (IPv4, IPv6)

JobStateEnum

Current status of the job.

Type : enum (PENDING, QUEUED, IN_PROGRESS, COMPLETED, SKIPPED, UNRECOVERABLE_FAILED, FAILED)

LocationHistoryReasonEnum

Reason for storage resource relocation.

Initial
: Initial placement.

Manual
: Manual migration operation initiated by user.

Recommended
: Storage system recommended migration.

Type : enum (Initial, Manual, Recommended)

MessageSeverityEnum

Message severity.

Type : enum (Info, Warning, Error)

MetricsEntityEnum

An enum describing the various entities supported by metrics.

performance_metrics_by_appliance
: Appliance performance metrics.

performance_metrics_by_node
: Node performance metrics.

performance_metrics_by_volume
: Volume performance metrics.

performance_metrics_by_cluster
: Cluster performance metrics.

performance_metrics_by_vm
: Virtual Machine performance metrics.

performance_metrics_by_vg
: Storage performance metrics for all volumes in a volume group

performance_metrics_by_fe_fc_port
: Frontend fibre channel port performance metrics.

performance_metrics_by_fe_eth_port
: Frontend ethernet port performance metrics.

performance_metrics_by_fe_eth_node

Frontend ethernet performance metrics for node.

performance_metrics_by_fe_fc_node

Frontend fibre channel performance metrics for node.

wear_metrics_by_drive

Drive wear metrics.

space_metrics_by_cluster

Cluster space metrics

space_metrics_by_appliance

Appliance space metrics

space_metrics_by_volume

Volume space metrics

space_metrics_by_volume_family

Volume family space metrics

space_metrics_by_vm

Virtual Machine space metrics

space_metrics_by_storage_container

Storage Container space metrics

space_metrics_by_vg

Volume space metrics in a volume group

copy_metrics_by_appliance

Appliance copy metrics

copy_metrics_by_cluster

Cluster copy metrics

copy_metrics_by_vg

Copy metrics for each volume group

copy_metrics_by_remote_system

Copy metrics for each remote system

copy_metrics_by_volume

Copy metrics for each volume

performance_metrics_by_file_system

Performance metrics for the file system.

performance_metrics_smb_by_node

Performance metrics for the SMB protocol global

performance_metrics_smb_builtinclient_by_node

Performance metrics for the SMB protocol built-in client

performance_metrics_smb_branch_cache_by_node

Performance metrics for the SMB protocol Branch-Cache

performance_metrics_smb1_by_node

Performance metrics for the SMB1 protocol basic

performance_metrics_smb1_builtinclient_by_node

Performance metrics for the SMB1 protocol built-in client

performance_metrics_smb2_by_node

Performance metrics for the SMB2 protocol basic

performance_metrics_smb2_builtinclient_by_node

Performance metrics for the SMB2 protocol built-in client

performance_metrics_nfs_by_node

Performance metrics for the NFS protocol

performance_metrics_nfsv3_by_node

Performance metrics for the NFSv3 protocol

performance_metrics_nfsv4_by_node

Performance metrics for the NFSv4 protocol

Type : enum (performance_metrics_by_appliance, performance_metrics_by_node, performance_metrics_by_volume, performance_metrics_by_cluster, performance_metrics_by_vm, performance_metrics_by_vg, performance_metrics_by_fe_fc_port, performance_metrics_by_fe_eth_port, performance_metrics_by_fe_eth_node, performance_metrics_by_fe_fc_node, wear_metrics_by_drive, space_metrics_by_cluster, space_metrics_by_appliance, space_metrics_by_volume, space_metrics_by_volume_family, space_metrics_by_vm, space_metrics_by_storage_container, space_metrics_by_vg, copy_metrics_by_appliance, copy_metrics_by_cluster, copy_metrics_by_vg, copy_metrics_by_remote_system, copy_metrics_by_volume, performance_metrics_by_file_system, performance_metrics_smb_by_node, performance_metrics_smb_builtinclient_by_node, performance_metrics_smb_branch_cache_by_node, performance_metrics_smb1_by_node, performance_metrics_smb1_builtinclient_by_node, performance_metrics_smb2_by_node, performance_metrics_smb2_builtinclient_by_node, performance_metrics_nfs_by_node, performance_metrics_nfsv3_by_node, performance_metrics_nfsv4_by_node)

MetricsIntervalEnum

Intervals of which metrics can be provided.

Type : enum (Twenty_Sec, Five_Mins, One_Hour, One_Day)

MigrationRecommendationActionStateEnum

State of a recommended migration action.

Recommendation_Created

This action has been recommended, but no other action has been taken.

Migration_Session_Created

A migration session was successfully created for this recommended action.

Migration_Session_Create_Failed

A migration session could not be created for this recommended action.

Migration_Started

The migration session for this recommended action was successfully started.

Migration_Start_Failed

The migration session for this recommended action failed to start.

Migration_Paused

The migration session for this recommended action is paused.

Migration_Error

The migration session for this recommended action has failed.

Migration_Successful

The migration session for this recommended action has been successfully completed.

Type : enum (Recommendation_Created, Migration_Session_Created, Migration_Session_Create_Failed, Migration_Started, Migration_Start_Failed, Migration_Paused, Migration_Error, Migration_Successful)

MigrationRecommendationPrimaryResourceTypeEnum

Specifies grouping mechanism for migration actions in a recommendation that identifies logically related migration actions. If a volume/virtual volume is attached to a host/virtual machine and the system selects all volumes/virtual volumes attached to the same host/virtual machine for migration, the type is set to host/virtual_machine. If a volume/virtual volume is unattached or the system couldn't consider logical grouping, the group type is set to volume or virtual volume. For volume group objects, the scope of migration is always volumes_group regardless of host attachment. The order of selection for primary resource types is: Resources without host/virtual_machine connectivity. Resources with host/virtual_machine connectivity. Resources in each of the above category are further ordered by decreasing cost of migration.

Valid scopes for migrations are:

volume
Standalone attached/unattached volume family.

virtual_volume
Standalone attached/unattached virtual volume family.

host
Logical group of all volume families attached to a host.

virtual_machine
Logical group of all virtual volume families attached to a virtual machine.

volume_group
Volume group family with or without host attachment.

Type : enum (volume, virtual_volume, host, virtual_machine, volume_group)

MigrationRecommendationReasonEnum

Reason for migrating a specific resource.

No_Host_Attached
Resource is not attached to any host.

No_Virtual_Machine_Attached
Resource is not attached to any virtual machine.

Attached_To_Host
Resource is attached to host.

Attached_To_Virtual_Machine
Resource is attached to virtual machine.

Volume_Group_Member
Resource is a member of volume group.

Unspecified
Unspecified.

Type : enum (No_Host_Attached, No_Virtual_Machine_Attached, Attached_To_Host, Attached_To_Virtual_Machine, Volume_Group_Member, Unspecified)

MigrationRecommendationStateEnum

State of a migration recommendation.

Recommendation_Created

Recommended actions meet all request parameters.

Some_Actions_Recommended

Recommendation generated, but not all request parameters satisfied.

Migration_Session_Created

Migration sessions were successfully created for each recommended migration action.

Migration_Session_Create_Failed

A migration session could not be created for at least one recommended recommended actions. When an error is encountered while creating one of the sessions, the session creation for remaining migration actions will be aborted and error is returned. Sessions which are already created for this recommendation will be rolled back. After completing the roll-back, recommendation and all actions will be restored to Recommendation_Created state so that the recommendation can be applied again.

Migration_Started

All migration sessions successfully started.

Migration_Start_Failed

At least one migration session failed to start. Even if start (sync) migration operation fails on one of the sessions, RB will continue and attempt to start all sessions within that recommendation. Error will be returned. There will not be a roll back for any sync operation.

Migration_Paused

At least one migration session for this recommendation is paused. Paused migration sessions can be resumed manually.

Migration_Error

At least one migration session for this recommendation has failed.

Migration_Successful

All migration sessions have been successfully completed.

Type : enum (Recommendation_Created, Some_Actions_Recommended, Migration_Session_Created, Migration_Session_Create_Failed, Migration_Started, Migration_Paused, Migration_Error, Migration_Successful)

MigrationRecommendationTypeEnum

Type of request that generated a migration recommendation. Evacuate_Appliance - A recommendation to evacuate space by auto selecting storage objects from an appliance using specified size.

Type : enum (Evacuate_Appliance)

MigrationResourceTypeEnum

Storage resource types eligible for migration.

Type : enum (volume, virtual_volume, volume_group)

MigrationSessionStateEnum

Migration session states.

Initializing

Migration session starts and stays in this state until the session initialization completes.

Initialized

Migration session transitions to this state when session initialization completes.

Synchronizing

Background copy is in progress.

Idle

Migration session transitions to this state when initial background copy completes.

Cutting_Over

Final phase of the migration, when ownership of the volume, vVol, or application group is transferred to the new appliance.

Deleting

Migration session is being deleted.

Completed

Migration session is complete and it is safe to delete the session.

Pausing

Migration session transitions to this state when the pause command is issued.

Paused

Migration session is paused. User intervention is required to resume the session.

System_Paused

Migration session transitions to this state if it encounters any error. User may resume or delete the migration session after resolving the error.

Resuming

Migration session background copy being resumed.

Failed

Migration session encountered an error.

Type : enum (Initializing, Initialized, Synchronizing, Idle, Cutting_Over, Deleting, Completed, Pausing, Paused, System_Paused, Resuming, Failed)

MigrationStateEnum

Migration status of a volume. Valid values are:

Legacy

Volume state is normal.

Preparing

Volume is prepared for migration.

Disabled_For_IO

Volume is disabled for IO from host.

In_Progress

Volume migration is in progress.

Done

Volume is migrated.

Aborted

Volume migration is aborted

Not_Applicable

Volume migration state is not applicable when storage system supports only agentless import

Unknown

Volume migration state is unknown to PowerStore.

Type : enum (Legacy, Preparing, Disabled_For_IO, In_Progress, Done, Aborted, Not_Applicable, Unknown)

MonthOfYearEnum

Months of the year. Valid values are:

January

January

February

February

March

March

April
April

May
May

June
June

July
July

August
August

September
September

October
October

November
November

December
December

Unknown
Month of year is unknown to PowerStore.

Type : enum (January, February, March, April, May, June, July, August, September, October, November, December, Unknown)

NASServerCurrentUnixDirectoryServiceEnum

Define the Unix directory service used for looking up identity information for Unix such as UIDs, GIDs, net groups, and so on.

Type : enum (None, NIS, LDAP, Local_Files, Local_Then_NIS, Local_Then_LDAP)

NASServerOperationalStatusEnum

NAS server operational status:

Stopped
NAS server is stopped.

Starting

NAS server is starting.

Started

NAS server is started.

Stopping

NAS server is stopping.

Failover

NAS server has failed over.

Degraded

NAS server is degraded (running without backup).

Unknown

NAS server state is unknown.

Type : enum (Stopped, Starting, Started, Stopping, Failover, Degraded, Unknown)

NFSExportDefaultAccessEnum

Default access level for all hosts that can access the Export.

No_Access

Deny access to the Export for the hosts.

Read_Only

Allow read only access to the Export for the hosts.

Read_Write

Allow read write access to the Export for the hosts.

Root

Allow read write access to the Export for the hosts. Allow access to the Export for root user.

Read_Only_Root

Allow read only root access to the Export for the hosts.

Type : enum (No_Access, Read_Only, Read_Write, Root, Read_Only_Root)

NFSExportMinSecurityEnum

NFS enforced security type for users accessing an NFS Export.

Sys

Allow the user to authenticate with any NFS security types: UNIX, Kerberos, Kerberos with integrity, or Kerberos with encryption.

Kerberos

Allow only Kerberos security for user authentication.

Kerberos_With_Integrity

Allow only Kerberos with integrity and Kerberos with encryption security for user authentication.

Kerberos_With_Encryption

Allow only Kerberos with encryption security for user authentication.

Type : enum (Sys, Kerberos, Kerberos_With_Integrity, Kerberos_With_Encryption)

NetworkTypeEnum

Network type.

Type : enum (Management, Intra_Cluster_Management, Intra_Cluster_Data, Storage, VMotion)

NodeAffinityEnum

This attribute shows which node will be advertised as the optimized IO path to the volume. It is initially set to System_Select_At_Attach and can be modified to other values. When a volume is first attached to a host, if node_affinity is System_Select_At_Attach then the system will make the assignment to either System_Selected_Node_A or System_Selected_Node_B. The node_affinity may be modified to one of System_Select_At_Attach or Preferred_Node_A or Preferred_Node_B. Both System_Selected_Node_A and System_Selected_Node_B are reserved for system use only and cannot be set as the volume's node_affinity.

Possible affinity for a volume.

System_Select_At_Attach

Volume currently has no node affinity, affinity will be assigned when the volume is first attached.

System_Selected_Node_A

System selected Node A as the optimized IO path to volume.

System_Selected_Node_B

System selected Node B as the optimized IO path to volume.

Preferred_Node_A

Node A will always advertise as the optimized IO path to volume.

Preferred_Node_B

Node B will always advertise as the optimized IO path to volume.

Type : enum (System_Select_At_Attach, System_Selected_Node_A, System_Selected_Node_B, Preferred_Node_A, Preferred_Node_B)

OSTypeEnum

Operating system of the host.

Type : enum (Windows, Linux, ESXi, AIX, HP-UX, Solaris)

PhysicalSwitchConnectMethodEnum

Physical switch connect method type. Valid values are:

SSH
: Secure shell.

SNMPv2c
: SNMPv2 community string.

Type : enum (SSH, SNMPv2c)

PhysicalSwitchPurposeEnum

Physical switch purpose in network. Possible purposes are:

Data_and_Management
: Physical switch for all data and management networks.

Management_Only
: Physical switch for management network only.

Type : enum (Data_and_Management, Management_Only)

PolicyTypeEnum

Supported policy types.

Protection
: A protection policy, consisting of snapshot and replication rules.

Performance
: A performance policy, consisting of performance rules.

Type : enum (Protection, Performance)

RPOEnum

Recovery point objective (RPO), which is the acceptable amount of data, measured in units of time, that may be lost in case of a failure.

Type : enum (Five_Minutes, Fifteen_Minutes, Thirty_Minutes, One_Hour, Six_Hours, Twelve_Hours,

One_Day)

RemoteSystemChapModeEnum

Challenge Handshake Authentication Protocol (CHAP) status:

- Disabled

Single
Enabled for initiator authentication.

Mutual
Enabled for initiator and target authentication.

Type : enum (Disabled, Single, Mutual)

RemoteSystemLatencyEnum

Network latency choices for a remote system. Replication traffic can be tuned for higher efficiency depending on the expected network latency. This will only be used when the remote system type is PowerStore.

Low
Less than 5 milliseconds.

High
More than 5 milliseconds.

Type : enum (Low, High)

RemoteSystemStateEnum

Possible remote system states:

OK
Normal conditions.

Update_Needed
Verify and update needed to handle network configuration changes on the systems.

Management_Connection_Lost
Management connection to the remote peer is lost.

Type : enum (OK, Update_Needed, Management_Connection_Lost)

RemoteSystemTypeEnum

Remote system connection type between the local system and the following remote systems:

PowerStore

PowerStore system

Unity

Unity import system

VNX

VNX import system

PS_Equallogic

PS EqualLogic import system

Storage_Center

Storage Center import system

XtremIO

XtremIO import system

Type : enum (PowerStore, Unity, VNX, PS_Equallogic, Storage_Center, XtremIO)

ReplicatedResourceTypeEnum

Storage resource types eligible for replication protection:

volume

Replication session created on a volume. * volume_group - Replication session created on a volume group.

Type : enum (volume, volume_group)

ReplicationRoleEnum

Role of the replication session:

Source

The local resource is the source of the remote replication session. * Destination - The local resource is the destination of the remote replication session.

Type : enum (Source, Destination)

ReplicationStateEnum

State of the replication session:

Initializing

The replication session is being created. The status changes to OK after the replication session is created.

OK

No other operation. The replication session is operating normally.

Synchronizing

The replication session has started either a manual or automatic synchronization.

System_Paused

Replication session operation has failed or was cancelled. User intervention required.

Paused

User paused the replication session.

Paused_For_Migration

Migration paused the replication session.

Paused_For_NDU

A non-disruptive upgrade paused the replication session.

Resuming

The replication session is resuming operation. The status changes to OK after the replication session is resumed.

Failing_Over

A planned failover is in progress. The status changes to Failed_Over after the replication session has failed over.

Failing_Over_For_DR

An unplanned failover is in progress. The status changes to Failed_Over after the replication session has failed over.

Failed_Over

The replication session underwent a planned or unplanned failover. User intervention required.

Reprotecting

The replication session is being reprotected. The status changes to OK after the replication session has been reprotected.

Partial_Cutover_For_Migration

Replication session created by internal migration has partially migrated the storage resource.

Error

Any other failure not specified.

Type : enum (Initializing, OK, Synchronizing, System_Paused, Paused, Paused_For_Migration, Paused_For_NDU, Resuming, Failing_Over, Failing_Over_For_DR, Failed_Over, Reprotecting)

ResourceActionEnum

User-specified action to be performed on the given resource.

Type : enum (add_members, attach, bind, cancel, cleanup, clone, create, create_migration_sessions, cutover, decommission, delete, detach, discover, download, drive_repurpose, exchange, failover, forecast, generate, import_snapshot_profiles, import_snapshot_schedules, install, join, modify, mount, pause, ping, puhc, refresh, refresh_quota, regenerate, remove_members, replace, reprotect, restore, resume, retrieve, scale, snapshot, start_migration_sessions, sync, test, time_to_full, unjoin, unmount, update_user_mappings, upgrade, upload, upload_certificate, upload_config, upload_file, upload_keytab, verify)

ResourceTypeEnum

Resource Type for the given resource.

Type : enum (alert, appliance, audit_event, bond, chap_config, cluster, discovered_initiator, dns, email_notify_destination, eth_port, event, fc_port, file_dns, file_ftp, file_interface, file_interface_route, file_kerberos, file_ldap, file_ndmp, file_nis, file_system, file_tree_quota, file_user_quota, file_virus_checker, hardware, host, host_group, host_virtual_volume_mapping, host_volume_mapping, import_host_initiator, import_host_system, import_host_volume, import_psgroup, import_psgroup_volume, import_session, import_storage_center, import_storage_center_consistency_group, import_storage_center_volume, import_unity, import_unity_consistency_group, import_unity_volume, import_vnx_array, import_vnx_consistency_group, import_vnx_volume, ip_pool_address, ip_port, job, keystore_archive, license, local_user, login_session, maintenance_window, metrics, migration_recommendation, migration_session, nas_server, ndu, network, nfs_export, nfs_server, node, ntp, performance_rule, physical_switch, policy, remote_system, replication_rule, replication_session, role, sas_port, scheduler, security_config, service_config, service_user, smb_server, smb_share, smtp_config, snapshot_rule, software_installed, software_package, storage_container, vcenter, veth_port, virtual_machine, virtual_volume, volume, volume_group, x509_certificate)

SCStatusEnum

Status of an SC array. Valid values are:

Up

Volume state is up.

Down

Volume state is down.

Degraded

Volume is in degraded state.

Unknown

Volume migration state is unknown to PowerStore.

Type : enum (Up, Down, Degraded, Unknown)

SMBShareOfflineAvailabilityEnum

Defines valid states of Offline Availability,

Manual

Only specified files will be available offline.

Documents

All files that users open will be available offline.

Programs

Program will preferably run from the offline cache even when connected to the network. All files that users open will be available offline.

None

Prevents clients from storing documents and programs in offline cache (default).

Type : enum (Manual, Documents, Programs, None)

SasPortSpeedEnum

SAS port transmission speed.

3_Gbps

3 Gigabits per second

6_Gbps

6 Gigabits per second

12_Gbps

12 Gigabits per second

Type : enum (3_Gbps, 6_Gbps, 12_Gbps)

ScScheduleTypeEnum

Available SC snapshot schedule types. Valid values are:

Once

Take snapshot only once.

Daily

Take snapshot hourly.

Weekly

Take snapshot on a weekly basis.

Monthly

Take snapshot on a monthly basis.

Unknown

SC schedule type is unknown to PowerStore.

Type : enum (Once, Daily, Weekly, Monthly, Unknown)

ScSnapshotProfileTypeEnum

Available SC snapshot profile types. Valid values are:

Standard

Takes snapshots in series for all volumes associated with the snapshot.

Parallel

Takes snapshots simultaneously for all volumes associated with the snapshot.

Consistent

Halts IO and takes snapshots for all volumes associated with the snapshot.

Unknown

SC snapshot profile type is unknown to PowerStore.

Type : enum (Standard, Parallel, Consistent, Unknown)

SeverityEnum

Possible severities.

Type : enum (None, Info, Minor, Major, Critical)

SnapRuleIntervalEnum

Interval between snapshots. Either the interval parameter or the time_of_day parameter may be set. Setting one clears the other parameter.

Type : enum (Five_Minutes, Fifteen_Minutes, Thirty_Minutes, One_Hour, Two_Hours, Three_Hours, Four_Hours, Six_Hours, Eight_Hours, Twelve_Hours, One_Day)

SoftwarePackageStateEnum

Software package state. Valid values are:

Available

The package is ready to be downloaded.

Downloaded

The package is downloaded and ready to install.

Installing

The package is being installed.

Installed

The package has been successfully installed.

Install_Failed

Installing the package failed.

Download_Failed

Downloading the package failed.

Type : enum (Available, Downloaded, Installing, Installed, Install_Failed, Download_Failed)

SoftwarePackageTypeEnum

Software package type. Valid values are:

Software_Release

A package containing a complete system software upgrade release.

Disk_Firmware

A package containing disk firmware updates only, for some or all supported drive types.

Hotfix

A package containing high priority firmware updates.

Language_Pack

A package containing additional language definitions.

Type : enum (Software_Release, Disk_Firmware, Hotfix, Language_Pack)

StorageCreatorTypeEnum

Creator type of the storage resource. * User - A resource created by a user. * System - A resource created by the replication engine. * Scheduler - A resource created by the snapshot scheduler.

Type : enum (User, System, Scheduler)

StorageElementTypeEnum

Storage element type being replicated:

volume
Replicating storage element type for a volume.

virtual_volume
Replicating storage element type for a virtual volume.

Type : enum (volume, virtual_volume)

ThumbprintAlgorithmEnum

The thumbprint algorithm: - SHA-256 : SHA-256 algorithm

Type : enum (SHA-256)

TransitConnectionStatusEnum

Possible transit connection statuses:

Login_Success
Login to target IP successful.

Authentication_Failure
Failed to authenticate the connection.

Connection_Refused
Connection was refused.

Login_Timeout
Login to target IP timed out.

Network_Error
Network error

General_Failure
Other failure not listed.

Login_Success_No_Ports
Login successful after discovery failure. Used only for PS EqualLogic systems.

Discovery_Success
Discovery of target IP successful.

Discovery_Authentication_Failure
Authentication failure during discovery of target IP.

Discovery_Connection_Refused

Connection was refused during discovery of target IP.

Discovery_Timeout

Discovery of target IP timed out.

Type : enum (Login_Success, Authentication_Failure, Connection_Refused, Login_Timeout, Network_Error, General_Failure, Login_Success_No_Ports, Discovery_Success, Discovery_Authentication_Failure, Discovery_Connection_Refused, Discovery_Timeout)

UnityDayofWeekEnum

Days of the week. Values are:

Sunday

Sunday.

Monday

Monday.

Tuesday

Tuesday.

Wednesday

Wednesday.

Thursday

Thursday.

Friday

Friday.

Saturday

Saturday.

Unknown

The day of week cannot be determined.

Type : enum (Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Unknown)

UnityHealthEnum

Health status of the Unity storage system. Values are:

Unknown

The status of the system cannot be determined.

Ok

The system is operating normally.

Ok_But

The system is operating normally but there are potential issues.

Degraded

The system is working, but performance may not be optimum.

Minor

The system is working, but it has experienced one or more minor failures.

Major

The system is failing; some or all of its functions may be degraded or not working. This condition has a significant impact on the system and should be remedied immediately.

Critical

The system has failed and recovery may not be possible. This condition should be remedied immediately.

Non_Recoverable

The system has failed and recovery may not be possible. This condition should be remedied immediately.

Type : enum (Unknown, Ok, Ok_But, Degraded, Minor, Major, Critical, Non_Recoverable)

UnityScheduleTypeEnum

Snapshot schedule types. Values are:

N_Hours_At_MM

Create a snapshot every {interval} hours, at {minutes} past the hour. Supported parameters: interval (required), minutes (optional, default 0).

Day_At_HHMM

Specify a list of {hour[,...]} when to create a snapshot each day at {minutes} past the hour. Supported parameters: hours (at least one required), minutes (optional).

N_Days_At_HHMM

Create a snapshot every {interval} days at the time {hours}:{minutes}. Supported Parameters: interval (required), hours (optional, exactly one), minutes (optional).

SelDays_At_HHMM

Create a snapshot on the selected {daysOfWeek}, at the time {hours}:{minutes}. Supported parameters: daysOfWeek (at least one required), hours (optional, default 0), minutes (optional, default 0)

Nth_Day_Of_Month_AT_HHMM

Create a snapshot on the selected {daysOfMonth}, at the time {hours}:{minutes}. Supported parameters: daysOfMonth (at least one required), hours (optional, default 0), minutes (optional, default 0).

Unsupported

Unsupported.

Unknown

Schedule type is unknown to PowerStore.

Type : enum (N_Hours_At_MM, Day_At_HHMM, N_Days_At_HHMM, SelDays_At_HHMM, Nth_Day_Of_Month_AT_HHMM, Unsupported, Unknown)

UnityScheduleVersionEnum

Type of snapshot schedule. Values are:

Legacy

Legacy schedule with more than two rules of type HoursList, DaysInterval or MonthDaysList.

Simple

Simple schedule with two rules or less of rule type HoursInterval or WeekDaysList.

Unknown

Schedule type cannot be determined.

Type : enum (Legacy, Simple, Unknown)

UnityVolumeMigrationStateEnum

Migration state of the Unity volume. Values are:

Normal

The volume is not migrated.

Prepared

The volume is ready for migration.

Disabled_For_IO

Host I/O is disabled on the volume.

In_Progress

Volume migration is in progress.

Completed

The volume is migrated.

Aborted

Volume migration is cancelled.

Not_Applicable

Volume migration state is not applicable if the system only supports agentless import.

Unknown

The volume migration state is unknown to PowerStore.

Type : enum (Normal, Prepare_For_Migration, Source_Disabled_For_IO, Source_Migration_In_Progress, Source_Migration_Completed, Source_Migration_Aborted, Unknown)

UnityVolumeTypeEnum

Type of the Unity volume. Values are:

Unknown

Volume type cannot be determined.

Generic_Storage

A volume that is associated with a consistency group.

Standalone

A volume that is not associated with a consistency group.

Vmware_iSCSI

A volume associated with a VMware VMFS datastore.

Type : enum (Unknown, Generic_Storage, Standalone, Vmware_iSCSI)

VGPlacementRule

This is set during creation, and determines resource balancer recommendations.

Same_Appliance

All the members of the group should be on the same appliance in the cluster.

No_Preference

The volumes can be placed on any of the appliances in the cluster.

Filtering on the fields of this embedded resource is not supported.

Type : enum (Same_Appliance, No_Preference)

VirtualMachineStatusEnum

General health status of the VM in vCenter. Not applicable to VM snapshots.

Green

VM is operating normally.

Yellow

VM is operating normally, but there are potential issues.

Red

VM is experiencing issues and is not operating normally.

Grey

Status of the VM cannot be determined.

Type : enum (Green, Yellow, Red, Gray)

VirtualMachineTypeEnum

Type of VM:

Primary

A base VM.

Template

A VM template.

Snapshot

A snapshot of a VM.

Type : enum (Primary, Template, Snapshot)

VirtualVolumeTypeEnum

The logical type of a virtual volume.

Type : enum (Primary, Snapshot, Prepared_Snapshot, Clone, Fast_Clone)

VirtualVolumeUsageTypeEnum

VMware's usage of the vVol.

Type : enum (Config, Data, Swap, Memory, Other)

VnxVolumeMigrationStateEnum

Migration state of the VNX volume. Values are: * None - The volume is not migrated. * Prepared - The volume is ready for migration. * Disabled_For_IO - Host I/O is disabled on the volume. * In_Progress - Volume migration is in progress. * Completed - The volume is migrated. * Aborted - Volume migration is cancelled. * Not_Applicable - Volume migration state is not applicable if the

system only supports agentless import. * Unknown - The volume migration state cannot be determined.

Type : enum (None, Prepared, Disabled_For_IO, In_Progress, Completed, Aborted, Not_Applicable, Unknown)

VnxVolumeStateEnum

State of the VNX volume. Only volumes that are in the Ready or Default state can be imported. If a volume is in any other state, the underlying cause of the state must be corrected with the VNX management software, and the VNX volume details must be refreshed using the refresh action to import the volume. Values are: * Invalid - The volume is in an invalid state. * Ready - The volume is ready. This is the healthy state of a storage pool based volume. * Faulted - The volume is faulted. * Offline - The volume is offline. * Destroying - The volume is being destroyed. * Default - The volume is ready. This is the healthy state of a RAID group based volume.

Type : enum (Invalid, Initializing, Ready, Faulted, Offline, Destroying, Default)

VolumeBlockSizeEnum

Block size of the volume. Valid values are:

512_Bytes

512 byte block size.

4K_Bytes

4096 byte block size.

Unknown

Block size cannot be determined.

Type : enum (512_Bytes, 4K_Bytes, Unknown)

VolumeImportableCriteriaEnum

Volume import criteria. Values are:

Ready

The volume is ready for nondisruptive import.

Ready_For_Agentless_Import

The volume is ready for agentless import.

In_Progress

Import is in progress.

Host_Not_Added

The host or hosts accessing the volume have not been added to the appliance.

Imported

Import is complete.

Incompatible_Firmware

The software version on the source array is not compatible.

Incompatible_Host_Agent

The agent version on the host is not compatible.

Undetermined

The import status cannot be determined due to an internal error. Contact technical support.

Host_Volume_Offline

The host volume is offline.

Cluster_Node_Count_MisMatch

The host or hosts added to the appliance are not part of the host cluster to which the volume is mapped.

Undetermined_Cluster_Type

The system cannot determine the host cluster type.

Source_Volume_Offline

The source volume is offline.

Replication_Destination

The volume is a replication destination.

SC_Live_Volume

The volume is a Storage Center Live Volume.

SC_Degraded

The volume is not available or is in a degraded state.

SC_Not_Active

The Storage Center volume is not an active volume.

Used_By_NAS

The volume is in use by NAS.

SC_Portable_Volume

The Storage Center volume is a destination of a portable volume.

VNX_Faulted

The VNX volume is in a faulted state.

VNX_Not_Ready

The VNX volume is not in a ready state.

VNX_Internal_Volume

The VNX volume is an internal volume.

Unity_System_Health_Inappropriate

The health of the Unity system is not suitable for import.

Unity_Volume_Health_Inappropriate

The health of the Unity volume is not suitable for import.

XtremIO_Severity_Inappropriate

The severity level of the XtremIO system is not suitable for import.

XtremIO_State_Inappropriate

The state of the XtremIO system is not suitable for import.

XtremIO_Volume_Severity_Inappropriate

The severity level XtremIO volume is not suitable for import.

XtremIO_Volume_State_Inappropriate

The state of the XtremIO volume is not suitable for import.

Type : enum (Ready, In_Progress, Host_Not_Added, Imported, Incompatible_Firmware, Incompatible_Host_Agent, Undetermined, Host_Volume_Offline, Cluster_Node_Count_MisMatch, Undetermined_Cluster_Type, Source_Volume_Offline, Replication_Destination, SC_Live_Volume, SC_Degraded, SC_Not_Active, Used_By_NAS, SC_Portable_Volume, VNX_Faulted, VNX_Not_Ready, VNX_Internal_Volume, Unity_System_Health_Inappropriate, Unity_Volume_Health_Inappropriate)

VolumeStateEnum

Volume life cycle states.

Ready

Volume is operating normally.

Initializing

Volume is starting but not yet ready for use.

Offline

Volume is not available.

Destroying

Volume is being deleted. No new operations are allowed.

Type : enum (Ready, Initializing, Offline, Destroying)

VolumeStatusEnum

Status of the import host volume. Valid values are:

Unknown

Volume status is unknown.

Online

Volume is online.

Offline

Volume is offline.

Type : enum (Unknown, Online, Offline)

VolumeTypeEnum

Type of volume.

Primary

A base object.

Clone

A read-write object that shares storage with the object from which it is sourced.

Snapshot

A read-only object created from a volume or clone.

Type : enum (Primary, Clone, Snapshot)

WeekOfMonthEnum

Weeks of the month. Valid values are:

First

First week of the month

Second

Second week of the month

Third

Third week of the month

Fourth

Fourth week of the month

Last

Last week of the month

Unknown

Week of month is unknown to PowerStore.

Type : enum (First, Second, Third, Fourth, Last, Unknown)

X509CertificateServiceEnum

Type of the service for which the certificate is used:

- Management HTTP - Management Web server
- Replication HTTP - Remote Replication service
- VASA HTTP - VASA provider service
- Import HTTP - External web service

Type : enum (Management_HTTP, Replication_HTTP, VASA_HTTP, Import_HTTP)

X509CertificateUsageTypeEnum

Usage of the certificate and the valid values are:

Server

Server Certificate

Client

Client Certificate

- CA Client Validation - A CA certificate used to authenticate clients during an SSL handshake.
- CA Server Validation - A CA certificate used to verify the server during an SSL handshake.

Type : enum (Server, Client, CA_Client_Validation, CA_Server_Validation)

active_session_instance

Name	Description	Schema
appliance_id *optional*	Unique identifier of the appliance containing the session.	string
bond_id *optional*	Unique identifier of the bond the initiator is logged into. Null if one of the following is non-null: veth_id, eth_port_id or fc_port_id.	string
eth_port_id *optional*	Unique identifier of the Ethernet port the initiator is logged into. Null if one of the following is non-null: bond_id, veth_id or fc_port_id.	string

Name	Description	Schema
fc_port_id *optional*	Unique identifier of the FC port the initiator is logged into. Null if one of the following is non-null: bond_id, veth_id or eth_port_id	string
node_id *optional*	Unique identifier of node on the appliance on which active session is create.	string
port_name *optional*	IQN or WWN of the target port that the initiator is logged into.	string
veth_id *optional*	Unique identifier of the virtual Ethernet port the initiator is logged into. Null if one of the following is non-null: bond, eth_port_id or fc_port_id.	string

alert_instance

An alert is a summation of one or more events that need (or needed) attention. Some events require attention and result in an alert being generated. Other events can update or clear an alert when the system detects a change in the condition that needs attention. To deal with an alert, look at the information about the most recent event included in the alert. In particular, examine the resource that the alert was generated about (using resource_type and resource_id or resource_name) as well as the system_impact_l10n and suggested repair_flow_l10n parameters.

Name	Description	Schema
acknowledged_timestamp *optional*	Timestamp when the alert was acknowledged, if any.	string (date-time)
called_home_timestamp *optional*	Timestamp when the event resulted in a notification to support (via Secured Remote Services), if any.	string (date-time)
cleared_timestamp *optional*	Timestamp of the event that cleared this alert.	string (date-time)
description_l10n *optional*	Latest event's description text for this alert.	string
email_sent_timestamp *optional*	Timestamp when the email was sent for the raised alert, if any.	string (date-time)

Name	Description	Schema
event_code *optional*	The event code of the latest event for this alert.	string
events *optional*	List of events associated with this alert. Filtering on the fields of this embedded resource is not supported.	< event_instance > array
generated_timestamp *optional*	Timestamp of the latest event for this alert.	string (date-time)
id *optional*	Unique identifier of the alert.	string
is_acknowledged *optional*	Whether an alert has been acknowledged.	boolean
raised_timestamp *optional*	Timestamp of the first event for this alert.	string (date-time)
resource_id *optional*	Unique identifier of the resource instance which generated this alert.	string
resource_name *optional*	Name of the resource instance which generated this alert. This property supports case-insensitive filtering	string
resource_type *optional*	Type of the resource instance which generated this alert.	ResourceTypeEnum
resource_type_l10n *optional*	Localized message string corresponding to resource_type	string
severity *optional*	Severity of the latest event for this alert.	SeverityEnum
severity_l10n *optional*	Localized message string corresponding to severity	string
state *optional*		AlertStateEnum

Name	Description	Schema
state_l10n *optional*	Localized message string corresponding to state	string

alert_modify

Alert modify request body.

Name	Description	Schema
acknowledged_severity *optional*		SeverityEnum
is_acknowledged *required*	Indicates whether the alert has been acknowledged.	boolean

appliance_forecast

Name	Schema
metric_type *required*	ForecastMetricTypeEnum

appliance_forecast_response

Name	Description	Schema
high_value *optional*	Estimate for the upper bound forecasted value on that particular time. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
low_value *optional*	Estimate for the lower bound forecasted value on that particular time. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
mean_value *optional*	Estimate for the mean forecasted value on that particular time. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
timestamp *optional*	Date-time of the forecast data.	string (date-time)

appliance_instance

This resource type has queriable associations from node, ip_pool_address, veth_port, maintenance_window, fc_port, sas_port, eth_port, software_installed, virtual_volume, hardware, volume

Name	Description	Schema
eth_ports *optional*	This is the inverse of the resource type eth_port association.	< eth_port_instance > array
express_service_code *optional*	Express Service Code.	string
fc_ports *optional*	This is the inverse of the resource type fc_port association.	< fc_port_instance > array
hardware *optional*	This is the inverse of the resource type hardware association.	< hardware_instance > array
id *optional*	Unique identifier of the appliance.	string
ip_pool_addresses *optional*	This is the inverse of the resource type ip_pool_address association.	< ip_pool_address_instance > array
maintenance_windows *optional*	This is the inverse of the resource type maintenance_window association.	< maintenance_window_instance > array
model *optional*	Model of the appliance.	string
name *optional*	Name of the appliance. This property supports case-insensitive filtering	string

Name	Description	Schema
nodes *optional*	This is the inverse of the resource type node association.	< node_instance > array
sas_ports *optional*	This is the inverse of the resource type sas_port association.	< sas_port_instance > array
service_tag *optional*	Dell Service Tag.	string
software_installed *optional*	This is the inverse of the resource type software_installed association.	< software_installed_instance > array
veth_ports *optional*	This is the inverse of the resource type veth_port association.	< veth_port_instance > array
virtual_volumes *optional*	This is the inverse of the resource type virtual_volume association.	< virtual_volume_instance > array
volumes *optional*	This is the inverse of the resource type volume association.	< volume_instance > array

appliance_modify

Appliance modify request body.

Name	Description	Schema
name *required*	New name of the appliance.	string

appliance_time_to_full

Name	Schema
metric_type *required*	ForecastMetricTypeEnum

appliance_time_to_full_response

Name	Description	Schema
appliance_id *optional*	Unique ID of appliance.	string
end_of_forecast *optional*	Timestamp of the end of the capacity forecast. If time to full estimates are null, the relevant forecast does not reach full capacity before it ends. In this case the end of the forecast can be used as a minimum for time to full.	string (date-time)
time_to_full *optional*	Estimated date-time at which the forecast value will reach full capacity.	string (date-time)
time_to_full_optimistic *optional*	Optimistic date-time for time to full based on the lower bound of the forecast 95% confidence interval.	string (date-time)
time_to_full_pessimistic *optional*	Pessimistic date-time for time to full based on the upper bound of the forecast 95% confidence interval.	string (date-time)
time_to_full_status *optional*		ForecastTimeToFullStatusEnum
time_to_full_status_l10n *optional*	Localized message string corresponding to time_to_full_status	string

audit_event_instance

Name	Description	Schema
appliance_id *optional*	Unique identifier of the appliance where the event occurred.	string
client_address *optional*	FQDN/IP Address of the client from where the event was initiated.	string (ip-address)
id *optional*	Unique identifier of the audit log entry.	string
is_successful *optional*	Whether the event was successful or not.	boolean

Name	Description	Schema
job_id *optional*	Unique identifier of the job associated with the audit event (if any).	string
message_arguments *optional*	Arguments (if applicable) for the audit_event message.	< string > array
message_code *optional*	Unique identifier of the message for this audit_event.	string
message_l10n *optional*	Localized message string corresponding to message_code.	string
resource_action *optional*		ResourceActionEnum
resource_action_l10n *optional*	Localized message string corresponding to resource_action	string
resource_type *optional*		ResourceTypeEnum
resource_type_l10n *optional*	Localized message string corresponding to resource_type	string
server_address *optional*	IP Address on which the request was targeted.	string (ip-address)
timestamp *optional*	Time the event occurred to one second precision.	string (date-time)
type *optional*		AuditEventTypeEnum
type_l10n *optional*	Localized message string corresponding to type	string
username *optional*	Fully qualified name of the user who initiated the event to be audited. For example, domain_name/name.	string

base_copy_metrics_by_appliance

Copy metrics for the appliance.

Name	Description	Schema
appliance_id *optional*	Unique identifier of the appliance.	string
data_remaining *optional*	Number of bytes remaining to be copied at the end of this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
data_transferred *optional*	Number of bytes transferred during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
read_time *optional*	Time (in milliseconds) spent doing reads during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
session_type *optional*		CopySessionTypeEnum
session_type_l10n *optional*	Localized message string corresponding to session_type	string
timestamp *optional*	End of sampling period.	string (date-time)
transfer_rate *optional*	Data transfer rate (in bytes/second) computed using data_transferred and transfer_time.	number (float)
transfer_time *optional*	The time (in milliseconds) spent in copy activity during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
write_time *optional*	Time (in milliseconds) spent doing writes during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

base_copy_metrics_by_cluster

Copy metrics for the cluster.

Name	Description	Schema
data_remaining *optional*	Number of bytes remaining to be copied at the end of this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
data_transferred *optional*	Number of bytes transferred during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
read_time *optional*	Time (in milliseconds) spent doing reads during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
session_type *optional*		CopySessionTypeEnum
session_type_l10n *optional*	Localized message string corresponding to session_type	string
timestamp *optional*	End of sampling period.	string (date-time)
transfer_rate *optional*	Data transfer rate (in bytes/second) computed using data_transferred and transfer_time.	number (float)

Name	Description	Schema
transfer_time *optional*	The time (in milliseconds) spent in copy activity during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
write_time *optional*	Time (in milliseconds) spent doing writes during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

base_copy_metrics_by_remote_system

Cluster wide copy metrics for the remote system.

Name	Description	Schema
data_remaining *optional*	Number of bytes remaining to be copied at the end of this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
data_transferred *optional*	Number of bytes transferred during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
read_time *optional*	Time (in milliseconds) spent doing reads during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
remote_system_id *optional*	Unique identifier of the remote system.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
session_type *optional*		CopySessionTypeEnum

Name	Description	Schema
session_type_l10n *optional*	Localized message string corresponding to session_type	string
timestamp *optional*	End of sampling period.	string (date-time)
transfer_rate *optional*	Data transfer rate (in bytes/second) computed using data_transferred and transfer_time.	number (float)
transfer_time *optional*	The time (in milliseconds) spent in copy activity during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
write_time *optional*	Time (in milliseconds) spent doing writes during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

base_copy_metrics_by_vg

Cluster wide copy metrics for the volume group.

Name	Description	Schema
data_remaining *optional*	Number of bytes remaining to be copied at the end of this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
data_transferred *optional*	Number of bytes transferred during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
read_time *optional*	Time (in milliseconds) spent doing reads during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
session_type *optional*		CopySessionTypeEnum
session_type_l10n *optional*	Localized message string corresponding to session_type	string
timestamp *optional*	End of sampling period.	string (date-time)
transfer_rate *optional*	Data transfer rate (in bytes/second) computed using data_transferred and transfer_time.	number (float)
transfer_time *optional*	The time (in milliseconds) spent in copy activity during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
vg_id *optional*	Unique identifier of the volume group.	string
write_time *optional*	Time (in milliseconds) spent doing writes during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

base_copy_metrics_by_volume

Cluster wide copy metrics for the volume.

Name	Description	Schema
data_remaining *optional*	Number of bytes remaining to be copied at the end of this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
data_transferred *optional*	Number of bytes transferred during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
read_time *optional*	Time (in milliseconds) spent doing reads during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
session_type *optional*		CopySessionTypeEnum
session_type_l10n *optional*	Localized message string corresponding to session_type	string
timestamp *optional*	End of sampling period.	string (date-time)
transfer_rate *optional*	Data transfer rate (in bytes/second) computed using data_transferred and transfer_time.	number (float)
transfer_time *optional*	The time (in milliseconds) spent in copy activity during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
volume_id *optional*	Unique identifier of the volume.	string
write_time *optional*	Time (in milliseconds) spent doing writes during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

base_performance_metrics_by_appliance

Performance metrics for the appliance collected at twenty second interval.

Name	Description	Schema
appliance_id *optional*	Unique identifier representing a specific appliance.	string
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
io_workload_cpu_utilization *optional*	The percentage of CPU Utilization on the cores dedicated to servicing storage I/O requests.	number (float)
read_bandwidth *optional*	Read rate in bytes per second.	number (float)
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

Name	Description	Schema
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)
total_iops *optional*	Total read and write operations per second.	number
write_bandwidth *optional*	Write rate in bytes per second.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

base_performance_metrics_by_appliance_rollup

Summary of appliance level performance metric data for various rollup intervals beginning with timestamp, including the average and maximum values for that period.

Name	Description	Schema
appliance_id *optional*	Unique identifier representing a specific appliance.	string
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_io_workload_cpu_utilization *optional*	The average percentage of CPU Utilization on the cores dedicated to servicing storage I/O requests. Calculated over time interval across appliance. Derived from an average of utilization across all nodes within the appliance.	number (float)
avg_latency *optional*	Weighted average latency in microseconds.	number (float)
avg_read_bandwidth *optional*	Weighted average read bandwidth in bytes per second.	number (float)
avg_read_iops *optional*	Average reads per second.	number (float)

Name	Description	Schema
avg_read_latency *optional*	Weighted average read latency in microseconds.	number (float)
avg_read_size *optional*	Weighted average read size in bytes.	number (float)
avg_total_bandwidth *optional*	Weighted average total bandwidth in bytes per second.	number (float)
avg_total_iops *optional*	Average total input and output operations per second.	number
avg_write_bandwidth *optional*	Weighted average write bandwidth in bytes per second.	number (float)
avg_write_iops *optional*	Average writes per second.	number (float)
avg_write_latency *optional*	Weighted average write latency in microseconds.	number (float)
avg_write_size *optional*	Weighted average write size in bytes.	number (float)
max_avg_io_size *optional*	Maximum average size of input and output operations in bytes.	number (float)
max_avg_latency *optional*	Maximum of average latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)

Name	Description	Schema
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_io_workload_cpu_utilization *optional*	The maximum percentage of CPU Utilization on the cores dedicated to servicing storage I/O requests. Calculated over time interval across appliance. Derived from an average of utilization across all nodes within the appliance.	number (float)
max_read_bandwidth *optional*	Maximum read bandwidth in bytes per second.	number (float)
max_read_iops *optional*	Maximum reads per second.	number (float)
max_total_bandwidth *optional*	Maximum total bandwidth in bytes per second.	number (float)
max_total_iops *optional*	Maximum totals per second.	number
max_write_bandwidth *optional*	Maximum write bandwith in bytes per second.	number (float)
max_write_iops *optional*	Maximum writes per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

base_performance_metrics_by_cluster

Performance metrics for the cluster collected at twenty second interval.

Name	Description	Schema
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
cluster_id *optional*	Identifier of the cluster.	string
read_bandwidth *optional*	Read rate in bytes per second.	number (float)
read_iops *optional*	Total number of read operations per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)

Name	Description	Schema
total_iops *optional*	Total read and write operations per second.	number (float)
write_bandwidth *optional*	Write rate in byte/sec.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

base_performance_metrics_by_cluster_rollup

Summary of cluster level performance metric data for various rollup intervals beginning with timestamp, including the average and maximum values for that period.

Name	Description	Schema
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Weighted average latency in microseconds.	number (float)
avg_read_bandwidth *optional*	Weighted average read bandwidth in bytes per second.	number (float)
avg_read_iops *optional*	Average reads per second.	number (float)
avg_read_latency *optional*	Weighted average read latency in microseconds.	number (float)
avg_read_size *optional*	Weighted average read size in bytes.	number (float)
avg_total_bandwidth *optional*	Weighted average total bandwidth in bytes per second.	number (float)
avg_total_iops *optional*	Average total input and output operations per second.	number

Name	Description	Schema
avg_write_bandwidth *optional*	Weighted average write bandwidth in bytes per second.	number (float)
avg_write_iops *optional*	Average writes per second.	number (float)
avg_write_latency *optional*	Weighted average write latency in microseconds.	number (float)
avg_write_size *optional*	Weighted average write size in bytes.	number (float)
cluster_id *optional*	Identifier of the cluster.	string
max_avg_io_size *optional*	Maximum average size of input and output operations in bytes.	number (float)
max_avg_latency *optional*	Maximum of average latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)

Name	Description	Schema
max_read_bandwidth *optional*	Maximum read bandwidth in bytes per second.	number (float)
max_read_iops *optional*	Maximum reads per second.	number (float)
max_total_bandwidth *optional*	Maximum total bandwidth in bytes per second.	number (float)
max_total_iops *optional*	Maximum totals per second.	number
max_write_bandwidth *optional*	Maximum write bandwidth in bytes per second.	number (float)
max_write_iops *optional*	Maximum writes per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

base_performance_metrics_by_fe_eth_node

Ethernet performance metrics for the node collected at twenty second interval.

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
bytes_rx_ps *optional*	The total bytes received per second.	number (float)

Name	Description	Schema
bytes_tx_ps *optional*	The total bytes transmitted per second.	number (float)
node_id *optional*	Reference to the associated node on which these metrics were recorded.	string
pkt_rx_crc_error_ps *optional*	The number of packets received with CRC error (and thus dropped) per second.	number (float)
pkt_rx_no_buffer_error_ps *optional*	The number of packets discarded per second due to lack of buffer space.	number (float)
pkt_rx_ps *optional*	The number of packets received per second.	number (float)
pkt_tx_error_ps *optional*	The number of packets that failed to be transmitted per second due to error.	number (float)
pkt_tx_ps *optional*	The number of packets transmitted per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

base_performance_metrics_by_fe_eth_node_rollup

Ethernet performance metrics for the node rolled up at various rollup intervals.

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
avg_bytes_rx_ps *optional*	The average total bytes received per second.	number (float)

Name	Description	Schema
avg_bytes_tx_ps *optional*	The average total bytes transmitted per second.	number (float)
avg_pkt_rx_crc_error_ps *optional*	The average number of packets received with CRC error (and thus dropped) per second.	number (float)
avg_pkt_rx_no_buffer_error_ps *optional*	The average number of packets discarded per second due to lack of buffer space.	number (float)
avg_pkt_rx_ps *optional*	The average number of packets received per second.	number (float)
avg_pkt_tx_error_ps *optional*	The average number of packets that failed to be transmitted per second due to error.	number (float)
avg_pkt_tx_ps *optional*	The average number of packets transmitted per second.	number (float)
max_bytes_rx_ps *optional*	The maximum total bytes received per second.	number (float)
max_bytes_tx_ps *optional*	The maximum total bytes transmitted per second.	number (float)
max_pkt_rx_crc_error_ps *optional*	The maximum number of packets received with CRC error (and thus dropped) per second.	number (float)
max_pkt_rx_no_buffer_error_ps *optional*	The maximum number of packets discarded per second due to lack of buffer space.	number (float)
max_pkt_rx_ps *optional*	The maximum number of packets received per second.	number (float)

Name	Description	Schema
max_pkt_tx_error_ps *optional*	The maximum number of packets that failed to be transmitted per second due to error.	number (float)
max_pkt_tx_ps *optional*	The maximum number of packets transmitted per second.	number (float)
node_id *optional*	Reference to the associated node on which these metrics were recorded.	string
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

base_performance_metrics_by_fe_eth_port

Performance metrics for the frontend ethernet port collected at twenty second interval.

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
bytes_rx_ps *optional*	The total bytes received per second.	number (float)
bytes_tx_ps *optional*	The total bytes transmitted per second.	number (float)
fe_port_id *optional*	Reference to the associated frontend ethernet port (eth_port) on which these metrics were recorded.	string
node_id *optional*	Reference to the node the port belongs to.	string
pkt_rx_crc_error_ps *optional*	The number of packets received with CRC error (and thus dropped) per second.	number (float)

Name	Description	Schema
pkt_rx_no_buffer_error_ps *optional*	The number of packets discarded per second due to lack of buffer space.	number (float)
pkt_rx_ps *optional*	The number of packets received per second.	number (float)
pkt_tx_error_ps *optional*	The number of packets that failed to be transmitted per second due to error.	number (float)
pkt_tx_ps *optional*	The number of packets transmitted per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

base_performance_metrics_by_fe_eth_port_rollup

Performance metrics for the frontend ethernet port rolled up at various rollup intervals.

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
avg_bytes_rx_ps *optional*	The average total bytes received per second.	number (float)
avg_bytes_tx_ps *optional*	The average total bytes transmitted per second.	number (float)
avg_pkt_rx_crc_error_ps *optional*	The average number of packets received with CRC error (and thus dropped) per second.	number (float)

Name	Description	Schema
avg_pkt_rx_no_buffer_error_ps *optional*	The average number of packets discarded per second due to lack of buffer space.	number (float)
avg_pkt_rx_ps *optional*	The average number of packets received per second.	number (float)
avg_pkt_tx_error_ps *optional*	The average number of packets that failed to be transmitted per second due to error.	number (float)
avg_pkt_tx_ps *optional*	The average number of packets transmitted per second.	number (float)
fe_port_id *optional*	Reference to the associated frontend ethernet port (eth_port) on which these metrics were recorded.	string
max_bytes_rx_ps *optional*	The maximum total bytes received per second.	number (float)
max_bytes_tx_ps *optional*	The maximum total bytes transmitted per second.	number (float)
max_pkt_rx_crc_error_ps *optional*	The maximum number of packets received with CRC error (and thus dropped) per second.	number (float)
max_pkt_rx_no_buffer_error_ps *optional*	The maximum number of packets discarded per second due to lack of buffer space.	number (float)
max_pkt_rx_ps *optional*	The maximum number of packets received per second.	number (float)
max_pkt_tx_error_ps *optional*	The maximum number of packets that failed to be transmitted per second due to error.	number (float)

Name	Description	Schema
max_pkt_tx_ps *optional*	The maximum number of packets transmitted per second.	number (float)
node_id *optional*	Reference to the node the port belongs to.	string
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

base_performance_metrics_by_fe_fc_node

Fibre channel performance metrics for the node collected at twenty second interval.

Name	Description	Schema
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
current_logins *optional*	The number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
dumped_frames_ps *optional*	Dumped frames per second.	number (float)
invalid_crc_count_ps *optional*	Invalid crc count per second.	number (float)
invalid_tx_word_count_ps *optional*	Invalid transmission word count per second.	number (float)
link_failure_count_ps *optional*	Link failure count per second.	number (float)
loss_of_signal_count_ps *optional*	Loss of signal count per second.	number (float)
loss_of_sync_count_ps *optional*	Loss of sync count per second.	number (float)
node_id *optional*	Reference to the associated node on which these metrics were recorded.	string
prim_seq_prot_err_count_ps *optional*	Primitive sequence protocol error count per second.	number (float)
read_bandwidth *optional*	Read rate in bytes per second.	number (float)
read_iops *optional*	Total number of read operations by the node.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

Name	Description	Schema
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
unaligned_bandwidth *optional*	Unaligned read/write rate in bytes per second.	number (float)
unaligned_iops *optional*	Unaligned total input/output per second.	number (float)
unaligned_read_bandwidth *optional*	Unaligned read rate in bytes per second.	number (float)
unaligned_read_iops *optional*	Unaligned read input/output per second.	number (float)
unaligned_write_bandwidth *optional*	Unaligned write rate in bytes per second.	number (float)
unaligned_write_iops *optional*	Unaligned write input/output per second.	number (float)
write_bandwidth *optional*	Write rate in byte/sec.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

base_performance_metrics_by_fe_fc_node_rollup

Fibre channel performance metrics for the node rolled up at various rollup intervals.

Name	Description	Schema
avg_current_logins *optional*	Average number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
avg_dumped_frames_ps *optional*	Average dumped frames per second.	number (float)
avg_invalid_crc_count_ps *optional*	Average invalid crc count per second.	number (float)
avg_invalid_tx_word_count_ps *optional*	Average invalid transmission word count per second.	number (float)
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Weighted average latency in microseconds.	number (float)
avg_link_failure_count_ps *optional*	Average link failure count per second.	number (float)
avg_loss_of_signal_count_ps *optional*	Average loss of signal count per second.	number (float)
avg_loss_of_sync_count_ps *optional*	Average loss of sync count per second.	number (float)
avg_prim_seq_prot_err_count_ps *optional*	Average primitive sequence protocol error count per second.	number (float)
avg_read_bandwidth *optional*	Weighted average read bandwidth in bytes per second.	number (float)

Name	Description	Schema
avg_read_iops *optional*	Average reads per second.	number (float)
avg_read_latency *optional*	Weighted average read latency in microseconds.	number (float)
avg_read_size *optional*	Weighted average read size in bytes.	number (float)
avg_total_bandwidth *optional*	Weighted average total bandwidth in bytes per second.	number (float)
avg_total_iops *optional*	Average total input and output operations per second.	number
avg_unaligned_bandwidth *optional*	Average unaligned read/write rate in bytes per second.	number (float)
avg_unaligned_iops *optional*	Average unaligned total input/output per second.	number (float)
avg_unaligned_read_bandwidth *optional*	Average unaligned read rate in bytes per second.	number (float)
avg_unaligned_read_iops *optional*	Average unaligned read input/output per second.	number (float)
avg_unaligned_write_bandwidth *optional*	Average unaligned write rate in bytes per second.	number (float)
avg_unaligned_write_iops *optional*	Average unaligned write input/output per second.	number (float)

Name	Description	Schema
avg_write_bandwidth *optional*	Weighted average write bandwidth in bytes per second.	number (float)
avg_write_iops *optional*	Average writes per second.	number (float)
avg_write_latency *optional*	Weighted average write latency in microseconds.	number (float)
avg_write_size *optional*	Weighted average write size in bytes.	number (float)
max_avg_io_size *optional*	Maximum average size of input and output operations in bytes.	number (float)
max_avg_latency *optional*	Maximum of average latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_current_logins *optional*	Maximum number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
max_dumped_frames_ps *optional*	The maximum dumped frames per second.	number (float)
max_invalid_crc_count_ps *optional*	The maximum invalid crc count per second.	number (float)
max_invalid_tx_word_count_ps *optional*	The maximum invalid transmission word count per second.	number (float)
max_link_failure_count_ps *optional*	The maximum link failure count per second.	number (float)
max_loss_of_signal_count_ps *optional*	The maximum loss of signal count per second.	number (float)
max_loss_of_sync_count_ps *optional*	The maximum loss of sync count per second.	number (float)
max_prim_seq_prot_err_count_ps *optional*	The maximum primitive sequence protocol error count per second.	number (float)
max_read_bandwidth *optional*	Maximum read bandwidth in bytes per second.	number (float)
max_read_iops *optional*	Maximum reads per second.	number (float)
max_total_bandwidth *optional*	Maximum total bandwidth in bytes per second.	number (float)

Name	Description	Schema
max_total_iops *optional*	Maximum totals per second.	number
max_unaligned_bandwidth *optional*	Maximum unaligned read/write rate in bytes per second.	number (float)
max_unaligned_iops *optional*	Maximum unaligned total input/output per second.	number (float)
max_unaligned_read_bandwidth *optional*	Maximum unaligned read rate in bytes per second.	number (float)
max_unaligned_read_iops *optional*	Maximum unaligned read input/output per second.	number (float)
max_unaligned_write_bandwidth *optional*	Maximum unaligned write rate in bytes per second.	number (float)
max_unaligned_write_iops *optional*	Maximum unaligned write input/output per second.	number (float)
max_write_bandwidth *optional*	Maximum write bandwidth in bytes per second.	number (float)
max_write_iops *optional*	Maximum writes per second.	number (float)
node_id *optional*	Reference to the associated node on which these metrics were recorded.	string
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)

Name	Description	Schema
timestamp *optional*	End of sample period.	string (date-time)

base_performance_metrics_by_fe_fc_port

Performance metrics for the frontend fibre channel port collected at twenty second interval.

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
current_logins *optional*	The number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
dumped_frames_ps *optional*	Dumped frames per second.	number (float)
fe_port_id *optional*	Reference to the associated frontend fibre channel port (fc_port) on which these metrics were recorded.	string

Name	Description	Schema
invalid_crc_count_ps *optional*	Invalid crc count per second.	number (float)
invalid_tx_word_count_ps *optional*	Invalid transmission word count per second.	number (float)
link_failure_count_ps *optional*	Link failure count per second.	number (float)
loss_of_signal_count_ps *optional*	Loss of signal count per second.	number (float)
loss_of_sync_count_ps *optional*	Loss of sync count per second.	number (float)
node_id *optional*	Reference to the node the port belongs to.	string
prim_seq_prot_err_count_ps *optional*	Primitive sequence protocol error count per second.	number (float)
read_bandwidth *optional*	Read rate in bytes per second.	number (float)
read_iops *optional*	Total number of read operations by the node.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)

Name	Description	Schema
total_iops *optional*	Total read and write operations per second.	number (float)
unaligned_bandwidth *optional*	Unaligned read/write rate in bytes per second.	number (float)
unaligned_iops *optional*	Unaligned total input/output per second.	number (float)
unaligned_read_bandwidth *optional*	Unaligned read rate in bytes per second.	number (float)
unaligned_read_iops *optional*	Unaligned read input/output per second.	number (float)
unaligned_write_bandwidth *optional*	Unaligned write rate in bytes per second.	number (float)
unaligned_write_iops *optional*	Unaligned write input/output per second.	number (float)
write_bandwidth *optional*	Write rate in byte/sec.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

base_performance_metrics_by_fe_fc_port_rollup

Performance metrics for the frontend fibre channel port rolled up at various intervals.

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string

Name	Description	Schema
avg_current_logins *optional*	Average number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
avg_dumped_frames_ps *optional*	Average dumped frames per second.	number (float)
avg_invalid_crc_count_ps *optional*	Average invalid crc count per second.	number (float)
avg_invalid_tx_word_count_ps *optional*	Average invalid transmission word count per second.	number (float)
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Weighted average latency in microseconds.	number (float)
avg_link_failure_count_ps *optional*	Average link failure count per second.	number (float)
avg_loss_of_signal_count_ps *optional*	Average loss of signal count per second.	number (float)
avg_loss_of_sync_count_ps *optional*	Average loss of sync count per second.	number (float)
avg_prim_seq_prot_err_count_ps *optional*	Average primitive sequence protocol error count per second.	number (float)
avg_read_bandwidth *optional*	Weighted average read bandwidth in bytes per second.	number (float)

Name	Description	Schema
avg_read_iops *optional*	Average reads per second.	number (float)
avg_read_latency *optional*	Weighted average read latency in microseconds.	number (float)
avg_read_size *optional*	Weighted average read size in bytes.	number (float)
avg_total_bandwidth *optional*	Weighted average total bandwidth in bytes per second.	number (float)
avg_total_iops *optional*	Average total input and output operations per second.	number
avg_unaligned_bandwidth *optional*	Average unaligned read/write rate in bytes per second.	number (float)
avg_unaligned_iops *optional*	Average unaligned total input/output per second.	number (float)
avg_unaligned_read_bandwidth *optional*	Average unaligned read rate in bytes per second.	number (float)
avg_unaligned_read_iops *optional*	Average unaligned read input/output per second.	number (float)
avg_unaligned_write_bandwidth *optional*	Average unaligned write rate in bytes per second.	number (float)
avg_unaligned_write_iops *optional*	Average unaligned write input/output per second.	number (float)

Name	Description	Schema
avg_write_bandwidth *optional*	Weighted average write bandwidth in bytes per second.	number (float)
avg_write_iops *optional*	Average writes per second.	number (float)
avg_write_latency *optional*	Weighted average write latency in microseconds.	number (float)
avg_write_size *optional*	Weighted average write size in bytes.	number (float)
fe_port_id *optional*	Reference to the associated frontend fibre channel port (fc_port) on which these metrics were recorded.	string
max_avg_io_size *optional*	Maximum average size of input and output operations in bytes.	number (float)
max_avg_latency *optional*	Maximum of average latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)

Name	Description	Schema
max_current_logins *optional*	Maximum number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_dumped_frames_ps *optional*	The maximum dumped frames per second.	number (float)
max_invalid_crc_count_ps *optional*	The maximum invalid crc count per second.	number (float)
max_invalid_tx_word_count_ps *optional*	The maximum invalid transmission word count per second.	number (float)
max_link_failure_count_ps *optional*	The maximum link failure count per second.	number (float)
max_loss_of_signal_count_ps *optional*	The maximum loss of signal count per second.	number (float)
max_loss_of_sync_count_ps *optional*	The maximum loss of sync count per second.	number (float)
max_prim_seq_prot_err_count_ps *optional*	The maximum primitive sequence protocol error count per second.	number (float)
max_read_bandwidth *optional*	Maximum read bandwidth in bytes per second.	number (float)
max_read_iops *optional*	Maximum reads per second.	number (float)

Name	Description	Schema
max_total_bandwidth *optional*	Maximum total bandwidth in bytes per second.	number (float)
max_total_iops *optional*	Maximum totals per second.	number
max_unaligned_bandwidth *optional*	Maximum unaligned read/write rate in bytes per second.	number (float)
max_unaligned_iops *optional*	Maximum unaligned total input/output per second.	number (float)
max_unaligned_read_bandwidth *optional*	Maximum unaligned read rate in bytes per second.	number (float)
max_unaligned_read_iops *optional*	Maximum unaligned read input/output per second.	number (float)
max_unaligned_write_bandwidth *optional*	Maximum unaligned write rate in bytes per second.	number (float)
max_unaligned_write_iops *optional*	Maximum unaligned write input/output per second.	number (float)
max_write_bandwidth *optional*	Maximum write bandwidth in bytes per second.	number (float)
max_write_iops *optional*	Maximum writes per second.	number (float)
node_id *optional*	Reference to the node the port belongs to.	string

Name	Description	Schema
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

base_performance_metrics_by_file_system

Performance metrics for the file system collected at twenty second interval.

Name	Description	Schema
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_size *optional*	Average read and write size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
file_system_id *optional*	Unique identifier of the file system.	string
read_bandwidth *optional*	Read rate in bytes per second.	number (float)
read_iops *optional*	Total read operations per second.	number (float)

Name	Description	Schema
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
write_bandwidth *optional*	Write rate in bytes per second.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

base_performance_metrics_by_file_system_rollup

Summary of file system level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Name	Description	Schema
avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)
avg_read_bandwidth *optional*	Average read rate in bytes per second.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)

Name	Description	Schema
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_size *optional*	Average read and write size in bytes.	number (float)
avg_total_bandwidth *optional*	Average data transfer rate in bytes per second.	number (float)
avg_total_iops *optional*	Average read and write operations per second.	number (float)
avg_write_bandwidth *optional*	Average write rate in bytes per second.	number (float)
avg_write_iops *optional*	Average write operations per second.	number (float)
avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
file_system_id *optional*	Unique identifier of the file system.	string
max_avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)

Name	Description	Schema
max_avg_size *optional*	Maximum of average read and write size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_iops *optional*	Maximum read and write operations per second.	number (float)
max_read_bandwidth *optional*	Maximum read rate in bytes per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_total_bandwidth *optional*	Maximum data transfer rate in bytes per second.	number (float)
max_write_bandwidth *optional*	Maximum write rate in bytes per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

base_performance_metrics_by_nfs

Performance metrics for the nfs collected at twenty second interval.

Name	Description	Schema
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
node_id *optional*	Unique identifier of the node.	string
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_iops *optional*	Total read and write operations per second.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

base_performance_metrics_by_nfs_rollup

Summary of nfs level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Name	Description	Schema
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_latency *optional*	Maximum read and write latency in microseconds.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_total_iops *optional*	Average read and write operations per second.	number (float)
avg_write_iops *optional*	Average write operations per second.	number (float)
avg_write_latency *optional*	Maximum write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
max_avg_io_size *optional*	Maximum of average read and write size in bytes.	number (float)
max_avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)

Name	Description	Schema
max_avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_iops *optional*	Maximum read and write operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

base_performance_metrics_by_nfsv3

Performance metrics for the nfs collected at twenty second interval.

Name	Description	Schema
avg_md_latency *optional*	Average md latency operations per second.	number (float)
failed_md_ops *optional*	Total failed md operations per second.	number (float)
md_ops *optional*	Total md operations per second.	number (float)
node_id *optional*	Unique identifier of the nfs.	string
read_iops *optional*	Total read iops in microseconds.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_iops *optional*	Total read and write iops in microseconds.	number (float)
write_iops *optional*	Total write iops in microseconds.	number (float)

base_performance_metrics_by_nfsv3_rollup

Summary of nfs level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Name	Description	Schema
avg_failed_md_ops *optional*	Average failed operations per second.	number (float)

Name	Description	Schema
avg_md_latency *optional*	Average md latency per second.	number (float)
avg_md_ops *optional*	Average md operations per second.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_total_iops *optional*	Average read and write operations per second.	number (float)
avg_write_iops *optional*	Average write operations per second.	number (float)
max_avg_md_latency *optional*	Maximum average md latency per second.	number (float)
max_failed_md_ops *optional*	Max failed operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_total_iops *optional*	Maximum read and write operations per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string

Name	Description	Schema
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

base_performance_metrics_by_nfsv4

Performance metrics for the nfs collected at twenty second interval.

Name	Description	Schema
avg_md_latency *optional*	Average md latency operations per second.	number (float)
failed_md_ops *optional*	Total failed md operations per second.	number (float)
md_ops *optional*	Total md operations per second.	number (float)
node_id *optional*	Unique identifier of the nfs.	string
read_iops *optional*	Total read iops in microseconds.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_iops *optional*	Total read and write iops in microseconds.	number (float)

Name	Description	Schema
write_iops *optional*	Total write iops in microseconds.	number (float)

base_performance_metrics_by_nfsv4_rollup

Summary of nfs level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Name	Description	Schema
avg_failed_md_ops *optional*	Average failed operations per second.	number (float)
avg_md_latency *optional*	Average md latency per second.	number (float)
avg_md_ops *optional*	Average md operations per second.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_total_iops *optional*	Average read and write operations per second.	number (float)
avg_write_iops *optional*	Average write operations per second.	number (float)
max_avg_md_latency *optional*	Maximum average md latency per second.	number (float)
max_failed_md_ops *optional*	Max failed operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)

Name	Description	Schema
max_total_iops *optional*	Maximum read and write operations per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

base_performance_metrics_by_node

Performance metrics for the node collected at twenty second interval.

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)

Name	Description	Schema
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
current_logins *optional*	The number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
io_workload_cpu_utilization *optional*	The percentage of CPU Utilization on the cores dedicated to servicing storage I/O requests.	number (float)
node_id *optional*	Unique identifier representing a specific node.	string
read_bandwidth *optional*	Read rate in bytes per second.	number (float)
read_iops *optional*	Total number of read operations by the node.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
unaligned_bandwidth *optional*	Unaligned read/write rate in bytes per second.	number (float)

Name	Description	Schema
unaligned_iops *optional*	Unaligned total input/output per second.	number (float)
unaligned_read_bandwidth *optional*	Unaligned read rate in bytes per second.	number (float)
unaligned_read_iops *optional*	Unaligned read input/output per second.	number (float)
unaligned_write_bandwidth *optional*	Unaligned write rate in bytes per second.	number (float)
unaligned_write_iops *optional*	Unaligned write input/output per second.	number (float)
write_bandwidth *optional*	Write rate in byte/sec.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

base_performance_metrics_by_node_rollup

Summary of node level performance metric data for various rollup intervals beginning with timestamp, including the average and maximum values for that period.

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
avg_current_logins *optional*	Average number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)

Name	Description	Schema
avg_io_workload_cpu_utilization *optional*	The average percentage of CPU Utilization on the cores dedicated to servicing storage I/O requests. Calculated over time across appliance. Derived from an average of utilization across all nodes within the appliance.	number (float)
avg_latency *optional*	Weighted average latency in microseconds.	number (float)
avg_read_bandwidth *optional*	Weighted average read bandwidth in bytes per second.	number (float)
avg_read_iops *optional*	Average reads per second.	number (float)
avg_read_latency *optional*	Weighted average read latency in microseconds.	number (float)
avg_read_size *optional*	Weighted average read size in bytes.	number (float)
avg_total_bandwidth *optional*	Weighted average total bandwidth in bytes per second.	number (float)
avg_total_iops *optional*	Average total input and output operations per second.	number
avg_unaligned_bandwidth *optional*	Average unaligned read/write rate in bytes per second.	number (float)
avg_unaligned_iops *optional*	Average unaligned total input/output per second.	number (float)
avg_unaligned_read_bandwidth *optional*	Average unaligned read rate in bytes per second.	number (float)

Name	Description	Schema
avg_unaligned_read_iops *optional*	Average unaligned read input/output per second.	number (float)
avg_unaligned_write_bandwidth *optional*	Average unaligned write rate in bytes per second.	number (float)
avg_unaligned_write_iops *optional*	Average unaligned write input/output per second.	number (float)
avg_write_bandwidth *optional*	Weighted average write bandwidth in bytes per second.	number (float)
avg_write_iops *optional*	Average writes per second.	number (float)
avg_write_latency *optional*	Weighted average write latency in microseconds.	number (float)
avg_write_size *optional*	Weighted average write size in bytes.	number (float)
max_avg_io_size *optional*	Maximum average size of input and output operations in bytes.	number (float)
max_avg_latency *optional*	Maximum of average latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)

Name	Description	Schema
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_current_logins *optional*	Maximum number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_io_workload_cpu_utilization *optional*	The maximum percentage of CPU Utilization on the cores dedicated to servicing storage I/O requests. Calculated over time across appliance. Derived from an average of utilization across all nodes within the appliance.	number (float)
max_read_bandwidth *optional*	Maximum read bandwidth in bytes per second.	number (float)
max_read_iops *optional*	Maximum reads per second.	number (float)
max_total_bandwidth *optional*	Maximum total bandwidth in bytes per second.	number (float)
max_total_iops *optional*	Maximum totals per second.	number
max_unaligned_bandwidth *optional*	Maximum unaligned read/write rate in bytes per second.	number (float)
max_unaligned_iops *optional*	Maximum unaligned total input/output per second.	number (float)

Name	Description	Schema
max_unaligned_read_bandwidth *optional*	Maximum unaligned read rate in bytes per second.	number (float)
max_unaligned_read_iops *optional*	Maximum unaligned read input/output per second.	number (float)
max_unaligned_write_bandwidth *optional*	Maximum unaligned write rate in bytes per second.	number (float)
max_unaligned_write_iops *optional*	Maximum unaligned write input/output per second.	number (float)
max_write_bandwidth *optional*	Maximum write bandwidth in bytes per second.	number (float)
max_write_iops *optional*	Maximum writes per second.	number (float)
node_id *optional*	Unique identifier representing a specific node.	string
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

base_performance_metrics_by_smb_cache

Performance metrics for the smb cache collected at twenty second interval.

Name	Description	Schema
hash_avg_latency *optional*	Average hash latency.	number (float)
hash_avg_size *optional*	Average hash size.	number (float)
hash_max_latency *optional*	Max hash latency.	number (float)
hash_max_size *optional*	Max hash size.	number (float)
hash_min_latency *optional*	Min hash latency.	number (float)
hash_min_size *optional*	Max hash size.	number (float)
max_used_threads *optional*	Max used threads	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_rejected_tasks *optional*	Total rejected task.	number (float)
total_tasks *optional*	Total tasks.	number (float)

base_performance_metrics_by_smb_cache_rollup

Performance metrics nfs level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Name	Description	Schema
hash_avg_latency *optional*	Average hash latency.	number (float)
hash_avg_size *optional*	Average hash size.	number (float)
hash_max_avg_latency *optional*	Average max hash latency.	number (float)
hash_max_avg_size *optional*	Average max hash size.	number (float)
hash_max_latency *optional*	Max hash latency.	number (float)
hash_max_size *optional*	Max hash size.	number (float)
hash_min_latency *optional*	Min hash latency.	number (float)
hash_min_size *optional*	Max hash size.	number (float)
max_used_threads *optional*	Max used threads	number (float)
node_id *optional*	Unique identifier of the node.	string

Name	Description	Schema
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_rejected_tasks *optional*	Total rejected task.	number (float)
total_tasks *optional*	Total tasks.	number (float)

base_performance_metrics_by_smb_client

Performance metrics for the smb client collected at twenty second interval.

Name	Description	Schema
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)

Name	Description	Schema
node_id *optional*	Unique identifier of the node.	string
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_calls *optional*	Total calls.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

base_performance_metrics_by_smb_client_rollup

Summary of smb client level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Name	Description	Schema
avg_calls *optional*	Average calls.	number (float)
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_iops *optional*	Average read and write operations per second.	number (float)
avg_latency *optional*	Maximum read and write latency in microseconds.	number (float)

Name	Description	Schema
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_iops *optional*	Average write operations per second.	number (float)
avg_write_latency *optional*	Maximum write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
max_avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_size *optional*	Maximum of average read and write size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)

Name	Description	Schema
max_calls *optional*	Maximum calls.	number (float)
max_iops *optional*	Maximum read and write operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

base_performance_metrics_by_smb_node

Performance metrics for the smb node collected at twenty second interval.

Name	Description	Schema
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)

Name	Description	Schema
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
node_id *optional*	Unique identifier of the node.	string
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_calls *optional*	Total calls.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

base_performance_metrics_by_smb_node_rollup

Summary of smb node level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Name	Description	Schema
avg_calls *optional*	Average calls.	number (float)

Name	Description	Schema
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_iops *optional*	Average read and write operations per second.	number (float)
avg_latency *optional*	Maximum read and write latency in microseconds.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_iops *optional*	Average write operations per second.	number (float)
avg_write_latency *optional*	Maximum write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
max_avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)

Name	Description	Schema
max_avg_size *optional*	Maximum of average read and write size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_calls *optional*	Maximum calls.	number (float)
max_iops *optional*	Maximum read and write operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

base_performance_metrics_by_smb_v1_builtin_client

Performance metrics for the smb v1 client collected at twenty second interval.

Name	Description	Schema
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
node_id *optional*	Unique identifier of the node.	string
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_calls *optional*	Total calls.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

base_performance_metrics_by_smb_v1_builtin_client_rollup

Summary of smb v1 client level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Name	Description	Schema
avg_calls *optional*	Average calls.	number (float)
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_iops *optional*	Average read and write operations per second.	number (float)
avg_latency *optional*	Maximum read and write latency in microseconds.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_iops *optional*	Average write operations per second.	number (float)
avg_write_latency *optional*	Maximum write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
max_avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)

Name	Description	Schema
max_avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_size *optional*	Maximum of average read and write size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_calls *optional*	Maximum calls.	number (float)
max_iops *optional*	Maximum read and write operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

base_performance_metrics_by_smb_v1_node

Performance metrics for the smb v1 node collected at twenty second interval.

Name	Description	Schema
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
node_id *optional*	Unique identifier of the node.	string
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_calls *optional*	Total calls.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)

Name	Description	Schema
write_iops *optional*	Total write operations per second.	number (float)

base_performance_metrics_by_smb_v1_node_rollup

Summary of smb v1 node level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Name	Description	Schema
avg_calls *optional*	Average calls.	number (float)
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_iops *optional*	Average read and write operations per second.	number (float)
avg_latency *optional*	Maximum read and write latency in microseconds.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_iops *optional*	Average write operations per second.	number (float)
avg_write_latency *optional*	Maximum write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)

Name	Description	Schema
max_avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_size *optional*	Maximum of average read and write size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_calls *optional*	Maximum calls.	number (float)
max_iops *optional*	Maximum read and write operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string

Name	Description	Schema
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

base_performance_metrics_by_smb_v2_builtin_client

Performance metrics for the smb v1 client collected at twenty second interval.

Name	Description	Schema
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
node_id *optional*	Unique identifier of the node.	string
read_iops *optional*	Total read operations per second.	number (float)

Name	Description	Schema
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_calls *optional*	Total calls.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

base_performance_metrics_by_smb_v2_builtin_client_rollup

Summary of smb v1 client level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Name	Description	Schema
avg_calls *optional*	Average calls.	number (float)
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_iops *optional*	Average read and write operations per second.	number (float)
avg_latency *optional*	Maximum read and write latency in microseconds.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)

Name	Description	Schema
avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_iops *optional*	Average write operations per second.	number (float)
avg_write_latency *optional*	Maximum write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
max_avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_size *optional*	Maximum of average read and write size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_calls *optional*	Maximum calls.	number (float)

Name	Description	Schema
max_iops *optional*	Maximum read and write operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

base_performance_metrics_by_smb_v2_node

Performance metrics for the smb v1 node collected at twenty second interval.

Name	Description	Schema
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)

Name	Description	Schema
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
node_id *optional*	Unique identifier of the node.	string
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_calls *optional*	Total calls.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

base_performance_metrics_by_smb_v2_node_rollup

Summary of smb v1 node level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Name	Description	Schema
avg_calls *optional*	Average calls.	number (float)
avg_io_size *optional*	Average read and write size in bytes.	number (float)

Name	Description	Schema
avg_iops *optional*	Average read and write operations per second.	number (float)
avg_latency *optional*	Maximum read and write latency in microseconds.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_iops *optional*	Average write operations per second.	number (float)
avg_write_latency *optional*	Maximum write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
max_avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_size *optional*	Maximum of average read and write size in bytes.	number (float)

Name	Description	Schema
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_calls *optional*	Maximum calls.	number (float)
max_iops *optional*	Maximum read and write operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

base_performance_metrics_by_vg

Performance metrics for the volumes in a volume group collected at twenty second interval.

Name	Description	Schema
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)

Name	Description	Schema
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
read_bandwidth *optional*	Read rate in byte/sec.	number (float)
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
vg_id *optional*	Unique identifier representing a volume group.	string

Name	Description	Schema
write_bandwidth *optional*	Write rate in byte/sec.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

base_performance_metrics_by_vm

Performance metrics for the virtual machine collected at twenty second interval.

Name	Description	Schema
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
read_bandwidth *optional*	Read rate in bytes per second.	number (float)
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)

Name	Description	Schema
timestamp *optional*	End of sample period.	string (date-time)
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
vm_id *optional*	Unique identifier representing a specific virtual machine.	string
write_bandwidth *optional*	Write rate in byte/sec.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

base_performance_metrics_by_vm_rollup

Summary of virtual machine level performance metric data for various rollup intervals beginning with timestamp, including the average and maximum values for that period.

Name	Description	Schema
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Weighted average latency in microseconds.	number (float)
avg_read_bandwidth *optional*	Weighted average read bandwidth in bytes per second.	number (float)
avg_read_iops *optional*	Average reads per second.	number (float)
avg_read_latency *optional*	Weighted average read latency in microseconds.	number (float)

Name	Description	Schema
avg_read_size *optional*	Weighted average read size in bytes.	number (float)
avg_total_bandwidth *optional*	Weighted average total bandwidth in bytes per second.	number (float)
avg_total_iops *optional*	Average total input and output operations per second.	number (float)
avg_write_bandwidth *optional*	Weighted average write bandwidth in bytes per second.	number (float)
avg_write_iops *optional*	Average writes per second.	number (float)
avg_write_latency *optional*	Weighted average write latency in microseconds.	number (float)
avg_write_size *optional*	Weighted average write size in bytes.	number (float)
max_avg_io_size *optional*	Maximum average size of input and output operations in bytes.	number (float)
max_avg_latency *optional*	Maximum of average latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)

Name	Description	Schema
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_read_bandwidth *optional*	Maximum read bandwidth in bytes per second.	number (float)
max_read_iops *optional*	Maximum reads per second.	number (float)
max_total_bandwidth *optional*	Maximum total bandwidth in bytes per second.	number (float)
max_total_iops *optional*	Maximum totals per second.	number
max_write_bandwidth *optional*	Maximum write bandwidth in bytes per second.	number (float)
max_write_iops *optional*	Maximum writes per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
vm_id *optional*	Unique identifier representing a specific virtual machine.	string

base_performance_metrics_by_volume

Performance metrics for the volume collected at twenty second interval.

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
read_bandwidth *optional*	Read rate in bytes per second.	number (float)
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)

Name	Description	Schema
volume_id *optional*	Unique identifier representing a specific volume.	string
write_bandwidth *optional*	Write rate in byte/sec.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

base_performance_metrics_by_volume_rollup

Summary of volume level performance metric data for various rollup intervals beginning with timestamp, including the average and maximum values for that period.

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Weighted average latency in microseconds.	number (float)
avg_read_bandwidth *optional*	Weighted average read bandwidth in bytes per second.	number (float)
avg_read_iops *optional*	Average reads per second.	number (float)
avg_read_latency *optional*	Weighted average read latency in microseconds.	number (float)
avg_read_size *optional*	Weighted average read size in bytes.	number (float)
avg_total_bandwidth *optional*	Weighted average total bandwidth in bytes per second.	number (float)

Name	Description	Schema
avg_total_iops *optional*	Average total input and output operations per second.	number
avg_write_bandwidth *optional*	Weighted average write bandwidth in bytes per second.	number (float)
avg_write_iops *optional*	Average writes per second.	number (float)
avg_write_latency *optional*	Weighted average write latency in microseconds.	number (float)
avg_write_size *optional*	Weighted average write size in bytes.	number (float)
max_avg_io_size *optional*	Maximum average size of input and output operations in bytes.	number (float)
max_avg_latency *optional*	Maximum of average latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)

Name	Description	Schema
max_read_bandwidth *optional*	Maximum read bandwidth in bytes per second.	number (float)
max_read_iops *optional*	Maximum reads per second.	number (float)
max_total_bandwidth *optional*	Maximum total bandwidth in bytes per second.	number (float)
max_total_iops *optional*	Maximum totals per second.	number
max_write_bandwidth *optional*	Maximum write bandwidth in bytes per second.	number (float)
max_write_iops *optional*	Maximum writes per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
volume_id *optional*	Unique identifier representing a specific volume.	string

base_response

Base response object Filtering on the fields of this embedded resource is not supported.

Name	Schema
response_type *required*	string

base_space_metrics_by_appliance

Space metrics for the appliance collected at five minute interval.

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
data_physical_used *optional*	This metric represents amount of physical space user data occupies after deduplication and compression. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
data_reduction *optional*	Ratio of the logical used space to data physical used space which is after deduplication and compression.	number (float)
efficiency_ratio *optional*	The overall efficiency is computed as a ratio of the total space provisioned to physical used space. For example, ten 2 GB volumes were provisioned and 1 GB of data is written to each of them. Each of the volumes has one snapshot as well, for another ten 2 GB volumes. All volumes are thinly provisioned with deduplication and compression applied, there is 4 GB of physical space used. Overall efficiency would be (20 * 2 GB) / 4 GB or 10:1. The efficiency_ratio value will be 10 in this example.	number (float)
logical_provisioned *optional*	Total configured size of all storage objects on an appliance. This metric includes all primaries, snaps and clones. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
logical_used *optional*	Amount of data in bytes written to all storage objects on an appliance, without any deduplication and/or compression. This metric includes all primaries, snaps and clones. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
physical_total *optional*	Total combined space on the physical drives of the appliance available for data. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
physical_used *optional*	Total physical space consumed in the appliance, accounting for all efficiency mechanisms, as well as all data protection. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
shared_logical_used *optional*	Amount of space the volume family needs to hold the data written by host and shared by snaps and fast-clones in the family. This does not include deduplication or compression. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
snapshot_savings *optional*	Ratio of the amount of space that would have been used by snapshots if space efficiency was not applied to logical space used solely by snapshots. For example, an object is provisioned as 1 GB and it has two snapshots. Each snapshot has 200 MB of data. Snapshot savings will be (1 GB + 1 GB) / (0.2 GB + 0.2 GB) or 5:1. The snapshot_savings value will be 5 in this case.	number (float)
thin_savings *optional*	Ratio of all the vVol provisioned to data they contain. This is the ratio of logical_provisioned to logical_used. For example, a cluster has two 2 GB objects and have written 500 MB bytes of data to them. The thin savings would be (2 * 2 GB) / (2 * 0.5 GB) or 4:1, so the thin_savings value would be 4.0.	number (float)
timestamp *optional*	End of sample period.	string (date-time)

base_space_metrics_by_appliance_rollup

Summary of appliance level space metric data for a specific period of time, beginning with timestamp and including the maximum and final values for that period. Current support is for a time period of one hour and one day.

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string

Name	Description	Schema
last_data_physical_used *optional*	Last physical used space for data during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_data_reduction *optional*	Last data reduction space during the period.	number (float)
last_efficiency_ratio *optional*	Last efficiency ratio during the period.	number (float)
last_logical_provisioned *optional*	Last logical total space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_logical_used *optional*	Last logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_physical_total *optional*	Last physical total space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_physical_used *optional*	Last physical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_shared_logical_used *optional*	Last shared logical used during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snapshot_savings *optional*	Last snapshot savings space during the period.	number (float)
last_thin_savings *optional*	Last thin savings ratio during the period.	number (float)
max_data_physical_used *optional*	Maximum physical used space for data during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
max_data_reduction *optional*	Maximum data reduction space during the period.	number (float)
max_efficiency_ratio *optional*	Maximum efficiency ratio during the period.	number (float)
max_logical_provisioned *optional*	Maxiumum logical total space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_logical_used *optional*	Maxiumum logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_physical_total *optional*	Maximum physical total space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_physical_used *optional*	Maximum physical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_shared_logical_used *optional*	Max shared logical used during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snapshot_savings *optional*	Maximum snapshot savings space during the period.	number (float)
max_thin_savings *optional*	Maximum thin savings ratio during the period.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

base_space_metrics_by_cluster

Space metrics for the cluster collected at five minute interval.

Name	Description	Schema
cluster_id *optional*	Identifier of the cluster.	string
data_physical_used *optional*	This metric represents total amount of physical space user data occupies after deduplication and compression. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
data_reduction *optional*	Ratio of the logical used space to data physical used space which is after deduplication and compression.	number (float)
efficiency_ratio *optional*	The overall efficiency is computed as a ratio of the total space provisioned to physical used space. For example, ten 2 GB volumes were provisioned and 1 GB of data is written to each of them. Each of the volumes has one snapshot as well, for another ten 2 GB volumes. All volumes are thinly provisioned with deduplication and compression applied, there is 4 GB of physical space used. Overall efficiency would be (20 * 2 GB) / 4 GB or 10:1. The efficiency_ratio value will be 10 in this example.	number (float)
logical_provisioned *optional*	Total configured size of all storage ojects within the cluster. This metric includes all primaries, snaps and clones. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
logical_used *optional*	Amount of data in bytes written to all storage objects within the cluster, without any deduplication and/or compression. This metric includes all primaries, snaps and clones. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
physical_total *optional*	The total combined space on the physical drives of the cluster available for data. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
physical_used *optional*	The total physical space consumed in the cluster, accounting for all efficiency mechanisms, as well as all data protection. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
shared_logical_used *optional*	Cluster shared logical used is sum of appliances' shared logical used in the cluster. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
snapshot_savings *optional*	Ratio of the amount of space that would have been used by snapshots if space efficiency was not applied to logical space used solely by snapshots. For example, an object is provisioned as 1 GB and it has two snapshots. Each snapshot has 200 MB of data. Snapshot savings will be (1 GB + 1 GB) / (0.2 GB + 0.2 GB) or 5:1. The snapshot_savings value will be 5 in this case.	number (float)
thin_savings *optional*	Ratio of all the vVol provisioned to data they contain. This is the ratio of logical_provisioned to logical_used. For example, a cluster has two 2 GB objects and have written 500 MB bytes of data to them. The thin savings would be (2 * 2 GB) / (2 * 0.5 GB) or 4:1, so the thin_savings value would be 4.0.	number (float)
timestamp *optional*	End of sample period.	string (date-time)

base_space_metrics_by_cluster_rollup

Summary of cluster level space metric data for a specific period of time, beginning with timestamp, including the maximum and final values for that period. Current support is for a time period of one hour and one day.

Name	Description	Schema
cluster_id *optional*	Identifier of the cluster.	string

Name	Description	Schema
last_data_physical_used *optional*	Last physical used space for data during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_data_reduction *optional*	Last data reduction space during the period.	number (float)
last_efficiency_ratio *optional*	Last efficiency ratio during the period.	number (float)
last_logical_provisioned *optional*	Last logical total space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_logical_used *optional*	Last logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_physical_total *optional*	Last physical total space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_physical_used *optional*	Last physical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_shared_logical_used *optional*	Last shared logical used during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snapshot_savings *optional*	Last snapshot savings space during the period.	number (float)
last_thin_savings *optional*	Last thin savings ratio during the period.	number (float)
max_data_physical_used *optional*	Maximum physical used space for data during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
max_data_reduction *optional*	Maximum data reduction space during the period.	number (float)
max_efficiency_ratio *optional*	Maximum efficiency ratio during the period.	number (float)
max_logical_provisioned *optional*	Maximum logical total space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_logical_used *optional*	Maximum logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_physical_total *optional*	Maximum physical total space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_physical_used *optional*	Maximum physical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_shared_logical_used *optional*	Maximum shared logical used during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snapshot_savings *optional*	Maximum snapshot savings space during the period.	number (float)
max_thin_savings *optional*	Maximum thin savings ratio during the period.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

base_space_metrics_by_storage_container

Space metrics of storage container aggregated from all appliances collected at five minute interval.

Name	Description	Schema
logical_provisioned *optional*	Total configured size in bytes of the primary and clone virtual volumes within the storage container. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
logical_used *optional*	Amount of data in bytes written to primary and clone virtual volumes within the storage container. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
snapshot_savings *optional*	Ratio of the amount of space that would have been used by snapshots if space efficiency was not applied to logical space used solely by snapshots. For example, a volume is provisioned as 1 GB and it has two snapshots. Each snapshot has 200 MB of data. Snapshot savings will be (1 GB + 1 GB) / (0.2 GB + 0.2 GB) or 5:1. The snapshot_savings value will be 5 in this case.	number (float)
storage_container_id *optional*	Internal ID of the storage container.	string
timestamp *optional*	End of sample period.	string (date-time)

base_space_metrics_by_storage_container_rollup

Summary of storage container level space metric data for a specific period of time beginning with timestamp, including the maximum and final values for that period. Current support is for a time period of one hour and one day.

Name	Description	Schema
last_logical_provisioned *optional*	Last logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
last_logical_used *optional*	Last logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snapshot_savings *optional*	Last snapshot savings during the period.	number (float)
max_logical_provisioned *optional*	Maximum logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_logical_used *optional*	Maximum logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snapshot_savings *optional*	Maximum snapshot savings during the period.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
storage_container_id *optional*	Internal ID of the storage container.	string
timestamp *optional*	End of sample period.	string (date-time)

base_space_metrics_by_vg

Space metrics for a volume group collected at a five minute interval.

Name	Description	Schema
logical_provisioned *optional*	Total configured size in bytes of all member volumes in a volume group. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
logical_used *optional*	Total amount of data in bytes written to all member volumes in a volume group. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
snap_clone_logical_used *optional*	Total amount of data in bytes host has written to all volumes in the volume group without any deduplication, compression or sharing. This metric includes used snaps and clones in the volume group. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
snapshot_savings *optional*	Ratio of the amount of space that would have been used by snapshots in the volume group if space efficiency was not applied to logical space used solely by snapshots. For example, two volumes are provisioned as 1 GB and each has two snapshots. Each snapshot has 200 MB of data. Snapshot savings will be (1 GB * 2 + 1 GB * 2) / (0.2 GB * 2 + 0.2 GB * 2) or 5:1. The snapshot_savings value will be 5 in this case.	number (float)
thin_savings *optional*	Ratio of all the volumes provisioned to data being written to them. For example, a volume group has two 2 GB volumes and have written 500 MB of data to them. The thin savings would be (2 * 2 GB) / (2 * 0.5 GB) or 4:1, so the thin_savings value would be 4.0.	number (float)
timestamp *optional*	End of sample period.	string (date-time)
vg_id *optional*	Unique identifier representing a volume group.	string

base_space_metrics_by_vg_rollup

Summary of volume group level space metric data for one hour or one day period beginning with timestamp, including the maximum and final values for that period.

Name	Description	Schema
last_logical_provisioned *optional*	Last logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_logical_used *optional*	Last logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snap_clone_logical_used *optional*	Last snap and clone logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snapshot_savings *optional*	Last snapshot savings space during the period.	number (float)
last_thin_savings *optional*	Last thin savings ratio during the period.	number (float)
max_logical_provisioned *optional*	Max logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_logical_used *optional*	Maximum logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snap_clone_logical_used *optional*	Max snap and clone logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snapshot_savings *optional*	Max snapshot savings space during the period.	number (float)
max_thin_savings *optional*	Max thin savings ratio during the period.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)

Name	Description	Schema
timestamp *optional*	End of sample period.	string (date-time)
vg_id *optional*	Unique identifier representing a specific volume group.	string

base_space_metrics_by_vm

Space metrics for the VM collected at five minute interval.

Name	Description	Schema
logical_provisioned *optional*	Total configured size in bytes of all virtual volumes used by virtual machine. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
logical_used *optional*	Total amount of data in bytes written to all virtual volumes used by virtual machine. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
snap_clone_logical_used *optional*	Total Amount of data in bytes host has written to all volumes used by virtual machine without any deduplication, compression or sharing. This metric includes snaps and clones in the volume family used by virtual machine. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
snapshot_savings *optional*	Ratio of the amount of space that would have been used by snapshots if space efficiency was not applied to logical space used solely by snapshots of vVols used by virtual machine. For example, a vVol is provisioned as 1 GB and it has two snapshots. Each snapshot has 200 MB of data. Snapshot savings will be (1 GB + 1 GB) / (0.2 GB + 0.2 GB) or 5:1. The snapshot_savings value will be 5 in this case.	number (float)

Name	Description	Schema
thin_savings *optional*	Ratio of all the vVol provisioned to data they contain. This is the ratio of logical_provisioned to logical_used. For example, a VM has two 2 GB vVol's and have written 500 MB of data to them. The thin savings would be (2 * 2GB) / (2 * 0.5 GB) or 4:1, so the thin_savings value would be 4.0.	number (float)
timestamp *optional*	End of sample period.	string (date-time)
unique_physical_used *optional*	Amount of physical space virtual machine used after compression and deduplication. This is the space to be freed up if a virtual machine is removed. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
vm_id *optional*	Unique identifier representing a specific virtual machine.	string

base_space_metrics_by_vm_rollup

Summary of VM level space metric data for one hour or one day period beginning with timestamp, including the maximum and final values for that period.

Name	Description	Schema
last_logical_provisioned *optional*	Last logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_logical_used *optional*	Last logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snap_clone_logical_used *optional*	Last snap and clone logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snapshot_savings *optional*	Last snapshot savings space during the period.	number (float)
last_thin_savings *optional*	Last thin savings ratio during the period.	number (float)

Name	Description	Schema
last_unique_physical_used *optional*	Last unique physical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_logical_provisioned *optional*	Max logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_logical_used *optional*	Max logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snap_clone_logical_used *optional*	Max snap and clone logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snapshot_savings *optional*	Max snapshot savings space during the period.	number (float)
max_thin_savings *optional*	Max thin savings ratio during the period.	number (float)
max_unique_physical_used *optional*	Max unique physical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
vm_id *optional*	Unique identifier representing a specific virtual machine.	string

base_space_metrics_by_volume

Space metrics for the volume collected at five minute interval.

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
logical_provisioned *optional*	Configured size in bytes of a volume which amount of data can be written to. This metric includes primaries, snaps and clones. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
logical_used *optional*	Amount of data in bytes host has written to a volume without any deduplication, compression or sharing. This metric includes primaries, snaps and clones. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
thin_savings *optional*	Ratio of all the volumes provisioned to data being written to them. For example, an appliance has two 2 GB volumes and have written 500 MB of data to them. The thin savings would be (2 GB * 2) / (0.5 GB * 2) or 4:1, so the thin_savings value would be 4.0.	number (float)
timestamp *optional*	End of sample period.	string (date-time)
volume_id *optional*	ID of the volume.	string

base_space_metrics_by_volume_family

Space metrics for the volume family collected at five minute interval.

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
family_id *optional*	ID of the family.	string

Name	Description	Schema
logical_provisioned *optional*	Configured size in bytes of a volume which amount of data can be written to. This metric includes primaries, snaps and clones. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
logical_used *optional*	Amount of data in bytes host has written to a volume family without any deduplication, compression or sharing. This metric includes primaries, snaps and clones. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
shared_logical_used *optional*	Amount of space the volume family needs to hold the data written by host and shared by snaps and fast-clones in the family. This does not include deduplication or compression. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
snap_clone_logical_used *optional*	Total Amount of data in bytes host has written to all volumes in the volume family without any deduplication, compression or sharing. This metric includes snaps and clones in the volume family. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
snapshot_savings *optional*	Ratio of the amount of space that would have been used by snapshots if space efficiency was not applied to logical space used solely by snapshots. For example, a volume is provisioned as 1 GB bytes and it has two snapshots. Each snapshot has 200 MB of data. Snapshot savings will be (1 GB + 1 GB) / (0.2 GB + 0.2 GB) or 5:1. The snapshot_savings value will be 5 in this case.	number (float)
timestamp *optional*	End of sample period.	string (date-time)

Name	Description	Schema
unique_physical_used *optional*	Amount of physical space volume family used after compression and deduplication. This is the space to be freed up if a volume family is removed from the appliance. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

base_space_metrics_by_volume_family_rollup

Space metrics for the volume family for one hour or one day period beginning with timestamp, including the maximum and final values for that period.

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
family_id *optional*	ID of the family.	string
last_logical_provisioned *optional*	Last logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_logical_used *optional*	Last logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_shared_logical_used *optional*	Last shared logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snap_clone_logical_used *optional*	Last snap and clone logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snapshot_savings *optional*	Last snapshot savings space during the period.	number (float)
last_unique_physical_used *optional*	Last unique physical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
max_logical_provisioned *optional*	Max logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_logical_used *optional*	Max logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_shared_logical_used *optional*	Max shared logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snap_clone_logical_used *optional*	Max snap and clone logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snapshot_savings *optional*	Max snapshot savings space during the period.	number (float)
max_unique_physical_used *optional*	Max unique physical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

base_space_metrics_by_volume_rollup

Summary of volume level space metric data for one hour or one day period beginning with timestamp, including the maximum and final values for that period.

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string

Name	Description	Schema
last_logical_provisioned *optional*	Last logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_logical_used *optional*	Last logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_thin_savings *optional*	Last thin savings ratio during the period.	number (float)
max_logical_provisioned *optional*	Max logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_logical_used *optional*	Max logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_thin_savings *optional*	Max thin savings ratio during the period.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
volume_id *optional*	ID of the volume.	string

base_wear_metrics_by_drive_instance

Wear metrics for the drives collected at twenty second interval.

Name	Description	Schema
drive_id *optional*	Reference to the associated drive which these metrics were recorded.	string

Name	Description	Schema
percent_endurance_remaining *optional*	The percentage of drive wear remaining.	number (float)
repeat_count *optional*	Number of times the metrics is repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

bond_instance

This resource type has queriable associations from ip_port, eth_port

Name	Description	Schema
eth_ports *optional*	This is the inverse of the resource type eth_port association.	< eth_port_instance > array
id *optional*	Unique identifier of the bond.	string
ip_ports *optional*	This is the inverse of the resource type ip_port association.	< ip_port_instance > array
is_link_up *optional*	Indicates whether the bond's link is up. Values are: **true** Link is up. **false** Link is down.	boolean
mode *optional*		BondingModeEnum
mode_l10n *optional*	Localized message string corresponding to mode	string

Name	Description	Schema
mtu *optional*	Maximum Transmission Unit (MTU) packet size that the bond can transmit, in bytes. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
name *optional*	Bond name. This property supports case-insensitive filtering	string

chap_config_instance

Name	Description	Schema
id *optional*	Unique id of the CHAP config settings instance (always "0").	string
mode *optional*		CHAPModeEnum
mode_l10n *optional*	Localized message string corresponding to mode	string

chap_config_modify

Name	Schema
mode *required*	CHAPModeEnum

chap_credentials_instance

Information about the initiator, target session, or discovery CHAP secrets.

Name	Description	Schema
initiator_discovery_password *optional*	Password used by the initiator to authenticate the target during discovery authentication. Mutual CHAP mode only.	string (password)
initiator_discovery_username *optional*	Username used by the initiator to authenticate the target during discovery authentication. Mutual CHAP mode only.	string

Name	Description	Schema
initiator_session_password *optional*	Password used by the initiator to authenticate the target during session authentication. Mutual CHAP mode only.	string (password)
initiator_session_username *optional*	Username used by the initiator to authenticate the target during session authentication. Mutual CHAP mode only.	string
target_discovery_password *optional*	Password used by the target to authenticate the initiator during discovery authentication. Single CHAP mode only.	string (password)
target_discovery_username *optional*	Username used by the target to authenticate the initiator during discovery authentication. Single CHAP mode only.	string
target_session_password *optional*	Password used by the target to authenticate the initiator during session authentication. Single CHAP mode only.	string (password)
target_session_username *optional*	Username used by the target to authenticate the initiator during session authentication. Single CHAP mode only.	string

cluster_forecast

Name	Schema
metric_type *required*	ForecastMetricTypeEnum

cluster_forecast_response

Name	Description	Schema
high_value *optional*	Estimate of the upper bound of the 95% confidence interval for the forecast value at the given timestamp. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
low_value *optional*	Estimate of the lower bound of the 95% confidence interval for the forecast value at the given timestamp. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
mean_value *optional*	Estimate for the mean forecast value at the given timestamp. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
timestamp *optional*	Timestamp when the forecast was performed.	string (date-time)

cluster_instance

Name	Description	Schema
appliance_count *optional*	Number of appliances configured in this cluster. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
compatibility_level *optional*	The behavioral version of the software version API, and it is used to help ensure compatibility across potentially different software versions. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
global_id *optional*	The global id of the cluster.	string
id *optional*	The id of the cluster.	string
is_encryption_enabled *optional*	Whether or not Data at Rest Encryption is enabled on the cluster.	boolean
management_address *optional*	The management IP address.	string (ip-address)

Name	Description	Schema
master_appliance_id *optional*	The id of the appliance acting as master.	string
name *optional*	The name of the cluster.	string
physical_mtu *optional*	The physical ethernet port (eth_port resource) MTU setting, global for all ports in the cluster. This is the default MTU setting for IP traffic, and the upper limit on network-specific MTU settings (network resource), where this can be overridden for some specific kinds of traffic (management, data, and vmotion). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
state *optional*		ClusterStateEnum
state_l10n *optional*	Localized string corresponding to state.	string
storage_discovery_address *optional*	The floating storage discovery address for the cluster.	string (ip-address)

cluster_modify

Name	Description	Schema
name *optional*	The name of the cluster. The name can be up to 64 UTF-8 characters and cannot be an empty string. **Length** : `1 - 64`	string
physical_mtu *optional*	The physical ethernet port (eth_port resource) MTU setting, global for all ports in the cluster. This is the default MTU setting for IP traffic, and the upper limit on network-specific MTU settings (network resource), where this can be overridden for some specific kinds of traffic (management, data, and vmotion). This value must be in the range 1500-9000. **Minimum value** : `1500` **Maximum value** : `9000`	integer (int32)

cluster_time_to_full

Name	Schema
metric_type *required*	ForecastMetricTypeEnum

cluster_time_to_full_response

Name	Description	Schema
cluster_id *optional*	Unique ID of the cluster.	string
end_of_forecast *optional*	Timestamp of the end of the capacity forecast. If time to full estimates are null, the relevant forecast does not reach full capacity before it ends. In this case the end of the forecast can be used as a minimum for time to full.	string (date-time)
time_to_full *optional*	Estimated date-time at which the forecast value will reach full capacity.	string (date-time)
time_to_full_optimistic *optional*	Optimistic date-time for time to full based on the lower bound of the forecast 95% confidence interval.	string (date-time)
time_to_full_pessimistic *optional*	Pessimistic date-time for time to full based on the upper bound of the forecast 95% confidence interval.	string (date-time)
time_to_full_status *optional*		ForecastTimeToFullStatusEnum
time_to_full_status_l10n *optional*	Localized message string corresponding to time_to_full_status	string

copy_metrics_by_appliance

Copy metrics for the appliance.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Unique identifier of the appliance.	string
data_remaining *optional*	Number of bytes remaining to be copied at the end of this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
data_transferred *optional*	Number of bytes transferred during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
read_time *optional*	Time (in milliseconds) spent doing reads during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
session_type *optional*		CopySessionTypeEnum
session_type_l10n *optional*	Localized message string corresponding to session_type	string
timestamp *optional*	End of sampling period.	string (date-time)
transfer_rate *optional*	Data transfer rate (in bytes/second) computed using data_transferred and transfer_time.	number (float)

Name	Description	Schema
transfer_time *optional*	The time (in milliseconds) spent in copy activity during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
write_time *optional*	Time (in milliseconds) spent doing writes during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

copy_metrics_by_cluster

Copy metrics for the cluster.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
data_remaining *optional*	Number of bytes remaining to be copied at the end of this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
data_transferred *optional*	Number of bytes transferred during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
read_time *optional*	Time (in milliseconds) spent doing reads during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)

Name	Description	Schema
session_type *optional*		CopySessionTypeEnum
session_type_l10n *optional*	Localized message string corresponding to session_type	string
timestamp *optional*	End of sampling period.	string (date-time)
transfer_rate *optional*	Data transfer rate (in bytes/second) computed using data_transferred and transfer_time.	number (float)
transfer_time *optional*	The time (in milliseconds) spent in copy activity during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
write_time *optional*	Time (in milliseconds) spent doing writes during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

copy_metrics_by_remote_system

Cluster wide copy metrics for the remote system.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
data_remaining *optional*	Number of bytes remaining to be copied at the end of this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
data_transferred *optional*	Number of bytes transferred during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
entity *required*		MetricsEntityEnum

Name	Description	Schema
entity_l10n *optional*	Localized message string corresponding to entity	string
read_time *optional*	Time (in milliseconds) spent doing reads during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
remote_system_id *optional*	Unique identifier of the remote system.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
session_type *optional*		CopySessionTypeEnum
session_type_l10n *optional*	Localized message string corresponding to session_type	string
timestamp *optional*	End of sampling period.	string (date-time)
transfer_rate *optional*	Data transfer rate (in bytes/second) computed using data_transferred and transfer_time.	number (float)
transfer_time *optional*	The time (in milliseconds) spent in copy activity during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
write_time *optional*	Time (in milliseconds) spent doing writes during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

copy_metrics_by_vg

Cluster wide copy metrics for the volume group.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
data_remaining *optional*	Number of bytes remaining to be copied at the end of this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
data_transferred *optional*	Number of bytes transferred during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
read_time *optional*	Time (in milliseconds) spent doing reads during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
session_type *optional*		CopySessionTypeEnum
session_type_l10n *optional*	Localized message string corresponding to session_type	string
timestamp *optional*	End of sampling period.	string (date-time)

Name	Description	Schema
transfer_rate *optional*	Data transfer rate (in bytes/second) computed using data_transferred and transfer_time.	number (float)
transfer_time *optional*	The time (in milliseconds) spent in copy activity during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
vg_id *optional*	Unique identifier of the volume group.	string
write_time *optional*	Time (in milliseconds) spent doing writes during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

copy_metrics_by_volume

Cluster wide copy metrics for the volume.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
data_remaining *optional*	Number of bytes remaining to be copied at the end of this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
data_transferred *optional*	Number of bytes transferred during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
read_time *optional*	Time (in milliseconds) spent doing reads during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
session_type *optional*		CopySessionTypeEnum
session_type_l10n *optional*	Localized message string corresponding to session_type	string
timestamp *optional*	End of sampling period.	string (date-time)
transfer_rate *optional*	Data transfer rate (in bytes/second) computed using data_transferred and transfer_time.	number (float)
transfer_time *optional*	The time (in milliseconds) spent in copy activity during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
volume_id *optional*	Unique identifier of the volume.	string
write_time *optional*	Time (in milliseconds) spent doing writes during this sampling period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

create_response

Create response for an operation.

Name	Description	Schema
id *optional*	Unique identifier of the new instance created.	string

data_connection_instance

Data connection status between the local node and a remote target.

Name	Description	Schema
initiator_address *optional*	Initiating address from the local node.	string (ip-address)
node_id *optional*	Unique identifier of the local, initiating node.	string
status *optional*	Status of the data connection.	TransitConnectionStatusEnum
status_l10n *optional*	Localized message string corresponding to status	string
target_address *optional*	Target address from the remote system.	string (ip-address)

discovered_initiator_instance

An initiator currently connected to the cluster, but not associated with any host.

Name	Description	Schema
name *optional*	IQN or WWN of the initiator	string
protocol_type *optional*		InitiatorProtocolTypeEnum
protocol_type_l10n *optional*	Localized message string corresponding to protocol_type	string

dns_instance

Name	Description	Schema
addresses *optional*	DNS server addresses in IPv4 or IPv6 format.	< string (ip-address) > array

Name	Description	Schema
id *optional*	Unique identifier of the DNS setting.	string

dns_modify

Name	Description	Schema
addresses *required*	DNS server addresses in IPv4 or IPv6 format.	< string (ip-address) > array

email_notify_destination_create

Name	Description	Schema
email_address *required*	Email address to receive notifications.	string
notify_critical *optional*	Whether to send notifications for critical alerts.	boolean
notify_info *optional*	Whether send notifications for informational alerts.	boolean
notify_major *optional*	Whether to send notifications for major alerts.	boolean
notify_minor *optional*	Whether to send notifications for minor alerts.	boolean

email_notify_destination_instance

Name	Description	Schema
email_address *optional*	Email address to receive notifications.	string
id *optional*	Unique identifier of the email notification destination.	string
notify_critical *optional*	Whether to send notifications for critical alerts.	boolean

Name	Description	Schema
notify_info *optional*	Whether to send notifications for informational alerts.	boolean
notify_major *optional*	Whether to send notifications for major alerts.	boolean
notify_minor *optional*	Whether to send notifications for minor alerts.	boolean

email_notify_destination_modify

Name	Description	Schema
email_address *optional*	Email address to receive notifications.	string
notify_critical *optional*	Whether to send notifications for critical alerts.	boolean
notify_info *optional*	Whether to send notifications for informational alerts.	boolean
notify_major *optional*	Whether to send notifications for major alerts.	boolean
notify_minor *optional*	Whether to send notifications for minor alerts.	boolean

error_instance

Filtering on the fields of this embedded resource is not supported.

Name	Description	Schema
arguments *optional*	Arguments (if applicable) for the error message.	< string > array
code *optional*	Hexadecimal error code for an import error.	string
message_l10n *optional*	Localized error message.	string

error_message

Error message for an operation.

Name	Description	Schema
arguments *optional*	Arguments (if applicable) for the error message.	< string > array
code *optional*	Hexadecimal error code of the message.	string
message_l10n *optional*	The message description in the specified locale with arguments substituted.	string
severity *optional*		MessageSeverityEnum

error_response

Error response for an operation. Contains an array of localized messages.

Name	Schema
messages *optional*	< error_message > array

esxi_credentials

Credentials required for re-registering the ESXi hosts in the vCenter. Should be passed only when ESXi host addresses or management network VLAN / prefix / gateway are changed during the reconfiguration of the PowerStore X model appliances.

Type : < esxi_credentials > array

esxi_credentials

Name	Description	Schema
node_id *optional*	Node identifier corresponding to the ESXi host.	string
password *optional*	ESXi host root password.	string (password)

eth_port_instance

This resource type has queriable associations from ip_port, appliance, hardware, bond, eth_port

Name	Description	Schema
appliance *optional*	This is the embeddable reference form of appliance_id attribute.	appliance_instance
appliance_id *optional*	The id of the appliance containing the port.	string
bond *optional*	This is the embeddable reference form of bond_id attribute.	bond_instance
bond_id *optional*	Unique identifier of the bond containing the port, or null if the port is not in a bond.	string
current_mtu *optional*	The Maximum transmission unit (MTU) packet size that the Ethernet port can transmit. The fabric MTU can be set to any value in the range [1500-9000]. The network MTU can be set to any value in the range [1280-9000]. The network MTU must be less than or equal to the current fabric MTU. **Minimum value** : `1280` **Maximum value** : `9000`	integer (int32)
current_speed *optional*		EthPortSpeedEnum
current_speed_l10n *optional*	Localized message string corresponding to current_speed	string
hypervisor_port_id *optional*	Unique identifier of the virtual switch port associated with the hypervisor port. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
hypervisor_port_name *optional*	Hypervisor front-end port name capabilities. This property supports case-insensitive filtering	string
hypervisor_vswitch_id *optional*	Unique identifier of the virtual switch associated with the hypervisor port.	string

Name	Description	Schema
hypervisor_vswitch_name *optional*	Name of the virtual switch associated with the hypervisor port. This property supports case-insensitive filtering	string
id *optional*	Ethernet port instance identifier.	string
io_module *optional*	This is the embeddable reference form of io_module_id attribute.	hardware_instance
io_module_id *optional*	Unique identifier of the hardware instance of type 'IO_Module' handling the port.	string
ip_ports *optional*	This is the inverse of the resource type ip_port association.	< ip_port_instance > array
is_hypervisor_managed *optional*	Indicates whether the port is managed by a hypervisor.	boolean
is_link_up *optional*	Indicates whether the Ethernet port's link is up. Values are: **true** Link is up. **false** Link is down.	boolean
mac_address *optional*	Ethernet port MAC address.	string
name *optional*	Ethernet port name. This property supports case-insensitive filtering	string
node *optional*	This is the embeddable reference form of node_id attribute.	hardware_instance
node_id *optional*	Unique identifier of the hardware instance of type 'Node' containing the port.	string
partner *optional*	This is the embeddable reference form of partner_id attribute.	eth_port_instance

Name	Description	Schema
partner_id *optional*	Unique identifier of the partner port instance.	string
port_connector_type *optional*		FrontEndPortConnectionTypeEnum
port_connector_type_l10n *optional*	Localized message string corresponding to port_connector_type	string
port_index *optional*	The index of the Ethernet port in IO module. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
requested_speed *optional*		EthPortSpeedEnum
requested_speed_l10n *optional*	Localized message string corresponding to requested_speed	string
sfp *optional*	This is the embeddable reference form of sfp_id attribute.	hardware_instance
sfp_id *optional*	Unique identifier of the hardware instance of type 'SFP' (Small Form-factor Pluggable) inserted into the port.	string
supported_speeds *optional*	The list of supported transmission speeds for Ethernet port.	< EthPortSpeedEnum > array
supported_speeds_l10n *optional*	Localized message array corresponding to supported_speeds	< string > array

eth_port_modify

Name	Schema
requested_speed *required*	EthPortSpeedEnum

event_instance

An event indicates that something of interest happened in the system. Normally, an event that requires attention will generate an alert as well. So, although they may be interesting for troubleshooting, it is not necessary to monitor events.

Name	Description	Schema
description_l10n *optional*	Description of this event.	string
event_code *optional*	Identifies the specific kind of event that has occurred.	string
generated_timestamp *optional*	Timestamp at which this event occured.	string (date-time)
id *optional*	Unique identifier of this occurrence of an event.	string
repair_flow_l10n *optional*	Suggestions for how to resolve any problems that may arise from this event.	string
resource_id *optional*	Unique identifier of the resource instance which generated this event.	string
resource_name *optional*	Name of the resource instance which generated this event. This property supports case-insensitive filtering	string
resource_type *optional*	The type of the object which generated this event.	ResourceTypeEnum
resource_type_l10n *optional*	Localized message string corresponding to resource_type	string
severity *optional*	The severity of the event.	SeverityEnum
severity_l10n *optional*	Localized message string corresponding to severity	string

Name	Description	Schema
system_impact_l10n *optional*	Describes the possible effect on the system of this event.	string

fc_port_instance

This resource type has queriable associations from appliance, hardware, fc_port

Name	Description	Schema
appliance *optional*	This is the embeddable reference form of appliance_id attribute.	appliance_instance
appliance_id *optional*	Unique identifier of the appliance containing the port.	string
current_speed *optional*		FcPortSpeedEnum
current_speed_l10n *optional*	Localized message string corresponding to current_speed	string
id *optional*	Unique identifier of the port.	string
io_module *optional*	This is the embeddable reference form of io_module_id attribute.	hardware_instance
io_module_id *optional*	Unique identifier of the hardware instance of type 'IO_Module' handling the port.	string
is_link_up *optional*	Indicates whether the port's link is up. Values are: **true** Link is up. **false** Link is down.	boolean
name *optional*	Name of the port. This property supports case-insensitive filtering	string

Name	Description	Schema
node *optional*	This is the embeddable reference form of node_id attribute.	hardware_instance
node_id *optional*	Unique identifier of the hardware instance of type 'Node' containing the port.	string
partner *optional*	This is the embeddable reference form of partner_id attribute.	fc_port_instance
partner_id *optional*	Unique identifier of the partner port.	string
port_connector_type *optional*		FrontEndPortConnectionTypeEnum
port_connector_type_l10n *optional*	Localized message string corresponding to port_connector_type	string
port_index *optional*	Index of the port in the IO module. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
requested_speed *optional*		FcPortSpeedEnum
requested_speed_l10n *optional*	Localized message string corresponding to requested_speed	string
sfp *optional*	This is the embeddable reference form of sfp_id attribute.	hardware_instance
sfp_id *optional*	Unique identifier of the hardware instance of type 'SFP' (Small Form-factor Pluggable) inserted into the port.	string
supported_speeds *optional*	List of supported transmission speeds for the port.	< FcPortSpeedEnum > array

Name	Description	Schema
supported_speeds_l10n *optional*	Localized message array corresponding to supported_speeds	< string > array
wwn *optional*	World Wide Name (WWN) of the port.	string

fc_port_modify

Name	Schema
requested_speed *required*	FcPortSpeedEnum

file_dns_create

Name	Description	Schema
domain *required*	Name of the DNS domain, where the NAS Server does host names lookup when an FQDN is not specified in the request. **Length** : `1 - 255`	string
ip_addresses *required*	The list of DNS server IP addresses. The addresses may be IPv4 or IPv6.	< string (ip-address) > array
nas_server_id *required*	Unique identifier of the associated NAS Server instance that uses this DNS object. Only one DNS object per NAS Server is supported.	string
transport *optional*		FileDNSTransportEnum

file_dns_instance

This resource type has queriable association from nas_server

Name	Description	Schema
domain *optional*	Name of the DNS domain, where the NAS Server does host names lookup when an FQDN is not specified in the request.	string

Name	Description	Schema
id *optional*	Unique identifier of the DNS server.	string
ip_addresses *optional*	The list of DNS server IP addresses. The addresses may be IPv4 or IPv6.	< string (ip-address) > array
nas_server *optional*	This is the embeddable reference form of nas_server_id attribute.	nas_server_instance
nas_server_id *optional*	Unique identifier of the associated NAS Server instance that uses this DNS object. Only one DNS object per NAS Server is supported.	string
transport *optional*		FileDNSTransportEnum
transport_l10n *optional*	Localized message string corresponding to transport	string

file_dns_modify

Name	Description	Schema
add_ip_addresses *optional*	IP addresses to add to the current list. The addresses may be IPv4 or IPv6. Error occurs if an IP address already exists. Cannot be combined with ip_addresses.	< string (ip-address) > array
domain *optional*	Name of the DNS domain, where the NAS Server does host names lookup when an FQDN is not specified in the request. **Length** : 1 - 255	string
ip_addresses *optional*	A new list of DNS server IP addresses to replace the existing list. The addresses may be IPv4 or IPv6.	< string (ip-address) > array
remove_ip_addresses *optional*	IP addresses to remove from the current list. The addresses may be IPv4 or IPv6. Error occurs if IP address is not present. Cannot be combined with ip_addresses.	< string (ip-address) > array
transport *optional*		FileDNSTransportEnum

file_ftp_create

Name	Description	Schema
audit_dir *optional*	(Applies when the value of is_audit_enabled is true.) Directory of FTP/SFTP audit files. Logs are saved in '/' directory (default) or in a mounted file system (Absolute path of the File system directory which should already exist).	string
audit_max_size *optional*	(Applies when the value of is_audit_enabled is true.) Maximum size of all (current plus archived) FTP/SFTP audit files, in bytes. There is a maximum of 5 audit files, 1 current audit file (ftp.log) and 4 archived audit files. The maximum value for this setting is 5GB (each file of 1GB) if the audit directory belongs to a user file system of the NAS server. If the audit directory is '/', the maximum value is 5MB (each file of 1MB). The minimum value is 40kB (each file of 8KB) on any file system. **Minimum value** : `40960` **Maximum value** : `9223372036854775807`	integer (int64)
default_homedir *optional*	(Applies when the value of is_homedir_limit_enabled is false.) Default directory of FTP and SFTP clients who have a home directory that is not defined or accessible.	string
groups *optional*	Allowed or denied user groups, depending on the value of the is_allowed_groups attribute. - If allowed groups exist, only users who are members of these groups and no others can connect to the NAS server through FTP or SFTP. - If denied groups exist, all users who are members of those groups always have access denied to the NAS server through FTP or SFTP. - If the list is empty, there is no restriction to the NAS server access through FTP or SFTP based on the user group.	< string > array
hosts *optional*	Allowed or denied hosts, depending on the value of the is_allowed_hosts attribute. A host is defined using its IP address. Subnets using CIDR notation are also supported. - If allowed hosts exist, only those hosts and no others can connect to the NAS server through FTP or SFTP. - If denied hosts exist, they always have access denied to the NAS server through FTP or SFTP. - If the list is empty, there is no restriction to NAS server access through FTP or SFTP based on the host IP address. - The addresses may be IPv4 or IPv6.	< string (ip-address) > array

Name	Description	Schema
is_allowed_groups *optional*	Indicates whether the groups attribute contains allowed or denied user groups. Values are: - true - groups contains allowed user groups. - false - groups contains denied user groups. **Default** : `true`	boolean
is_allowed_hosts *optional*	Indicates whether the hosts attribute contains allowed or denied hosts. Values are: true - hosts contains allowed hosts. false - hosts contains denied hosts. **Default** : `true`	boolean
is_allowed_users *optional*	Indicates whether the users attribute contains allowed or denied users. Values are: - true - users contains allowed users. - false - users contains denied users. **Default** : `true`	boolean
is_anonymous_authentication_enabled *optional*	Indicates whether FTP clients can be authenticated anonymously. Values are: - true - Anonymous user name is accepted. - false - Anonymous user name is not accepted. **Default** : `false`	boolean
is_audit_enabled *optional*	Indicates whether the activity of FTP and SFTP clients is tracked in audit files. Values are: - true - FTP/SFTP activity is tracked. - false - FTP/SFTP activity is not tracked. **Default** : `false`	boolean
is_ftp_enabled *optional*	Indicates whether the FTP server is enabled on the NAS server specified in the nasServer attribute. Values are: - true - FTP server is enabled on the specified NAS server. - false - FTP server is disabled on the specified NAS server. **Default** : `false`	boolean
is_homedir_limit_enabled *optional*	Indicates whether an FTP or SFTP user access is limited to the home directory of the user. Values are: - true - An FTP or SFTP user can access only the home directory of the user. - false - FTP and SFTP users can access any NAS server directory, according to NAS server permissions. **Default** : `true`	boolean
is_sftp_enabled *optional*	Indicates whether the SFTP server is enabled on the NAS server specified in the nasServer attribute. Values are: - true - SFTP server is enabled on the specified NAS server. - false - SFTP server is disabled on the specified NAS server. **Default** : `false`	boolean

Name	Description	Schema
is_smb_authentication_enabled *optional*	Indicates whether FTP and SFTP clients can be authenticated using an SMB user name. These user names are defined in a Windows domain controller, and their formats are user@domain or domain\user. Values are: - true - SMB user names are accepted for authentication. - false - SMB user names are not accepted for authentication. **Default** : `true`	boolean
is_unix_authentication_enabled *optional*	Indicates whether FTP and SFTP clients can be authenticated using a Unix user name. Unix user names are defined in LDAP, NIS servers or in local passwd file. Values are: - true - Unix user names are accepted for authentication. - false - Unix user names are not accepted for authentication. **Default** : `true`	boolean
message_of_the_day *optional*	Message of the day displayed on the console of FTP clients after their authentication. The length of this message is limited to 511 bytes of UTF-8 characters, and the length of each line is limited to 80 bytes.	string
nas_server_id *required*	Unique identifier of the NAS server that is configured with the FTP server.	string
users *optional*	Allowed or denied users, depending on the value of the is_allowed_user attribute. - If allowed users exist, only those users and no others can connect to the NAS server through FTP or SFTP. - If denied users exist, they have always access denied to the NAS server through FTP or SFTP. - If the list is empty, there is no restriction to the NAS server access through FTP or SFTP based on the user name.	< string > array
welcome_message *optional*	Welcome message displayed on the console of FTP and SFTP clients before their authentication. The length of this message is limited to 511 bytes of UTF-8 characters, and the length of each line is limited to 80 bytes.	string

file_ftp_instance

This resource type has queriable association from nas_server

Name	Description	Schema
audit_dir *optional*	(Applies when the value of is_audit_enabled is true.) Directory of FTP/SFTP audit files. Logs are saved in '/' directory (default) or in a mounted file system (Absolute path of the File system directory which should already exist).	string
audit_max_size *optional*	(Applies when the value of is_audit_enabled is true.) Maximum size of all (current plus archived) FTP/SFTP audit files, in bytes. There is a maximum of 5 audit files, 1 current audit file (ftp.log) and 4 archived audit files. The maximum value for this setting is 5GB (each file of 1GB) if the audit directory belongs to a user file system of the NAS server. If the audit directory is '/', the maximum value is 5MB (each file of 1MB). The minimum value is 40kB (each file of 8KB) on any file system. **Minimum value** : `40960` **Maximum value** : `9223372036854775807`	integer (int64)
default_homedir *optional*	(Applies when the value of is_homedir_limit_enabled is false.) Default directory of FTP and SFTP clients that have a home directory which is not defined or accessible.	string
groups *optional*	Allowed or denied user groups, depending on the value of the is_allowed_groups attribute. - If allowed groups exist, only users who are members of these groups and no others can connect to the NAS server through FTP or SFTP. - If denied groups exist, all users who are members of those groups always have access denied to the NAS server through FTP or SFTP. - If the list is empty, there is no restriction to the NAS server access through FTP or SFTP based on the user group.	< string > array
hosts *optional*	Allowed or denied hosts, depending on the value of the is_allowed_hosts attribute. A host is defined using its IP address. Subnets using CIDR notation are also supported. - If allowed hosts exist, only those hosts and no others can connect to the NAS server through FTP or SFTP. - If denied hosts exist, they always have access denied to the NAS server through FTP or SFTP. - If the list is empty, there is no restriction to NAS server access through FTP or SFTP based on the host IP address. - The addresses may be IPv4 or IPv6.	< string (ip-address) > array
id *optional*	Unique identifier of the FTP server.	string

Name	Description	Schema
is_allowed_groups *optional*	Indicates whether the groups attribute contains allowed or denied user groups. Values are: - true - groups contains allowed user groups. - false - groups contains denied user groups. **Default** : `true`	boolean
is_allowed_hosts *optional*	Indicates whether the hosts attribute contains allowed or denied hosts. Values are: true - hosts contains allowed hosts. false - hosts contains denied hosts. **Default** : `true`	boolean
is_allowed_users *optional*	Indicates whether the users attribute contains allowed or denied users. Values are: - true - users contains allowed users. - false - users contains denied users. **Default** : `true`	boolean
is_anonymous_authentication_enabled *optional*	Indicates whether FTP clients can be authenticated anonymously. Values are: - true - Anonymous user name is accepted. - false - Anonymous user name is not accepted. **Default** : `true`	boolean
is_audit_enabled *optional*	Indicates whether the activity of FTP and SFTP clients is tracked in audit files. Values are: - true - FTP/SFTP activity is tracked. - false - FTP/SFTP activity is not tracked. **Default** : `false`	boolean
is_ftp_enabled *optional*	Indicates whether the FTP server is enabled on the NAS server. Values are: - true - FTP server is enabled on the specified NAS server. - false - FTP server is disabled on the specified NAS server.	boolean
is_homedir_limit_enabled *optional*	Indicates whether an FTP or SFTP user access is limited to his home directory. Values are: - true - An FTP or SFTP user can access his or her own home directory only. - false - FTP and SFTP users can access any NAS server directory, according to NAS server permissions.	boolean
is_sftp_enabled *optional*	Indicates whether the SFTP server is enabled on the NAS server. Values are: - true - SFTP server is enabled on the specified NAS server. - false - SFTP server is disabled on the specified NAS server. **Default** : `false`	boolean

Name	Description	Schema
is_smb_authentication_enabled *optional*	Indicates whether FTP and SFTP clients can be authenticated using an SMB user name. These user names are defined in a Windows domain controller, and their formats are user@domain or domain\user. Values are: - true - SMB user names are accepted for authentication. - false - SMB user names are not accepted for authentication. **Default** : `true`	boolean
is_unix_authentication_enabled *optional*	Indicates whether FTP and SFTP clients can be authenticated using a Unix user name. Unix user names are defined in LDAP, NIS servers or in local passwd file. Values are: - true - Unix user names are accepted for authentication. - false - Unix user names are not accepted for authentication. **Default** : `true`	boolean
message_of_the_day *optional*	Message of the day displayed on the console of FTP clients after their authentication. The length of this message is limited to 511 bytes of UTF-8 characters, and the length of each line is limited to 80 bytes.	string
nas_server *optional*	This is the embeddable reference form of nas_server_id attribute.	nas_server_instance
nas_server_id *optional*	Unique identifier of the NAS server that is configured with the FTP server.	string
users *optional*	Allowed or denied users, depending on the value of the is_allowed_users attribute. - If allowed users exist, only those users and no others can connect to the NAS server through FTP or SFTP. - If denied users exist, they have always access denied to the NAS server through FTP or SFTP. - If the list is empty, there is no restriction to the NAS server access through FTP or SFTP based on the user name.	< string > array
welcome_message *optional*	Welcome message displayed on the console of FTP and SFTP clients before their authentication. The length of this message is limited to 511 bytes of UTF-8 characters, and the length of each line is limited to 80 bytes.	string

file_ftp_modify

Name	Description	Schema
add_groups *optional*	Groups to add to the current groups. Error occurs if the group already exists. Cannot be combined with groups.	< string > array
add_hosts *optional*	Host IP addresses to add to the current hosts. The addresses may be IPv4 or IPv6. Error occurs if the IP address already exists. Cannot be combined with hosts.	< string (ip-address) > array
add_users *optional*	Users to add to the current users. Error occurs if the user already exist. Cannot be combined with users.	< string > array
audit_dir *optional*	(Applies when the value of is_audit_enabled is true.) Directory of FTP/SFTP audit files. Logs are saved in '/' directory (default) or in a mounted file system (Absolute path of the File system directory which should already exist).	string
audit_max_size *optional*	(Applies when the value of is_audit_enabled is true.) Maximum size of all (current plus archived) FTP/SFTP audit files, in bytes. There is a maximum of 5 audit files, 1 current audit file (ftp.log) and 4 archived audit files. The maximum value for this setting is 5GB (each file of 1GB) if the audit directory belongs to a user file system of the NAS server. If the audit directory is '/', the maximum value is 5MB (each file of 1MB). The minimum value is 40kB (each file of 8KB) on any file system. **Minimum value** : `40960` **Maximum value** : `9223372036854775807`	integer (int64)
default_homedir *optional*	(Applies when the value of is_homedir_limit_enabled is false.) Default directory of FTP and SFTP clients that have a home directory which is not defined or accessible.	string
groups *optional*	Allowed or denied user groups, depending on the value of the is_allowed_groups attribute. - If allowed groups exist, only users who are members of these groups and no others can connect to the NAS server through FTP or SFTP. - If denied groups exist, all users who are members of those groups always have access denied to the NAS server through FTP or SFTP. - If the list is empty, there is no restriction to the NAS server access through FTP or SFTP based on the user group.	< string > array

Name	Description	Schema
hosts *optional*	Allowed or denied hosts, depending on the value of the is_allowed_hosts attribute. A host is defined using its IP address. Subnets using CIDR notation are also supported. - If allowed hosts exist, only those hosts and no others can connect to the NAS server through FTP or SFTP. - If denied hosts exist, they always have access denied to the NAS server through FTP or SFTP. - If the list is empty, there is no restriction to NAS server access through FTP or SFTP based on the host IP address. - The addresses may be IPv4 or IPv6.	< string (ip-address) > array
is_allowed_groups *optional*	Indicates whether the groups attribute contains allowed or denied user groups. Values are: - true - groups contains allowed user groups. - false - groups contains denied user groups. **Default** : `true`	boolean
is_allowed_hosts *optional*	Indicates whether the hosts attribute contains allowed or denied hosts. Values are: true - hosts contains allowed hosts. false - hosts contains denied hosts. **Default** : `true`	boolean
is_allowed_users *optional*	Indicates whether the users attribute contains allowed or denied users. Values are: - true - users contains allowed users. - false - users contains denied users. **Default** : `true`	boolean
is_anonymous_authentication_enabled *optional*	Indicates whether FTP clients can be authenticated anonymously. Values are: - true - Anonymous user name is accepted. - false - Anonymous user name is not accepted. **Default** : `true`	boolean
is_audit_enabled *optional*	Indicates whether the activity of FTP and SFTP clients is tracked in audit files. Values are: - true - FTP/SFTP activity is tracked. - false - FTP/SFTP activity is not tracked. **Default** : `false`	boolean
is_ftp_enabled *optional*	Indicates whether the FTP server is enabled on the NAS server specified in the nasServer attribute. Values are: - true - FTP server is enabled on the specified NAS server. - false - FTP server is disabled on the specified NAS server.	boolean

Name	Description	Schema
is_homedir_limit_enabled *optional*	Indicates whether an FTP or SFTP user access is limited to the home directory of the user. Values are: - true - An FTP or SFTP user can access only the home directory of the user. - false - FTP and SFTP users can access any NAS server directory, according to NAS server permissions.	boolean
is_sftp_enabled *optional*	Indicates whether the SFTP server is enabled on the NAS server specified in the nasServer attribute. Values are: - true - SFTP server is enabled on the specified NAS server. - false - SFTP server is disabled on the specified NAS server. **Default** : `false`	boolean
is_smb_authentication_enabled *optional*	Indicates whether FTP and SFTP clients can be authenticated using an SMB user name. These user names are defined in a Windows domain controller, and their formats are user@domain or domain\user. Values are: - true - SMB user names are accepted for authentication. - false - SMB user names are not accepted for authentication. **Default** : `true`	boolean
is_unix_authentication_enabled *optional*	Indicates whether FTP and SFTP clients can be authenticated using a Unix user name. Unix user names are defined in LDAP, NIS servers or in local passwd file. Values are: - true - Unix user names are accepted for authentication. - false - Unix user names are not accepted for authentication. **Default** : `true`	boolean
message_of_the_day *optional*	Message of the day displayed on the console of FTP clients after their authentication. The length of this message is limited to 511 bytes of UTF-8 characters, and the length of each line is limited to 80 bytes.	string
remove_groups *optional*	Groups to remove from the current groups. Error occurs if the group is not present. Cannot be combined with groups.	< string > array
remove_hosts *optional*	Host IP addresses to remove from the current hosts. The addresses may be IPv4 or IPv6. Error occurs if the IP address is not present. Cannot be combined with hosts.	< string (ip-address) > array
remove_users *optional*	Users to remove from the current users. Error occurs if the user is not present. Cannot be combined with users.	< string > array

Name	Description	Schema
users *optional*	Allowed or denied users, depending on the value of the is_allowed_users attribute. - If allowed users exist, only those users and no others can connect to the NAS server through FTP or SFTP. - If denied users exist, they always have access denied to the NAS server through FTP or SFTP. - If the list is empty, there is no restriction to the NAS server access through FTP or SFTP based on the user name.	< string > array
welcome_message *optional*	Welcome message displayed on the console of FTP and SFTP clients before their authentication. The length of this message is limited to 511 bytes of UTF-8 characters, and the length of each line is limited to 80 bytes.	string

file_interface_create

Attributes for the create operation.

Name	Description	Schema
gateway *optional*	Gateway address for the network interface. IPv4 and IPv6 are supported. **Length** : `1 - 45`	string (ip-address)
ip_address *required*	IP address of the network interface. IPv4 and IPv6 are supported. **Length** : `1 - 45`	string (ip-address)
is_disabled *optional*	Indicates whether the network interface is disabled. **Default** : `false`	boolean
nas_server_id *required*	Unique identifier of the NAS server to which the network interface belongs, as defined by the nas_server resource type.	string
prefix_length *required*	Prefix length for the interface. IPv4 and IPv6 are supported. **Minimum value** : `1` **Maximum value** : `128`	integer (int32)
role *optional*		FileInterfaceRoleEnum

Name	Description	Schema
vlan_id *optional*	Virtual Local Area Network (VLAN) identifier for the interface. The interface uses the identifier to accept packets that have matching VLAN tags. **Default** : `0` **Minimum value** : `0` **Maximum value** : `4094`	integer (int32)

file_interface_instance

This resource type has queriable associations from nas_server, file_interface_route

Name	Description	Schema
file_interface_routes *optional*	This is the inverse of the resource type file_interface_route association.	< file_interface_route_instance > array
gateway *optional*	Gateway address for the network interface. IPv4 and IPv6 are supported.	string (ip-address)
id *optional*	Unique identifier of the file interface.	string
ip_address *optional*	IP address of the network interface. IPv4 and IPv6 are supported.	string (ip-address)
is_disabled *optional*	Indicates whether the network interface is disabled. **Default** : `false`	boolean
name *optional*	Name of the network interface. This property supports case-insensitive filtering	string
nas_server *optional*	This is the embeddable reference form of nas_server_id attribute.	nas_server_instance
nas_server_id *optional*	Unique identifier of the NAS server.	string
prefix_length *optional*	Prefix length for the interface. IPv4 and IPv6 are supported. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)

Name	Description	Schema
role *optional*		FileInterfaceRoleEnum
role_l10n *optional*	Localized message string corresponding to role	string
vlan_id *optional*	Virtual Local Area Network (VLAN) identifier for the interface. The interface uses the identifier to accept packets that have matching VLAN tags. **Default** : `0` **Minimum value** : `0` **Maximum value** : `4094`	integer (int32)

file_interface_modify

Attributes for the modify operation.

Name	Description	Schema
gateway *optional*	Gateway address for the network interface. IPv4 and IPv6 are supported. **Length** : `0 - 45`	string (ip-address)
ip_address *optional*	IP address of the network interface. IPv4 and IPv6 are supported. **Length** : `1 - 45`	string (ip-address)
is_disabled *optional*	Indicates whether the network interface is disabled. **Default** : `false`	boolean
prefix_length *optional*	Prefix length for the interface. IPv4 and IPv6 are supported. **Minimum value** : `1` **Maximum value** : `128`	integer (int32)
vlan_id *optional*	Virtual Local Area Network (VLAN) identifier for the interface. The interface uses the identifier to accept packets that have matching VLAN tags. **Default** : `0` **Minimum value** : `0` **Maximum value** : `4094`	integer (int32)

file_interface_route_create

Name	Description	Schema
destination *optional*	IPv4 or IPv6 address of the target network node based on the specific route type. Values are: • For a default route, there is no value because the system will use the specified gateway IP address. • For a host route, the value is the host IP address. • For a subnet route, the value is a subnet IP address.	string (ip-address)
file_interface_id *required*	Unique identifier of the associated file interface.	string
gateway *optional*	IP address of the gateway associated with the route. **Length** : 1 - 45	string (ip-address)
prefix_length *optional*	IPv4 or IPv6 prefix length for the route. **Minimum value** : 1 **Maximum value** : 128	integer (int32)

file_interface_route_instance

This resource type has queriable association from file_interface

Name	Description	Schema
destination *optional*	IPv4 or IPv6 address of the target network node based on the specific route type. Values are: • For a default route, there is no value because the system will use the specified gateway IP address. • For a host route, the value is the host IP address. • For a subnet route, the value is a subnet IP address.	string (ip-address)
file_interface *optional*	This is the embeddable reference form of file_interface_id attribute.	file_interface_instance
file_interface_id *optional*	Unique identifier of the associated file interface.	string

Name	Description	Schema
gateway *optional*	IP address of the gateway associated with the route.	string (ip-address)
id *optional* *read-only*	Unique identifier of the file interface route.	string
operational_status *optional*		FileInterfaceRouteOperationalStatusEnum
operational_status_l10n *optional*	Localized message string corresponding to operational_status	string
prefix_length *optional*	IPv4 or IPv6 prefix length for the route. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)

file_interface_route_modify

Name	Description	Schema
destination *optional*	IPv4 or IPv6 address of the target network node based on the specific route type. Values are: • For a default route, there is no value because the system will use the specified gateway IP address. • For a host route, the value is the host IP address. • For a subnet route, the value is a subnet IP address.	string (ip-address)
gateway *optional*	IP address of the gateway associated with the route. **Length** : `0 - 45`	string (ip-address)
prefix_length *optional*	IPv4 or IPv6 prefix length for the route. **Minimum value** : `1` **Maximum value** : `128`	integer (int32)

file_kerberos_create

Name	Description	Schema
kdc_addresses *required*	Fully Qualified domain names of the Kerberos Key Distribution Center (KDC) servers. IPv4 and IPv6 addresses are not supported.	< string > array
nas_server_id *required*	Unique identifier of the associated NAS Server instance that uses this Kerberos object. Only one Kerberos object per NAS Server is supported.	string
port_number *optional*	KDC servers TCP port. **Default** : `88` **Minimum value** : `0` **Maximum value** : `65535`	integer (int32)
realm *required*	Realm name of the Kerberos Service. **Length** : `1 - 255`	string

file_kerberos_instance

This resource type has queriable association from nas_server

Name	Description	Schema
id *optional*	Unique identifier of the Kerberos service settings instance.	string
kdc_addresses *optional*	Fully Qualified domain names of the Kerberos Key Distribution Center (KDC) servers. IPv4 and IPv6 addresses are not supported.	< string > array
nas_server *optional*	This is the embeddable reference form of nas_server_id attribute.	nas_server_instance
nas_server_id *optional*	Unique identifier of the associated NAS Server instance that uses this Kerberos object. Only one Kerberos object per NAS Server is supported.	string
port_number *optional*	KDC servers TCP port. **Default** : `88` **Minimum value** : `0` **Maximum value** : `65535`	integer (int32)
realm *optional*	Realm name of the Kerberos Service.	string

file_kerberos_keytab_file

Name	Description	Schema
data *optional*	The current keytab file for secure NFS service.	string (binary)

file_kerberos_modify

Name	Description	Schema
add_kdc_addresses *optional*	Fully Qualified domain names of the Kerberos Key Distribution Center (KDC) servers to add to the current list. Error occurs if name already exists. Cannot be combined with kdc_addresses. IPv4 and IPv6 addresses are not supported.	< string > array
kdc_addresses *optional*	Fully Qualified domain names of the Kerberos Key Distribution Center (KDC) servers. IPv4 and IPv6 addresses are not supported.	< string > array
port_number *optional*	KDC servers TCP port. **Default** : `88` **Minimum value** : `0` **Maximum value** : `65535`	integer (int32)
realm *optional*	Realm name of the Kerberos Service. **Length** : `1 - 255`	string
remove_kdc_addresses *optional*	Fully Qualified domain names of the Kerberos Key Distribution Center (KDC) servers to remove from the current list. Error occurs if name is not in the existing list. Cannot be combined with kdc_addresses. IPv4 and IPv6 addresses are not supported.	< string > array

file_ldap_create

Arguments for the create operation.

Name	Description	Schema
addresses *optional*	The list of LDAP server IP addresses. The addresses may be IPv4 or IPv6.	< string (ip-address) > array

Name	Description	Schema
authentication_type *required*		FileLDAPAuthenticationTypeEnum
base_DN *required*	Name of the LDAP base DN. Base Distinguished Name (BDN) of the root of the LDAP directory tree. The appliance uses the DN to bind to the LDAP service and locate in the LDAP directory tree to begin a search for information. The base DN can be expressed as a fully-qualified domain name or in X.509 format by using the attribute dc=. For example, if the fully-qualified domain name is mycompany.com, the base DN is expressed as dc=mycompany,dc=com. **Length** : `3 - 255`	string
bind_DN *optional*	Bind Distinguished Name (DN) to be used when binding. **Length** : `0 - 1023`	string
bind_password *optional*	The associated password to be used when binding to the server. **Length** : `0 - 1023`	string (password)
is_smb_account_used *optional*	Indicates whether SMB authentication is used to authenticate to the LDAP server. Values are: **true** Indicates that the SMB settings are used for Kerberos authentication. **false** Indicates that Kerberos uses its own settings.	boolean
is_verify_server_certificate *optional*	Indicates whether Certification Authority certificate is used to verify the LDAP server certificate for secure SSL connections. Values are: **true** verifies LDAP server's certificate. **false** doesn't verify LDAP server's certificate.	boolean
nas_server_id *required*	Unique identifier of the associated NAS Server instance that will use this LDAP object. Only one LDAP object per NAS Server is supported.	string

Name	Description	Schema
password *optional*	The associated password for Kerberos authentication. **Length** : `0 - 1023`	string (password)
port_number *optional*	The TCP/IP port used by the NAS Server to connect to the LDAP servers. The default port number for LDAP is 389 and LDAPS is 636. **Minimum value** : `0` **Maximum value** : `65536`	integer (int32)
principal *optional*	Specifies the principal name for Kerberos authentication. **Length** : `0 - 1023`	string
profile_DN *optional*	For an iPlanet LDAP server, specifies the DN of the entry with the configuration profile. **Length** : `0 - 255`	string
protocol *optional*		FileLDAPProtocolEnum
realm *optional*	Specifies the realm name for Kerberos authentication. **Length** : `0 - 255`	string

file_ldap_instance

This resource type has queriable association from nas_server

Name	Description	Schema
addresses *optional*	The list of LDAP server IP addresses. The addresses may be IPv4 or IPv6.	< string (ip-address) > array
authentication_type *optional*		FileLDAPAuthenticationTypeEnum
authentication_type_l10n *optional*	Localized message string corresponding to authentication_type	string

Name	Description	Schema
base_DN *optional*	Name of the LDAP base DN. Base Distinguished Name (BDN) of the root of the LDAP directory tree. The appliance uses the DN to bind to the LDAP service and locate in the LDAP directory tree to begin a search for information. The base DN can be expressed as a fully-qualified domain name or in X.509 format by using the attribute dc=. For example, if the fully-qualified domain name is mycompany.com, the base DN is expressed as dc=mycompany,dc=com.	string
bind_DN *optional*	Bind Distinguished Name (DN) to be used when binding.	string
id *optional* *read-only*	Unique identifier of the LDAP service object.	string
is_certificate_uploaded *optional*	Indicates whether an LDAP certificate file has been uploaded. **Default** : `false`	boolean
is_config_file_uploaded *optional*	Indicates whether an LDAP configuration file has been uploaded. **Default** : `false`	boolean
is_smb_account_used *optional*	Indicates whether SMB authentication is used to authenticate to the LDAP server. Values are: **true** Indicates that the SMB settings are used for Kerberos authentication. **false** Indicates that Kerberos uses its own settings.	boolean
is_verify_server_certificate *optional*	Indicates whether a Certification Authority certificate is used to verify the LDAP server certificate for secure SSL connections. Values are: **true** verifies LDAP server’s certificate. **false** doesn’t verify LDAP server’s certificate.	boolean

Name	Description	Schema
nas_server *optional*	This is the embeddable reference form of nas_server_id attribute.	nas_server_instance
nas_server_id *optional*	Unique identifier of the associated NAS Server instance that uses this LDAP object. Only one LDAP object per NAS Server is supported.	string
port_number *optional*	The TCP/IP port used by the NAS Server to connect to the LDAP servers. The default port number for LDAP is 389 and LDAPS is 636. **Minimum value** : `0` **Maximum value** : `65535`	integer (int32)
principal *optional*	Specifies the principal name for Kerberos authentication.	string
profile_DN *optional*	For an iPlanet LDAP server, specifies the DN of the entry with the configuration profile.	string
protocol *optional*		FileLDAPProtocolEnum
protocol_l10n *optional*	Localized message string corresponding to protocol	string
realm *optional*	Specifies the realm name for Kerberos authentication.	string
schema_type *optional*		FileLDAPSchemaTypeEnum
schema_type_l10n *optional*	Localized message string corresponding to schema_type	string

file_ldap_modify

Name	Description	Schema
add_addresses *optional*	IP addresses to add to the current server IP addresses list. The addresses may be IPv4 or IPv6. Error occurs if an IP address already exists in the addresses list. Cannot be combined with addresses.	< string (ip-address) > array

Name	Description	Schema
addresses *optional*	The list of LDAP server IP addresses. The addresses may be IPv4 or IPv6.	< string (ip-address) > array
authentication_type *optional*		FileLDAPAuthenticationTypeEnum
base_DN *optional*	Name of the LDAP base DN. Base Distinguished Name (BDN) of the root of the LDAP directory tree. The appliance uses the DN to bind to the LDAP service and locate in the LDAP directory tree to begin a search for information. The base DN can be expressed as a fully-qualified domain name or in X.509 format by using the attribute dc=. For example, if the fully-qualified domain name is mycompany.com, the base DN is expressed as dc=mycompany,dc=com. **Length** : `3 - 255`	string
bind_DN *optional*	Bind Distinguished Name (DN) to be used when binding. **Length** : `0 - 1023`	string
bind_password *optional*	The associated password to be used when binding to the server. **Length** : `0 - 1023`	string (password)
is_smb_account_used *optional*	Indicates whether SMB authentication is used to authenticate to the LDAP server. Values are: **true** Indicates that the SMB settings are used for Kerberos authentication. **false** Indicates that Kerberos uses its own settings.	boolean
is_verify_server_certificate *optional*	Indicates whether Certification Authority certificate is used to verify the LDAP server certificate for secure SSL connections. Values are: **true** verifies LDAP server's certificate. **false** doesn't verify LDAP server's certificate.	boolean

Name	Description	Schema
password *optional*	The associated password for Kerberos authentication. **Length** : `0 - 1023`	string (password)
port_number *optional*	The TCP/IP port used by the NAS Server to connect to the LDAP servers. **Minimum value** : `0` **Maximum value** : `65536`	integer (int32)
principal *optional*	Specifies the principal name for Kerberos authentication. **Length** : `0 - 1023`	string
profile_DN *optional*	For an iPlanet LDAP server, specifies the DN of the entry with the configuration profile. **Length** : `0 - 255`	string
protocol *optional*		FileLDAPProtocolEnum
realm *optional*	Specifies the realm name for Kerberos authentication. **Length** : `0 - 255`	string
remove_addresses *optional*	IP addresses to remove from the current server IP addresses list. The addresses may be IPv4 or IPv6. Error occurs if an IP address does not exist in the addresses_list. Cannot be combined with addresses.	< string (ip-address) > array

file_ndmp_create

Name	Description	Schema
nas_server_id *required*	Unique identifier of the NAS server to be configured with these NDMP settings.	string
password *required*	Password for the NDMP service user.	string (password)
user_name *required*	User name for accessing the NDMP service.	string

file_ndmp_instance

This resource type has queriable association from nas_server

Name	Description	Schema
id *optional* *read-only*	Unique identifier of the NDMP service object.	string
nas_server *optional*	This is the embeddable reference form of nas_server_id attribute.	nas_server_instance
nas_server_id *optional*	Unique identifier of the NAS server to be configured with these NDMP settings.	string
user_name *optional*	User name for accessing the NDMP service.	string

file_ndmp_modify

Name	Description	Schema
password *optional*	Password for the NDMP service user.	string (password)
user_name *optional*	User name for accessing the NDMP service.	string

file_nis_create

Name	Description	Schema
domain *required*	Name of the NIS domain. **Length** : 1 - 255	string
ip_addresses *required*	The list of NIS server IP addresses.	< string (ip-address) > array
nas_server_id *required*	Unique identifier of the associated NAS Server instance that uses this NIS Service object. Only one NIS Service per NAS Server is supported.	string

file_nis_instance

This resource type has queriable association from nas_server

Name	Description	Schema
domain *optional*	Name of the NIS domain.	string
id *optional*	Unique identifier of the NIS Service.	string
ip_addresses *optional*	The list of NIS server IP addresses.	< string (ip-address) > array
nas_server *optional*	This is the embeddable reference form of nas_server_id attribute.	nas_server_instance
nas_server_id *optional*	Unique identifier of the associated NAS Server instance that uses this NIS Service object. Only one NIS Service per NAS Server is supported.	string

file_nis_modify

Name	Description	Schema
add_ip_addresses *optional*	IP addresses to add to the current list. The addresses may be IPv4 or IPv6. Error occurs if the IP address already exists. Cannot be combined with ip_addresses.	< string (ip-address) > array
domain *optional*	Name of the NIS domain. **Length** : `1 - 255`	string
ip_addresses *optional*	A new list of NIS server IP addresses to replace the existing list. The addresses may be IPv4 or IPv6.	< string (ip-address) > array
remove_ip_addresses *optional*	IP addresses to remove from the current list. The addresses may be IPv4 or IPv6. Error occurs if the IP address is not present. Cannot be combined with ip_addresses.	< string (ip-address) > array

file_system_clone

Name	Description	Schema
access_policy *optional*		FileSystemAccessPolicyEnum
description *optional*	Description of the clone. **Length** : `0 - 255`	string

Name	Description	Schema
folder_rename_policy *optional*		FileSystemFolderRenamePolicyEnum
is_async_MTime_enabled *optional*	Indicates whether asynchronous MTIME is enabled on the file system. Values are: **true** Asynchronous MTIME is enabled on the file system. **false** Asynchronous MTIME is disabled on the file system.	boolean
is_smb_no_notify_enabled *optional*	Indicates whether notifications of changes to directory file structure are enabled. **true** Change directory notifications are enabled. **false** Change directory notifications are disabled.	boolean
is_smb_notify_on_access_enabled *optional*	Indicates whether file access notifications are enabled on the file system. Values are: **true** File system notifications are enabled on the file system. **false** File system notifications are disabled on the file system.	boolean
is_smb_notify_on_write_enabled *optional*	Indicates whether file writes notifications are enabled on the file system. Values are: **true** File writes notifications are enabled on the file system. **false** File writes notifications are disabled on the file system.	boolean

Name	Description	Schema
is_smb_op_locks_enabled *optional*	Indicates if opportunistic file locking is enabled on the file system. Values are: **true** Opportunistic file locking is enabled on the file system. **false** Opportunistic file locking is disabled on the file system.	boolean
is_smb_sync_writes_enabled *optional*	Indicates whether the synchronous writes option is enabled on the file system. Values are: **true** Synchronous writes option is enabled on the file system. **false** Synchronous writes option is disabled on the file system.	boolean
locking_policy *optional*		FileSystemLockingPolicyEnum
name *required*	Name of the clone. **Length** : 1 - 255	string
smb_notify_on_change_dir_depth *optional*	Lowest directory level to which the enabled notifications apply, if any. **Minimum value** : 1 **Maximum value** : 512	integer (int32)

file_system_clone_response

File system clone created.

Name	Description	Schema
id *optional*	The id of the created clone.	string

file_system_create

Name	Description	Schema
access_policy *optional*		FileSystemAccessPolicyEnum

Name	Description	Schema
description *optional*	File system description. (255 UTF-8 characters). **Length** : `0 - 255`	string
folder_rename_policy *optional*		FileSystemFolderRenamePolicyEnum
is_async_MTime_enabled *optional*	Indicates whether asynchronous MTIME is enabled on the file system or protocol snaps that are mounted writeable. Values are: **true** Asynchronous MTIME is enabled on the file system. **false** Asynchronous MTIME is disabled on the file system. **Default** : `false`	boolean
is_smb_no_notify_enabled *optional*	Indicates whether notifications of changes to directory file structure are enabled. **true** Change directory notifications are enabled. **false** Change directory notifications are disabled. **Default** : `false`	boolean
is_smb_notify_on_access_enabled *optional*	Indicates whether file access notifications are enabled on the file system. Values are: **true** File access notifications are enabled on the file system. **false** File access notifications are disabled on the file system. **Default** : `false`	boolean

Name	Description	Schema
is_smb_notify_on_write_enabled *optional*	Indicates whether file writes notifications are enabled on the file system. Values are: **true** File writes notifications are enabled on the file system. **false** File writes notifications are disabled on the file system. **Default** : `false`	boolean
is_smb_op_locks_enabled *optional*	Indicates whether opportunistic file locking is enabled on the file system. Values are: **true** Opportunistic file locking is enabled on the file system. **false** Opportunistic file locking is disabled on the file system. **Default** : `true`	boolean
is_smb_sync_writes_enabled *optional*	Indicates whether the synchronous writes option is enabled on the file system. Values are: **true** Synchronous writes option is enabled on the file system. **false** Synchronous writes option is disabled on the file system. **Default** : `false`	boolean
locking_policy *optional*		FileSystemLockingPolicyEnum
name *required*	Name of the file system. (255 UTF-8 characters). **Length** : `1 - 255`	string
nas_server_id *required*	Id of the NAS Server on which the file system is mounted.	string
protection_policy_id *optional*	Id of the protection policy applied to the file system.	string

Name	Description	Schema
size_total *required*	Size that the file system presents to the host or end user. (Bytes) **Minimum value** : 3221225472 **Maximum value** : 281474976710656	integer (int64)
smb_notify_on_change_dir_depth *optional*	Lowest directory level to which the enabled notifications apply, if any. **Minimum value** : 1 **Maximum value** : 512	integer (int32)

file_system_instance

This resource type has queriable associations from nas_server, policy, file_tree_quota, file_user_quota, nfs_export, smb_share

Name	Description	Schema
access_policy *optional*		FileSystemAccessPolicyEnum
access_policy_l10n *optional*	Localized message string corresponding to access_policy	string
access_type *optional*		FileSystemSnapshotAccessTypeEnum
access_type_l10n *optional*	Localized message string corresponding to access_type	string
creation_timestamp *optional*	Time, in seconds, when the snapshot was created.	string (date-time)
creator_type *optional*		FileSystemSnapshotCreatorTypeEnum
creator_type_l10n *optional*	Localized message string corresponding to creator_type	string

Name	Description	Schema
default_hard_limit *optional*	Default hard limit of user quotas and tree quotas (bytes). (0 means 'No limitation'. This value can be used to compute the amount of space consumed without limiting the space). **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
default_soft_limit *optional*	Default soft limit of user quotas and tree quotas (bytes). (0 means 'No limitation') **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
description *optional*	File system description.	string
expiration_timestamp *optional*	Time, in seconds, when the snapshot will expire.	string (date-time)
file_tree_quotas *optional*	This is the inverse of the resource type file_tree_quota association.	< file_tree_quota_instance > array
file_user_quotas *optional*	This is the inverse of the resource type file_user_quota association.	< file_user_quota_instance > array
filesystem_type *optional*		FileSystemTypeEnum
filesystem_type_l10n *optional*	Localized message string corresponding to filesystem_type	string
folder_rename_policy *optional*		FileSystemFolderRenamePolicyEnum
folder_rename_policy_l10n *optional*	Localized message string corresponding to folder_rename_policy	string

Name	Description	Schema
grace_period *optional*	Grace period of soft limit (seconds): -1: Infinite grace period (Windows policy). 0: Use default grace period of 1 week (default). positive: Grace period after which the soft limit is treated as a hard limit (seconds). **Default** : -1 **Minimum value** : -1 **Maximum value** : 2147483647	integer (int32)
id *optional*	File system id.	string
is_async_MTime_enabled *optional*	Indicates whether asynchronous MTIME is enabled on the file system. Values are: **true** Asynchronous MTIME is enabled on the file system. **false** Asynchronous MTIME is disabled on the file system.	boolean
is_modified *optional*	Indicates whether the snapshot may have changed since it was created. Values are: true - Snapshot is or was shared with read/write access. false - Snapshot was never shared.	boolean
is_quota_enabled *optional*	Indicates whether quota is enabled. Values are: **true** Start tracking usages for all users on a file system or a quota tree, and user quota limits will be enforced. **false** Stop tracking usages for all users on a file system or a quota tree, and user quota limits will not be enforced.	boolean
is_smb_no_notify_enabled *optional*	Indicates whether notifications of changes to a directory file structure are enabled. **true** Change directory notifications are enabled. **false** Change directory notifications are disabled.	boolean

Name	Description	Schema
is_smb_notify_on_access_enabled *optional*	Indicates whether file access notifications are enabled on the file system. Values are: **true** File access notifications are enabled on the file system. **false** File access notifications are disabled on the file system.	boolean
is_smb_notify_on_write_enabled *optional*	Indicates whether file writes notifications are enabled on the file system. Values are: **true** File writes notification are enabled on the file system. **false** File writes notifications are disabled on the file system.	boolean
is_smb_op_locks_enabled *optional*	Indicates whether opportunistic file locking is enabled on the file system. Values are: **true** Opportunistic file locking is enabled on the file system. **false** Opportunistic file locking is disabled on the file system.	boolean
is_smb_sync_writes_enabled *optional*	Indicates whether the synchronous writes option is enabled on the file system. Values are: **true** Synchronous writes option is enabled on the file system. **false** Synchronous writes option is disabled on the file system.	boolean
last_refresh_timestamp *optional*	Time, in seconds, when the snapshot was last refreshed.	string (date-time)
last_writable_timestamp *optional*	If not mounted, and was previously mounted, the time (in seconds) of last mount. If never mounted, the value will be zero.	string (date-time)

Name	Description	Schema
locking_policy *optional*		FileSystemLockingPolicyEnum
locking_policy_l10n *optional*	Localized message string corresponding to locking_policy	string
name *optional*	File system name. This property supports case-insensitive filtering	string
nas_server *optional*	This is the embeddable reference form of nas_server_id attribute.	nas_server_instance
nas_server_id *optional*	Id of the NAS Server on which the file system is mounted.	string
nfs_exports *optional*	This is the inverse of the resource type nfs_export association.	< nfs_export_instance > array
parent_id *optional*	The object id of the parent of this file system (only applies to clones and snapshots). If the parent of a clone has been deleted the object_id will contain null.	string
protection_policy *optional*	This is the embeddable reference form of protection_policy_id attribute.	policy_instance
protection_policy_id *optional*	Id of the protection policy applied to the file system.	string
size_total *optional*	Size, in bytes, presented to the host or end user. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
size_used *optional*	Size used, in bytes, for the data and metadata of the file system. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
smb_notify_on_change_dir_depth *optional*	Lowest directory level to which the enabled notifications apply, if any. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
smb_shares *optional*	This is the inverse of the resource type smb_share association.	< smb_share_instance > array

file_system_modify

Name	Description	Schema
access_policy *optional*		FileSystemAccessPolicyEnum
default_hard_limit *optional*	Default hard limit of user quotas and tree quotas (bytes). The hard limit value is always rounded up to match the file system's physical block size. (0 means 'No limitation'. This value can be used to compute the amount of space consumed without limiting the space). **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
default_soft_limit *optional*	Default soft limit of user quotas and tree quotas (bytes). Value is always rounded up to match the file system's physical block size. (0 means 'No limitation'.) **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
description *optional*	File system description. (255 UTF-8 characters). **Length** : `0 - 255`	string
expiration_timestamp *optional*	Time when the snapshot will expire. Use 1970-01-01T00:00:00.000Z to set expiration timestamp to null.	string (date-time)
folder_rename_policy *optional*		FileSystemFolderRenamePolicyEnum

Name	Description	Schema
grace_period *optional*	Grace period of soft limits (seconds): -1: default: Infinite grace (Windows policy). 0: Use system default of 1 week. positive: Grace period after which the soft limit is treated as a hard limit (seconds). **Default** : -1 **Minimum value** : -1 **Maximum value** : 2147483647	integer (int32)
is_async_MTime_enabled *optional*	Indicates whether asynchronous MTIME is enabled on the file system or protocol snaps that are mounted writeable. Values are: **true** Asynchronous MTIME is enabled on the file system. **false** Asynchronous MTIME is disabled on the file system.	boolean
is_quota_enabled *optional*	Indicates whether quota is enabled. Quotas are not supported for read-only file systems. Default value for the grace period is set to infinite=-1 to match Windows' quota policy Values are: **true** Start tracking usages for all users on a file system or a quota tree, and user quota limits will be enforced. **false** Stop tracking usages for all users on a file system or a quota tree, and user quota limits will not be enforced.	boolean
is_smb_no_notify_enabled *optional*	Indicates whether notifications of changes to a directory file structure are enabled. Values are: **true** Change directory notifications are enabled. **false** Change directory notifications are disabled.	boolean

Name	Description	Schema
is_smb_notify_on_access_enabled *optional*	Indicates whether file access notifications are enabled on the file system. Values are: **true** File access notifications are enabled on the file system. **false** File access notifications on file access are disabled on the file system.	boolean
is_smb_notify_on_write_enabled *optional*	Indicates whether notifications on file writes are enabled on the file system. Values are: **true** File writes notifications are enabled on the file system. **false** File writes notifications are disabled on the file system.	boolean
is_smb_op_locks_enabled *optional*	Indicates whether opportunistic file locking is enabled on the file system. Values are: **true** Opportunistic file locking is enabled on the file system. **false** Opportunistic file locking is disabled on the file system.	boolean
is_smb_sync_writes_enabled *optional*	Indicates whether the synchronous writes option is enabled on the file system. Values are: **true** Synchronous writes option is enabled on the file system. **false** Synchronous writes option is disabled on the file system.	boolean
locking_policy *optional*		FileSystemLockingPolicyEnum
protection_policy_id *optional*	Id of the protection policy applied to the file system.	string

Name	Description	Schema
size_total *optional*	Size, in bytes, presented to the host or end user. This can be used for both expand and shrink on a file system. **Minimum value** : 3221225472 **Maximum value** : 281474976710656	integer (int64)
smb_notify_on_change_dir_depth *optional*	Lowest directory level to which the enabled notifications apply, if any. **Minimum value** : 1 **Maximum value** : 512	integer (int32)

file_system_restore

Name	Description	Schema
copy_name *optional*	Name of the backup snap to be created before the Restore operation occurs. If no name is specified no backup copy will be made. **Length** : 1 - 255	string

file_system_restore_response

File system backup snapshot created.

Name	Description	Schema
id *optional*	The id of the created snapshot.	string

file_system_snapshot

Name	Description	Schema
access_policy *optional*		FileSystemAccessPolicyEnum
access_type *optional*		FileSystemSnapshotAccessTypeEnum
description *optional*	Snapshot description **Length** : 0 - 255	string

Name	Description	Schema
expiration_timestamp *optional*	Time, when the snapshot will expire.	string (date-time)
folder_rename_policy *optional*		FileSystemFolderRenamePolicyEnum
is_async_MTime_enabled *optional*	Indicates whether asynchronous MTIME is enabled on the protocol snaps that are mounted writeable. Values are: **true** Asynchronous MTIME is enabled on the file system. **false** Asynchronous MTIME is disabled on the file system.	boolean
is_auto_delete_enabled *optional*	Indicates whether the snapshot can be automatically deleted per threshold settings. Values are: **true** Snapshot can be automatically deleted per threshold settings. **false** Snapshot cannot be automatically deleted.	boolean
is_smb_no_notify_enabled *optional*	Indicates whether notifications of changes to a directory file structure are enabled. **true** Change directory notifications are enabled. **false** Change directory notifications are disabled.	boolean
is_smb_notify_on_access_enabled *optional*	Indicates whether file access notifications are enabled on the file system. Values are: **true** File access notifications are enabled on the file system. **false** File access notifications are disabled on the file system.	boolean

Name	Description	Schema
is_smb_notify_on_write_enabled *optional*	Indicates whether file writes notifications are enabled on the file system. Values are: **true** File writes notifications are enabled on the file system. **false** File writes notifications are disabled on the file system.	boolean
is_smb_op_locks_enabled *optional*	Indicates whether opportunistic file locking is enabled on the file system. Values are: **true** Opportunistic file locking is enabled on the file system. **false** Opportunistic file locking is disabled on the file system.	boolean
is_smb_sync_writes_enabled *optional*	Indicates whether the synchronous writes option is enabled on the file system. Values are: **true** Synchronous writes option is enabled on the file system. **false** Synchronous writes option is disabled on the file system.	boolean
locking_policy *optional*		FileSystemLockingPolicyEnum
name *optional*	Name of the snapshot. The default name of the snapshot is the date and time when the snapshot is taken. **Length** : 1 - 255	string
smb_notify_on_change_dir_depth *optional*	Lowest directory level to which the enabled notifications apply, if any. **Minimum value** : 1 **Maximum value** : 512	integer (int32)

file_system_snapshot_response

Snapshot file system created.

Name	Description	Schema
id *optional*	The id of the created snapshot.	string

file_tree_quota_create

Name	Description	Schema
description *optional*	Description of the tree quota.	string
file_system_id *required*	Unique identifier of the associated file system.	string
hard_limit *optional*	Hard limit of the tree quota, in bytes. No hard limit when set to 0. This value can be used to compute amount of space that is consumed without limiting the space. Value is always rounded up to match the physical block size of the filesystem. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
is_user_quotas_enforced *optional*	Whether the quota must be enabled for all users, and whether user quota limits, if any, are enforced. Values are: - true - start tracking usage for all users on the quota tree, and enforce user quota limits. - false - stop tracking usage for all users on the quota tree, and do not enforce user quota limits.	boolean
path *required*	Path relative to the root of the associated filesystem.	string
soft_limit *optional*	Soft limit of the tree quota, in bytes. No hard limit when set to 0. Value is always rounded up to match the physical block size of the filesystem. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

file_tree_quota_instance

This resource type has queriable associations from file_system, file_user_quota

Name	Description	Schema
description *optional*	Description of the tree quota.	string
file_system *optional*	This is the embeddable reference form of file_system_id attribute.	file_system_instance
file_system_id *optional*	Unique identifier of the associated file system.	string
file_user_tree_quotas *optional*	This is the inverse of the resource type file_user_quota association.	< file_user_quota_instance > array
hard_limit *optional*	Hard limit of the tree quota, in bytes. No hard limit when set to 0. This value can be used to compute amount of space that is consumed without limiting the space. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
id *optional* *read-only*	Unique identifier of the tree quota.	string
is_user_quotas_enforced *optional*	Whether user quota are enabled on this tree quota. The tree quota itself is enforced regardless of this parameter.	boolean
path *optional*	Path relative to the root of the associated filesystem.	string
remaining_grace_period *optional*	Remaining grace period, in seconds, after the soft limit is exceeded: - 0 - Grace period has already expired - -1 - No grace period in-progress, or infinite grace period set The grace period of user quotas is set in the file system quota config. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
size_used *optional*	Size already used on the tree quota, in bytes. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
soft_limit *optional*	Soft limit of the tree quota, in bytes. No hard limit when set to 0. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
state *optional*		FileQuotaStateEnum
state_l10n *optional*	Localized message string corresponding to state	string

file_tree_quota_modify

Name	Description	Schema
description *optional*	Description of the tree quota.	string
hard_limit *optional*	Hard limit of the tree quota, in bytes. No hard limit when set to 0. This value can be used to compute amount of space that is consumed without limiting the space. Value is always rounded up to match the physical block size of the filesystem. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
is_user_quotas_enforced *optional*	Whether the quota must be enabled for all users, and whether user quota limits, if any, are enforced. Values are: - true - start tracking usage for all users on the quota tree, and enforce user quota limits. - false - stop tracking usage for all users on the quota tree, and do not enforce user quota limits.	boolean
soft_limit *optional*	Soft limit of the tree quota, in bytes. No hard limit when set to 0. Value is always rounded up to match the physical block size of the filesystem. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

file_user_quota_create

Name	Description	Schema
file_system_id *required*	Unique identifier of the filesystem in which the new user quota will be created.	string
hard_limit *optional*	Hard limit of the user quota, in bytes. No hard limit when set to 0. This value can be used to compute amount of space that is consumed without limiting the space. Value is rounded up to match the physical block size of the filesystem. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
soft_limit *optional*	Soft limit of the user quota, in bytes. No hard limit when set to 0. Value is rounded up to match the physical block size of the filesystem. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
tree_quota_id *optional*	Unique identifier of the tree quota in which the new user quota will be created.	string
uid *optional*	Unix user identifier (UID) of the user. Preferred identifier. **Minimum value** : `1` **Maximum value** : `4294967294`	integer (int64)
unix_name *optional*	Unix username. Identifers are exclusive. Only one of the four identifiers among 'user uid' / 'unix username' / 'windows username' / 'windows SID' can be used at a time.	string
windows_name *optional*	Windows username. The format is domain\user for the domain user. Identifers are exclusive. Only one of the four identifiers among 'user uid' / 'unix username' / 'windows username' / 'windows SID' can be used at a time.	string
windows_sid *optional*	Windows Security Identifier of the user. Identifers are exclusive. Only one of the four identifiers among 'user uid' / 'unix username' / 'windows username' / 'windows SID' can be used at a time.	string

file_user_quota_instance

This resource type has queriable associations from file_system, file_tree_quota

Name	Description	Schema
file_system *optional*	This is the embeddable reference form of file_system_id attribute.	file_system_instance
file_system_id *optional*	Unique identifier of the associated filesystem.	string
hard_limit *optional*	Hard limit of the user quota, in bytes. No hard limit when set to 0. This value can be used to compute amount of space that is consumed without limiting the space. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
id *optional* *read-only*	Unique identifier of the user quota.	string
remaining_grace_period *optional*	Remaining grace period, in seconds, after the soft limit is exceeded: - 0 - Grace period has already expired - -1 - No grace period in-progress, or infinite grace period set The grace period of user quotas is set in the file system quota configuration. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
size_used *optional*	Size currently consumed by the user on the filesystem, in bytes. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
soft_limit *optional*	Soft limit of the user quota, in bytes. No hard limit when set to 0. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
state *optional*		FileQuotaStateEnum
state_l10n *optional*	Localized message string corresponding to state	string
tree_quota *optional*	This is the embeddable reference form of tree_quota_id attribute.	file_tree_quota_instance

Name	Description	Schema
tree_quota_id *optional*	Unique identifier of the associated tree quota. Values are: - null - if the user quota is not within a quota tree. - tree_quota instance id - if the user quota is within a quota tree.	string
uid *optional*	Unix user identifier (UID) of the user. **Minimum value** : 1 **Maximum value** : 4294967294	integer (int64)
unix_name *optional*	Unix username.	string
windows_name *optional*	Windows username. The format is domain\user for the domain user.	string
windows_sid *optional*	Windows Security Identifier of the user.	string

file_user_quota_modify

Name	Description	Schema
hard_limit *optional*	Hard limit of the user quota, in bytes. No hard limit when set to 0. This value can be used to compute amount of space that is consumed without limiting the space. Value is rounded up to match the physical block size of the filesystem. **Minimum value** : 0 **Maximum value** : 9223372036854775807	integer (int64)
soft_limit *optional*	Soft limit of the user quota, in bytes. No hard limit when set to 0. Value is rounded up to match the physical block size of the filesystem. **Minimum value** : 0 **Maximum value** : 9223372036854775807	integer (int64)

file_virus_checker_create

Name	Description	Schema
nas_server_id *required*	Unique identifier of an associated NAS Server instance that uses this virus checker configuration. Only one virus checker configuration per NAS Server is supported.	string

file_virus_checker_instance

This resource type has queriable association from nas_server

Name	Description	Schema
id *optional*	Unique identifier of the virus checker instance.	string
is_config_file_uploaded *optional*	Indicates whether a virus checker configuration file has been uploaded. **Default** : `false`	boolean
is_enabled *optional*	Indicates whether the anti-virus service is enabled on this NAS server. Value are: - true - Anti-virus service is enabled. Each file created or modified by an SMB client is scanned by the third-party anti-virus servers. If a virus is detected, the access to the file system is denied. If third-party anti-virus servers are not available, according the policy, the access to the file systems is denied to prevent potential viruses propagation. - false - Anti-virus service is disabled. File systems of the NAS servers are available for access without virus checking	boolean
nas_server *optional*	This is the embeddable reference form of nas_server_id attribute.	nas_server_instance
nas_server_id *optional*	NAS server that is configured with these anti-virus settings.	string

file_virus_checker_modify

Name	Description	Schema
is_enabled *required*	Indicates whether the anti-virus service is enabled on this NAS server. Value are: - true - Anti-virus service is enabled. Each file created or modified by an SMB client is scanned by the third-party anti-virus servers. If a virus is detected, the access to the file system is denied. If third-party anti-virus servers are not available, according the policy, the access to the file systems is denied to prevent potential viruses propagation. - false - Anti-virus service is disabled. File systems of the NAS servers are available for access without virus checking.	boolean

hardware_drive_repurpose

Name	Description	Schema
psid *required*	An alpha-numeric string that can be found on the physical label of the drive to repurpose. This is needed to validate that the user has physical control of the drive before performing the operation.	string

hardware_extra_details_instance

Additional hardware details that are specific to each hardware type. Filtering on the fields of this embedded resource is not supported.

Name	Description	Schema
bus_number *optional*	Bus number of the Expansion_Shelf. Available on the Expansion_Shelf hardware type. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
connector_type *optional*		HardwareSFPConnectorTypeEnum
connector_type_l10n *optional*	Localized message string corresponding to connector_type	string

Name	Description	Schema
cpu_cores *optional*	Total number of physical cores. Available on the Node hardware type. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
cpu_model *optional*	CPU model name. Available on Node hardware type.	string
cpu_sockets *optional*	Total number of physical sockets. Available on the Node hardware type. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
dell_service_tag *optional*	Dell service tag of the hardware. Available on the Base_Enclosure and Expansion_Enclosure hardware types.	string
drive_type *optional*		HardwareDriveTypeEnum
drive_type_l10n *optional*	Localized message string corresponding to drive_type	string
enclosure_number *optional*	Enclosure number of the Expansion_Shelf. Available on the Expansion_Shelf hardware type. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
encryption_status *optional*		HardwareDriveEncryptionStatusEnum
encryption_status_l10n *optional*	Localized message string corresponding to encryption_status	string
express_service_code *optional*	Express service code of the hardware. Available on the Base_Enclosure and Expansion_Enclosure hardware types.	string
fips_status *optional*		HardwareDriveFIPSStatusEnum

Name	Description	Schema
fips_status_l10n *optional*	Localized message string corresponding to fips_status	string
firmware_version *optional*	Firmware version of the hardware. Available on the Drive hardware type.	string
mode *optional*		HardwareSFPModeEnum
mode_l10n *optional*	Localized message string corresponding to mode	string
model_name *optional*	Model name of the hardware. Available on the IO_Module and M2_Drive hardware types.	string
physical_memory_size_gb *optional*	Total amount of physical memory in gigabytes. Available on the Node hardware type. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
size *optional*	Size of the drive in bytes. Available on the Drive hardware type. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
supported_protocol *optional*		HardwareSFPSupportedProtocolEnum
supported_protocol_l10n *optional*	Localized message string corresponding to supported_protocol	string
supported_speeds *optional*		< HardwareSFPSpeedEnum > array
supported_speeds_l10n *optional*	Localized message array corresponding to supported_speeds	< string > array

hardware_instance

Hardware component information. This resource type has queriable associations from fc_port, sas_port, eth_port, hardware, appliance

Name	Description	Schema
appliance *optional*	This is the embeddable reference form of appliance_id attribute.	appliance_instance
appliance_id *optional*	The id of the component's associated appliance.	string
children *optional*	This is the inverse of the resource type hardware association.	< hardware_instance > array
extra_details *optional*	Additional hardware details. Contents are specific to each component type.	hardware_extra_details_instance
id *optional*	The unique id of the component.	string
io_module_eth_ports *optional*	This is the inverse of the resource type eth_port association.	< eth_port_instance > array
io_module_fc_ports *optional*	This is the inverse of the resource type fc_port association.	< fc_port_instance > array
io_module_sas_ports *optional*	This is the inverse of the resource type sas_port association.	< sas_port_instance > array
is_marked *optional*	Indicator of whether a component is location marked or not.	boolean
lifecycle_state *optional*	Life cycle state of the component.	HardwareLifecycleStateEnum
lifecycle_state_l10n *optional*	Localized message string corresponding to lifecycle_state	string

Name	Description	Schema
name *optional*	The name of the component. This property supports case-insensitive filtering	string
node_eth_ports *optional*	This is the inverse of the resource type eth_port association.	< eth_port_instance > array
node_fc_ports *optional*	This is the inverse of the resource type fc_port association.	< fc_port_instance > array
node_sas_ports *optional*	This is the inverse of the resource type sas_port association.	< sas_port_instance > array
parent *optional*	This is the embeddable reference form of parent_id attribute.	hardware_instance
parent_id *optional*	The id of the component's parent, or null if this component is at the top of the parent hierarchy.	string
part_number *optional*	The part number of the component.	string
serial_number *optional*	The serial number of the component.	string
sfp_eth_ports *optional*	This is the inverse of the resource type eth_port association.	< eth_port_instance > array
sfp_fc_ports *optional*	This is the inverse of the resource type fc_port association.	< fc_port_instance > array
sfp_sas_ports *optional*	This is the inverse of the resource type sas_port association.	< sas_port_instance > array
slot *optional*	The slot or location of the component. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
status_led_state *optional*	Indicator of the state of the component status LED.	HardwareStatusLEDStateEnum

Name	Description	Schema
status_led_state_l10n *optional*	Localized message string corresponding to status_led_state	string
type *optional*	Hardware component type.	HardwareTypeEnum
type_l10n *optional*	Localized message string corresponding to type	string

hardware_modify

Hardware properties to modify.

Name	Description	Schema
is_marked *required*	New state for the hardware component location marker LED. Setting it to true will put the LED in a blinking state until set to false. Note that the state returned in the hardware component may not actually change for up to 60 seconds. This operation is currently supported for Base_Enclosure, Expansion_Enclosure, Node and Drive. Note that operations at the Base_Enclosure and Expansion_Enclosure apply to their children (Nodes and Drives for Base_Enclosure and Drives for Expansion_Enclosure). For components with a single physical LED (Base_Enclosure and Node), setting is_marked=true overrides the status_led_state property from on (or off) to Null, and setting is_marked=false reverts status_led_state to showing the state of the physical LED.	boolean

host_attach

Volume id and optional logical unit number for attaching to host.

Name	Description	Schema
logical_unit_number *optional*	Logical unit number for the volume, if desired. **Minimum value** : `0` **Maximum value** : `16383`	integer (int32)
volume_id *required*	Volume to attach.	string

host_create

Name	Description	Schema
description *optional*	An optional description for the host. The description should not be more than 256 UTF-8 characters long and should not have any unprintable characters. **Maximal length** : 256	string
initiators *required*		< initiator_create_modify > array
name *required*	The host name. The name should not be more than 128 UTF-8 characters long and should not have any unprintable characters. **Maximal length** : 128	string
os_type *required*		OSTypeEnum

host_delete

Type : object

host_detach

Name	Description	Schema
volume_id *required*	Volume to detach.	string

host_group_attach

Volume id and optional logical unit number for attaching to host group.

Name	Description	Schema
logical_unit_number *optional*	Logical unit number for the volume, if desired. **Minimum value** : 0 **Maximum value** : 16383	integer (int32)
volume_id *required*	Volume to attach.	string

host_group_create

Create host group parameters.

Name	Description	Schema
description *optional*	An optional description for the host group. The description should not have any unprintable characters. **Maximal length** : 256	string
host_ids *required*		< string > array
name *required*	The host group name. The name should not be more than 128 UTF-8 characters long and should not have any unprintable characters. **Maximal length** : 128	string

host_group_detach

Name	Description	Schema
volume_id *required*	Volume to detach.	string

host_group_instance

This resource type has queriable associations from host, host_volume_mapping, host_virtual_volume_mapping

Name	Description	Schema
description *optional*	A description for the host group.	string
host_virtual_volume_mappings *optional*	This is the inverse of the resource type host_virtual_volume_mapping association.	< host_virtual_volume_mapping_instance > array
hosts *optional*	This is the inverse of the resource type host association.	< host_instance > array
id *optional*	The host group unique identifier.	string

Name	Description	Schema
mapped_host_groups *optional*	This is the inverse of the resource type host_volume_mapping association.	< host_volume_mapping_instance > array
name *optional*	The host group name. This property supports case-insensitive filtering	string

host_group_modify

Modify host group parameters.

Name	Description	Schema
add_host_ids *optional*	List of hosts to be added to host group. The operation fails if the host(s) to be added are attached to volume.	< string > array
description *optional*	An optional description for the host group. The description should not be more than 256 UTF-8 characters long and should not have any unprintable characters. **Maximal length** : 256	string
name *optional*	A new host group name. The name should not be more than 128 UTF-8 characters long and should not have any unprintable characters. **Maximal length** : 128	string
remove_host_ids *optional*	List of hosts to be removed from the host group. The operation fails if host group is attached to volume.	< string > array

host_initiator_instance

Name	Description	Schema
active_sessions *optional*	Array of active login session between an initiator and a target port.	< active_session_instance > array
chap_mutual_username *optional*	Username for CHAP authentication. This value must be 1 to 64 UTF-8 characters. CHAP username is required when the cluster CHAP mode is mutual authentication. **Length** : 1 - 64	string

Name	Description	Schema
chap_single_username *optional*	Username for CHAP authentication. This value must be 1 to 64 UTF-8 characters. CHAP username is required when the cluster CHAP mode is mutual authentication. **Length** : 1 - 64	string
port_name *optional*	IQN name aka address.	string
port_type *optional*		InitiatorProtocolTypeEnum
port_type_l10n *optional*	Localized message string corresponding to port_type	string

host_instance

This resource type has queriable associations from host_group, import_host_system, host_volume_mapping, host_virtual_volume_mapping

Name	Description	Schema
description *optional*	A description for the host.	string
host_group *optional*	This is the embeddable reference form of host_group_id attribute.	host_group_instance
host_group_id *optional*	Associated host group, if host is part of host group.	string
host_initiators *optional*	Filtering on the fields of this embedded resource is not supported.	< host_initiator_instance > array
host_virtual_volume_mappings *optional*	This is the inverse of the resource type host_virtual_volume_mapping association.	< host_virtual_volume_mapping_instance > array
id *optional*	Unique id of the host.	string

Name	Description	Schema
import_host_system *optional*	This is the embeddable reference form of import_host_system_id attribute.	import_host_system_instance
mapped_hosts *optional*	This is the inverse of the resource type host_volume_mapping association.	< host_volume_mapping_instance > array
name *optional*	The host name. This property supports case-insensitive filtering	string
os_type *optional*		OSTypeEnum
os_type_l10n *optional*	Localized message string corresponding to os_type	string

host_modify

Name	Description	Schema
add_initiators *optional*	The list of initiators to be added. CHAP username and password are optional.	< initiator_create_modify > array
description *optional*	An optional description for the host. The description should not be more than 256 UTF-8 characters long and should not have any unprintable characters. **Maximal length** : 256	string
modify_initiators *optional*	Update list of existing initiators, identified by port_name, with new CHAP usernames and/or passwords.	< update_initiator_in_host > array
name *optional*	The host name. The name should not be more than 128 UTF-8 characters long and should not have any unprintable characters. **Maximal length** : 128	string
remove_initiators *optional*	The list of initiator port_names to be removed.	< string > array

host_virtual_volume_mapping_instance

Virtual volume mapping details. This resource type has queriable associations from host, host_group, virtual_volume

Name	Description	Schema
host *optional*	This is the embeddable reference form of host_id attribute.	host_instance
host_group *optional*	This is the embeddable reference form of host_group_id attribute.	host_group_instance
host_group_id *optional*	Unique identifier of a host group attached to a virtual volume. The host_id and host_group_id cannot both be set.	string
host_id *optional*	Unique identifier of a host attached to a virtual volume. The host_id and host_group_id cannot both be set.	string
id *optional*	Unique identifier of a mapping between a host and a virtual volume.	string
virtual_volume *optional*	This is the embeddable reference form of virtual_volume_id attribute.	virtual_volume_instance
virtual_volume_id *optional*	Unique identifier of the virtual volume to which the host is attached.	string

host_volume_mapping_instance

Details about a configured host or host group attached to a volume. The host or host group may not necessarily be connected. This resource type has queriable associations from host, host_group, volume

Name	Description	Schema
host *optional*	This is the embeddable reference form of host_id attribute.	host_instance
host_group *optional*	This is the embeddable reference form of host_group_id attribute.	host_group_instance

Name	Description	Schema
host_group_id *optional*	Unique identifier of a host group attached to a volume. The host_id and host_group_id cannot both be set.	string
host_id *optional*	Unique identifier of a host attached to a volume. The host_id and host_group_id cannot both be set.	string
id *optional*	Unique identifier of a mapping between a host and a volume.	string
logical_unit_number *optional*	Logical unit number for the host volume access. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
volume *optional*	This is the embeddable reference form of volume_id attribute.	volume_instance
volume_id *optional*	Unique identifier of the volume to which the host is attached.	string

import_host_initiator_instance

Details about an import host initiator.

Name	Description	Schema
id *optional*	Unique identifier of the import host initiator.	string
import_host_system_id *optional*	Unique identifier of the import host system.	string
iqn_or_wwn *optional*	iSCSI Qualified Name (IQN) or World Wide Name (WWN) of the host initiator.	string
protocol *optional*		HostInitiatorProtocolTypeEnum
protocol_l10n *optional*	Localized message string corresponding to protocol	string

import_host_system_create

Required parameters for adding an import host system.

Name	Description	Schema
agent_address *required*	Hostname or IPv4 address of the import host system.	string
agent_port *required*	TCP port of the import host system. **Minimum value** : `0` **Maximum value** : `65535`	integer (int32)
chap_mutual_password *optional*	Password for mutual CHAP authentication. This password is required when the cluster is using mutual authentication CHAP mode.	string (password)
chap_mutual_username *optional*	Username for mutual CHAP authentication. This username is required when the cluster is using mutual authentication CHAP mode.	string
chap_single_password *optional*	Password for single CHAP authentication. This password is required when the cluster is using single authentication CHAP mode.	string (password)
chap_single_username *optional*	Username for single CHAP authentication. This username is required when the cluster is using single authentication CHAP mode.	string
os_type *required*		HAOSTypeEnum
password *required*	Password for the specified username.	string (password)
user_name *required*	Username for the import host system.	string

import_host_system_instance

Details about an import host system. This resource type has queriable association from host

Name	Description	Schema
agent_address *optional*	Hostname or IPv4 address of the import host system.	string (ip-address)
agent_api_version *optional*	API version of the import host system.	string
agent_port *optional*	TCP port on the import host system. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
agent_status *optional*		HostAgentStatusEnum
agent_status_l10n *optional*	Localized message string corresponding to agent_status	string
agent_type *optional*		HostAgentTypeEnum
agent_type_l10n *optional*	Localized message string corresponding to agent_type	string
agent_version *optional*	Version of the import host system.	string
hosts *optional*	This is the inverse of the resource type host association.	< host_instance > array
id *optional*	Unique identifier of the import host system.	string
last_update_time *optional*	Time when the import host system was last updated.	string (date-time)
os_type *optional*		HAOSTypeEnum
os_type_l10n *optional*	Localized message string corresponding to os_type	string

Name	Description	Schema
os_version *optional*	Operating system version of the import host system.	string
user_name *optional*	Username for the import host system.	string

import_host_volume_instance

Details about an import host volume.

Name	Description	Schema
active_path *optional*	Active path of the host volume.	ActivePathEnum
active_path_l10n *optional*	Localized message string corresponding to active_path	string
array_identifier *optional*	Unique identifier of the storage system.	string
array_type *optional*	Product type of the storage system.	ArrayTypeEnum
array_type_l10n *optional*	Localized message string corresponding to array_type	string
host_system_id *optional*	Unique identifier of the import host system.	string
id *optional*	Unique identifier of the import host volume.	string
import_state *optional*		ImportOperationStatusEnum
import_state_l10n *optional*	Localized message string corresponding to import_state	string

Name	Description	Schema
is_migrating *optional*	Indicates whether the import host volume is migrating.	boolean
last_update_time *optional*	Time when the import host volume was last updated.	string (date-time)
mount_paths *optional*	Mount paths on the import host system.	< string > array
naa_id *optional*	Unique identifier of a volume that is presented to the import host.	string
name *optional*	Name of the import host volume. This property supports case-insensitive filtering	string
protocols *optional*	Supported protocols for the import host volume.	< HostInitiatorProtocolTypeEnum > array
protocols_l10n *optional*	Localized message array corresponding to protocols	< string > array
size *optional*	Size of the import host volume, in bytes. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
status *optional*	Status of the import host volume.	VolumeStatusEnum
status_l10n *optional*	Localized message string corresponding to status	string

import_psgroup_instance

PS Group details. This resource type has queriable association from import_psgroup_volume

Name	Description	Schema
description *optional*	Description of the PS Group.	string

Name	Description	Schema
group_address *optional*	IP address of the PS Group, which is used for data path communication. If a management address is not configured, this address is also used for management operations.	string (ip-address)
id *optional*	Unique identifier of the PS Group.	string
import_psgroup_volumes *optional*	This is the inverse of the resource type import_psgroup_volume association.	< import_psgroup_volume_instance > array
last_update_time *optional*	Time when the PS Group was last updated.	string (date-time)
management_address *optional*	Management address of the PS Group. This can be an IPv4 address, IPv6 address, or FQDN (Fully Qualified Domain Name).	string (ip-address)
name *optional*	Name of the PS Group. This property supports case-insensitive filtering	string
serial_number *optional*	Serial number of the PS Group.	string
user_name *optional*	Name used to log in to the PS Group.	string

import_psgroup_schedule_instance

Snapshot schedule of a volume

Name	Description	Schema
active_date *optional*	Number of days for which the snapshot schedule has been active. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)

Name	Description	Schema
end_time *optional*	Time when snapshot creation ends each day, in minutes. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
frequency *optional*	Frequency at which snapshots are created, in minutes. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
inactive_date *optional*	Number of days for which the snapshot schedule has been inactive. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
keep_count *optional*	Number of snapshots to retain. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
name *optional*	Name of the snapshot schedule.	string
repetition_interval *optional*	Repeat interval of the snapshot schedule, in days. The value is 1 for the schedule frequencies Once and Hourly. It can be greater than 1 for the schedule frequencies Daily and Weekly. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
start_time *optional*	Time when snapshot creation begins each day, in minutes. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
status *optional*		ImportPsgroupScheduleStatusEnum
status_l10n *optional*	Localized message string corresponding to status	string
type *optional*		ImportPsgroupScheduleTypeEnum
type_l10n *optional*	Localized message string corresponding to type	string

import_psgroup_volume_import_snapshot_schedules_response

Type : < import_psgroup_schedule_instance > array

import_psgroup_volume_instance

PS Group volume instance details. This resource type has queriable association from import_psgroup

Name	Description	Schema
block_size *optional*		VolumeBlockSizeEnum
block_size_l10n *optional*	Localized message string corresponding to block_size	string
host_volume_ids *optional*	Unique identifiers of the host volumes associated with the volume.	< string > array
id *optional*	Unique identifier of the volume.	string
import_psgroup *optional*	This is the embeddable reference form of import_psgroup_id attribute.	import_psgroup_instance
import_psgroup_id *optional*	Unique identifier of the PS Group with which the volume is associated.	string
importable_criteria *optional*	Volume import criteria. If the value is not Ready, the volume is not importable.	VolumeImportableCriteriaEnum
importable_criteria_l10n *optional*	Localized message string corresponding to importable_criteria	string
is_online *optional*	Indicates whether the volume is online.	boolean

Name	Description	Schema
is_read_only *optional*	Indicates whether the volume is read-only.	boolean
migration_state *optional*		ImportStatusEnum
migration_state_l10n *optional*	Localized message string corresponding to migration_state	string
name *optional*	Name of the volume. This property supports case-insensitive filtering	string
size *optional*	Size of the volume, in bytes. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
wwn *optional*	Unique WWN of the volume.	string

import_session_cancel

Name	Description	Schema
force *optional*	Indicates whether the cancel import session operation is a normal cancel (true) or a forced stop (false). For a forced stop, the import job terminates without rolling back in source or host down failover scenarios. **Default** : `false`	boolean

import_session_create

Name	Description	Schema
automatic_cutover *optional*	Indicates whether the import session cutover is manual (true) or automatic (false). **Default** : `false`	boolean
description *optional*	Description of the import session. The name can contain a maximum of 128 unicode characters. It cannot contain unprintable characters. **Maximal length** : `128`	string

Name	Description	Schema
name *required*	Name of the import session. The name must be unique in the PowerStore cluster and can contain a maximum of 128 unicode characters. It cannot contain special HTTP characters, unprintable characters, or white space. **Maximal length** : 128	string
protection_policy_id *optional*	Unique identifier of the protection policy that will be applied to an imported volume or consistency group after the import completes. Only snapshot policies are supported in an import. Once the import completes, you can add a replication policy. If you try to import a replication policy, the import job will fail.	string
remote_system_id *required*	Unique identifier of the storage system that contains the source volume or consistency group to be imported. You can query the source volume or consistency group object to get the identifier of the source system that the volume or consistency group are part of. Alternatively, you can use the remote_system object to get this information.	string
scheduled_timestamp *optional*	Date and time at which the import session is scheduled to start. The date time is specified in ISO 8601 format with the time expressed in UTC format.	string (date-time)
source_resource_id *required*	Unique identifier of the volume or consistency group to be imported. Refer to the following objects for more information: * Storage Center : import_storage_center_volume, import_storage_center_consistency_group * VNX : import_vnx_volume, import_vnx_consistency_group * PS Series : import_psgroup_volume * Unity : import_unity_volume, import_unity_consistency_group	string
volume_group_id *optional*	Unique identifier of the volume group to which the imported volume will belong, if any.	string

import_session_instance

This resource type has queriable association from remote_system

Name	Description	Schema
automatic_cutover *optional*	Indicates whether the import session cutover is manual (true) or automatic (false). **Default** : `false`	boolean
average_transfer_rate *optional*	Average transfer rate of a data import operation in bytes/sec over the whole copy period. Before and after the import is in the Copy_In_Progress state, this value is null. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
current_transfer_rate *optional*	Current transfer rate of a data import operation in bytes/sec. Before and after the import is in the Copy_In_Progress state, this value is null. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
description *optional*	User-specified description of the import session.	string
destination_resource_id *optional*	Unique identifier of the destination volume or volume group created as part of the import process.	string
destination_resource_type *optional*		ImportDestinationResourceTypeEnum
destination_resource_type_l10n *optional*	Localized message string corresponding to destination_resource_type	string
error *optional*		error_instance
estimated_completion_timestamp *optional*	When the import is in the Copy_In_Progress state, this value indicates the estimated time at which the data copy will complete. Before the import is in the Copy_In_Progress state, the value is null.	string (date-time)
id *optional*	Unique identifier of the import session.	string

Name	Description	Schema
last_update_timestamp *optional*	Date and time when was the import was last updated. This value is updated each time the import job updates.	string (date-time)
name *optional*	User-specified name of the import session. This property supports case-insensitive filtering	string
parent_session_id *optional*	For a volume that is part of a consistency group import, this value is the session identifier of the import session. For an individual volume import, this value is null.	string
progress_percentage *optional*	When the import is in the Copy_In_Progress state, this value indicates the completion percent for the import. Before the import is in the Copy_In_Progress state, this value is 0. After the cutover or if there is a failure, this value is null. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
protection_policy_id *optional*	Unique identifier of the local protection policy in the PowerStore storage system that will be applied on an imported destination volume or consistency group after cutover. Only snapshot policies are supported in an import. Once the import completes, you can add a replication policy.	string
remote_system *optional*	This is the embeddable reference form of remote_system_id attribute.	remote_system_instance
remote_system_id *optional*	Unique identifier of the storage system that contains the source volume or consistency group to be imported.	string
scheduled_timestamp *optional*	Date and time at which the import session is scheduled to run. The date is specified in ISO 8601 format with the time expressed in UTC format.	string (date-time)
source_resource_id *optional*	Unique identifier of the volume or consistency group to be imported.	string
state *optional*		ImportSessionStateEnum

Name	Description	Schema
state_l10n *optional*	Localized message string corresponding to state	string
volume_group_id *optional*	Unique identifier of the volume group to which the destination volume will be added, if any.	string

import_session_modify

Name	Description	Schema
scheduled_timestamp *optional*	Indicates the new date and time at which the import session is scheduled to run. The date is specified in ISO 8601 format with time expressed in UTC format.	string (date-time)

import_storage_center_consistency_group_import_snapshot_profiles_response

Type : < import_storage_center_snapshot_profile_instance > array

import_storage_center_consistency_group_instance

This resource type has queriable associations from import_storage_center_volume, import_storage_center

Name	Description	Schema
id *optional*	Unique identifier of the SC consistency group.	string
import_storage_center *optional*	This is the embeddable reference form of import_storage_center_id attribute.	import_storage_center_instance
import_storage_center_id *optional*	Unique identifier of the SC array.	string
import_storage_center_volumes *optional*	This is the inverse of the resource type import_storage_center_volume association.	< import_storage_center_volume_instance > array

Name	Description	Schema
importable_criteria *optional*	Volume import criteria. If the value is not Ready, the volume is not importable.	CGImportableCriteriaEnum
importable_criteria_l10n *optional*	Localized message string corresponding to importable_criteria	string
name *optional*	Name of the SC consistency group. This property supports case-insensitive filtering	string

import_storage_center_instance

This resource type has queriable associations from import_storage_center_volume, import_storage_center_consistency_group

Name	Description	Schema
api_version *optional*	API version of the SC OS (SCOS).	string
id *optional*	Unique identifier of the SC array that is a source storage system for import.	string
import_storage_center_consistency_groups *optional*	This is the inverse of the resource type import_storage_center_consistency_group association.	< import_storage_center_consistency_group_instance > array
import_storage_center_volumes *optional*	This is the inverse of the resource type import_storage_center_volume association.	< import_storage_center_volume_instance > array
last_update_time *optional*	Timestamp at which the SC array details were last updated. This includes the information about the array and its importable volumes and consistency groups. The timestamp is updated when the SC array is created and when the importable storage resources are discovered using the discover_importable_resources action.	string (date-time)

Name	Description	Schema
management_address *optional*	Management address to use for communicating with the SC array. The address can be an IPv4 address, IPv6 address, or FQDN (Fully Qualified Domain Name).	string (ip-address)
model *optional*	Model name of the SC array.	string
name *optional*	Name of the SC array. This property supports case-insensitive filtering	string
serial_number *optional*	Serial number of the SC array. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
status *optional*		SCStatusEnum
status_l10n *optional*	Localized message string corresponding to status	string
user_name *optional*	User account name used to communicate with the SC array.	string

import_storage_center_snapshot_profile_instance

Snapshot profile.

Name	Description	Schema
description *optional*	Description of the snapshot profile.	string
id *optional*	Unique identifier of the snapshot profile.	string
name *optional*	Name of the snapshot profile.	string
rules *optional*		< sc_profile_rule_instance > array

Name	Description	Schema
type *optional*	Type of the snapshot profile.	ScSnapshotProfileTypeEnum
type_l10n *optional*	Localized message string corresponding to type	string

import_storage_center_volume_import_snapshot_profiles_response

Type : < import_storage_center_snapshot_profile_instance > array

import_storage_center_volume_instance

This resource type has queriable associations from import_storage_center, import_storage_center_consistency_group

Name	Description	Schema
health *optional*		SCStatusEnum
health_l10n *optional*	Localized message string corresponding to health	string
host_volume_ids *optional*	List of host volume identifiers that correspond to SC volumes.	< string > array
id *optional*	Unique identifier of the SC volume.	string
import_storage_center *optional*	This is the embeddable reference form of import_storage_center_id attribute.	import_storage_center_instance
import_storage_center_consistency_group *optional*	This is the embeddable reference form of import_storage_center_consistency_group_id attribute.	import_storage_center_consistency_group_instance

Name	Description	Schema
import_storage_center_consistency_group_id *optional*	Unique identifier of an SC consistency group, if the volume is part of one consistency group only. If the volume is part of multiple consistency groups, the attribute is empty.	string
import_storage_center_consistency_group_names *optional*	Names of the consistency groups of which the volume is a member, if this volume is in multiple consistency groups.	< string > array
import_storage_center_id *optional*	Unique identifier of the SC array where the volume resides.	string
importable_criteria *optional*	Volume import criteria. If the value is not Ready, the volume is not importable.	VolumeImportableCriteriaEnum
importable_criteria_l10n *optional*	Localized message string corresponding to importable_criteria	string
is_active *optional*	Indicates whether the SC volume is active on any controller. Only volumes that are active are importable.	boolean
is_read_only *optional*	Indicates whether the volume is read-only.	boolean
migration_state *optional*		MigrationStateEnum
migration_state_l10n *optional*	Localized message string corresponding to migration_state	string
name *optional*	Name of the SC volume. This property supports case-insensitive filtering	string
size *optional*	Size of the SC volume, in bytes. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
wwn *optional*	Device identifier presented to the server to which the volume is mapped.	string

import_unity_consistency_group_import_snapshot_schedules_response

Type : < import_unity_snapshot_schedule_instance > array

import_unity_consistency_group_instance

This resource type has queriable associations from import_unity_volume, import_unity

Name	Description	Schema
id *optional*	Unique identifier of the Unity consistency group.	string
import_unity *optional*	This is the embeddable reference form of import_unity_id attribute.	import_unity_instance
import_unity_id *optional*	Unique identifier of the Unity storage system where the consistency group resides.	string
import_unity_volumes *optional*	This is the inverse of the resource type import_unity_volume association.	< import_unity_volume_instance > array
importable_criteria *optional*	Consistency group import criteria.	CGImportableCriteriaEnum
importable_criteria_l10n *optional*	Localized message string corresponding to importable_criteria	string
name *optional*	Name of the consistency group. This property supports case-insensitive filtering	string

import_unity_instance

This resource type has queriable associations from import_unity_volume, import_unity_consistency_group

Name	Description	Schema
api_version *optional*	Version of the API that the Unity storage system supports.	string
health *optional*		UnityHealthEnum
health_l10n *optional*	Localized message string corresponding to health	string
id *optional*	Unique identifier of the Unity storage system that is a source storage system for import. This is the serial number of the storage system.	string
import_unity_consistency_groups *optional*	This is the inverse of the resource type import_unity_consistency_group association.	< import_unity_consistency_group_instance > array
import_unity_volumes *optional*	This is the inverse of the resource type import_unity_volume association.	< import_unity_volume_instance > array
last_updated_timestamp *optional*	Date and time when the Unity storage system details were last updated. These details include the Unity storage system and information about its importable volumes and consistency groups. The timestamp is updated when the Unity storage system is created and whenever the importable volumes and consistency groups are discovered.	string (date-time)
management_address *optional*	Management address to use for communicating with the Unity storage system. The address can be an IPv4 address, IPv6 address, or FQDN (Fully Qualified Domain Name).	string (ip-address)
model *optional*	Model name of the Unity storage system.	string
name *optional*	Name of the Unity storage system. This property supports case-insensitive filtering	string
serial_number *optional*	Serial number of the system	string

Name	Description	Schema
software_version *optional*	Software version of the Unity storage system.	string
user_name *optional*	User account name used to communicate with the Unity storage system.	string

import_unity_snapshot_schedule_instance

Name	Description	Schema
id *optional*	Unique identifier of the Unity snapshot schedule.	string
is_default *optional*	Indicates whether the Unity snapshot schedule is the default snapshot schedule.	boolean
is_modified *optional*	Indicates whether the Unity snapshot schedule has been modified.	boolean
name *optional*	Name of the Unity snapshot schedule.	string
rules *optional*		< import_unity_snapshot_schedule_rule_instance > array
version *optional*	Version of the snapshot schedule.	UnityScheduleVersionEnum
version_l10n *optional*	Localized message string corresponding to version	string

import_unity_snapshot_schedule_rule_instance

Name	Description	Schema
days_of_month *optional*	Days of the month for which the snapshot schedule rule applies. [1..31].	< integer > array

Name	Description	Schema
days_of_week *optional*	Days of the week for which the snapshot schedule rule applies.	< UnityDayofWeekEnum > array
days_of_week_l10n *optional*	Localized message array corresponding to days_of_week	< string > array
hours *optional*	Hourly frequency for the snapshot schedule rule.[0..23].	< integer > array
id *optional*	Unique identifier of the snapshot schedule rule .	string
interval *optional*	Number of days or hours between snaps, depending on the rule type. [1..31]. **Minimum value** : 1 **Maximum value** : 31	integer (int32)
is_auto_delete *optional*	Indicates whether the system can automatically delete the snapshot based on pool automatic-deletion thresholds.	boolean
minute *optional*	Snapshot schedule frequency.[0..59]. **Minimum value** : 0 **Maximum value** : 59	integer (int32)
retention_time *optional*	(Applies when the value of the isAutoDelete attribute is false.) Period of time for which to keep the snapshot, in seconds. **Minimum value** : 0 **Maximum value** : 2147483647	integer (int32)
type *optional*	Type of the snapshot schedule rule.	UnityScheduleTypeEnum
type_l10n *optional*	Localized message string corresponding to type	string

import_unity_volume_import_snapshot_schedules_response

Type : < import_unity_snapshot_schedule_instance > array

import_unity_volume_instance

This resource type has queriable associations from import_unity, import_unity_consistency_group

Name	Description	Schema
health *optional*		UnityHealthEnum
health_l10n *optional*	Localized message string corresponding to health	string
host_volume_ids *optional*	List of host volume identifiers that correspond to Unity volumes.	< string > array
id *optional*	Unique identifier of the Unity volume.	string
import_unity *optional*	This is the embeddable reference form of import_unity_id attribute.	import_unity_instance
import_unity_consistency_group *optional*	This is the embeddable reference form of import_unity_consistency_group_id attribute.	import_unity_consistency_group_instance
import_unity_consistency_group_id *optional*	Unique identifier of the consistency group to which the Unity volume belongs. This value is null if the volume does not belong to a consistency group.	string
import_unity_id *optional*	Unique identifier of the Unity storage system to which the Unity volume belongs.	string
importable_criteria *optional*	Volume import criteria. If the value is not Ready, the volume is not importable and the value specifies the reason it is not importable.	VolumeImportableCriteriaEnum
importable_criteria_l10n *optional*	Localized message string corresponding to importable_criteria	string

Name	Description	Schema
is_replication_destination *optional*	Indicates whether the Unity volume is a replication destination.	boolean
is_thin_clone *optional*	Indicates whether the Unity volume is a thin clone.	boolean
migration_state *optional*		UnityVolumeMigrationStateEnum
migration_state_l10n *optional*	Localized message string corresponding to migration_state	string
name *optional*	Name of the Unity volume. This property supports case-insensitive filtering	string
size *optional*	Size of the Unity volume, in bytes. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
type *optional*		UnityVolumeTypeEnum
type_l10n *optional*	Localized message string corresponding to type	string
wwn *optional*	World Wide Name (WWN) of the Unity volume.	string

import_vnx_array_instance

This resource type has queriable associations from import_vnx_volume, import_vnx_consistency_group

Name	Description	Schema
alternate_management_address *optional*	Alternate management address for communicating with the VNX storage system. This is usually the address of Storage Processor B (SPB). The address can be an IPv4 address, IPv6 address, or FQDN (Fully Qualified Domain Name).	string (ip-address)

Name	Description	Schema
id *optional*	Unique identifier of the VNX storage system.	string
import_vnx_consistency_groups *optional*	This is the inverse of the resource type import_vnx_consistency_group association.	< import_vnx_consistency_group_instance > array
import_vnx_volumes *optional*	This is the inverse of the resource type import_vnx_volume association.	< import_vnx_volume_instance > array
is_faulted *optional*	Indicates whether the VNX storage system is faulted.	boolean
last_updated_timestamp *optional*	Timestamp at which the VNX storage system details were last updated. These details include information about the VNX storage system and its importable volumes and consistency groups. The timestamp is updated when the VNX storage system is created and when the importable storage resources are discovered using the discover action.	string (date-time)
management_address *optional*	Management address for communicating with the VNX storage system. This is usually the address of Storage Processor A (SPA). The address can be an IPv4 address, IPv6 address, or FQDN (Fully Qualified Domain Name).	string (ip-address)
model *optional*	Model name of the VNX storage system.	string
name *optional*	Name of the VNX storage system. This property supports case-insensitive filtering	string
serial_number *optional*	Serial number of the VNX storage system.	string
software_version *optional*	The software version of the block operating environment of the VNX storage system.	string
user_name *optional*	User account name used to communicate with the VNX storage system.	string

import_vnx_consistency_group_instance

This resource type has queriable associations from import_vnx_volume, import_vnx_array

Name	Description	Schema
id *optional*	Unique identifier of the VNX consistency group.	string
import_vnx_array *optional*	This is the embeddable reference form of import_vnx_array_id attribute.	import_vnx_array_instance
import_vnx_array_id *optional*	Unique identifier of the VNX storage system where the consistency group exists.	string
import_vnx_volumes *optional*	This is the inverse of the resource type import_vnx_volume association.	< import_vnx_volume_instance > array
importable_criteria *optional*		CGImportableCriteriaEnum
importable_criteria_l10n *optional*	Localized message string corresponding to importable_criteria	string
name *optional*	Name of the consistency group. This property supports case-insensitive filtering	string

import_vnx_volume_instance

This resource type has queriable associations from import_vnx_array, import_vnx_consistency_group

Name	Description	Schema
health *optional*		VnxVolumeStateEnum
health_l10n *optional*	Localized message string corresponding to health	string

Name	Description	Schema
host_volume_ids *optional*	List of host volume identifiers associated with the VNX volume.	< string > array
id *optional*	Unique identifier of the VNX volume.	string
import_vnx_array *optional*	This is the embeddable reference form of import_vnx_array_id attribute.	import_vnx_array_instance
import_vnx_array_id *optional*	Unique identifier of the VNX storage system where the volume exists.	string
import_vnx_consistency_group *optional*	This is the embeddable reference form of import_vnx_consistency_group_id attribute.	import_vnx_consistency_group_instance
import_vnx_consistency_group_id *optional*	Unique identifier of the VNX consistency group, if the volume is in a consistency group.	string
importable_criteria *optional*		VolumeImportableCriteriaEnum
importable_criteria_l10n *optional*	Localized message string corresponding to importable_criteria	string
migration_state *optional*		VnxVolumeMigrationStateEnum
migration_state_l10n *optional*	Localized message string corresponding to migration_state	string
name *optional*	Name of the VNX volume. This property supports case-insensitive filtering	string

Name	Description	Schema
size *optional*	Size of the VNX volume in bytes. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
wwn *optional*	World wide name of the VNX volume.	string

initiator_create_modify

Name	Description	Schema
chap_mutual_password *optional*	Password for CHAP authentication. This value must be 12 to 64 UTF-8 characters. This password is not queriable. CHAP password is required when the cluster CHAP mode is mutual authentication. **Length** : `12 - 64`	string (password)
chap_mutual_username *optional*	Username for CHAP authentication. This value must be 1 to 64 UTF-8 characters. CHAP username is required when the cluster CHAP mode is mutual authentication. **Length** : `1 - 64`	string
chap_single_password *optional*	Password for CHAP authentication. This value must be 12 to 64 UTF-8 characters. This password is not queriable. CHAP password is required when the cluster CHAP mode is mutual authentication. **Length** : `12 - 64`	string (password)
chap_single_username *optional*	Username for CHAP authentication. This value must be 1 to 64 UTF-8 characters. CHAP username is required when the cluster CHAP mode is mutual authentication. **Length** : `1 - 64`	string
port_name *required*	IQN name aka address.	string
port_type *required*		InitiatorProtocolTypeEnum

ip_pool_address_instance

This resource type has queriable associations from network, ip_port, appliance, node

Name	Description	Schema
address *optional*	IP address value, in IPv4 or IPv6 format.	string (ip-address)
appliance *optional*	This is the embeddable reference form of appliance_id attribute.	appliance_instance
appliance_id *optional*	Unique identifier of the appliance to which the IP address belongs.	string
id *optional*	Unique identifier of the IP address.	string
ip_port *optional*	This is the embeddable reference form of ip_port_id attribute.	ip_port_instance
ip_port_id *optional*	Unique identifier of the port that uses this IP address to provide access to storage network services, such as iSCSI. This attribute can be set only for an IP address used by networks of type Storage.	string
network *optional*	This is the embeddable reference form of network_id attribute.	network_instance
network_id *optional*	Unique identifier of the network to which the IP address belongs.	string
node *optional*	This is the embeddable reference form of node_id attribute.	node_instance
node_id *optional*	Unique identifier of the cluster node to which the IP address belongs.	string
purposes *optional*	IP address purposes.	< IpPurposeTypeEnum > array
purposes_l10n *optional*	Localized message array corresponding to purposes	< string > array

ip_port_instance

This resource type has queriable associations from ip_pool_address, ip_port, bond, eth_port, veth_port

Name	Description	Schema
available_usages *optional*	Available IP port usages.	< IpPortUsageEnum > array
available_usages_l10n *optional*	Localized message array corresponding to available_usages	< string > array
bond *optional*	This is the embeddable reference form of bond_id attribute.	bond_instance
bond_id *optional*	Unique identifier of the bond on top of which the IP port is configured. If the IP port is configured on top of an Ethernet front-end port, this attribute should be empty.	string
current_usages *optional*	Current IP port usages.	< IpPortUsageEnum > array
current_usages_l10n *optional*	Localized message array corresponding to current_usages	< string > array
eth_port *optional*	This is the embeddable reference form of eth_port_id attribute.	eth_port_instance
eth_port_id *optional*	Unique identifier of the physical Ethernet front-end port on top of which the IP port is configured. This attribute can be set when the IP port is used by a Unified appliance. It should be empty if the IP port is used by a Unified+ appliance or if the IP port is configured on top of a bond on a Unified appliance.	string
id *optional*	Unique identifier of the IP port.	string
ip_pool_addresses *optional*	This is the inverse of the resource type ip_pool_address association.	< ip_pool_address_instance > array
partner *optional*	This is the embeddable reference form of partner_id attribute.	ip_port_instance

Name	Description	Schema
partner_id *optional*	Identifier of the IP port that is configured on top of physical Ethernet port or virtual Ethernet port or bond with the same physical location on the other node of the appliance. Partner ports are configured symmetrically for HA and load balancing purposes within the appliance.	string
target_iqn *optional*	iSCSI qualified name used by the target configured on top of the IP port initially or as a result of network scaling. If the IP port is not used by an iSCSI connection, this attribute should be empty.	string
veth_port *optional*	This is the embeddable reference form of veth_port_id attribute.	veth_port_instance
veth_port_id *optional*	Unique identifier of the virtual Ethernet front-end port on top of which the IP port is configured. This attribute can be set when the IP port is used by a Unified+ appliance. For a Unified appliance, the value of veth_port_id should be empty.	string

ip_port_modify

Name	Description	Schema
add_current_usages *optional*	Usages to add to the current usages of an IP port. The current usages of an IP port can be extended with external replication if this usage is in the port's list of available usages. The same settings will be applied to the partner IP port. **WARNING** Only one IP port on each node can be assigned to the External_Replication usage. Assigning another IP port to this usage will automatically unassign the currently used IP port on the same node. To unassign an IP port from being used for external replication, choose another IP port and add External_Replication to its list of current usages.	< IpPortUsageEnum > array

job_appliance_forecast_response

Polymorphism : Inheritance
Discriminator : response_type

Name	Description	Schema
high_value *optional*	Estimate for the upper bound forecasted value on that particular time. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
low_value *optional*	Estimate for the lower bound forecasted value on that particular time. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
mean_value *optional*	Estimate for the mean forecasted value on that particular time. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
response_type *required*		string
timestamp *optional*	Date-time of the forecast data.	string (date-time)

job_appliance_time_to_full_response

Polymorphism : Inheritance
Discriminator : response_type

Name	Description	Schema
appliance_id *optional*	Unique ID of appliance.	string
end_of_forecast *optional*	Timestamp of the end of the capacity forecast. If time to full estimates are null, the relevant forecast does not reach full capacity before it ends. In this case the end of the forecast can be used as a minimum for time to full.	string (date-time)
response_type *required*		string

Name	Description	Schema
time_to_full *optional*	Estimated date-time at which the forecast value will reach full capacity.	string (date-time)
time_to_full_optimistic *optional*	Optimistic date-time for time to full based on the lower bound of the forecast 95% confidence interval.	string (date-time)
time_to_full_pessimistic *optional*	Pessimistic date-time for time to full based on the upper bound of the forecast 95% confidence interval.	string (date-time)
time_to_full_status *optional*		ForecastTimeToFullStatusEnum
time_to_full_status_l10n *optional*	Localized message string corresponding to time_to_full_status	string

job_cluster_forecast_response

Polymorphism : Inheritance
Discriminator : response_type

Name	Description	Schema
high_value *optional*	Estimate of the upper bound of the 95% confidence interval for the forecast value at the given timestamp. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
low_value *optional*	Estimate of the lower bound of the 95% confidence interval for the forecast value at the given timestamp. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
mean_value *optional*	Estimate for the mean forecast value at the given timestamp. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
response_type *required*		string

Name	Description	Schema
timestamp *optional*	Timestamp when the forecast was performed.	string (date-time)

job_cluster_time_to_full_response

Polymorphism : Inheritance
Discriminator : response_type

Name	Description	Schema
cluster_id *optional*	Unique ID of the cluster.	string
end_of_forecast *optional*	Timestamp of the end of the capacity forecast. If time to full estimates are null, the relevant forecast does not reach full capacity before it ends. In this case the end of the forecast can be used as a minimum for time to full.	string (date-time)
response_type *required*		string
time_to_full *optional*	Estimated date-time at which the forecast value will reach full capacity.	string (date-time)
time_to_full_optimistic *optional*	Optimistic date-time for time to full based on the lower bound of the forecast 95% confidence interval.	string (date-time)
time_to_full_pessimistic *optional*	Pessimistic date-time for time to full based on the upper bound of the forecast 95% confidence interval.	string (date-time)
time_to_full_status *optional*		ForecastTimeToFullStatusEnum
time_to_full_status_l10n *optional*	Localized message string corresponding to time_to_full_status	string

job_create_response

Create response for an operation.

Polymorphism : Inheritance
Discriminator : response_type

Name	Description	Schema
id *optional*	Unique identifier of the new instance created.	string
response_type *required*		string

job_error_response

Error response for an operation. Contains an array of localized messages.

Polymorphism : Inheritance
Discriminator : response_type

Name	Schema
messages *optional*	< error_message > array
response_type *required*	string

job_file_system_clone_response

File system clone created.

Polymorphism : Inheritance
Discriminator : response_type

Name	Description	Schema
id *optional*	The id of the created clone.	string
response_type *required*		string

job_file_system_restore_response

File system backup snapshot created.

Polymorphism : Inheritance

Discriminator : response_type

Name	Description	Schema
id *optional*	The id of the created snapshot.	string
response_type *required*		string

job_file_system_snapshot_response

Snapshot file system created.

Polymorphism : Inheritance
Discriminator : response_type

Name	Description	Schema
id *optional*	The id of the created snapshot.	string
response_type *required*		string

job_instance

Information about the job. This resource type has queriable associations from job

Name	Description	Schema
children *optional*	This is the inverse of the resource type job association.	< job_instance > array
description_l10n *optional*	Description of the job.	string
end_time *optional*	Date and time when the job execution completed.	string (date-time)
estimated_completion_time *optional*	Estimated completion date and time.	string (date-time)

Name	Description	Schema
id *optional*	Unique identifier of the job.	string
leafs *optional*	This is the inverse of the resource type job association.	< job_instance > array
parent *optional*	This is the embeddable reference form of parent_id attribute.	job_instance
parent_id *optional*	Unique identifier of the parent job, if applicable.	string
progress_percentage *optional*	Percent complete of the job. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
resource_action *optional*		ResourceActionEnum
resource_action_l10n *optional*	Localized message string corresponding to resource_action	string
resource_id *optional*	Unique identifier of the resource on which the job is operating.	string
resource_name *optional*	Name of the resource on which the job is operating. This property supports case-insensitive filtering	string
resource_type *optional*		ResourceTypeEnum
resource_type_l10n *optional*	Localized message string corresponding to resource_type	string
response_body *optional*		base_response

Name	Description	Schema
root *optional*	This is the embeddable reference form of root_id attribute.	job_instance
root_id *optional*	Unique identifier of the root job, if applicable. The root job is the job at the top of the parent hierarchy.	string
start_time *optional*	Date and time when the job execution started.	string (date-time)
state *optional*		JobStateEnum
state_l10n *optional*	Localized message string corresponding to state	string
step_order *optional*	Order of a given job step with respect to its siblings within the job hierarchy. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
user *optional*	Name of the user associated with the job.	string

job_job_response

Job response for an asynchronous request. The response to any asynchronous request that does not fail immediately.

Polymorphism : Inheritance
Discriminator : response_type

Name	Description	Schema
id *optional*	The id of the job created by the request.	string
response_type *required*		string

job_keystore_archive_regenerate_response

Success response body.

Polymorphism : Inheritance

Discriminator : response_type

Name	Description	Schema
download_uri *optional*	A Uniform Resource Identifier which can be used in a subsequent GET request to download the keystore backup archive file.	string
response_type *required*		string

job_migration_recommendation_create_migration_sessions_response

Polymorphism : Inheritance
Discriminator : response_type

Name	Description	Schema
migration_session_ids *optional*	ID of migration sessions created for the recommendation.	< string > array
rescan_host_list *optional*	IDs of attached hosts that require a rescan to ensure accessibility of migrated storage objects after migrations complete.	< string > array
response_type *required*		string

job_migration_session_create_response

The response for the create migration operation.

Polymorphism : Inheritance
Discriminator : response_type

Name	Description	Schema
id *optional*	Identifier of the migration_session object.	string
rescan_host_ids *optional*	List of hosts that be rescanned before a migration session can proceed.	< string > array

Name	Description	Schema
response_type *required*		string

job_response

Job response for an asynchronous request. The response to any asynchronous request that does not fail immediately.

Name	Description	Schema
id *optional*	The id of the job created by the request.	string

job_virtual_machine_snapshot_response

The response to a virtual_machine snapshot request.

Polymorphism : Inheritance
Discriminator : response_type

Name	Description	Schema
id *optional*	Unique id of the new snapshot.	string
response_type *required*		string

job_volume_clone_response

Unique identifier of the new clone volume.

Polymorphism : Inheritance
Discriminator : response_type

Name	Schema
id *optional*	string
response_type *required*	string

job_volume_group_clone_response

Response for volume group clone action

Polymorphism : Inheritance
Discriminator : response_type

Name	Description	Schema
id *optional*	Unique identifier of the new instance created.	string
response_type *required*		string

job_volume_group_refresh_response

volume group refresh response.

Polymorphism : Inheritance
Discriminator : response_type

Name	Description	Schema
backup_snapshot_id *optional*	Unique identifier of the backup snapshot set. This parameter will not be available if the **create_backup_snap** flag was set to false.	string
response_type *required*		string

job_volume_group_restore_response

volume group restore response.

Polymorphism : Inheritance
Discriminator : response_type

Name	Description	Schema
backup_snapshot_id *optional*	Unique identifier of the backup snapshot set. This parameter will not be available if the **create_backup_snap** was set to false.	string
response_type *required*		string

job_volume_group_snapshot_response

Unique identifier of the new snapshot volume.

Polymorphism : Inheritance
Discriminator : response_type

Name	Schema
id *optional*	string
response_type *required*	string

job_volume_refresh_response

Unique identifier of the backup snapshot if one is created.

Polymorphism : Inheritance
Discriminator : response_type

Name	Schema
backup_snapshot_id *optional*	string
response_type *required*	string

job_volume_restore_response

Unique identifier of the backup snapshot if one is created.

Polymorphism : Inheritance
Discriminator : response_type

Name	Schema
backup_snapshot_id *optional*	string
response_type *required*	string

job_volume_snapshot_response

Unique identifier of the new snapshot volume.

Polymorphism : Inheritance
Discriminator : response_type

Name	Schema
id *optional*	string
response_type *required*	string

job_vvol_error_response

Polymorphism : Inheritance
Discriminator : response_type

Name	Description	Schema
description *optional*		string
error_code *optional*	**Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
response_type *required*		string

keystore_archive_instance

A keystore archive file.

Name	Description	Schema
data *optional*	A keystore archive file which includes the individual keystore backup files from each appliance in the cluster.	string (binary)

keystore_archive_regenerate_response

Success response body.

Name	Description	Schema
download_uri *optional*	A Uniform Resource Identifier which can be used in a subsequent GET request to download the keystore backup archive file.	string

license_instance

Software license information for the cluster.

Name	Description	Schema
activation_file_content *optional*	The content of the license activation file to send to the DellEMC Software Licensing Central to retrieve the software license for the cluster.	string
id *optional*	Unique ididentifier of the cluster license.	string
is_licensed *optional*	Whether or not the cluster currently has a valid license.	boolean
trial_expiration_timestamp *optional*	If not currently licensed, the date the trial period expires. If the trial period expires, new provisioning operations will not be allowed.	string (date-time)

local_user_create

Parameters for creating a local user.

Name	Description	Schema
name *required*	Name of the new local user account to be created. The name value can be 1 to 64 UTF-8 characters long, and may only use alphanumeric characters. Dot(.) is the only special character allowed.	string
password *required*	Password for the new local user account to be created. The password value can be 8 to 40 UTF-8 characters long, and include as a minimum one uppercase character, one lowercase character, one numeric character, and one special character from this list [!,@#$%^*>_~].	string (password)

Name	Description	Schema
role_id *required*	The unique identifier of the role to which the new local user will be mapped. Where role_id "1" is for Administrator, "2" is for Storage Administrator, "3" is for Operator, "4" is for VM Administrator and "5" is for Security Administrator roles.	string

local_user_instance

Information about a local user.

Name	Description	Schema
id *optional*	Unique identifier of the local user account.	string
is_built_in *optional*	Whether the user account is built-in or not.	boolean
is_default_password *optional*	Whether the user account has a default password or not. Only applies to default user accounts.	boolean
is_locked *optional*	Whether the user account is locked or not. Defaults to false at creation time.	boolean
name *optional*	Name of the local user account.	string
role_id *optional*	Unique identifier of the role local user account is mapped to.	string

local_user_modify

Name	Description	Schema
current_password *optional*	Current password of the local user. Any local user can change his own password by providing current_password along with the new password.	string (password)
is_locked *optional*	Lock or unlock the local user account. Local user with administration/security administration role can lock or unlock any other local user account. You cannot lock an account you are currently logged-in to.	boolean

Name	Description	Schema
password *optional*	New password of the local user. Local user with administrator or security administrator role can reset the password of other local user accounts without providing the current password. You cannot reset the password of the account you are currently logged-in to.	string (password)
role_id *optional*	The unique identifier of the new role to which the local user has to be mapped. Where role_id "1" is for Administrator, "2" is for Storage Administrator, "3" is for Operator, "4" is for VM Administrator and "5" is for Security Administrator. A local user with either an administration or a security administration role can change the role of any other local user. You cannot change the role of the account you are currently logged-in to.	string

location_history_instance

Storage resource location history. All entries are kept indefinitely and are removed when the resource object is deleted.

Name	Description	Schema
from_appliance_id *optional*	Unique identifier of the appliance from which the volume was relocated.	string
migrated_on *optional*	Time when the storage resource location changed.	string (date-time)
reason *optional*		LocationHistoryReasonEnum
reason_l10n *optional*	Localized message string corresponding to reason	string
to_appliance_id *optional*	Unique identifier of the appliance to which the volume was relocated.	string

login_session_instance

Name	Description	Schema
id *optional*	Unique identifier of the login session.	string
idle_timeout *optional*	Remaining idle time until the session will expire, in seconds. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
is_built_in_user *optional*	Indicates whether the logged-in user is predefined.	boolean
is_password_change_required *optional*	Indicates whether the logged-in user requires a password change.	boolean
role_ids *optional*	Roles to which the logged-in user is mapped.	< string > array
user *optional*	Fully qualified user account name being used to log in.	string

maintenance_window_instance

This resource type has queriable association from appliance

Name	Description	Schema
appliance *optional*	This is the embeddable reference form of appliance_id attribute.	appliance_instance
appliance_id *optional*	Appliance id on which this maintenance window is configured.	string
end_time *optional*	Time when the maintenance window will close (or did close).	string (date-time)
id *optional*	Unique identifier of the maintenance window.	string
is_enabled *optional*	Whether the maintenance window is active.	boolean

maintenance_window_modify

Name	Description	Schema
end_offset *optional*	Number of seconds from the current timestamp the maintenance window will expire. This value is required if is_enabled is passed as true, and may not be more than 172800 (48 hours). **Minimum value** : `0` **Maximum value** : `172800`	integer (int32)
is_enabled *optional*	Activate or deactivate the window for one appliance.	boolean

member_certificate_instance

Embedded member certificate in x509_certificate.

Name	Description	Schema
certificate *optional*	Base64 encoded certificate without any line breaks.	string
depth *optional*	Depth indicates the position of this member certificate in the X509 Certificate chain. End-entity certificate will always have a depth of 1, which is the minimum value for depth. The depth of direct issuer certificate will be incremented by 1 until reaching the root certificate. Root certificate should have the largest depth for the certificate chain. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
issuer *optional*	Distinguished name of the certificate issuer.	string
key_length *optional*	Private key length. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
public_key_algorithm *optional*	Public key algorithm used to generate the key pair.	string
serial_number *optional*	Certificate serial number.	string

Name	Description	Schema
signature_algorithm *optional*	Certificate signature algorithm.	string
subject *optional*	Certificate subject or so called distinguished name.	string
subject_alternative_names *optional*	Additional DNS names or IP addresses in the x509_certificate.	< string > array
thumbprint *optional*	Hash value of the certificate.	string
thumbprint_algorithm *optional*		ThumbprintAlgorithmEnum
thumbprint_algorithm_l10n *optional*	Localized message string corresponding to thumbprint_algorithm	string
valid_from *optional*	Date and time when the certificate becomes valid.	string (date-time)
valid_to *optional*	Date and time when the certificate will expire.	string (date-time)

metrics_generate

Metrics for specified entity

Name	Description	Schema
entity *required*		MetricsEntityEnum
entity_id *required*	Identifier for specific entity.	string
interval *optional*		MetricsIntervalEnum

metrics_generate_response

Response will be just an array of one of the child of this definition

Name	Description	Schema
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string

migration_recommendation_action

A recommended migration action.

Name	Description	Schema
action_state *required*		MigrationRecommendationActionStateEnum
action_state_l10n *optional*	Localized message string corresponding to action_state	string
cost *required*	Unitless value describing estimated cost to perform relative to other migration actions. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
dst_appliance_id *required*	ID of appliance that is the destination for this migration action.	string
host_connectivity_to_destination *required*	Whether all hosts for the migrating resource have connectivity to the destination appliance.	boolean
migration_primary_resource_type *required*		MigrationRecommendationPrimaryResourceTypeEnum

Name	Description	Schema
migration_primary_resource_type_l10n *optional*	Localized message string corresponding to migration_primary_resource_type	string
migration_reason *required*		MigrationRecommendationReasonEnum
migration_reason_l10n *optional*	Localized message string corresponding to migration_reason	string
primary_id *required*	Unique ID of the primary object.	string
primary_name *required*	Name of the primary object.	string
resource_id *required*	ID of storage resource migrated by this action.	string
resource_type *required*		MigrationResourceTypeEnum
resource_type_l10n *optional*	Localized message string corresponding to resource_type	string
src_appliance_id *required*	ID of appliance that is the source for this migration action.	string

migration_recommendation_create

Set evacuate_appliance parameters to evacuate space Filtering on the fields of this embedded resource is not supported.

Name	Description	Schema
evacuate_appliance *required*	Evacuate appliance by specifying optional space_to_free	evacuate_appliance

evacuate_appliance

Name	Description	Schema
appliance_id *required*	ID of appliance on which available space is desired. **Example** : `"evac_from_appliance"`	string
space_to_free *optional*	Optional desired amount of used storage (in bytes) to move to other appliances. If space_to_free is not specified, space to be freed is estimated by the system such that migrating objects equivalent to that much amount of storage space would clear Major severity capacity alarm on the appliance. If there is no Major severity capacity alarm on an appliance and space_to_free is not specified, error will be returned. To free up desired amount of space from an appliance, specify the amount of space greater than zero to be freed. **Minimum value** : `1` **Example** : `3000000000000`	integer (int64)
target_appliance_ids *optional*	Optional IDs of appliances to which used storage can be migrated for this request. If no target appliances are specified, the evacuated objects can be placed on any appliance in the cluster. **Example** : `[ "evac_to_appliance_1", "evac_to_appliance_2", "…" ]`	< string > array

migration_recommendation_create_migration_sessions_response

Name	Description	Schema
migration_session_ids *optional*	ID of migration sessions created for the recommendation.	< string > array
rescan_host_list *optional*	IDs of attached hosts that require a rescan to ensure accessibility of migrated storage objects after migrations complete.	< string > array

migration_recommendation_instance

Name	Description	Schema
created_timestamp *optional*	Time at which recommendation was created.	string (date-time)
estimated_cost *optional*	Unitless value describing estimated cost to migrate all volumes for this recommendation relative to other recommendations. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
id *optional*	Unique ID of recommendation.	string
migration_actions *optional*	Filtering on the fields of this embedded resource is not supported.	< migration_recommendation_action > array
request_parameters *optional*		migration_recommendation_create
rescan_host_list *optional*	IDs of hosts that must be rescanned after migration sessions are created but before migration sessions are started.	< string > array
sessions_completed_timestamp *optional*	Time at which all migration sessions for the recommendation were complete. Null if migration sessions have not been created/started or if any migration pursuant to the recommendation is still ongoing.	string (date-time)
sessions_created_timestamp *optional*	Time at which migration sessions were created for the recommendation. Null if migration sessions have not been created.	string (date-time)
state *optional*		MigrationRecommendationStateEnum
state_l10n *optional*	Localized message string corresponding to state	string

Name	Description	Schema
type *optional*	Type of request that generated a migration recommendation. Evacuate_Appliance - A recommendation to evacuate space by auto selecting storage objects from an appliance using specified size.	MigrationRecommendationTypeEnum
type_l10n *optional*	Localized message string corresponding to type	string

migration_session_create

Name	Description	Schema
automatic_cutover *optional*	Indicates whether the migration session cutover is manual or automatic. Default for virtual_volume resource type migrations is automatic, otherwise the default is manual. **Default** : `false`	boolean
destination_appliance_id *required*	Unique identifier of the destination appliance instance.	string
family_id *required*	Family identifier designating the storage resource or resources to migrate. For volume or virtual_volume migrations, the family is moved together because they share data among the primary object, snapshots, and clones. For volume_group migration, the family of each volume in the group is moved because it is a grouping of volumes.	string
name *optional*	User-specified friendly name of the migration session instance. The name can contain a maximum of 32 Unicode characters. It cannot contain unprintable characters, special HTTP characters, or whitespace.	string
resource_type *required*		MigrationResourceTypeEnum

migration_session_create_response

The response for the create migration operation.

Name	Description	Schema
id *optional*	Identifier of the migration_session object.	string
rescan_host_ids *optional*	List of hosts that be rescanned before a migration session can proceed.	< string > array

migration_session_delete

Name	Description	Schema
force *optional*	Indicates whether all migration activities will be canceled before deleting the session. **Default** : `false`	boolean

migration_session_instance

A migration session. This resource type has queriable associations from virtual_volume, volume, replication_session, volume_group

Name	Description	Schema
created_timestamp *optional*	Time when the migration session was created.	string (date-time)
current_transfer_rate *optional*	Transfer rate of the current sync operation in bytes/sec. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
destination_appliance_id *optional*	Unique identifier of the destination appliance instance.	string
estimated_completion_timestamp *optional*	Estimated completion time of the current sync operation.	string (date-time)

Name	Description	Schema
family_id *optional*	Family identifier designating the storage resource or resources being migrated. For volume or virtual_volume migrations, the family is moved together because they share data among the primary object, snapshots, and clones. For volume_group migration, the family of each volume in the group is moved because it is a grouping of volumes.	string
id *optional*	Unique identifier of the migration session instance.	string
last_sync_timestamp *optional*	Time of the last successful sync operation.	string (date-time)
name *optional*	User-specified friendly name of the migration session instance. This property supports case-insensitive filtering	string
progress_percentage *optional*	Progress percentage of the current sync operation. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
replication_sessions *optional*	This is the inverse of the resource type replication_session association.	< replication_session_instance > array
resource_type *optional*		MigrationResourceTypeEnum
resource_type_l10n *optional*	Localized message string corresponding to resource_type	string
source_appliance_id *optional*	Unique identifier of the source appliance instance.	string
state *optional*		MigrationSessionStateEnum
state_l10n *optional*	Localized message string corresponding to state	string

Name	Description	Schema
virtual_volumes *optional*	This is the inverse of the resource type virtual_volume association.	< virtual_volume_instance > array
volume_groups *optional*	This is the inverse of the resource type volume_group association.	< volume_group_instance > array
volumes *optional*	This is the inverse of the resource type volume association.	< volume_instance > array

migration_session_sync

Name	Description	Schema
automatic_cutover *optional*	Indicates whether the migration session cutover is manual or automatic. Default is manual. **Default** : `false`	boolean
rescan_complete *optional*	Indicates whether a rescan will be performed during the sync operation. Default value is false. If the session creation completed with a message that rescan is required from one or more hosts, you must set this value to true during the subsequent sync operation. Otherwise, the sync operation will fail. **Default** : `false`	boolean

nas_server_create

Name	Description	Schema
current_unix_directory_service *optional*		NASServerCurrentUnixDirectoryServiceEnum
default_unix_user *optional*	Default Unix user name used for granting access in case of Windows to Unix user mapping failure. When empty, access in such case is denied. **Length** : `0 - 63`	string

Name	Description	Schema
default_windows_user *optional*	Default Windows user name used for granting access in case of Unix to Windows user mapping failure. When empty, access in such case is denied. **Length** : `0 - 1023`	string
description *optional*	Description of the NAS server. **Length** : `0 - 255`	string
is_auto_user_mapping_enabled *optional*	A Windows user must have a corresponding matching Unix user (uid) in order to connect. This attribute enables you to automatically generates this Unix user (uid), if that Windows user does not have any in the configured Unix directory service (UDS). In a pure SMB or non multi-protocol environment, this should be set to true. **Default** : `false`	boolean
is_username_translation_enabled *optional*	Enable the possibility to match a Windows account with an Unix account with different names. **Default** : `false`	boolean
name *required*	Name of the NAS server. **Length** : `1 - 255`	string

nas_server_delete

Arguments for the Delete operation.

Name	Description	Schema
domain_password *optional*	Administrator password used to unjoin the associated SMB servers from the Active Directory (AD) domain before deleting the NAS server. This parameter is required when the skipDomainUnjoin parameter is false or not set, and the NAS server has SMB servers joined to an AD domain.	string (password)
domain_user_name *optional*	Administrator login used to unjoin the associated SMB servers from the Active Directory (AD) domain before deleting the NAS server. This parameter is required when the skipDomainUnjoin parameter is false or not set, and the NAS server has SMB servers joined to an AD domain.	string

Name	Description	Schema
is_skip_domain_unjoin *optional*	Indicates whether to keep the associated SMB servers joined to the Active Directory when the NAS server is deleted. Values are:\n - true - Keep the associated SMB servers joined to the Active Directory when the NAS server is deleted. - false - (Default) Try to unjoin the associated SMB servers from the Active Directory before deleting the NAS server. **Default** : `false`	boolean

nas_server_instance

This resource type has queriable associations from file_interface, file_ndmp, file_virus_checker, nfs_server, smb_server, file_dns, file_ftp, file_kerberos, file_ldap, file_nis, file_system

Name	Description	Schema
backup_IPv4_interface_id *optional*	Unique identifier of the preferred IPv4 backup interface.	string
backup_IPv6_interface_id *optional*	Unique identifier of the preferred IPv6 backup interface.	string
current_node_id *optional*	Unique identifier of the node on which the NAS server is running.	string
current_preferred_IPv4_interface_id *optional*	Unique identifier of the current active preferred IPv4 interface.	string
current_preferred_IPv6_interface_id *optional*	Unique identifier of the current active preferred IPv6 interface.	string
current_unix_directory_service *optional*		NASServerCurrentUnixDirectoryServiceEnum

Name	Description	Schema
current_unix_directory_service_l10n *optional*	Localized message string corresponding to current_unix_directory_service	string
default_unix_user *optional*	Default Unix user name used for granting access in case of Windows to Unix user mapping failure. When empty, access in such case is denied.	string
default_windows_user *optional*	Default Windows user name used for granting access in case of Unix to Windows user mapping failure. When empty, access in such case is denied.	string
description *optional*	Description of the NAS server.	string
file_dnses *optional*	This is the inverse of the resource type file_dns association.	< file_dns_instance > array
file_ftps *optional*	This is the inverse of the resource type file_ftp association.	< file_ftp_instance > array
file_interfaces *optional*	This is the inverse of the resource type file_interface association.	< file_interface_instance > array
file_kerberoses *optional*	This is the inverse of the resource type file_kerberos association.	< file_kerberos_instance > array
file_ldaps *optional*	This is the inverse of the resource type file_ldap association.	< file_ldap_instance > array
file_ndmps *optional*	This is the inverse of the resource type file_ndmp association.	< file_ndmp_instance > array
file_nises *optional*	This is the inverse of the resource type file_nis association.	< file_nis_instance > array
file_systems *optional*	This is the inverse of the resource type file_system association.	< file_system_instance > array

Name	Description	Schema
file_virus_checkers *optional*	This is the inverse of the resource type file_virus_checker association.	< file_virus_checker_instance > array
id *optional*	Unique identifier of the NAS server.	string
is_auto_user_mapping_enabled *optional*	A Windows user must have a corresponding matching Unix user (uid) in order to connect. This attribute enables you to automatically generate this Unix user (uid), if that Windows user does not have any in the configured Unix directory service (UDS). In a pure SMB or non multi-protocol environment, this should be set to true. **Default** : `false`	boolean
is_username_translation_enabled *optional*	Enable the possibility to match a windows account to a Unix account with different names. **Default** : `false`	boolean
name *optional*	Name of the NAS server. This property supports case-insensitive filtering	string
nfs_servers *optional*	This is the inverse of the resource type nfs_server association.	< nfs_server_instance > array
operational_status *optional*		NASServerOperationalStatusEnum
operational_status_l10n *optional*	Localized message string corresponding to operational_status	string
preferred_node_id *optional*	Unique identifier of the preferred node for the NAS server The initial value (on NAS server creation) is taken from the current node.	string
production_IPv4_interface_id *optional*	Unique identifier of the preferred IPv4 production interface.	string

Name	Description	Schema
production_IPv6_interface_id *optional*	Unique identifier of the preferred IPv6 production interface.	string
smb_servers *optional*	This is the inverse of the resource type smb_server association.	< smb_server_instance > array

nas_server_modify

Arguments for the modify operation.

Name	Description	Schema
backup_IPv4_interface_id *optional*	Unique identifier of the preferred IPv4 backup interface.	string
backup_IPv6_interface_id *optional*	Unique identifier of the preferred IPv6 backup interface.	string
current_node_id *optional*	Unique identifier of the node on which the NAS server is running.	string
current_unix_directory_service *optional*		NASServerCurrentUnixDirectoryServiceEnum
default_unix_user *optional*	Default Unix user name used for granting access in case of Windows to Unix user mapping failure. When empty, access in such case is denied. **Length** : `0 - 63`	string
default_windows_user *optional*	Default Windows user name used for granting access in case of Unix to Windows user mapping failure. When empty, access in such case is denied. **Length** : `0 - 1023`	string
description *optional*	Description of the NAS server. **Length** : `0 - 255`	string

Name	Description	Schema
is_auto_user_mapping_enabled *optional*	A Windows user must have a corresponding matching Unix user (uid) in order to connect. This attribute enables you to automatically generate this Unix user (uid), if that Windows user does not have any in the configured Unix directory service (UDS). In a pure SMB or non multi-protocol environment, this should be set to true. **Default** : `false`	boolean
is_username_translation_enabled *optional*	Enable the possibility to match a windows account to a Unix account with different names **Default** : `false`	boolean
name *optional*	Name of the NAS server. **Length** : `1 - 255`	string
preferred_node_id *optional*	Unique identifier of the preferred node for the NAS server The initial value (on NAS server create) is taken from the current node.	string
production_IPv4_interface_id *optional*	Unique identifier of the preferred IPv4 production interface.	string
production_IPv6_interface_id *optional*	Unique identifier of the preferred IPv6 production interface.	string

nas_server_ping

Request body for ping arguments.

Name	Description	Schema
destination_address *optional*	Destination to ping, can be either an IP address (IPv4 or IPv6) or a hostname being resolved by the NAS server name resolvers.	string (ip-address)
is_ipv6 *optional*	When true, and the destination is a hostname, it will be resolved to IPv6. Otherwise the hostname is resolved preferably to an IPv4 address. **Default** : `false`	boolean

network_instance

This resource type has queriable association from ip_pool_address

Name	Description	Schema
gateway *optional*	Network gateway in IPv4 or IPv6 format, corresponding to the network's IP version.	string (ip-address)
id *optional*	Unique identifier of the network.	string
ip_pool_addresses *optional*	This is the inverse of the resource type ip_pool_address association.	< ip_pool_address_instance > array
ip_version *optional*		IpVersionTypeEnum
ip_version_l10n *optional*	Localized message string corresponding to ip_version	string
mtu *optional*	Maximum Transmission Unit (MTU) packet size set on network interfaces, in bytes. **Minimum value** : `1280` **Maximum value** : `9000`	integer (int32)
prefix_length *optional*	Network prefix length, used for both IPv4 and IPv6. **Minimum value** : `1` **Maximum value** : `127`	integer (int32)
type *optional*		NetworkTypeEnum
type_l10n *optional*	Localized message string corresponding to type	string
vlan_id *optional*	VLAN identifier. **Minimum value** : `0` **Maximum value** : `4094`	integer (int32)

network_modify

Name	Description	Schema
add_addresses *optional*	IP addresses to add in IPv4 or IPv6 format.	< string (ip-address) > array
cluster_mgmt_address *optional*	New cluster management IP address in IPv4 or IPv6 format, corresponding to the network's IP version. This can only be specified when reconfiguring the management network. Caution: Changing the cluster management IP address will lead to losing management sessions through this address.	string (ip-address)
esxi_credentials *optional*		esxi_credentials
force *optional*	Indicates whether to suppress network validation errors. The option is intended to suppress false errors caused by network environment constraints. Normally the command will fail with an error when: - some of system network ports are in degraded state or have cabling issues, - system top-of-rack switches have configuration issues leading to network unreachability, - network IP addresses have duplicates in the network environment, - or network gateway is unreachable. When force is true, the command will proceed instead. Caution: Only use this option when you are certain your requested settings are correct and you understand why they are failing at this time, and you want to apply the settings anyway. Improper network settings can make the system unreachable for data and management. **Default** : `false`	boolean
gateway *optional*	Network gateway in IPv4 or IPv6 format, corresponding to the network's IP version. Specify empty string to remove the gateway.	string (ip-address)
mtu *optional*	Maximum Transmission Unit (MTU) packet size set on network interfaces, in bytes. **Minimum value** : `1280` **Maximum value** : `9000`	integer (int32)

Name	Description	Schema
prefix_length *optional*	Network prefix length. (Used for both IPv4 and IPv6). **Minimum value** : 1 **Maximum value** : 127	integer (int32)
remove_addresses *optional*	IP addresses to remove in IPv4 or IPv6 format.	< string (ip-address) > array
storage_discovery_address *optional*	New storage discovery IP address in IPv4 or IPv6 format, corresponding to the network's IP version. This can only be specified when reconfiguring the storage network. Specify empty string to remove the storage discovery IP address.	string (ip-address)
vasa_provider_credentials *optional*	Credentials required for re-registering the VASA vendor provider during the reconfiguration of the cluster management IP address. Should be passed only when reconfiguring cluster management IP address.	vasa_provider_credentials
vlan_id *optional*	VLAN identifier. **Minimum value** : 0 **Maximum value** : 4094	integer (int32)

vasa_provider_credentials

Name	Description	Schema
password *optional*	VASA vendor provider password.	string (password)
username *optional*	VASA vendor provider user name.	string

network_replace

Name	Description	Schema
cluster_mgmt_address *required*	New cluster management IP address in IPv4 or IPv6 format, corresponding to the network's IP version. **Minimum length** : 1	string (ip-address)
dns_addresses *required*	List of new DNS server IP addresses in IPv4 or IPv6 format.	< string (ip-address) > array

Name	Description	Schema
esxi_credentials *optional*		esxi_credentials
force *optional*	Indicates whether to suppress network validation errors. The option is intended to suppress false errors caused by network environment constraints. Normally the command will fail with an error when: - some of system network ports are in degraded state or have cabling issues, - system top-of-rack switches have configuration issues leading to network unreachability, - network IP addresses have duplicates in the network environment, - or network gateway is unreachable. When force is true, the command will proceed instead. Caution: Only use this option when you are certain your requested settings are correct and you understand why they are failing at this time, and you want to apply the settings anyway. Improper network settings can make the system unreachable for data and management. **Default** : `false`	boolean
gateway *required*	Network gateway in IPv4 or IPv6 format, corresponding to the network's IP version. Specify empty string to remove the gateway.	string (ip-address)
ip_pool_addresses *required*	List of new IP addresses in IPv4 or IPv6 format.	< string (ip-address) > array
mtu *required*	Maximum Transmission Unit (MTU) packet size set on network interfaces, in bytes. **Minimum value** : `1280` **Maximum value** : `9000`	integer (int32)
ntp_addresses *required*	List of new NTP server FQDNs or IP addresses in IPv4 or IPv6 format.	< string (ip-address) > array
physical_switches *optional*	List of new physical switches settings. If this property is omitted, physical switches configuration will not be modified.	< network_replace_physical_switch > array

Name	Description	Schema
prefix_length *required*	Network prefix length. (Used for both IPv4 and IPv6). **Minimum value** : 1 **Maximum value** : 127	integer (int32)
smtp_config *optional*		network_replace_smtp_config
vasa_provider_credentials *optional*	Credentials required for re-registering the VASA vendor provider during the replacement of the cluster management IP address. Should be passed only when reconfiguring PowerStoreX cluster.	vasa_provider_credentials
vcenter_address *optional*	New vCenter FQDNs or IP address in IPv4 or IPv6 format. Required only when reconfiguring PowerStoreX cluster. **Minimum length** : 1	string (ip-address)
vlan_id *required*	VLAN identifier. **Minimum value** : 0 **Maximum value** : 4094	integer (int32)

vasa_provider_credentials

Name	Description	Schema
password *optional*	VASA vendor provider password.	string (password)
username *optional*	VASA vendor provider user name.	string

network_replace_physical_switch

Name	Description	Schema
connections *optional*	Supported connections for a physical switch.	< network_replace_physical_switch_connection > array
name *optional*	Name of a physical switch.	string

Name	Description	Schema
purpose *optional*		PhysicalSwitchPurposeEnum

network_replace_physical_switch_connection

Name	Description	Schema
address *required*	Physical switch address in IPv4 or IPv6 or DNS hostname format.	string (ip-address)
connect_method *required*		PhysicalSwitchConnectMethodEnum
port *optional*	Port used for connection to switch. **Minimum value** : `0` **Maximum value** : `65535`	integer (int32)
snmp_community_string *optional*	SNMPv2 community string, if SNMPv2c connect method is specified.	string (password)
ssh_password *optional*	SSH password to connect a physical switch if SSH connect method is specified.	string (password)
username *optional*	Username to connect a physical switch for SSH connection method.	string

network_replace_smtp_config

Name	Description	Schema
address *required*	IP address of the SMTP server.	string (ip-address)
port *required*	Port used for sending SMTP messages. **Minimum value** : `0` **Maximum value** : `65535`	integer (int32)
source_email *required*	Source email address used for sending SMTP messages.	string

network_scale

Name	Description	Schema
add_port_ids *optional*	Unique identifiers of available IP ports to be used in the network.	< string > array
force *optional*	Indicates whether to suppress network validation errors. The option is intended to suppress false errors caused by network environment constraints. Normally the command will fail with an error when: • system network ports on top of which IP ports are configured are in degraded state or have cabling issues, • or network IP addresses applied as a result of network scaling have duplicates in the network environment. When force is true, the command will proceed instead. Caution: Only use this option when you are certain your requested settings are correct and you understand why they are failing at this time, and you want to apply the settings anyway. Improper network settings can make the system unreachable for data. **Default** : `false`	boolean
remove_port_ids *optional*	Unique identifiers of IP ports to remove from use in the network.	< string > array

nfs_export_create

Name	Description	Schema
anonymous_GID *optional*	Specifies the group ID of the anonymous account. **Default** : `-2` **Minimum value** : `-2147483648` **Maximum value** : `2147483647`	integer (int32)
anonymous_UID *optional*	Specifies the user ID of the anonymous account. **Default** : `-2` **Minimum value** : `-2147483648` **Maximum value** : `2147483647`	integer (int32)

Name	Description	Schema
default_access *optional*		NFSExportDefaultAccessEnum
description *optional*	User defined NFS Export description. **Length** : `0 - 511`	string
file_system_id *required*	Unique identifier of the file system on which the NFS Export will be created.	string
is_no_SUID *optional*	If set, do not allow access to set SUID. Otherwise, allow access. **Default** : `false`	boolean
min_security *optional*		NFSExportMinSecurityEnum
name *required*	NFS Export name. **Length** : `1 - 80`	string
no_access_hosts *optional*	Hosts with no access to the NFS export or its snapshots. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @.	< string > array
path *required*	Local path to export relative to the file system root directory. With NFS, each export of a file_system or file_snap must have a unique local path. Before you can create additional Exports within an NFS shared folder, you must create directories within it from a Linux/Unix host that is connected to the file system. After a directory has been created from a mounted host, you can create a corresponding Export and set access permissions accordingly. **Length** : `1 - 1023`	string
read_only_hosts *optional*	Hosts with read-only access to the NFS export and its snapshots. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @.	< string > array

Name	Description	Schema
read_only_root_hosts *optional*	Hosts with read-only and ready-only for root user access to the NFS Export and its snapshots. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @.	< string > array
read_write_hosts *optional*	Hosts with read and write access to the NFS export and its snapshots.Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @.	< string > array
read_write_root_hosts *optional*	Hosts with read and write and read and write for root user access to the NFS Export and its snapshots. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @.	< string > array

nfs_export_instance

This resource type has queriable association from file_system

Name	Description	Schema
anonymous_GID *optional*	Specifies the group ID of the anonymous account. **Default** : -2 **Minimum value** : -2147483648 **Maximum value** : 2147483647	integer (int32)
anonymous_UID *optional*	Specifies the user ID of the anonymous account. **Default** : -2 **Minimum value** : -2147483648 **Maximum value** : 2147483647	integer (int32)
default_access *optional*		NFSExportDefaultAccessEnum
default_access_l10n *optional*	Localized message string corresponding to default_access	string
description *optional*	NFS Export description.	string

Name	Description	Schema
file_system *optional*	This is the embeddable reference form of file_system_id attribute.	file_system_instance
file_system_id *optional*	Unique identifier of the file system on which the NFS Export was created.	string
id *optional*	Unique id of the NFS Export.	string
is_no_SUID *optional*	If set, do not allow access to set SUID. Otherwise, allow access.	boolean
min_security *optional*		NFSExportMinSecurityEnum
min_security_l10n *optional*	Localized message string corresponding to min_security	string
name *optional*	NFS Export name. This property supports case-insensitive filtering	string
nfs_owner_username *optional*	**(Applies to NFS shares of VMware NFS storage resources.)** Default owner of the NFS Export associated with the datastore. Required if secure NFS enabled. For NFSv3 or NFSv4 without Kerberos, the default owner is root.	string
no_access_hosts *optional*	Hosts with no access to the NFS export or its snapshots. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @.	< string > array
path *optional*	Local path to a location within the file system. With NFS, each export must have a unique local path. By default, the system exports the root of the file system (top-most directory) at the time the file system is created. This path specifies the unique location of the file system on the storage system. Before you can create additional exports within an NFS shared folder, you must create directories within it from a Linux/Unix host that is connected to the file system. After a directory has been created from a mounted host, you can create a corresponding export and set access permissions accordingly.	string

Name	Description	Schema
read_only_hosts *optional*	Hosts with read-only access to the NFS export and its snapshots. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @.	< string > array
read_only_root_hosts *optional*	Hosts with read-only and ready-only for root user access to the NFS Export and its snapshots. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @.	< string > array
read_write_hosts *optional*	Hosts with read and write access to the NFS export and its snapshots. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @.	< string > array
read_write_root_hosts *optional*	Hosts with read and write and read and write for root user access to the NFS Export and its snapshots. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @.	< string > array

nfs_export_modify

Name	Description	Schema
add_no_access_hosts *optional*	Hosts to add to the no_access_host list. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @. Error if the host already exists in the list. Cannot be combined with no_access_hosts.	< string > array
add_read_only_hosts *optional*	Hosts to add to the current read_only_hosts list. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @. Error if the host already exists. Cannot combine with read_only_hosts.	< string > array
add_read_only_root_hosts *optional*	Hosts to add to the current read_only_root_hosts list. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @. Error if the host already exists. Cannot combine with read_only_root_hosts.	< string > array

Name	Description	Schema
add_read_write_hosts *optional*	Hosts to add to the current read_write_hosts list. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @. Error if Host is already exists. Cannot combine with read_write_hosts.	< string > array
add_read_write_root_hosts *optional*	Hosts to add to the current read_write_root_hosts list. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @. Error if the host already exists. Cannot combine with read_write_root_hosts.	< string > array
anonymous_GID *optional*	Specifies the group ID of the anonymous account. **Default** : `-2` **Minimum value** : `-2147483648` **Maximum value** : `2147483647`	integer (int32)
anonymous_UID *optional*	Specifies the user ID of the anonymous account. **Default** : `-2` **Minimum value** : `-2147483648` **Maximum value** : `2147483647`	integer (int32)
default_access *optional*		NFSExportDefaultAccessEnum
description *optional*	NFS Export description. **Length** : `0 - 511`	string
is_no_SUID *optional*	If set, do not allow access to set SUID. Otherwise, allow access.	boolean
min_security *optional*		NFSExportMinSecurityEnum
no_access_hosts *optional*	Hosts with no access to the NFS export or its snapshots. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @.	< string > array
read_only_hosts *optional*	Hosts with read-only access to the NFS export and its snapshots. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @.	< string > array

Name	Description	Schema
read_only_root_hosts *optional*	Hosts with read-only and ready-only for root user access to the NFS Export and its snapshots. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), Netgroups prefixed with @.	< string > array
read_write_hosts *optional*	Hosts with read and write access to the NFS export and its snapshots. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask) or, Netgroups prefixed with @.	< string > array
read_write_root_hosts *optional*	Hosts with read and write and read and write for root user access to the NFS Export and its snapshots. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @.	< string > array
remove_no_access_hosts *optional*	Hosts to remove from the current no_access_hosts list. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @. Error if the host is not present. Cannot combine with no_access_hosts.	< string > array
remove_read_only_hosts *optional*	Hosts to remove from the current read_only_hosts list. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @. Error if the host is not present. Cannot combine with read_only_hosts.	< string > array
remove_read_only_root_hosts *optional*	Hosts to remove from the current read_only_root_hosts list. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @. Error if The host is not present. Cannot combine with read_only_root_hosts.	< string > array
remove_read_write_hosts *optional*	Hosts to remove from the current read_write_hosts list. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @. Error if Host is not present. Cannot combine with read_write_hosts.	< string > array

Name	Description	Schema
remove_read_write_root_hosts *optional*	Hosts to remove from the current read_write_root_hosts list. Hosts can be entered by Hostname, IP addresses (IPv4, IPv6, IPv4/PrefixLength, IPv6/PrefixLenght, or IPv4/subnetmask), or Netgroups prefixed with @. Error if the host is not present. Cannot combine with read_write_root_hosts.	< string > array

nfs_server_create

Argument for the NFS server create operation.

Name	Description	Schema
credentials_cache_TTL *optional*	Sets the Time-To-Live (in minutes) expiration time in minutes for a Windows entry in the credentials cache. When failed mapping entries expire, the system retries mapping the UID to the SID. **Default** : `5` **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
host_name *optional*	The name that will be used by NFS clients to connect to this NFS server. This name is required when using secure NFS, except when is_use_smb_config_enabled is true. In this case host_name is forced to the SMB server computer name, and must not be specified. **Length** : `1 - 255`	string
is_extended_credentials_enabled *optional*	Indicates whether the NFS server supports more than 16 Unix groups in a Unix credential. Valid values are, - true - NFS server supports more than 16 Unix groups in a Unix credential. The NFS server will send additional request to Unix Directory service to identify Unix groups. - false - NFS server supports more than 16 Unix groups in a Unix credential. The NFS server will send additional request to Unix Directory service to identify Unix groups. Note - The NFS server builds its own Unix credential when it supports more than 16 groups. This process can slow performance. **Default** : `false`	boolean

Name	Description	Schema
is_nfsv3_enabled *optional*	Indicates whether NFSv3 is enabled on the NAS server. When enabled, NFS shares can be accessed with NFSv3. When disabled, NFS shares can not be accessed with NFSv3 protocol. - true - NFSv3 is enabled on the specified NAS server. - false - NFSv3 is disabled on the specified NAS server. **Default** : `true`	boolean
is_nfsv4_enabled *optional*	Indicates whether NFSv4 is enabled on the NAS server. When enabled, NFS shares can be accessed with NFSv4. When disabled, NFS shares can not be accessed with NFSv4 protocol. - true - NFSv4 is enabled on the specified NAS server. - false - NFSv4 is disabled on the specified NAS server. **Default** : `false`	boolean
is_secure_enabled *optional*	Indicates whether secure NFS is enabled on the NFS server. - true - Secure NFS is Enabled. - false - Secure NFS is disabled. **Default** : `false`	boolean
is_use_smb_config_enabled *optional*	Indicates whether SMB authentication is used to authenticate to the KDC. Values are: - true: Indicates that the configured SMB Server settings are used for Kerberos authentication. - false: Indicates that Kerberos uses its own settings. **Default** : `false`	boolean
nas_server_id *required*	Unique identifier of the NAS server.	string

nfs_server_delete

Arguments for the NFS server Delete operation.

Name	Description	Schema
is_skip_unjoin *optional*	Allow to bypass NFS server unjoin. If false delete will fail if secure is enabled and current kdc_type is MS Windows. If secure is enabled either unjoin NFS server before doing delete or set value to true. **Default** : `false`	boolean

nfs_server_instance

This resource type has queriable association from nas_server

Name	Description	Schema
credentials_cache_TTL *optional*	Sets the Time-To-Live (in minutes) expiration timestamp for a Windows entry in the credentials cache. When failed mapping entries expire, the system retries mapping the UID to the SID. **Default** : `5` **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
host_name *optional*	The name that will be used by NFS clients to connect to this NFS server. This name is required when using secure NFS, except when is_use_smb_config_enabled is true. In this case host_name is forced to the SMB server computer name, and must not be specified.	string
id *optional*	Unique identifier of the NFS server.	string
is_extended_credentials_enabled *optional*	Indicates whether the NFS server supports more than 16 Unix groups in a Unix credential. Valid values are, - true - NFS server supports more than 16 Unix groups in a Unix credential. The NFS server will send additional request to Unix Directory service to identify Unix groups. - false - NFS server supports more than 16 Unix groups in a Unix credential. The NFS server will send additional request to Unix Directory service to identify Unix groups. Note - The NFS server builds its own Unix credential when it supports more than 16 groups. This process can slow performance. **Default** : `false`	boolean
is_joined *optional*	Indicates whether the NFS server is joined to Active Directory. Required for Secure NFS. Always false when secure NFS is disabled and kdc_type is not MS Windows.	boolean
is_nfsv3_enabled *optional*	Indicates whether NFSv3 is enabled on the NAS server. When enabled, NFS shares can be accessed with NFSv3. When disabled, NFS shares cannot be accessed with NFSv3 protocol. - true - NFSv3 is enabled on the specified NAS server. - false - NFSv3 is disabled on the specified NAS server.	boolean

Name	Description	Schema
is_nfsv4_enabled *optional*	Indicates whether NFSv4 is enabled on the NAS server. When enabled, NFS shares can be accessed with NFSv4. When disabled, NFS shares cannot be accessed with NFSv4 protocol. - true - NFSv4 is enabled on the specified NAS server. - false - NFSv4 is disabled on the specified NAS server.	boolean
is_secure_enabled *optional*	Indicates whether secure NFS is enabled on the NFS server. - true - Secure NFS is Enabled. - false - Secure NFS is disabled.	boolean
is_use_smb_config_enabled *optional*	Indicates whether SMB authentication is used to authenticate to the KDC. Values are: - true: Indicates that the the configured SMB Server settings are used for Kerberos authentication. - false: Indicates that Kerberos uses its own settings. **Default** : `false`	boolean
nas_server *optional*	This is the embeddable reference form of nas_server_id attribute.	nas_server_instance
nas_server_id *optional*	The unique identifier of the NAS server that serves this share.	string
service_principal_name *optional*	The Service Principal Name (SPN) for the NFS server. This name is updated automatically when the NFS server configuration changes.	string

nfs_server_join

Request arguments for the NFS server join operation.

Name	Description	Schema
domain_password *required*	Password of the domain-user specified to join the Active Directory domain.	string (password)
domain_user_name *required*	Name of a domain-user with privileges to join the Active Directory domain.	string

nfs_server_modify

Arguments for the NFS server modify operation.

Name	Description	Schema
credentials_cache_TTL *optional*	Sets the Time-To-Live (in minutes) expiration stamp for a Windows entry in the credentials cache. When failed mapping entries expire, the system retries mapping the UID to the SID. **Default** : `5` **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
host_name *optional*	The name that will be used by NFS clients to connect to this NFS server. This name is required when using secure NFS, except when is_use_smb_config_enabled is true. In this case host_name is forced to the SMB server computer name, and must not be specified. **Length** : `1 - 255`	string
is_extended_credentials_enabled *optional*	Indicates whether the NFS server supports more than 16 Unix groups in a Unix credential. Valid values are, - true - NFS server supports more than 16 Unix groups in a Unix credential. The NFS server will send additional request to Unix Directory service to identify Unix groups. - false - NFS server supports more than 16 Unix groups in a Unix credential. The NFS server will send additional request to Unix Directory service to identify Unix groups. Note - The NFS server builds its own Unix credential when it supports more than 16 groups. This process can slow performance.	boolean
is_nfsv3_enabled *optional*	Indicates whether NFSv3 is enabled on the NAS server. When enabled, NFS shares can be accessed with NFSv3. When disabled, NFS shares cannot be accessed with NFSv3 protocol. - true - NFSv3 is enabled on the specified NAS server. - false - NFSv3 is disabled on the specified NAS server.	boolean
is_nfsv4_enabled *optional*	Indicates whether NFSv4 is enabled on the NAS server. When enabled, NFS shares can be accessed with NFSv4. When disabled, NFS shares cannot be accessed with NFSv4 protocol. - true - NFSv4 is enabled on the specified NAS server. - false - NFSv4 is disabled on the specified NAS server.	boolean

Name	Description	Schema
is_secure_enabled *optional*	Indicates whether secure NFS is enabled on the NFS server. - true - Secure NFS is Enabled. - false - Secure NFS is disabled.	boolean
is_skip_unjoin *optional*	Allow to bypass NFS server unjoin. If false modification will fail if secure is enabled and current kdc_type is MS Windows. If secure is enabled either unjoin NFS server before deleting or set value to true.	boolean
is_use_smb_config_enabled *optional*	Indicates whether SMB authentication is used to authenticate to the KDC. Values are: - true: Indicates that the the configured SMB Server settings are used for Kerberos authentication. - false: Indicates that Kerberos uses its own settings. **Default** : `false`	boolean

nfs_server_unjoin

Request arguments for the NFS server unjoin operation.

Name	Description	Schema
domain_password *required*	Password of the domain-user specified to unjoin from the Active Directory domain.	string (password)
domain_user_name *required*	Name of a domain-user with privileges to unjoin from the Active Directory domain.	string

node_instance

This resource type has queriable associations from appliance, ip_pool_address, veth_port

Name	Description	Schema
appliance *optional*	This is the embeddable reference form of appliance_id attribute.	appliance_instance
appliance_id *optional*	Unique identifier of the appliance to which the node belongs.	string

Name	Description	Schema
id *optional*	Unique identifier of the node.	string
ip_pool_addresses *optional*	This is the inverse of the resource type ip_pool_address association.	< ip_pool_address_instance > array
slot *optional*	Slot number of the node. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
veth_ports *optional*	This is the inverse of the resource type veth_port association.	< veth_port_instance > array

ntp_instance

Name	Description	Schema
addresses *optional*	NTP server addresses. This list may contain IPv4 addresses, IPv6 addresses, and host names.	< string > array
id *optional*	Unique identifier of the NTP setting.	string

ntp_modify

Name	Description	Schema
addresses *required*	NTP server addresses. This list may contain IPv4 addresses, IPv6 addresses, and host names.	< string > array

performance_metrics_by_appliance

Performance metrics for the appliance collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Unique identifier representing a specific appliance.	string

Name	Description	Schema
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
io_workload_cpu_utilization *optional*	The percentage of CPU Utilization on the cores dedicated to servicing storage I/O requests.	number (float)
read_bandwidth *optional*	Read rate in bytes per second.	number (float)
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

Name	Description	Schema
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)
total_iops *optional*	Total read and write operations per second.	number
write_bandwidth *optional*	Write rate in bytes per second.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

performance_metrics_by_appliance_rollup

Summary of appliance level performance metric data for various rollup intervals beginning with timestamp, including the average and maximum values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Unique identifier representing a specific appliance.	string
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_io_workload_cpu_utilization *optional*	The average percentage of CPU Utilization on the cores dedicated to servicing storage I/O requests. Calculated over time interval across appliance. Derived from an average of utilization across all nodes within the appliance.	number (float)
avg_latency *optional*	Weighted average latency in microseconds.	number (float)
avg_read_bandwidth *optional*	Weighted average read bandwidth in bytes per second.	number (float)
avg_read_iops *optional*	Average reads per second.	number (float)

Name	Description	Schema
avg_read_latency *optional*	Weighted average read latency in microseconds.	number (float)
avg_read_size *optional*	Weighted average read size in bytes.	number (float)
avg_total_bandwidth *optional*	Weighted average total bandwidth in bytes per second.	number (float)
avg_total_iops *optional*	Average total input and output operations per second.	number
avg_write_bandwidth *optional*	Weighted average write bandwidth in bytes per second.	number (float)
avg_write_iops *optional*	Average writes per second.	number (float)
avg_write_latency *optional*	Weighted average write latency in microseconds.	number (float)
avg_write_size *optional*	Weighted average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
max_avg_io_size *optional*	Maximum average size of input and output operations in bytes.	number (float)
max_avg_latency *optional*	Maximum of average latency in microseconds.	number (float)

Name	Description	Schema
max_avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_io_workload_cpu_utilization *optional*	The maximum percentage of CPU Utilization on the cores dedicated to servicing storage I/O requests. Calculated over time interval across appliance. Derived from an average of utilization across all nodes within the appliance.	number (float)
max_read_bandwidth *optional*	Maximum read bandwidth in bytes per second.	number (float)
max_read_iops *optional*	Maximum reads per second.	number (float)
max_total_bandwidth *optional*	Maximum total bandwidth in bytes per second.	number (float)
max_total_iops *optional*	Maximum totals per second.	number
max_write_bandwidth *optional*	Maximum write bandwith in bytes per second.	number (float)
max_write_iops *optional*	Maximum writes per second.	number (float)

Name	Description	Schema
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

performance_metrics_by_cluster

Performance metrics for the cluster collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
cluster_id *optional*	Identifier of the cluster.	string
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string

Name	Description	Schema
read_bandwidth *optional*	Read rate in bytes per second.	number (float)
read_iops *optional*	Total number of read operations per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
write_bandwidth *optional*	Write rate in byte/sec.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

performance_metrics_by_cluster_rollup

Summary of cluster level performance metric data for various rollup intervals beginning with timestamp, including the average and maximum values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Weighted average latency in microseconds.	number (float)

Name	Description	Schema
avg_read_bandwidth *optional*	Weighted average read bandwidth in bytes per second.	number (float)
avg_read_iops *optional*	Average reads per second.	number (float)
avg_read_latency *optional*	Weighted average read latency in microseconds.	number (float)
avg_read_size *optional*	Weighted average read size in bytes.	number (float)
avg_total_bandwidth *optional*	Weighted average total bandwidth in bytes per second.	number (float)
avg_total_iops *optional*	Average total input and output operations per second.	number
avg_write_bandwidth *optional*	Weighted average write bandwidth in bytes per second.	number (float)
avg_write_iops *optional*	Average writes per second.	number (float)
avg_write_latency *optional*	Weighted average write latency in microseconds.	number (float)
avg_write_size *optional*	Weighted average write size in bytes.	number (float)
cluster_id *optional*	Identifier of the cluster.	string
entity *required*		MetricsEntityEnum

Name	Description	Schema
entity_l10n *optional*	Localized message string corresponding to entity	string
max_avg_io_size *optional*	Maximum average size of input and output operations in bytes.	number (float)
max_avg_latency *optional*	Maximum of average latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_read_bandwidth *optional*	Maximum read bandwidth in bytes per second.	number (float)
max_read_iops *optional*	Maximum reads per second.	number (float)
max_total_bandwidth *optional*	Maximum total bandwidth in bytes per second.	number (float)
max_total_iops *optional*	Maximum totals per second.	number

Name	Description	Schema
max_write_bandwidth *optional*	Maximum write bandwidth in bytes per second.	number (float)
max_write_iops *optional*	Maximum writes per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

performance_metrics_by_fe_eth_node

Ethernet performance metrics for the node collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
bytes_rx_ps *optional*	The total bytes received per second.	number (float)
bytes_tx_ps *optional*	The total bytes transmitted per second.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
node_id *optional*	Reference to the associated node on which these metrics were recorded.	string

Name	Description	Schema
pkt_rx_crc_error_ps *optional*	The number of packets received with CRC error (and thus dropped) per second.	number (float)
pkt_rx_no_buffer_error_ps *optional*	The number of packets discarded per second due to lack of buffer space.	number (float)
pkt_rx_ps *optional*	The number of packets received per second.	number (float)
pkt_tx_error_ps *optional*	The number of packets that failed to be transmitted per second due to error.	number (float)
pkt_tx_ps *optional*	The number of packets transmitted per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

performance_metrics_by_fe_eth_node_rollup

Ethernet performance metrics for the node rolled up at various rollup intervals.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
avg_bytes_rx_ps *optional*	The average total bytes received per second.	number (float)
avg_bytes_tx_ps *optional*	The average total bytes transmitted per second.	number (float)

Name	Description	Schema
avg_pkt_rx_crc_error_ps *optional*	The average number of packets received with CRC error (and thus dropped) per second.	number (float)
avg_pkt_rx_no_buffer_error_ps *optional*	The average number of packets discarded per second due to lack of buffer space.	number (float)
avg_pkt_rx_ps *optional*	The average number of packets received per second.	number (float)
avg_pkt_tx_error_ps *optional*	The average number of packets that failed to be transmitted per second due to error.	number (float)
avg_pkt_tx_ps *optional*	The average number of packets transmitted per second.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
max_bytes_rx_ps *optional*	The maximum total bytes received per second.	number (float)
max_bytes_tx_ps *optional*	The maximum total bytes transmitted per second.	number (float)
max_pkt_rx_crc_error_ps *optional*	The maximum number of packets received with CRC error (and thus dropped) per second.	number (float)
max_pkt_rx_no_buffer_error_ps *optional*	The maximum number of packets discarded per second due to lack of buffer space.	number (float)

Name	Description	Schema
max_pkt_rx_ps *optional*	The maximum number of packets received per second.	number (float)
max_pkt_tx_error_ps *optional*	The maximum number of packets that failed to be transmitted per second due to error.	number (float)
max_pkt_tx_ps *optional*	The maximum number of packets transmitted per second.	number (float)
node_id *optional*	Reference to the associated node on which these metrics were recorded.	string
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

performance_metrics_by_fe_eth_port

Performance metrics for the frontend ethernet port collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
bytes_rx_ps *optional*	The total bytes received per second.	number (float)
bytes_tx_ps *optional*	The total bytes transmitted per second.	number (float)
entity *required*		MetricsEntityEnum

Name	Description	Schema
entity_l10n *optional*	Localized message string corresponding to entity	string
fe_port_id *optional*	Reference to the associated frontend ethernet port (eth_port) on which these metrics were recorded.	string
node_id *optional*	Reference to the node the port belongs to.	string
pkt_rx_crc_error_ps *optional*	The number of packets received with CRC error (and thus dropped) per second.	number (float)
pkt_rx_no_buffer_error_ps *optional*	The number of packets discarded per second due to lack of buffer space.	number (float)
pkt_rx_ps *optional*	The number of packets received per second.	number (float)
pkt_tx_error_ps *optional*	The number of packets that failed to be transmitted per second due to error.	number (float)
pkt_tx_ps *optional*	The number of packets transmitted per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

performance_metrics_by_fe_eth_port_rollup

Performance metrics for the frontend ethernet port rolled up at various rollup intervals.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
avg_bytes_rx_ps *optional*	The average total bytes received per second.	number (float)
avg_bytes_tx_ps *optional*	The average total bytes transmitted per second.	number (float)
avg_pkt_rx_crc_error_ps *optional*	The average number of packets received with CRC error (and thus dropped) per second.	number (float)
avg_pkt_rx_no_buffer_error_ps *optional*	The average number of packets discarded per second due to lack of buffer space.	number (float)
avg_pkt_rx_ps *optional*	The average number of packets received per second.	number (float)
avg_pkt_tx_error_ps *optional*	The average number of packets that failed to be transmitted per second due to error.	number (float)
avg_pkt_tx_ps *optional*	The average number of packets transmitted per second.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
fe_port_id *optional*	Reference to the associated frontend ethernet port (eth_port) on which these metrics were recorded.	string
max_bytes_rx_ps *optional*	The maximum total bytes received per second.	number (float)

Name	Description	Schema
max_bytes_tx_ps *optional*	The maximum total bytes transmitted per second.	number (float)
max_pkt_rx_crc_error_ps *optional*	The maximum number of packets received with CRC error (and thus dropped) per second.	number (float)
max_pkt_rx_no_buffer_error_ps *optional*	The maximum number of packets discarded per second due to lack of buffer space.	number (float)
max_pkt_rx_ps *optional*	The maximum number of packets received per second.	number (float)
max_pkt_tx_error_ps *optional*	The maximum number of packets that failed to be transmitted per second due to error.	number (float)
max_pkt_tx_ps *optional*	The maximum number of packets transmitted per second.	number (float)
node_id *optional*	Reference to the node the port belongs to.	string
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

performance_metrics_by_fe_fc_node

Fibre channel performance metrics for the node collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
current_logins *optional*	The number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
dumped_frames_ps *optional*	Dumped frames per second.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
invalid_crc_count_ps *optional*	Invalid crc count per second.	number (float)
invalid_tx_word_count_ps *optional*	Invalid transmission word count per second.	number (float)

Name	Description	Schema
link_failure_count_ps *optional*	Link failure count per second.	number (float)
loss_of_signal_count_ps *optional*	Loss of signal count per second.	number (float)
loss_of_sync_count_ps *optional*	Loss of sync count per second.	number (float)
node_id *optional*	Reference to the associated node on which these metrics were recorded.	string
prim_seq_prot_err_count_ps *optional*	Primitive sequence protocol error count per second.	number (float)
read_bandwidth *optional*	Read rate in bytes per second.	number (float)
read_iops *optional*	Total number of read operations by the node.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
unaligned_bandwidth *optional*	Unaligned read/write rate in bytes per second.	number (float)

Name	Description	Schema
unaligned_iops *optional*	Unaligned total input/output per second.	number (float)
unaligned_read_bandwidth *optional*	Unaligned read rate in bytes per second.	number (float)
unaligned_read_iops *optional*	Unaligned read input/output per second.	number (float)
unaligned_write_bandwidth *optional*	Unaligned write rate in bytes per second.	number (float)
unaligned_write_iops *optional*	Unaligned write input/output per second.	number (float)
write_bandwidth *optional*	Write rate in byte/sec.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

performance_metrics_by_fe_fc_node_rollup

Fibre channel performance metrics for the node rolled up at various rollup intervals.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_current_logins *optional*	Average number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
avg_dumped_frames_ps *optional*	Average dumped frames per second.	number (float)

Name	Description	Schema
avg_invalid_crc_count_ps *optional*	Average invalid crc count per second.	number (float)
avg_invalid_tx_word_count_ps *optional*	Average invalid transmission word count per second.	number (float)
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Weighted average latency in microseconds.	number (float)
avg_link_failure_count_ps *optional*	Average link failure count per second.	number (float)
avg_loss_of_signal_count_ps *optional*	Average loss of signal count per second.	number (float)
avg_loss_of_sync_count_ps *optional*	Average loss of sync count per second.	number (float)
avg_prim_seq_prot_err_count_ps *optional*	Average primitive sequence protocol error count per second.	number (float)
avg_read_bandwidth *optional*	Weighted average read bandwidth in bytes per second.	number (float)
avg_read_iops *optional*	Average reads per second.	number (float)
avg_read_latency *optional*	Weighted average read latency in microseconds.	number (float)

Name	Description	Schema
avg_read_size *optional*	Weighted average read size in bytes.	number (float)
avg_total_bandwidth *optional*	Weighted average total bandwidth in bytes per second.	number (float)
avg_total_iops *optional*	Average total input and output operations per second.	number
avg_unaligned_bandwidth *optional*	Average unaligned read/write rate in bytes per second.	number (float)
avg_unaligned_iops *optional*	Average unaligned total input/output per second.	number (float)
avg_unaligned_read_bandwidth *optional*	Average unaligned read rate in bytes per second.	number (float)
avg_unaligned_read_iops *optional*	Average unaligned read input/output per second.	number (float)
avg_unaligned_write_bandwidth *optional*	Average unaligned write rate in bytes per second.	number (float)
avg_unaligned_write_iops *optional*	Average unaligned write input/output per second.	number (float)
avg_write_bandwidth *optional*	Weighted average write bandwidth in bytes per second.	number (float)
avg_write_iops *optional*	Average writes per second.	number (float)

Name	Description	Schema
avg_write_latency *optional*	Weighted average write latency in microseconds.	number (float)
avg_write_size *optional*	Weighted average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
max_avg_io_size *optional*	Maximum average size of input and output operations in bytes.	number (float)
max_avg_latency *optional*	Maximum of average latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_current_logins *optional*	Maximum number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_dumped_frames_ps *optional*	The maximum dumped frames per second.	number (float)

Name	Description	Schema
max_invalid_crc_count_ps *optional*	The maximum invalid crc count per second.	number (float)
max_invalid_tx_word_count_ps *optional*	The maximum invalid transmission word count per second.	number (float)
max_link_failure_count_ps *optional*	The maximum link failure count per second.	number (float)
max_loss_of_signal_count_ps *optional*	The maximum loss of signal count per second.	number (float)
max_loss_of_sync_count_ps *optional*	The maximum loss of sync count per second.	number (float)
max_prim_seq_prot_err_count_ps *optional*	The maximum primitive sequence protocol error count per second.	number (float)
max_read_bandwidth *optional*	Maximum read bandwidth in bytes per second.	number (float)
max_read_iops *optional*	Maximum reads per second.	number (float)
max_total_bandwidth *optional*	Maximum total bandwidth in bytes per second.	number (float)
max_total_iops *optional*	Maximum totals per second.	number

Name	Description	Schema
max_unaligned_bandwidth *optional*	Maximum unaligned read/write rate in bytes per second.	number (float)
max_unaligned_iops *optional*	Maximum unaligned total input/output per second.	number (float)
max_unaligned_read_bandwidth *optional*	Maximum unaligned read rate in bytes per second.	number (float)
max_unaligned_read_iops *optional*	Maximum unaligned read input/output per second.	number (float)
max_unaligned_write_bandwidth *optional*	Maximum unaligned write rate in bytes per second.	number (float)
max_unaligned_write_iops *optional*	Maximum unaligned write input/output per second.	number (float)
max_write_bandwidth *optional*	Maximum write bandwidth in bytes per second.	number (float)
max_write_iops *optional*	Maximum writes per second.	number (float)
node_id *optional*	Reference to the associated node on which these metrics were recorded.	string
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

performance_metrics_by_fe_fc_port

Performance metrics for the frontend fibre channel port collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
current_logins *optional*	The number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
dumped_frames_ps *optional*	Dumped frames per second.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string

Name	Description	Schema
fe_port_id *optional*	Reference to the associated frontend fibre channel port (fc_port) on which these metrics were recorded.	string
invalid_crc_count_ps *optional*	Invalid crc count per second.	number (float)
invalid_tx_word_count_ps *optional*	Invalid transmission word count per second.	number (float)
link_failure_count_ps *optional*	Link failure count per second.	number (float)
loss_of_signal_count_ps *optional*	Loss of signal count per second.	number (float)
loss_of_sync_count_ps *optional*	Loss of sync count per second.	number (float)
node_id *optional*	Reference to the node the port belongs to.	string
prim_seq_prot_err_count_ps *optional*	Primitive sequence protocol error count per second.	number (float)
read_bandwidth *optional*	Read rate in bytes per second.	number (float)
read_iops *optional*	Total number of read operations by the node.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

Name	Description	Schema
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
unaligned_bandwidth *optional*	Unaligned read/write rate in bytes per second.	number (float)
unaligned_iops *optional*	Unaligned total input/output per second.	number (float)
unaligned_read_bandwidth *optional*	Unaligned read rate in bytes per second.	number (float)
unaligned_read_iops *optional*	Unaligned read input/output per second.	number (float)
unaligned_write_bandwidth *optional*	Unaligned write rate in bytes per second.	number (float)
unaligned_write_iops *optional*	Unaligned write input/output per second.	number (float)
write_bandwidth *optional*	Write rate in byte/sec.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

performance_metrics_by_fe_fc_port_rollup

Performance metrics for the frontend fibre channel port rolled up at various intervals.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
avg_current_logins *optional*	Average number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
avg_dumped_frames_ps *optional*	Average dumped frames per second.	number (float)
avg_invalid_crc_count_ps *optional*	Average invalid crc count per second.	number (float)
avg_invalid_tx_word_count_ps *optional*	Average invalid transmission word count per second.	number (float)
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Weighted average latency in microseconds.	number (float)
avg_link_failure_count_ps *optional*	Average link failure count per second.	number (float)
avg_loss_of_signal_count_ps *optional*	Average loss of signal count per second.	number (float)
avg_loss_of_sync_count_ps *optional*	Average loss of sync count per second.	number (float)
avg_prim_seq_prot_err_count_ps *optional*	Average primitive sequence protocol error count per second.	number (float)

Name	Description	Schema
avg_read_bandwidth *optional*	Weighted average read bandwidth in bytes per second.	number (float)
avg_read_iops *optional*	Average reads per second.	number (float)
avg_read_latency *optional*	Weighted average read latency in microseconds.	number (float)
avg_read_size *optional*	Weighted average read size in bytes.	number (float)
avg_total_bandwidth *optional*	Weighted average total bandwidth in bytes per second.	number (float)
avg_total_iops *optional*	Average total input and output operations per second.	number
avg_unaligned_bandwidth *optional*	Average unaligned read/write rate in bytes per second.	number (float)
avg_unaligned_iops *optional*	Average unaligned total input/output per second.	number (float)
avg_unaligned_read_bandwidth *optional*	Average unaligned read rate in bytes per second.	number (float)
avg_unaligned_read_iops *optional*	Average unaligned read input/output per second.	number (float)
avg_unaligned_write_bandwidth *optional*	Average unaligned write rate in bytes per second.	number (float)

Name	Description	Schema
avg_unaligned_write_iops *optional*	Average unaligned write input/output per second.	number (float)
avg_write_bandwidth *optional*	Weighted average write bandwidth in bytes per second.	number (float)
avg_write_iops *optional*	Average writes per second.	number (float)
avg_write_latency *optional*	Weighted average write latency in microseconds.	number (float)
avg_write_size *optional*	Weighted average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
fe_port_id *optional*	Reference to the associated frontend fibre channel port (fc_port) on which these metrics were recorded.	string
max_avg_io_size *optional*	Maximum average size of input and output operations in bytes.	number (float)
max_avg_latency *optional*	Maximum of average latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)

Name	Description	Schema
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_current_logins *optional*	Maximum number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_dumped_frames_ps *optional*	The maximum dumped frames per second.	number (float)
max_invalid_crc_count_ps *optional*	The maximum invalid crc count per second.	number (float)
max_invalid_tx_word_count_ps *optional*	The maximum invalid transmission word count per second.	number (float)
max_link_failure_count_ps *optional*	The maximum link failure count per second.	number (float)
max_loss_of_signal_count_ps *optional*	The maximum loss of signal count per second.	number (float)
max_loss_of_sync_count_ps *optional*	The maximum loss of sync count per second.	number (float)
max_prim_seq_prot_err_count_ps *optional*	The maximum primitive sequence protocol error count per second.	number (float)

Name	Description	Schema
max_read_bandwidth *optional*	Maximum read bandwidth in bytes per second.	number (float)
max_read_iops *optional*	Maximum reads per second.	number (float)
max_total_bandwidth *optional*	Maximum total bandwidth in bytes per second.	number (float)
max_total_iops *optional*	Maximum totals per second.	number
max_unaligned_bandwidth *optional*	Maximum unaligned read/write rate in bytes per second.	number (float)
max_unaligned_iops *optional*	Maximum unaligned total input/output per second.	number (float)
max_unaligned_read_bandwidth *optional*	Maximum unaligned read rate in bytes per second.	number (float)
max_unaligned_read_iops *optional*	Maximum unaligned read input/output per second.	number (float)
max_unaligned_write_bandwidth *optional*	Maximum unaligned write rate in bytes per second.	number (float)
max_unaligned_write_iops *optional*	Maximum unaligned write input/output per second.	number (float)

Name	Description	Schema
max_write_bandwidth *optional*	Maximum write bandwidth in bytes per second.	number (float)
max_write_iops *optional*	Maximum writes per second.	number (float)
node_id *optional*	Reference to the node the port belongs to.	string
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

performance_metrics_by_file_system

Performance metrics for the file system collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_size *optional*	Average read and write size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)

Name	Description	Schema
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
file_system_id *optional*	Unique identifier of the file system.	string
read_bandwidth *optional*	Read rate in bytes per second.	number (float)
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
write_bandwidth *optional*	Write rate in bytes per second.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

performance_metrics_by_file_system_rollup

Summary of file system level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)
avg_read_bandwidth *optional*	Average read rate in bytes per second.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_size *optional*	Average read and write size in bytes.	number (float)
avg_total_bandwidth *optional*	Average data transfer rate in bytes per second.	number (float)
avg_total_iops *optional*	Average read and write operations per second.	number (float)
avg_write_bandwidth *optional*	Average write rate in bytes per second.	number (float)
avg_write_iops *optional*	Average write operations per second.	number (float)

Name	Description	Schema
avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
file_system_id *optional*	Unique identifier of the file system.	string
max_avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_size *optional*	Maximum of average read and write size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_iops *optional*	Maximum read and write operations per second.	number (float)

Name	Description	Schema
max_read_bandwidth *optional*	Maximum read rate in bytes per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_total_bandwidth *optional*	Maximum data transfer rate in bytes per second.	number (float)
max_write_bandwidth *optional*	Maximum write rate in bytes per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

performance_metrics_by_nfs

Performance metrics for the nfs collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)

Name	Description	Schema
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
node_id *optional*	Unique identifier of the node.	string
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_iops *optional*	Total read and write operations per second.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

performance_metrics_by_nfs_rollup

Summary of nfs level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_latency *optional*	Maximum read and write latency in microseconds.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_total_iops *optional*	Average read and write operations per second.	number (float)
avg_write_iops *optional*	Average write operations per second.	number (float)
avg_write_latency *optional*	Maximum write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string

Name	Description	Schema
max_avg_io_size *optional*	Maximum of average read and write size in bytes.	number (float)
max_avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_iops *optional*	Maximum read and write operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)

Name	Description	Schema
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

performance_metrics_by_nfsv3

Performance metrics for the nfs collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_md_latency *optional*	Average md latency operations per second.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
failed_md_ops *optional*	Total failed md operations per second.	number (float)
md_ops *optional*	Total md operations per second.	number (float)
node_id *optional*	Unique identifier of the nfs.	string
read_iops *optional*	Total read iops in microseconds.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

Name	Description	Schema
total_iops *optional*	Total read and write iops in microseconds.	number (float)
write_iops *optional*	Total write iops in microseconds.	number (float)

performance_metrics_by_nfsv3_rollup

Summary of nfs level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_failed_md_ops *optional*	Average failed operations per second.	number (float)
avg_md_latency *optional*	Average md latency per second.	number (float)
avg_md_ops *optional*	Average md operations per second.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_total_iops *optional*	Average read and write operations per second.	number (float)
avg_write_iops *optional*	Average write operations per second.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string

Name	Description	Schema
max_avg_md_latency *optional*	Maximum average md latency per second.	number (float)
max_failed_md_ops *optional*	Max failed operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_total_iops *optional*	Maximum read and write operations per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

performance_metrics_by_nfsv4

Performance metrics for the nfs collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_md_latency *optional*	Average md latency operations per second.	number (float)

Name	Description	Schema
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
failed_md_ops *optional*	Total failed md operations per second.	number (float)
md_ops *optional*	Total md operations per second.	number (float)
node_id *optional*	Unique identifier of the nfs.	string
read_iops *optional*	Total read iops in microseconds.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_iops *optional*	Total read and write iops in microseconds.	number (float)
write_iops *optional*	Total write iops in microseconds.	number (float)

performance_metrics_by_nfsv4_rollup

Summary of nfs level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_failed_md_ops *optional*	Average failed operations per second.	number (float)
avg_md_latency *optional*	Average md latency per second.	number (float)
avg_md_ops *optional*	Average md operations per second.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_total_iops *optional*	Average read and write operations per second.	number (float)
avg_write_iops *optional*	Average write operations per second.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
max_avg_md_latency *optional*	Maximum average md latency per second.	number (float)
max_failed_md_ops *optional*	Max failed operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_total_iops *optional*	Maximum read and write operations per second.	number (float)

Name	Description	Schema
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

performance_metrics_by_node

Performance metrics for the node collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)

Name	Description	Schema
avg_write_size *optional*	Average write size in bytes.	number (float)
current_logins *optional*	The number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
io_workload_cpu_utilization *optional*	The percentage of CPU Utilization on the cores dedicated to servicing storage I/O requests.	number (float)
node_id *optional*	Unique identifier representing a specific node.	string
read_bandwidth *optional*	Read rate in bytes per second.	number (float)
read_iops *optional*	Total number of read operations by the node.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)

Name	Description	Schema
unaligned_bandwidth *optional*	Unaligned read/write rate in bytes per second.	number (float)
unaligned_iops *optional*	Unaligned total input/output per second.	number (float)
unaligned_read_bandwidth *optional*	Unaligned read rate in bytes per second.	number (float)
unaligned_read_iops *optional*	Unaligned read input/output per second.	number (float)
unaligned_write_bandwidth *optional*	Unaligned write rate in bytes per second.	number (float)
unaligned_write_iops *optional*	Unaligned write input/output per second.	number (float)
write_bandwidth *optional*	Write rate in byte/sec.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

performance_metrics_by_node_rollup

Summary of node level performance metric data for various rollup intervals beginning with timestamp, including the average and maximum values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string

Name	Description	Schema
avg_current_logins *optional*	Average number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_io_workload_cpu_utilization *optional*	The average percentage of CPU Utilization on the cores dedicated to servicing storage I/O requests. Calculated over time across appliance. Derived from an average of utilization across all nodes within the appliance.	number (float)
avg_latency *optional*	Weighted average latency in microseconds.	number (float)
avg_read_bandwidth *optional*	Weighted average read bandwidth in bytes per second.	number (float)
avg_read_iops *optional*	Average reads per second.	number (float)
avg_read_latency *optional*	Weighted average read latency in microseconds.	number (float)
avg_read_size *optional*	Weighted average read size in bytes.	number (float)
avg_total_bandwidth *optional*	Weighted average total bandwidth in bytes per second.	number (float)
avg_total_iops *optional*	Average total input and output operations per second.	number
avg_unaligned_bandwidth *optional*	Average unaligned read/write rate in bytes per second.	number (float)
avg_unaligned_iops *optional*	Average unaligned total input/output per second.	number (float)

Name	Description	Schema
avg_unaligned_read_bandwidth *optional*	Average unaligned read rate in bytes per second.	number (float)
avg_unaligned_read_iops *optional*	Average unaligned read input/output per second.	number (float)
avg_unaligned_write_bandwidth *optional*	Average unaligned write rate in bytes per second.	number (float)
avg_unaligned_write_iops *optional*	Average unaligned write input/output per second.	number (float)
avg_write_bandwidth *optional*	Weighted average write bandwidth in bytes per second.	number (float)
avg_write_iops *optional*	Average writes per second.	number (float)
avg_write_latency *optional*	Weighted average write latency in microseconds.	number (float)
avg_write_size *optional*	Weighted average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
max_avg_io_size *optional*	Maximum average size of input and output operations in bytes.	number (float)

Name	Description	Schema
max_avg_latency *optional*	Maximum of average latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_current_logins *optional*	Maximum number of logins to the target from initiators. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_io_workload_cpu_utilization *optional*	The maximum percentage of CPU Utilization on the cores dedicated to servicing storage I/O requests. Calculated over time across appliance. Derived from an average of utilization across all nodes within the appliance.	number (float)
max_read_bandwidth *optional*	Maximum read bandwidth in bytes per second.	number (float)
max_read_iops *optional*	Maximum reads per second.	number (float)
max_total_bandwidth *optional*	Maximum total bandwidth in bytes per second.	number (float)
max_total_iops *optional*	Maximum totals per second.	number

Name	Description	Schema
max_unaligned_bandwidth *optional*	Maximum unaligned read/write rate in bytes per second.	number (float)
max_unaligned_iops *optional*	Maximum unaligned total input/output per second.	number (float)
max_unaligned_read_bandwidth *optional*	Maximum unaligned read rate in bytes per second.	number (float)
max_unaligned_read_iops *optional*	Maximum unaligned read input/output per second.	number (float)
max_unaligned_write_bandwidth *optional*	Maximum unaligned write rate in bytes per second.	number (float)
max_unaligned_write_iops *optional*	Maximum unaligned write input/output per second.	number (float)
max_write_bandwidth *optional*	Maximum write bandwidth in bytes per second.	number (float)
max_write_iops *optional*	Maximum writes per second.	number (float)
node_id *optional*	Unique identifier representing a specific node.	string
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

performance_metrics_by_smb_cache

Performance metrics for the smb cache collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
hash_avg_latency *optional*	Average hash latency.	number (float)
hash_avg_size *optional*	Average hash size.	number (float)
hash_max_latency *optional*	Max hash latency.	number (float)
hash_max_size *optional*	Max hash size.	number (float)
hash_min_latency *optional*	Min hash latency.	number (float)
hash_min_size *optional*	Max hash size.	number (float)
max_used_threads *optional*	Max used threads	number (float)
node_id *optional*	Unique identifier of the node.	string

Name	Description	Schema
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_rejected_tasks *optional*	Total rejected task.	number (float)
total_tasks *optional*	Total tasks.	number (float)

performance_metrics_by_smb_cache_rollup

Performance metrics nfs level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
hash_avg_latency *optional*	Average hash latency.	number (float)
hash_avg_size *optional*	Average hash size.	number (float)
hash_max_avg_latency *optional*	Average max hash latency.	number (float)

Name	Description	Schema
hash_max_avg_size *optional*	Average max hash size.	number (float)
hash_max_latency *optional*	Max hash latency.	number (float)
hash_max_size *optional*	Max hash size.	number (float)
hash_min_latency *optional*	Min hash latency.	number (float)
hash_min_size *optional*	Max hash size.	number (float)
max_used_threads *optional*	Max used threads	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_rejected_tasks *optional*	Total rejected task.	number (float)
total_tasks *optional*	Total tasks.	number (float)

performance_metrics_by_smb_client

Performance metrics for the smb client collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
node_id *optional*	Unique identifier of the node.	string
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)

Name	Description	Schema
timestamp *optional*	End of sample period.	string (date-time)
total_calls *optional*	Total calls.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

performance_metrics_by_smb_client_rollup

Summary of smb client level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_calls *optional*	Average calls.	number (float)
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_iops *optional*	Average read and write operations per second.	number (float)
avg_latency *optional*	Maximum read and write latency in microseconds.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)

Name	Description	Schema
avg_write_iops *optional*	Average write operations per second.	number (float)
avg_write_latency *optional*	Maximum write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
max_avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_size *optional*	Maximum of average read and write size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_calls *optional*	Maximum calls.	number (float)

Name	Description	Schema
max_iops *optional*	Maximum read and write operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

performance_metrics_by_smb_node

Performance metrics for the smb node collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)

Name	Description	Schema
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
node_id *optional*	Unique identifier of the node.	string
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_calls *optional*	Total calls.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

performance_metrics_by_smb_node_rollup

Summary of smb node level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_calls *optional*	Average calls.	number (float)
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_iops *optional*	Average read and write operations per second.	number (float)
avg_latency *optional*	Maximum read and write latency in microseconds.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_iops *optional*	Average write operations per second.	number (float)
avg_write_latency *optional*	Maximum write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
max_avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)

Name	Description	Schema
max_avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_size *optional*	Maximum of average read and write size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_calls *optional*	Maximum calls.	number (float)
max_iops *optional*	Maximum read and write operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

performance_metrics_by_smb_v1_builtin_client

Performance metrics for the smb v1 client collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
node_id *optional*	Unique identifier of the node.	string
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)

Name	Description	Schema
timestamp *optional*	End of sample period.	string (date-time)
total_calls *optional*	Total calls.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

performance_metrics_by_smb_v1_builtin_client_rollup

Summary of smb v1 client level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_calls *optional*	Average calls.	number (float)
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_iops *optional*	Average read and write operations per second.	number (float)
avg_latency *optional*	Maximum read and write latency in microseconds.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)

Name	Description	Schema
avg_write_iops *optional*	Average write operations per second.	number (float)
avg_write_latency *optional*	Maximum write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
max_avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_size *optional*	Maximum of average read and write size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_calls *optional*	Maximum calls.	number (float)

Name	Description	Schema
max_iops *optional*	Maximum read and write operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

performance_metrics_by_smb_v1_node

Performance metrics for the smb v1 node collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)

Name	Description	Schema
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
node_id *optional*	Unique identifier of the node.	string
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_calls *optional*	Total calls.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

performance_metrics_by_smb_v1_node_rollup

Summary of smb v1 node level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_calls *optional*	Average calls.	number (float)
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_iops *optional*	Average read and write operations per second.	number (float)
avg_latency *optional*	Maximum read and write latency in microseconds.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_iops *optional*	Average write operations per second.	number (float)
avg_write_latency *optional*	Maximum write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
max_avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)

Name	Description	Schema
max_avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_size *optional*	Maximum of average read and write size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_calls *optional*	Maximum calls.	number (float)
max_iops *optional*	Maximum read and write operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

performance_metrics_by_smb_v2_builtin_client

Performance metrics for the smb v1 client collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
node_id *optional*	Unique identifier of the node.	string
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)

Name	Description	Schema
timestamp *optional*	End of sample period.	string (date-time)
total_calls *optional*	Total calls.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

performance_metrics_by_smb_v2_builtin_client_rollup

Summary of smb v1 client level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_calls *optional*	Average calls.	number (float)
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_iops *optional*	Average read and write operations per second.	number (float)
avg_latency *optional*	Maximum read and write latency in microseconds.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)

Name	Description	Schema
avg_write_iops *optional*	Average write operations per second.	number (float)
avg_write_latency *optional*	Maximum write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
max_avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_size *optional*	Maximum of average read and write size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_calls *optional*	Maximum calls.	number (float)

Name	Description	Schema
max_iops *optional*	Maximum read and write operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

performance_metrics_by_smb_v2_node

Performance metrics for the smb v1 node collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)

Name	Description	Schema
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
node_id *optional*	Unique identifier of the node.	string
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_calls *optional*	Total calls.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

performance_metrics_by_smb_v2_node_rollup

Summary of smb v1 node level performance metric data for the period beginning with timestamp, including the average and maximum values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_calls *optional*	Average calls.	number (float)
avg_io_size *optional*	Average read and write size in bytes.	number (float)
avg_iops *optional*	Average read and write operations per second.	number (float)
avg_latency *optional*	Maximum read and write latency in microseconds.	number (float)
avg_read_iops *optional*	Average read operations per second.	number (float)
avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_iops *optional*	Average write operations per second.	number (float)
avg_write_latency *optional*	Maximum write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
max_avg_latency *optional*	Maximum of average read and write latency in microseconds.	number (float)

Name	Description	Schema
max_avg_read_latency *optional*	Maximum of average read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_size *optional*	Maximum of average read and write size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_calls *optional*	Maximum calls.	number (float)
max_iops *optional*	Maximum read and write operations per second.	number (float)
max_read_iops *optional*	Maximum read operations per second.	number (float)
max_write_iops *optional*	Maximum write operations per second.	number (float)
node_id *optional*	Unique identifier of the node.	string
repeat_count *optional*	Number of consecutive sampling periods during which there were no changes in the metrics values. If the value is omitted from the response, it is 1 (no additional repeats). **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	Time at the beginning of sample period.	string (date-time)

performance_metrics_by_vg

Performance metrics for the volumes in a volume group collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
read_bandwidth *optional*	Read rate in byte/sec.	number (float)
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)

Name	Description	Schema
timestamp *optional*	End of sample period.	string (date-time)
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
vg_id *optional*	Unique identifier representing a volume group.	string
write_bandwidth *optional*	Write rate in byte/sec.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

performance_metrics_by_vm

Performance metrics for the virtual machine collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)

Name	Description	Schema
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
read_bandwidth *optional*	Read rate in bytes per second.	number (float)
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
vm_id *optional*	Unique identifier representing a specific virtual machine.	string
write_bandwidth *optional*	Write rate in byte/sec.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

performance_metrics_by_vm_rollup

Summary of virtual machine level performance metric data for various rollup intervals beginning with timestamp, including the average and maximum values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Weighted average latency in microseconds.	number (float)
avg_read_bandwidth *optional*	Weighted average read bandwidth in bytes per second.	number (float)
avg_read_iops *optional*	Average reads per second.	number (float)
avg_read_latency *optional*	Weighted average read latency in microseconds.	number (float)
avg_read_size *optional*	Weighted average read size in bytes.	number (float)
avg_total_bandwidth *optional*	Weighted average total bandwidth in bytes per second.	number (float)
avg_total_iops *optional*	Average total input and output operations per second.	number (float)
avg_write_bandwidth *optional*	Weighted average write bandwidth in bytes per second.	number (float)
avg_write_iops *optional*	Average writes per second.	number (float)

Name	Description	Schema
avg_write_latency *optional*	Weighted average write latency in microseconds.	number (float)
avg_write_size *optional*	Weighted average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
max_avg_io_size *optional*	Maximum average size of input and output operations in bytes.	number (float)
max_avg_latency *optional*	Maximum of average latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_read_bandwidth *optional*	Maximum read bandwidth in bytes per second.	number (float)
max_read_iops *optional*	Maximum reads per second.	number (float)

Name	Description	Schema
max_total_bandwidth *optional*	Maximum total bandwidth in bytes per second.	number (float)
max_total_iops *optional*	Maximum totals per second.	number
max_write_bandwidth *optional*	Maximum write bandwidth in bytes per second.	number (float)
max_write_iops *optional*	Maximum writes per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
vm_id *optional*	Unique identifier representing a specific virtual machine.	string

performance_metrics_by_volume

Performance metrics for the volume collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Average read and write latency in microseconds.	number (float)

Name	Description	Schema
avg_read_latency *optional*	Average read latency in microseconds.	number (float)
avg_read_size *optional*	Average read size in bytes.	number (float)
avg_write_latency *optional*	Average write latency in microseconds.	number (float)
avg_write_size *optional*	Average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
read_bandwidth *optional*	Read rate in bytes per second.	number (float)
read_iops *optional*	Total read operations per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
total_bandwidth *optional*	Total data transfer rate in bytes per second.	number (float)
total_iops *optional*	Total read and write operations per second.	number (float)
volume_id *optional*	Unique identifier representing a specific volume.	string

Name	Description	Schema
write_bandwidth *optional*	Write rate in byte/sec.	number (float)
write_iops *optional*	Total write operations per second.	number (float)

performance_metrics_by_volume_rollup

Summary of volume level performance metric data for various rollup intervals beginning with timestamp, including the average and maximum values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
avg_io_size *optional*	Average size of read and write operations in bytes.	number (float)
avg_latency *optional*	Weighted average latency in microseconds.	number (float)
avg_read_bandwidth *optional*	Weighted average read bandwidth in bytes per second.	number (float)
avg_read_iops *optional*	Average reads per second.	number (float)
avg_read_latency *optional*	Weighted average read latency in microseconds.	number (float)
avg_read_size *optional*	Weighted average read size in bytes.	number (float)
avg_total_bandwidth *optional*	Weighted average total bandwidth in bytes per second.	number (float)

Name	Description	Schema
avg_total_iops *optional*	Average total input and output operations per second.	number
avg_write_bandwidth *optional*	Weighted average write bandwidth in bytes per second.	number (float)
avg_write_iops *optional*	Average writes per second.	number (float)
avg_write_latency *optional*	Weighted average write latency in microseconds.	number (float)
avg_write_size *optional*	Weighted average write size in bytes.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
max_avg_io_size *optional*	Maximum average size of input and output operations in bytes.	number (float)
max_avg_latency *optional*	Maximum of average latency in microseconds.	number (float)
max_avg_read_latency *optional*	Maximum read latency in microseconds.	number (float)
max_avg_read_size *optional*	Maximum of average read size in bytes.	number (float)
max_avg_write_latency *optional*	Maximum of average write latency in microseconds.	number (float)

Name	Description	Schema
max_avg_write_size *optional*	Maximum of average write size in bytes.	number (float)
max_read_bandwidth *optional*	Maximum read bandwidth in bytes per second.	number (float)
max_read_iops *optional*	Maximum reads per second.	number (float)
max_total_bandwidth *optional*	Maximum total bandwidth in bytes per second.	number (float)
max_total_iops *optional*	Maximum totals per second.	number
max_write_bandwidth *optional*	Maximum write bandwidth in bytes per second.	number (float)
max_write_iops *optional*	Maximum writes per second.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
volume_id *optional*	Unique identifier representing a specific volume.	string

performance_rule_instance

Quality of service rule in a performance policy for policy based management of storage resources. This resource type has queriable association from policy

Name	Description	Schema
id *optional*	Unique identifier representing a performance rule.	string
io_priority *optional*		IoPriorityEnum
io_priority_l10n *optional*	Localized message string corresponding to io_priority	string
name *optional*	Name of the performance rule. This property supports case-insensitive filtering	string
policies *optional*	List of the policies that are associated with this performance_rule.	< policy_instance > array

physical_switch_connection_create

Name	Description	Schema
address *required*	Physical switch address in IPv4 or IPv6 or DNS hostname format. **Length** : 1 - 255	string (ip-address)
connect_method *required*		PhysicalSwitchConnectMethodEnum
port *optional*	Port used for connection to switch. **Minimum value** : 0 **Maximum value** : 65535	integer (int32)
snmp_community_string *optional*	SNMPv2 community string, if SNMPv2c connect method is specified. **Maximal length** : 128	string (password)
ssh_password *optional*	SSH password to connect a physical switch if SSH connect method is specified. **Maximal length** : 128	string (password)
username *optional*	Username to connect a physical switch for SSH connection method. **Maximal length** : 128	string

physical_switch_connection_instance

This resource type has queriable association from physical_switch

Name	Description	Schema
address *optional*	Physical switch address in IPv4 or IPv6 or DNS hostname format. **Length** : 1 - 255	string (ip-address)
connect_method *optional*		PhysicalSwitchConnectMethodEnum
connect_method_l10n *optional*	Localized message string corresponding to connect_method	string
physical_switch *optional*	This is the embeddable reference form of physical_switch_id attribute.	physical_switch_instance
physical_switch_id *optional*	Id of physical switch to which connection belongs. **Maximal length** : 128	string
port *optional*	Port used for connection to switch. **Minimum value** : 0 **Maximum value** : 65535	integer (int32)
username *optional*	Username to connect a physical switch for SSH connection method. **Maximal length** : 128	string

physical_switch_connection_modify

Name	Description	Schema
address *required*	Physical switch address in IPv4 or IPv6 or DNS hostname format. **Length** : 1 - 255	string (ip-address)
connect_method *required*		PhysicalSwitchConnectMethodEnum

Name	Description	Schema
port *optional*	Port used for connection to switch. **Minimum value** : 0 **Maximum value** : 65535	integer (int32)
snmp_community_string *optional*	SNMPv2 community string, if SNMPv2c connect method is specified. **Maximal length** : 128	string (password)
ssh_password *optional*	SSH password to connect a physical switch if SSH connect method is specified. **Maximal length** : 128	string (password)
username *optional*	Username to connect a physical switch for SSH connection method. **Maximal length** : 128	string

physical_switch_create

Name	Description	Schema
connections *required*	Supported connections for a physical switch.	< physical_switch_connection_create > array
name *required*	Name of a physical switch. **Length** : 1 - 128	string
purpose *required*		PhysicalSwitchPurposeEnum

physical_switch_instance

This resource type has queriable association from physical_switch_connection

Name	Description	Schema
connections *optional*	This is the inverse of the resource type physical_switch_connection association.	< physical_switch_connection_instance > array

Name	Description	Schema
id *optional*	Unique identifier of the physical switch setting. **Length** : 1 - 32	string
name *optional*	Name of physical switch. This property supports case-insensitive filtering **Length** : 1 - 128	string
purpose *optional*		PhysicalSwitchPurposeEnum
purpose_l10n *optional*	Localized message string corresponding to purpose	string

physical_switch_modify

Name	Description	Schema
connections *optional*	Supported connections for a physical switch.	< physical_switch_connection_modify > array
name *optional*	Name of physical switch. **Length** : 1 - 128	string
purpose *optional*		PhysicalSwitchPurposeEnum

policy_create

Policy create request.

Name	Description	Schema
description *optional*	Policy description.	string
name *required*	Policy name.	string
replication_rule_ids *optional*	Replication rule identifiers included in this policy. At least one snapshot rule or one replication rule must be specified to create a protection policy.	< string > array

Name	Description	Schema
snapshot_rule_ids *optional*	Snapshot rule identifiers included in this policy. At least one snapshot rule or one replication rule must be specified to create a protection policy.	< string > array

policy_instance

Properties of a policy. This resource type has queriable associations from performance_rule, snapshot_rule, replication_rule, virtual_machine, volume, volume_group, file_system

Name	Description	Schema
description *optional*	Policy description.	string
file_systems *optional*	This is the inverse of the resource type file_system association.	< file_system_instance > array
id *optional*	Unique identifier of the policy.	string
is_replica *optional*	Indicates whether this is a replica policy, which is applied to replication destination storage resources. A policy of this type is restricted from many operations. **Default** : `false`	boolean
name *optional*	Policy name. This property supports case-insensitive filtering	string
performance_rules *optional*	List of the performance_rules that are associated with this policy.	< performance_rule_instance > array
replication_rules *optional*	List of the replication_rules that are associated with this policy.	< replication_rule_instance > array
snapshot_rules *optional*	List of the snapshot_rules that are associated with this policy.	< snapshot_rule_instance > array
type *optional*		PolicyTypeEnum

Name	Description	Schema
type_l10n *optional*	Localized message string corresponding to type	string
virtual_machines *optional*	This is the inverse of the resource type virtual_machine association.	< virtual_machine_instance > array
volume_groups *optional*	This is the inverse of the resource type volume_group association.	< volume_group_instance > array
volumes *optional*	This is the inverse of the resource type volume association.	< volume_instance > array

policy_modify

Policy modify request.

Name	Description	Schema
add_replication_rule_ids *optional*	Replication rule identifiers to be added to this policy.	< string > array
add_snapshot_rule_ids *optional*	Snapshot rule identifiers to be added to this policy.	< string > array
description *optional*	Policy description.	string
name *optional*	Policy name.	string
remove_replication_rule_ids *optional*	Replication rule identifiers to be removed from this policy.	< string > array
remove_snapshot_rule_ids *optional*	Snapshot rule identifiers to be removed from this policy.	< string > array

Name	Description	Schema
replication_rule_ids *optional*	Replication rule identifiers that should replace the current list of replication rule identifiers in this policy.	< string > array
snapshot_rule_ids *optional*	Snapshot rule identifiers that should replace the current list of snapshot rule identifiers in this policy.	< string > array

protection_data_instance

Protection data associated with a resource. Filtering on the fields of this embedded resource is not supported.

Name	Description	Schema
copy_signature *optional*	Used for tracking replicated copies of a snapshot set.	string
created_by_rule_id *optional*	Unique identifier of the snapshot rule that created the snapshot.	string
created_by_rule_name *optional*	The name of the rule that created the snapshot. This value will not change if the name of the rule changes after creating the snapshot.	string
creator_type *optional*	StorageCreatorTypeEnum	StorageCreatorTypeEnum
creator_type_l10n *optional*	Localized message string corresponding to creator_type	string
expiration_timestamp *optional*	Date when the snapshot can be automatically purged.	string (date-time)
family_id *optional*	Family identifier of the resource. This is the identifier of the primary object at the root of the family tree. For a primary resource this will be the same as the id of the object. For snapshots and clone resources it will be set to the source object's family ID.	string

Name	Description	Schema
is_app_consistent *optional*	A boolean flag that indicates whether the snapshot is application consistent. Only App Sync can create application consistent snapshots. **Default** : `false`	boolean
parent_id *optional*	Unique identifier of the resource from which a snapshot or clone resource is created. The parent_id is set when a resource is created and will only change if its parent resource is deleted. When a resource is deleted, its children get reparented to the parent of the deleted resource. If the deleted parent is of type Primary, the parent_id of the child resources will be set to null.	string
source_id *optional*	Unique identifier of the resource from which a snapshot or clone resource is created. The parent_id is set when a resource is created and will only change if its parent resource is deleted. When a resource is deleted, its children get reparented to the parent of the deleted resource. If the deleted parent is of type Primary, the parent_id of the child resources will be set to null.	string
source_timestamp *optional*	The time at which the resource was sourced from the resource identified by source_id.	string (date-time)

remote_system_create

Create a remote system. For a PowerStore remote system, an x509 Replication HTTP Certificate is a prerequisite. Refer to the x509_certificate resource type's exchange operation API documentation.

Name	Description	Schema
data_network_latency *optional*	Network latency choices for remote system. This is applicable to PowerStore remote systems.	RemoteSystemLatencyEnum
description *optional*	User-specified description of the remote system. **Maximal length** : `256`	string
discovery_chap_mode *optional*	Indicates the chap mode to be used during discovery. This is applicable to non-PowerStore remote systems.	RemoteSystemChapModeEnum

Name	Description	Schema
import_chap_info *optional*	Chap information to be used for session and discovery. This is applicable to non-PowerStore remote systems.	chap_credentials_instance
iscsi_addresses *optional*	iSCSI target IP addresses for the data connection to the remote system. Must be specified when creating a non-PowerStore remote system.	< string (ip-address) > array
management_address *required*	Management IP address of the remote system instance. Only IPv4 is supported for non-PowerStore remote systems. Both IPv4 and IPv6 are supported for PowerStore remote systems.	string (ip-address)
name *optional*	User-specified name of the remote system. Used only for non-PowerStore systems. This value must contain 128 or fewer printable Unicode characters. **Maximal length** : 128	string
remote_password *optional*	Password used to access the remote system. Used only for non-PowerStore systems.	string (password)
remote_username *optional*	Username used to access the remote system. Used only for non-PowerStore systems.	string
session_chap_mode *optional*	Indicates the chap mode to be used for session. This is applicable to non-PowerStore remote systems.	RemoteSystemChapModeEnum
type *optional*	Type of remote system.	RemoteSystemTypeEnum

remote_system_delete

Delete a remote system and any associated x509 Replication HTTP certificates.

Type : object

remote_system_instance

A remote system.

This resource type has queriable associations from import_session, replication_session

Name	Description	Schema
data_connection_state *optional*	State of the data connection.	DataConnectionStateEnum
data_connection_state_l10n *optional*	Localized message string corresponding to data_connection_state	string
data_connections *optional*	List of data connections from each appliance in the local cluster to iSCSI target IP address. Filtering on the fields of this embedded resource is not supported.	< data_connection_instance > array
data_network_latency *optional*	Network latency for the remote system.	RemoteSystemLatencyEnum
data_network_latency_l10n *optional*	Localized message string corresponding to data_network_latency	string
description *optional*	User-specified description of the remote system instance.	string
discovery_chap_mode *optional*	Discovery chap mode for the non-PowerStore remote system.	RemoteSystemChapModeEnum
discovery_chap_mode_l10n *optional*	Localized message string corresponding to discovery_chap_mode	string
id *optional*	Unique identifier of the remote system instance.	string
import_sessions *optional*	This is the inverse of the resource type import_session association.	< import_session_instance > array
iscsi_addresses *optional*	iSCSI target addresses for the data connection to the remote system.	< string (ip-address) > array

Name	Description	Schema
management_address *optional*	Management IP address of the remote system instance.	string (ip-address)
name *optional*	User-specified name of the remote system instance. This property supports case-insensitive filtering	string
replication_sessions *optional*	This is the inverse of the resource type replication_session association.	< replication_session_instance > array
serial_number *optional*	Serial number of the remote system instance.	string
session_chap_mode *optional*	Session chap mode for the non-PowerStore remote system.	RemoteSystemChapModeEnum
session_chap_mode_l10n *optional*	Localized message string corresponding to session_chap_mode	string
state *optional*	Current state of the remote system.	RemoteSystemStateEnum
state_l10n *optional*	Localized message string corresponding to state	string
type *optional*	Type of the remote system.	RemoteSystemTypeEnum
type_l10n *optional*	Localized message string corresponding to type	string
user_name *optional*	Username used to access the non-PowerStore remote systems.	string

remote_system_modify

Modify the remote system.

Name	Description	Schema
data_network_latency *optional*	Network latency for the PowerStore remote system.	RemoteSystemLatencyEnum
description *optional*	User-specified description of the remote system. **Maximal length** : 256	string
management_address *optional*	Management IP address of the remote system.	string (ip-address)
name *optional*	User-specified name of the remote system. Used only for non-PowerStore type remote systems. This value must contain 128 or fewer printable Unicode characters. **Maximal length** : 128	string
remote_password *optional*	Password used to access the remote system. Used only for non-PowerStore systems.	string (password)
remote_username *optional*	Username used to access the remote system. Used only for non-PowerStore systems.	string

remote_system_verify

Verify the remote system.

Type : object

replication_element_pair

Replication session element pair which maps the local storage element to the remote storage element.

Name	Description	Schema
local_storage_element_id *required*	Unique identifier of a local storage element.	string
remote_storage_element_id *required*	Unique identifier of a remote storage element.	string

Name	Description	Schema
replication_shadow_id *optional*	Unique identifier of the internal snap used for replicating data.	string
storage_element_type *optional*	Storage element type.	StorageElementTypeEnum

replication_rule_create

Replication rule create request.

Name	Description	Schema
alert_threshold *optional*	Acceptable delay in minutes between the expected and actual replication sync intervals. The system generates an alert if the delay between the expected and actual sync exceeds this threshold. Alert threshold has the default value of one RPO in minutes. **Minimum value** : `0` **Maximum value** : `1440`	integer (int32)
name *required*	Name of the replication rule.	string
remote_system_id *required*	Unique identifier of the remote system to which this rule will replicate the associated resources.	string
rpo *required*		RPOEnum

replication_rule_instance

Properties of the replication rule. This resource type has queriable associations from policy, replication_session

Name	Description	Schema
alert_threshold *optional*	Acceptable delay in minutes between the expected and actual replication sync intervals. The system generates an alert if the delay between the expected and actual sync exceeds this threshold. Alert threshold has the default value of one RPO in minutes. **Minimum value** : `0` **Maximum value** : `1440`	integer (int32)
id *optional*	Unique identifier of the replication rule.	string
is_replica *optional*	Indicates if this is a replica of a rule or policy on a remote system that is the source of a replication session replicating a resource to the local system. **Default** : `false`	boolean
name *optional*	Name of the replication rule. This property supports case-insensitive filtering	string
policies *optional*	List of the policies that are associated with this replication_rule.	< policy_instance > array
remote_system_id *optional*	Unique identifier of the remote system to which this rule will replicate the associated resources.	string
replication_sessions *optional*	This is the inverse of the resource type replication_session association.	< replication_session_instance > array
rpo *optional*		RPOEnum
rpo_l10n *optional*	Localized message string corresponding to rpo	string

replication_rule_modify

Replication rule modify request.

Name	Description	Schema
alert_threshold *optional*	Acceptable delay in minutes between the expected and actual replication sync intervals. The system generates an alert if the delay between the expected and actual sync exceeds this threshold. **Minimum value** : `0` **Maximum value** : `1440`	integer (int32)
name *optional*	Name of the replication rule.	string
remote_system_id *optional*	Unique identifier of the remote system to which this rule will replicate the associated resources.	string
rpo *optional*		RPOEnum

replication_session_failover

Parameters to fail over a replication session.

Name	Description	Schema
force *optional*	Indicates whether an unplanned failover needs to be done for a session that is already in failed over state **Default** : `false`	boolean
is_planned *optional*	Indicates whether the replication session failover is planned or unplanned. For planned failovers, the value is true. For unplanned failovers, the value is false. **Default** : `true`	boolean
reverse *optional*	Indicates whether the system is auto-reprotected. Auto-reprotect is combination of failover and reprotect. **Default** : `false`	boolean

replication_session_instance

A replication session.

This resource type has queriable associations from remote_system, migration_session, replication_rule

Name	Description	Schema
estimated_completion_timestamp *optional*	Estimated completion time of the current replication operation.	string (date-time)
id *optional*	Unique identifier of the replication session instance.	string
last_sync_timestamp *optional*	Time of last successful synchronization.	string (date-time)
local_resource_id *optional*	Unique identifier of the local storage resource for the replication session.	string
migration_session *optional*	This is the embeddable reference form of migration_session_id attribute.	migration_session_instance
progress_percentage *optional*	Progress of the current replication operation. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
remote_resource_id *optional*	Unique identifier of the remote storage resource for the replication session.	string
remote_system *optional*	This is the embeddable reference form of remote_system_id attribute.	remote_system_instance
remote_system_id *optional*	Unique identifier of the remote system instance.	string
replication_rule *optional*	This is the embeddable reference form of replication_rule_id attribute.	replication_rule_instance
replication_rule_id *optional*	Associated replication rule instance if created by policy engine.	string

Name	Description	Schema
resource_type *optional*	Type of the storage resource.	ReplicatedResourceTypeEnum
resource_type_l10n *optional*	Localized message string corresponding to resource_type	string
role *optional*	Role of the replication session.	ReplicationRoleEnum
role_l10n *optional*	Localized message string corresponding to role	string
state *optional*	Current state of the replication session.	ReplicationStateEnum
state_l10n *optional*	Localized message string corresponding to state	string
storage_element_pairs *optional*	List of storage element pairs for a replication session. For a volume or volume group replication session, the replicating storage elements are of type 'volume'. For a virtual volume replication session, the replicating storage elements are of type 'virtual volume'. For a volume group replication session, there will be as many pairs of storage elements as the number of volumes in the volume group. For volume/virtual volume replication session, there will be only one storage element pair. Filtering on the fields of this embedded resource is not supported.	< replication_element_pair > array

role_instance

Name	Description	Schema
description *optional*	Description of the role.	string
id *optional*	Unique identifier of the role.	string

Name	Description	Schema
is_built_in *optional*	Indicates whether the role is built-in.	boolean
name *optional*	Name of the role.	string

sas_port_instance

This resource type has queriable associations from appliance, hardware, sas_port

Name	Description	Schema
appliance *optional*	This is the embeddable reference form of appliance_id attribute.	appliance_instance
appliance_id *optional*	Unique identifier of the appliance containing the port.	string
id *optional*	Unique identifier of the SAS port.	string
io_module *optional*	This is the embeddable reference form of io_module_id attribute.	hardware_instance
io_module_id *optional*	Unique identifier of the hardware instance of type 'IO_Module' handling the port.	string
is_link_up *optional*	Indicates whether the SAS port's link is up. Values are: **true** Link is up. **false** Link is down.	boolean
name *optional*	Name of the SAS port. This property supports case-insensitive filtering	string
node *optional*	This is the embeddable reference form of node_id attribute.	hardware_instance
node_id *optional*	Unique identifier of the hardware instance of type 'Node' containing the port.	string

Name	Description	Schema
partner *optional*	This is the embeddable reference form of partner_id attribute.	sas_port_instance
partner_id *optional*	Unique identifier of the SAS partner port.	string
port_index *optional*	Index of the SAS port in IO module. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
sfp *optional*	This is the embeddable reference form of sfp_id attribute.	hardware_instance
sfp_id *optional*	Unique identifier of the hardware instance of type 'SFP' (Small Form-factor Pluggable) inserted into the port.	string
speed *optional*		SasPortSpeedEnum
speed_l10n *optional*	Localized message string corresponding to speed	string

sc_profile_rule_instance

Snapshot profile rule.

Name	Description	Schema
date_of_month *optional*	Dates of the month in which a snapshot will be taken.	< integer > array
day_of_week *optional*	Days of the week in which a snapshot will be taken.	< DayOfWeekEnum > array
day_of_week_l10n *optional*	Localized message array corresponding to day_of_week	< string > array
end_time *optional*	Time when snapshot creation will stop.	string (timestamp)

Name	Description	Schema
expiration *optional*	Length of time to keep snapshots before deleting them, in minutes. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
frequency *optional*	Frequency at which the snapshot will be taken.	ScScheduleTypeEnum
frequency_l10n *optional*	Localized message string corresponding to frequency	string
interval *optional*	Time interval between any two snapshot creations, in minutes. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
month_of_year *optional*	Months of the year in which a snapshot will be taken.	< MonthOfYearEnum > array
month_of_year_l10n *optional*	Localized message array corresponding to month_of_year	< string > array
name *optional*	Name of the snapshot profile rule.	string
start_date_time *optional*	Date and time when the snapshot will be created. This applies to the value Once in the ScScheduleTypeEnum.	string (date-time)
start_time *optional*	Time when snapshot creation will start.	string (timestamp)
week_of_month *optional*	Weeks of the month in which a snapshot will be taken.	< WeekOfMonthEnum > array
week_of_month_l10n *optional*	Localized message array corresponding to week_of_month	< string > array

security_config_instance

Name	Description	Schema
id *optional*	Unique identifier of the system security configuration.	string
idle_timeout *optional*	Idle time (in seconds) after which login sessions will expire and require re-authentication. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)

service_config_instance

Name	Description	Schema
appliance_id *optional*	Unique identifier of the appliance.	string
id *optional*	Unique identifier for the service configuration instance.	string
is_ssh_enabled *optional*	The current ssh service access state. **true** SSH access is enabled **false** SSH access is disabled	boolean

service_config_modify

Name	Description	Schema
is_ssh_enabled *required*	Current SSH service access state. **true** Enables SSH access **false** Disables SSH access	boolean

service_user_instance

Name	Description	Schema
id *optional*	Unique identifier of the service user account.	string
is_built_in *optional*	Whether the user account is built-in or not.	boolean
is_default_password *optional*	Whether the user account has the default password or not.	boolean
name *optional*	Name of the service user account. Always 'service' in this release.	string

service_user_modify

Name	Description	Schema
password *required*	New password for the service user account. The password value can be 8 to 40 UTF-8 characters long, and include as a minimum one uppercase character, one lowercase character, one numeric character, and one special character from this list [!,@#$%^*>_~].	string (password)

smb_server_create

Arguments for the SMB server create operation. ***Note that domain SMB servers must be explicitly joined to the Active Directory using the join action before it can be accessed*** To create a standalone SMB server, set the is_standalone option to true and specify the following mandatory parameters: - netbios_name - workgroup For domain SMB servers, set the is_standalone option to false and specify the following mandatory parameters: - computer_name - domain For both cases, you must also specify a password for the local administrator of the SMB server using the local_admin_password option.

Name	Description	Schema
computer_name *optional*	DNS name of the associated computer account when the SMB server is joined to an Active Directory domain. This name is limited to 63 bytes and must not contain the following characters - - comma (.) - tilde (~) - colon (:) - exclamation point (!) - at sign (@) - number sign (#) - dollar sign ($) - percent (%) - caret (^) - ampersand (&) - apostrophe (') - period (.) - note that if you enter string with period only the first word will be kept - parentheses (()) - braces ({}) - underscore (_) - white space (blank) as defined by the Microsoft naming convention (see https://support.microsoft.com/en-us/help/909264/) **Length** : `1 - 63`	string
description *optional*	Description of the SMB server in UTF-8 characters. **Length** : `0 - 48`	string
domain *optional*	Domain name where SMB server is registered in Active Directory, if applicable. **Length** : `1 - 255`	string
is_standalone *required*	Indicates whether the SMB server is standalone. Values are: - true - SMB server is standalone. - false - SMB server is joined to the Active Directory.	boolean
local_admin_password *required*	Regardless of the type of the SMB server, standalone or in the domain, a local administrator user must be created. local_admin_password is the password of this user. **Length** : `0 - 512`	string (password)
nas_server_id *required*	Unique identifier of the NAS server.	string

Name	Description	Schema
netbios_name *optional*	NetBIOS name is the network name of the standalone SMB server. SMB servers joined to Active Directory also have NetBIOS Name, defaulted to the 15 first characters of the computer_name attribute. Administrators can specify a custom NetBIOS Name for a SMB server using this attribute. NetBIOS name is limited to 15 characters and cannot contain the following characters - - backslash () - slash mark (/) - colon (:) - asterisk (*) - question mark (?) - quotation mark ("") - less than sign (<) - greater than sign (>) - vertical bar (|) as defined by the Microsoft naming convention (see https://support.microsoft.com/en-us/help/909264/) **Length** : 1 - 15	string
workgroup *optional*	Applies to standalone SMB servers only. Windows network workgroup for the SMB server. Workgroup names are limited to 15 alphanumeric ASCII characters. **Length** : 1 - 15	string

smb_server_delete

Arguments for the SMB server delete operation.

Name	Description	Schema
force *optional*	If false, the delete will fail if the SMB server is still joined, else the SMB server is deleted but AD account is not removed.	boolean

smb_server_instance

This resource type has queriable association from nas_server

Name	Description	Schema
computer_name *optional*	DNS name of the associated computer account when the SMB server is joined to an Active Directory domain. This name's minimum length is 2 characters, it is limited to 63 bytes and must not contain the following characters - - comma (.) - tilde (~) - colon (:) - exclamation point (!) - at sign (@) - number sign (#) - dollar sign ($) - percent (%) - caret (^) - ampersand (&) - apostrophe (') - period (.) - note that if you enter string with period only the first word will be kept - parentheses (()) - braces ({}) - underscore (_) - white space (blank) as defined by the Microsoft naming convention (see https://support.microsoft.com/en-us/help/909264/)	string
description *optional*	Description of the SMB server.	string
domain *optional*	Domain name where SMB server is registered in Active Directory, if applicable.	string
id *optional*	Unique identifier of the SMB server.	string
is_joined *optional*	Indicates whether the SMB server is joined to the Active Directory. Always false for standalone SMB servers.	boolean
is_standalone *optional*	Indicates whether the SMB server is standalone. Values are: - true - SMB server is standalone. - false - SMB server is a domain SMB server to be joined to the Active Directory.	boolean
nas_server *optional*	This is the embeddable reference form of nas_server_id attribute.	nas_server_instance
nas_server_id *optional*	Unique identifier of the NAS server.	string

Name	Description	Schema
netbios_name *optional*	NetBIOS name is the network name of the standalone SMB server. SMB server joined to Active Directory also have NetBIOS Name, defaulted to the 15 first characters of the computerName attribute. Administrators can specify a custom NetBIOS Name for a SMB server using this attribute. NetBIOS Name are limited to 15 characters and cannot contain the following characters - - backslash () - slash mark (/) - colon (:) - asterisk (*) - question mark (?) - quotation mark ("") - less than sign (<) - greater than sign (>) - vertical bar (|) as definied by the Microsoft naming convention (see https://support.microsoft.com/en-us/help/909264/)	string
workgroup *optional*	Applies to stand-alone SMB servers only. Windows network workgroup for the SMB server. Workgroup names are limited to 15 alphanumeric ASCII characters.	string

smb_server_join

Argument to join the SMB server to a Active Directory domain.

Name	Description	Schema
domain_password *required*	Password of the domain-user specified to join the Active Directory domain.	string (password)
domain_user_name *required*	Name of a domain-user with sufficient privileges to join the Active Directory domain.	string
organizational_unit *optional*	Organizational unit of the SMB server in Active Directory, if applicable.	string
reuse_computer_account *optional*	If set to yes: try to reuse the existing SMB server account in the Active Directory when joining. **Default** : `false`	boolean

smb_server_modify

Arguments for the SMB server modify operation.

Name	Description	Schema
computer_name *optional*	DNS Name of the associated Computer Account when the SMB server is joined to an Active Directory domain. This name is limited to 63 bytes and must not contain the following characters - - comma (.) - tilde (~) - colon (:) - exclamation point (!) - at sign (@) - number sign (#) - dollar sign ($) - percent (%) - caret (^) - ampersand (&) - apostrophe (') - period (.) - note that if you enter string with period only the first word will be kept - parentheses (()) - braces ({}) - underscore (_) - white space (blank) as defined by the Microsoft naming convention (see https://support.microsoft.com/en-us/help/909264/) **Length** : `1 - 63`	string
description *optional*	Description of the SMB server in UTF-8 characters. **Length** : `0 - 48`	string
domain *optional*	Domain name where SMB server is registered in Active Directory, if applicable. **Length** : `1 - 255`	string
is_standalone *optional*	Indicates whether the SMB server is standalone. Values are: - true - SMB server is standalone. - false - SMB server is joined to the Active Directory.	boolean
local_admin_password *optional*	Password for the local administrator account of the SMB server. **Length** : `0 - 512`	string (password)
netbios_name *optional*	NetBIOS name is the network name of the standalone SMB server. SMB servers joined to Active Directory also have NetBIOS Name, defaulted to the 15 first characters of the computer_name attribute. Administrators can specify a custom NetBIOS Name for an SMB server using this attribute. NetBIOS name is limited to 15 characters and cannot contain the following characters - - backslash () - slash mark (/) - colon (:) - asterisk (*) - question mark (?) - quotation mark ("") - less than sign (<) - greater than sign (>) - vertical bar (|) as defined by the Microsoft naming convention (see https://support.microsoft.com/en-us/help/909264/)	string

Name	Description	Schema
workgroup *optional*	Applies to standalone SMB servers only. Windows network workgroup for the SMB server. Workgroup names are limited to 15 alphanumeric ASCII characters. **Length** : `1 - 15`	string

smb_server_unjoin

Argument to ujoin the SMB server from an Active Directory domain. domain_user_name and domain_password are mandatory if is_skip_AD_unjoin is false

Name	Description	Schema
domain_password *optional*	Password of the domain-user specified to unjoin from the Active Directory domain.	string (password)
domain_user_name *optional*	Name of a domain-user with sufficient privileges to unjoin from the Active Directory domain.	string
is_skip_AD_unjoin *optional*	If set to yes: Will not remove the account from the Active Directory. This is to be used in case that no DC is available. **Default** : `false`	boolean

smb_share_create

Name	Description	Schema
description *optional*	SMB share description. **Length** : `0 - 511`	string
file_system_id *required*	Unique identifier of the file system on which the SMB Share will be created.	string
is_ABE_enabled *optional*	Indicates whether Access-based Enumeration (ABE) is enabled. ABE filters the list of available files and folders on a server to include only those to which the requesting user has access. Values are: - true - ABE is enabled. - false - ABE is disabled. **Default** : `false`	boolean

Name	Description	Schema
is_branch_cache_enabled *optional*	Indicates whether BranchCace optimization is enabled. BranchCache optimization technology copies content from your main office or hosted cloud content servers and caches the content at branch office locations, allowing client computers at branch offices to access the content locally rather than over the WAN. Values are: - true - BranchCache is enabled. - false - BranchCache is disabled. **Default** : `false`	boolean
is_continuous_availability_enabled *optional*	Indicates whether continuous availability for Server Message Block (SMB) 3.0 is enabled for the SMB Share. Values are: - true - Continuous availability for SMB 3.0 is enabled for the SMB Share. - false - Continuous availability for SMB 3.0 is disabled for the SMB Share. **Default** : `false`	boolean
is_encryption_enabled *optional*	Indicates whether encryption for Server Message Block (SMB) 3.0 is enabled at the shared folder level. Values are: - true - encryption for SMB 3.0 is enabled. - false - encryption for SMB 3.0 is disabled. **Default** : `false`	boolean
name *required*	SMB share name. **Length** : `1 - 80`	string
offline_availability *optional*		SMBShareOfflineAvailabilityEnum
path *required*	Local path to the file system or any existing sub-folder of the file system that is shared over the network. This path is relative to the NAS Server and must start with the filesystem's mountpoint path, which is the filesystem name. For example to share the top-level of a filesystem named svr1fs1, which is on the /svr1fs1 mountpoint of the NAS Server, use /svr1fs1 in the path parameter. SMB shares allow you to create multiple network shares for the same local path.	string
umask *optional*	The default UNIX umask for new files created on the Share. If not specified the umask defaults to 022. **Default** : `"022"`	string

smb_share_instance

This resource type has queriable association from file_system

Name	Description	Schema
description *optional*	User defined SMB share description.	string
file_system *optional*	This is the embeddable reference form of file_system_id attribute.	file_system_instance
file_system_id *optional*	The file system from which the share was created.	string
id *optional*	Id of the SMB Share.	string
is_ABE_enabled *optional*	Indicates whether Access-based Enumeration (ABE) is enabled. ABE filters the list of available files and folders on a server to include only those to which the requesting user has access. Values are: - true - ABE is enabled. - false - ABE is disabled.	boolean
is_branch_cache_enabled *optional*	Indicates whether BranchCache optimization is enabled. BranchCache optimization technology copies content from your main office or hosted cloud content servers and caches the content at branch office locations, allowing client computers at branch offices to access the content locally rather than over the WAN. Values are: - true - BranchCache is enabled. - false - BranchCache is disabled.	boolean
is_continuous_availability_enabled *optional*	Indicates whether continuous availability for Server Message Block (SMB) 3.0 is enabled for the SMB Share. Values are: - true - Continuous availability for SMB 3.0 is enabled for the SMB Share. - false - Continuous availability for SMB 3.0 is disabled for the SMB Share.	boolean
is_encryption_enabled *optional*	Indicates whether encryption for Server Message Block (SMB) 3.0 is enabled at the shared folder level. Values are: - true - Encryption for SMB 3.0 is enabled. - false - Encryption for SMB 3.0 is disabled.	boolean
name *optional*	SMB share name. This property supports case-insensitive filtering	string

Name	Description	Schema
offline_availability *optional*		SMBShareOfflineAvailabilityEnum
offline_availability_l10n *optional*	Localized message string corresponding to offline_availability	string
path *optional*	Local path to the file system or any existing sub-folder of the file system that is shared over the network. This path is relative to the NAS Server and must start with the filesystem's mountpoint path, which is the filesystem name. For example to share the top-level of a filesystem named svr1fs1, which is on the /svr1fs1 mountpoint of the NAS Server, use /svr1fs1 in the path parameter. SMB shares allow you to create multiple network shares for the same local path.	string
umask *optional*	The default UNIX umask for new files created on the Share. If not specified the umask defaults to 022. **Default** : `"022"`	string

smb_share_modify

Name	Description	Schema
description *optional*	NFS Share description. **Length** : `0 - 511`	string
is_ABE_enabled *optional*	Indicates whether Access-based Enumeration (ABE) is enabled. ABE filters the list of available files and folders on a server to include only those, that the requesting user has access to. Values are: - true - ABE is enabled. - false - ABE is disabled.	boolean
is_branch_cache_enabled *optional*	Indicates whether BranchCace optimization is enabled. BranchCache optimization technology copies content from your main office or hosted cloud content servers and caches the content at branch office locations, allowing client computers at branch offices to access the content locally rather than over the WAN. Values are: - true - BranchCache is enabled. - false - BranchCache is disabled.	boolean

Name	Description	Schema
is_continuous_availability_enabled *optional*	Indicates whether continuous availability for Server Message Block (SMB) 3.0 is enabled for the SMB Share. Values are: - true - Continuous availability for SMB 3.0 is enabled for the SMB Share. - false - Continuous availability for SMB 3.0 is disabled for the SMB Share.	boolean
is_encryption_enabled *optional*	Indicates whether encryption for Server Message Block (SMB) 3.0 is enabled at the shared folder level. Values are: - true - encryption for SMB 3.0 is enabled. - false - encryption for SMB 3.0 is disabled.	boolean
offline_availability *optional*		SMBShareOfflineAvailabilityEnum
umask *optional*	The default UNIX umask for new files created on the Share.	string

smtp_config_instance

Name	Description	Schema
address *optional*	IP address of the SMTP server.	string (ip-address)
id *optional*	Unique identifier of the SMTP configuration. This value is always '0'.	string
port *optional*	Port used for sending SMTP messages. **Minimum value** : `0` **Maximum value** : `65535`	integer (int32)
source_email *optional*	Source email address used for sending SMTP messages.	string

smtp_config_modify

Name	Description	Schema
address *optional*	IP address of the SMTP server.	string (ip-address)

Name	Description	Schema
port *optional*	Port used for sending SMTP messages. **Minimum value** : `0` **Maximum value** : `65535`	integer (int32)
source_email *optional*	Source email address used for sending SMTP messages.	string

smtp_config_test

Name	Description	Schema
email_address *optional*	Destination email address for the test.	string

snapshot_rule_create

Snapshot rule create request.

Name	Description	Schema
days_of_week *optional*	Days of the week when the rule should be applied. Applies only for rules where the time_of_day parameter is set.	< DaysOfWeekEnum > array
desired_retention *required*	Desired snapshot retention period in hours. The system will retain snapshots for this time period, if space is available. **Minimum value** : `1` **Maximum value** : `8760`	integer (int32)
interval *optional*		SnapRuleIntervalEnum
name *required*	Snapshot rule name.	string
time_of_day *optional*	Time of the day to take a daily snapshot, with format "hh:mm" in 24 hour time format. Either the interval parameter or the time_of_day parameter may be set, but not both.	string (timestamp)

snapshot_rule_delete

Snapshot rule delete request.

Name	Description	Schema
delete_snaps *optional*	Specify whether all snapshots previously created by this rule should also be deleted when this rule is removed. **Default** : `false`	boolean

snapshot_rule_instance

Snapshot rule instance. This resource type has queriable association from policy

Name	Description	Schema
days_of_week *optional*	Days of the week when the rule should be applied. Applies only for rules where the time_of_day parameter is set.	< DaysOfWeekEnum > array
days_of_week_l10n *optional*	Localized message array corresponding to days_of_week	< string > array
desired_retention *optional*	Desired snapshot retention period in hours. The system will retain snapshots for this time period, if space is available. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
id *optional*	Unique identifier of the snapshot rule.	string
interval *optional*		SnapRuleIntervalEnum
interval_l10n *optional*	Localized message string corresponding to interval	string
is_replica *optional*	Indicates if this is a replica of a rule or policy on a remote system that is the source of a replication session replicating a resource to the local system. **Default** : `false`	boolean
name *optional*	Snapshot rule name. This property supports case-insensitive filtering	string
policies *optional*	List of the policies that are associated with this snapshot_rule.	< policy_instance > array

Name	Description	Schema
time_of_day *optional*	Time of the day to take a daily snapshot, with format "hh:mm" in 24 hour time format. Either the interval parameter or the time_of_day parameter will be set, but not both.	string (timestamp)

snapshot_rule_modify

Snapshot rule modify request.

Name	Description	Schema
days_of_week *optional*	Days of the week when the rule should be applied. Applies only for rules where the time_of_day parameter is set.	< DaysOfWeekEnum > array
desired_retention *optional*	Desired snapshot retention period in hours. The system will retain snapshots for this time period, if space is available. **Minimum value** : 1 **Maximum value** : 8760	integer (int32)
interval *optional*		SnapRuleIntervalEnum
name *optional*	Snapshot rule name.	string
time_of_day *optional*	Time of the day to take a daily snapshot, with format "hh:mm" in 24 hour time format. Either the interval parameter or the time_of_day parameter may be set, but not both.	string (timestamp)

software_installed_instance

Summary of the software packages that are installed on each appliance, or on the cluster as a whole. This resource type has queriable association from appliance

Name	Description	Schema
appliance *optional*	This is the embeddable reference form of appliance_id attribute.	appliance_instance
id *optional*	Unique identifier of the installed software instance.	string

Name	Description	Schema
installed_date *optional*	Date and time when the software was successfully installed and committed on the cluster. If the software package has not been commited, this value is null.	string (date-time)
is_cluster *optional*	Whether this information represents the common software release version that is supported on all appliances in the cluster. The value is true for the instance representing the cluster. The value is false for appliance software instances.	boolean
release_timestamp *optional*	Date and time when this software package was produced.	string (date-time)
release_version *optional*	Version of the installed release software package release.	string

software_package_install

Install the software package.

Type : object

software_package_instance

A software package contains all of the content required to upgrade the cluster to the version specified in the release_version property.

Name	Description	Schema
description_l10n *optional*	Summary of the contents in this package.	string
id *optional*	Unique identifier of the software package.	string
installed_date *optional*	Date and time when this software package was successfully installed and committed on the cluster. If the software package has not been committed, this value is null.	string (date-time)
is_reboot_required *optional*	Whether a reboot is required during the upgrade process.	boolean

Name	Description	Schema
justification_l10n *optional*	Explanation of why this software release is recommended for this cluster.	string
name *optional*	Name of the software package. This property supports case-insensitive filtering	string
release_timestamp *optional*	Date and time when this software package was produced.	string (date-time)
release_version *optional*	Version number of the software package.	string
size *optional*	File size of the software package in bytes. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
software_package_state *optional*		SoftwarePackageStateEnum
software_package_state_l10n *optional*	Localized message string corresponding to software_package_state	string
software_package_type *optional*		SoftwarePackageTypeEnum
software_package_type_l10n *optional*	Localized message string corresponding to software_package_type	string

space_metrics_by_appliance

Space metrics for the appliance collected at five minute interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
data_physical_used *optional*	This metric represents amount of physical space user data occupies after deduplication and compression. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
data_reduction *optional*	Ratio of the logical used space to data physical used space which is after deduplication and compression.	number (float)
efficiency_ratio *optional*	The overall efficiency is computed as a ratio of the total space provisioned to physical used space. For example, ten 2 GB volumes were provisioned and 1 GB of data is written to each of them. Each of the volumes has one snapshot as well, for another ten 2 GB volumes. All volumes are thinly provisioned with deduplication and compression applied, there is 4 GB of physical space used. Overall efficiency would be (20 * 2 GB) / 4 GB or 10:1. The efficiency_ratio value will be 10 in this example.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
logical_provisioned *optional*	Total configured size of all storage objects on an appliance. This metric includes all primaries, snaps and clones. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
logical_used *optional*	Amount of data in bytes written to all storage objects on an appliance, without any deduplication and/or compression. This metric includes all primaries, snaps and clones. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
physical_total *optional*	Total combined space on the physical drives of the appliance available for data. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
physical_used *optional*	Total physical space consumed in the appliance, accounting for all efficiency mechanisms, as well as all data protection. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
shared_logical_used *optional*	Amount of space the volume family needs to hold the data written by host and shared by snaps and fast-clones in the family. This does not include deduplication or compression. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
snapshot_savings *optional*	Ratio of the amount of space that would have been used by snapshots if space efficiency was not applied to logical space used solely by snapshots. For example, an object is provisioned as 1 GB and it has two snapshots. Each snapshot has 200 MB of data. Snapshot savings will be (1 GB + 1 GB) / (0.2 GB + 0.2 GB) or 5:1. The snapshot_savings value will be 5 in this case.	number (float)
thin_savings *optional*	Ratio of all the vVol provisioned to data they contain. This is the ratio of logical_provisioned to logical_used. For example, a cluster has two 2 GB objects and have written 500 MB bytes of data to them. The thin savings would be (2 * 2 GB) / (2 * 0.5 GB) or 4:1, so the thin_savings value would be 4.0.	number (float)
timestamp *optional*	End of sample period.	string (date-time)

space_metrics_by_appliance_rollup

Summary of appliance level space metric data for a specific period of time, beginning with timestamp and including the maximum and final values for that period. Current support is for a time period of one hour and one day.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
last_data_physical_used *optional*	Last physical used space for data during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_data_reduction *optional*	Last data reduction space during the period.	number (float)
last_efficiency_ratio *optional*	Last efficiency ratio during the period.	number (float)
last_logical_provisioned *optional*	Last logical total space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_logical_used *optional*	Last logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_physical_total *optional*	Last physical total space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_physical_used *optional*	Last physical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_shared_logical_used *optional*	Last shared logical used during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snapshot_savings *optional*	Last snapshot savings space during the period.	number (float)

Name	Description	Schema
last_thin_savings *optional*	Last thin savings ratio during the period.	number (float)
max_data_physical_used *optional*	Maximum physical used space for data during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_data_reduction *optional*	Maximum data reduction space during the period.	number (float)
max_efficiency_ratio *optional*	Maximum efficiency ratio during the period.	number (float)
max_logical_provisioned *optional*	Maxiumum logical total space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_logical_used *optional*	Maxiumum logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_physical_total *optional*	Maximum physical total space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_physical_used *optional*	Maximum physical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_shared_logical_used *optional*	Max shared logical used during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snapshot_savings *optional*	Maximum snapshot savings space during the period.	number (float)
max_thin_savings *optional*	Maximum thin savings ratio during the period.	number (float)

Name	Description	Schema
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

space_metrics_by_cluster

Space metrics for the cluster collected at five minute interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
cluster_id *optional*	Identifier of the cluster.	string
data_physical_used *optional*	This metric represents total amount of physical space user data occupies after deduplication and compression. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
data_reduction *optional*	Ratio of the logical used space to data physical used space which is after deduplication and compression.	number (float)
efficiency_ratio *optional*	The overall efficiency is computed as a ratio of the total space provisioned to physical used space. For example, ten 2 GB volumes were provisioned and 1 GB of data is written to each of them. Each of the volumes has one snapshot as well, for another ten 2 GB volumes. All volumes are thinly provisioned with deduplication and compression applied, there is 4 GB of physical space used. Overall efficiency would be (20 * 2 GB) / 4 GB or 10:1. The efficiency_ratio value will be 10 in this example.	number (float)
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string

Name	Description	Schema
logical_provisioned *optional*	Total configured size of all storage ojects within the cluster. This metric includes all primaries, snaps and clones. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
logical_used *optional*	Amount of data in bytes written to all storage objects within the cluster, without any deduplication and/or compression. This metric includes all primaries, snaps and clones. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
physical_total *optional*	The total combined space on the physical drives of the cluster available for data. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
physical_used *optional*	The total physical space consumed in the cluster, accounting for all efficiency mechanisms, as well as all data protection. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
shared_logical_used *optional*	Cluster shared logical used is sum of appliances' shared logical used in the cluster. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
snapshot_savings *optional*	Ratio of the amount of space that would have been used by snapshots if space efficiency was not applied to logical space used solely by snapshots. For example, an object is provisioned as 1 GB and it has two snapshots. Each snapshot has 200 MB of data. Snapshot savings will be (1 GB + 1 GB) / (0.2 GB + 0.2 GB) or 5:1. The snapshot_savings value will be 5 in this case.	number (float)

Name	Description	Schema
thin_savings *optional*	Ratio of all the vVol provisioned to data they contain. This is the ratio of logical_provisioned to logical_used. For example, a cluster has two 2 GB objects and have written 500 MB bytes of data to them. The thin savings would be (2 * 2 GB) / (2 * 0.5 GB) or 4:1, so the thin_savings value would be 4.0.	number (float)
timestamp *optional*	End of sample period.	string (date-time)

space_metrics_by_cluster_rollup

Summary of cluster level space metric data for a specific period of time, beginning with timestamp, including the maximum and final values for that period. Current support is for a time period of one hour and one day.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
cluster_id *optional*	Identifier of the cluster.	string
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
last_data_physical_used *optional*	Last physical used space for data during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_data_reduction *optional*	Last data reduction space during the period.	number (float)
last_efficiency_ratio *optional*	Last efficiency ratio during the period.	number (float)

Name	Description	Schema
last_logical_provisioned *optional*	Last logical total space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_logical_used *optional*	Last logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_physical_total *optional*	Last physical total space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_physical_used *optional*	Last physical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_shared_logical_used *optional*	Last shared logical used during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snapshot_savings *optional*	Last snapshot savings space during the period.	number (float)
last_thin_savings *optional*	Last thin savings ratio during the period.	number (float)
max_data_physical_used *optional*	Maximum physical used space for data during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_data_reduction *optional*	Maximum data reduction space during the period.	number (float)
max_efficiency_ratio *optional*	Maximum efficiency ratio during the period.	number (float)
max_logical_provisioned *optional*	Maximum logical total space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
max_logical_used *optional*	Maximum logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_physical_total *optional*	Maximum physical total space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_physical_used *optional*	Maximum physical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_shared_logical_used *optional*	Maximum shared logical used during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snapshot_savings *optional*	Maximum snapshot savings space during the period.	number (float)
max_thin_savings *optional*	Maximum thin savings ratio during the period.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

space_metrics_by_storage_container

Space metrics of storage container aggregated from all appliances collected at five minute interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
entity *required*		MetricsEntityEnum

Name	Description	Schema
entity_l10n *optional*	Localized message string corresponding to entity	string
logical_provisioned *optional*	Total configured size in bytes of the primary and clone virtual volumes within the storage container. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
logical_used *optional*	Amount of data in bytes written to primary and clone virtual volumes within the storage container. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
snapshot_savings *optional*	Ratio of the amount of space that would have been used by snapshots if space efficiency was not applied to logical space used solely by snapshots. For example, a volume is provisioned as 1 GB and it has two snapshots. Each snapshot has 200 MB of data. Snapshot savings will be (1 GB + 1 GB) / (0.2 GB + 0.2 GB) or 5:1. The snapshot_savings value will be 5 in this case.	number (float)
storage_container_id *optional*	Internal ID of the storage container.	string
timestamp *optional*	End of sample period.	string (date-time)

space_metrics_by_storage_container_rollup

Summary of storage container level space metric data for a specific period of time beginning with timestamp, including the maximum and final values for that period. Current support is for a time period of one hour and one day.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
last_logical_provisioned *optional*	Last logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_logical_used *optional*	Last logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snapshot_savings *optional*	Last snapshot savings during the period.	number (float)
max_logical_provisioned *optional*	Maximum logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_logical_used *optional*	Maximum logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snapshot_savings *optional*	Maximum snapshot savings during the period.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
storage_container_id *optional*	Internal ID of the storage container.	string
timestamp *optional*	End of sample period.	string (date-time)

space_metrics_by_vg

Space metrics for a volume group collected at a five minute interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
logical_provisioned *optional*	Total configured size in bytes of all member volumes in a volume group. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
logical_used *optional*	Total amount of data in bytes written to all member volumes in a volume group. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
snap_clone_logical_used *optional*	Total amount of data in bytes host has written to all volumes in the volume group without any deduplication, compression or sharing. This metric includes used snaps and clones in the volume group. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
snapshot_savings *optional*	Ratio of the amount of space that would have been used by snapshots in the volume group if space efficiency was not applied to logical space used solely by snapshots. For example, two volumes are provisioned as 1 GB and each has two snapshots. Each snapshot has 200 MB of data. Snapshot savings will be (1 GB * 2 + 1 GB * 2) / (0.2 GB * 2 + 0.2 GB * 2) or 5:1. The snapshot_savings value will be 5 in this case.	number (float)

Name	Description	Schema
thin_savings *optional*	Ratio of all the volumes provisioned to data being written to them. For example, a volume group has two 2 GB volumes and have written 500 MB of data to them. The thin savings would be (2 * 2 GB) / (2 * 0.5 GB) or 4:1, so the thin_savings value would be 4.0.	number (float)
timestamp *optional*	End of sample period.	string (date-time)
vg_id *optional*	Unique identifier representing a volume group.	string

space_metrics_by_vg_rollup

Summary of volume group level space metric data for one hour or one day period beginning with timestamp, including the maximum and final values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
last_logical_provisioned *optional*	Last logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_logical_used *optional*	Last logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snap_clone_logical_used *optional*	Last snap and clone logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snapshot_savings *optional*	Last snapshot savings space during the period.	number (float)

Name	Description	Schema
last_thin_savings *optional*	Last thin savings ratio during the period.	number (float)
max_logical_provisioned *optional*	Max logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_logical_used *optional*	Maximum logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snap_clone_logical_used *optional*	Max snap and clone logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snapshot_savings *optional*	Max snapshot savings space during the period.	number (float)
max_thin_savings *optional*	Max thin savings ratio during the period.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
vg_id *optional*	Unique identifier representing a specific volume group.	string

space_metrics_by_vm

Space metrics for the VM collected at five minute interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
logical_provisioned *optional*	Total configured size in bytes of all virtual volumes used by virtual machine. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
logical_used *optional*	Total amount of data in bytes written to all virtual volumes used by virtual machine. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
snap_clone_logical_used *optional*	Total Amount of data in bytes host has written to all volumes used by virtual machine without any deduplication, compression or sharing. This metric includes snaps and clones in the volume family used by virtual machine. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
snapshot_savings *optional*	Ratio of the amount of space that would have been used by snapshots if space efficiency was not applied to logical space used solely by snapshots of vVols used by virtual machine. For example, a vVol is provisioned as 1 GB and it has two snapshots. Each snapshot has 200 MB of data. Snapshot savings will be (1 GB + 1 GB) / (0.2 GB + 0.2 GB) or 5:1. The snapshot_savings value will be 5 in this case.	number (float)
thin_savings *optional*	Ratio of all the vVol provisioned to data they contain. This is the ratio of logical_provisioned to logical_used. For example, a VM has two 2 GB vVol's and have written 500 MB of data to them. The thin savings would be (2 * 2GB) / (2 * 0.5 GB) or 4:1, so the thin_savings value would be 4.0.	number (float)
timestamp *optional*	End of sample period.	string (date-time)

Name	Description	Schema
unique_physical_used *optional*	Amount of physical space virtual machine used after compression and deduplication. This is the space to be freed up if a virtual machine is removed. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
vm_id *optional*	Unique identifier representing a specific virtual machine.	string

space_metrics_by_vm_rollup

Summary of VM level space metric data for one hour or one day period beginning with timestamp, including the maximum and final values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
last_logical_provisioned *optional*	Last logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_logical_used *optional*	Last logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snap_clone_logical_used *optional*	Last snap and clone logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snapshot_savings *optional*	Last snapshot savings space during the period.	number (float)
last_thin_savings *optional*	Last thin savings ratio during the period.	number (float)

Name	Description	Schema
last_unique_physical_used *optional*	Last unique physical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_logical_provisioned *optional*	Max logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_logical_used *optional*	Max logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snap_clone_logical_used *optional*	Max snap and clone logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snapshot_savings *optional*	Max snapshot savings space during the period.	number (float)
max_thin_savings *optional*	Max thin savings ratio during the period.	number (float)
max_unique_physical_used *optional*	Max unique physical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
vm_id *optional*	Unique identifier representing a specific virtual machine.	string

space_metrics_by_volume

Space metrics for the volume collected at five minute interval.

Polymorphism : Inheritance

Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
logical_provisioned *optional*	Configured size in bytes of a volume which amount of data can be written to. This metric includes primaries, snaps and clones. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
logical_used *optional*	Amount of data in bytes host has written to a volume without any deduplication, compression or sharing. This metric includes primaries, snaps and clones. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
thin_savings *optional*	Ratio of all the volumes provisioned to data being written to them. For example, an appliance has two 2 GB volumes and have written 500 MB of data to them. The thin savings would be (2 GB * 2) / (0.5 GB * 2) or 4:1, so the thin_savings value would be 4.0.	number (float)
timestamp *optional*	End of sample period.	string (date-time)
volume_id *optional*	ID of the volume.	string

space_metrics_by_volume_family

Space metrics for the volume family collected at five minute interval.

Polymorphism : Inheritance

Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
family_id *optional*	ID of the family.	string
logical_provisioned *optional*	Configured size in bytes of a volume which amount of data can be written to. This metric includes primaries, snaps and clones. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
logical_used *optional*	Amount of data in bytes host has written to a volume family without any deduplication, compression or sharing. This metric includes primaries, snaps and clones. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
shared_logical_used *optional*	Amount of space the volume family needs to hold the data written by host and shared by snaps and fast-clones in the family. This does not include deduplication or compression. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
snap_clone_logical_used *optional*	Total Amount of data in bytes host has written to all volumes in the volume family without any deduplication, compression or sharing. This metric includes snaps and clones in the volume family. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
snapshot_savings *optional*	Ratio of the amount of space that would have been used by snapshots if space efficiency was not applied to logical space used solely by snapshots. For example, a volume is provisioned as 1 GB bytes and it has two snapshots. Each snapshot has 200 MB of data. Snapshot savings will be (1 GB + 1 GB) / (0.2 GB + 0.2 GB) or 5:1. The snapshot_savings value will be 5 in this case.	number (float)
timestamp *optional*	End of sample period.	string (date-time)
unique_physical_used *optional*	Amount of physical space volume family used after compression and deduplication. This is the space to be freed up if a volume family is removed from the appliance. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

space_metrics_by_volume_family_rollup

Space metrics for the volume family for one hour or one day period beginning with timestamp, including the maximum and final values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
family_id *optional*	ID of the family.	string
last_logical_provisioned *optional*	Last logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
last_logical_used *optional*	Last logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_shared_logical_used *optional*	Last shared logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snap_clone_logical_used *optional*	Last snap and clone logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_snapshot_savings *optional*	Last snapshot savings space during the period.	number (float)
last_unique_physical_used *optional*	Last unique physical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_logical_provisioned *optional*	Max logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_logical_used *optional*	Max logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_shared_logical_used *optional*	Max shared logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snap_clone_logical_used *optional*	Max snap and clone logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_snapshot_savings *optional*	Max snapshot savings space during the period.	number (float)
max_unique_physical_used *optional*	Max unique physical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

space_metrics_by_volume_rollup

Summary of volume level space metric data for one hour or one day period beginning with timestamp, including the maximum and final values for that period.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
appliance_id *optional*	Reference to the associated appliance on which these metrics were recorded.	string
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
last_logical_provisioned *optional*	Last logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_logical_used *optional*	Last logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
last_thin_savings *optional*	Last thin savings ratio during the period.	number (float)
max_logical_provisioned *optional*	Max logical provisioned space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)

Name	Description	Schema
max_logical_used *optional*	Max logical used space during the period. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
max_thin_savings *optional*	Max thin savings ratio during the period.	number (float)
repeat_count *optional*	Number of times the metrics are repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)
volume_id *optional*	ID of the volume.	string

storage_container_create

Parameters for storage container create.

Name	Description	Schema
name *required*	Name for the storage container that is unique across all storage containers in the cluster. The name must be between 1 and 64 UTF-8 characters (inclusive), and not more than 127 bytes. **Length** : `1 - 64`	string
quota *optional*	The number of bytes that can be provisioned against this storage container. This must be a value greater than 10Gb and the default is 0 which means no limit. **Default** : `0` **Minimum value** : `0` **Maximum value** : `4611686018427387904`	integer (int64)

storage_container_delete

Parameters for storage container delete.

Name	Description	Schema
force *optional*	Normally, deletion of a storage container that is mounted or still contains virtual volumes will be rejected. This option overrides that error and allows the delete to continue. Use with great caution.	boolean

storage_container_instance

A storage container is a logical grouping of related storage objects. For example, a storage container maps to a vVol datastore in vSphere where the storage for virtual machines can be provisioned. This resource type has queriable association from virtual_volume

Name	Description	Schema
id *optional*	The unique id of the storage container.	string
name *optional*	Name for the storage container. This should be unique across all storage containers in the cluster. Name can be from 1 to 64 UTF-8 characters, and not more than 127 bytes. This property supports case-insensitive filtering **Length** : `1 - 64`	string
quota *optional*	The total number of bytes that can be provisioned/reserved against this storage container. A value of 0 means there is no limit. It is possible to set the quota to a value that overprovisions the amount of space available in the system. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
virtual_volumes *optional*	This is the inverse of the resource type virtual_volume association.	< virtual_volume_instance > array

storage_container_modify

Parameters for storage container modify.

Name	Description	Schema
name *optional*	New name for the storage container that is unique across all storage containers in the cluster. The name must be between 1 and 64 UTF-8 characters (inclusive), and not more than 127 bytes. **Length** : `1 - 64`	string

Name	Description	Schema
quota *optional*	The number of bytes that can be provisioned against this storage container. It cannot be set lower than the current used space or 10Gb. A value of 0 means unlimited. **Minimum value** : `0` **Maximum value** : `4611686018427387904`	integer (int64)

storage_container_mount

Properties for mounting storage container.

Name	Description	Schema
datastore_name *optional*	This will be the vVol datastore name in vCenter when it is mounted.	string

update_initiator_in_host

Name	Description	Schema
chap_mutual_password *optional*	Password for CHAP authentication. This value must be 12 to 64 printable UTF-8 characters. CHAP password is required when the cluster CHAP mode is mutual authentication. **Length** : `12 - 64`	string (password)
chap_mutual_username *optional*	Username for CHAP authentication. This value must be 1 to 64 printable UTF-8 characters. CHAP username is required when the cluster CHAP mode is mutual authentication. **Length** : `1 - 64`	string
chap_single_password *optional*	Password for CHAP authentication. This value must be 12 to 64 printable UTF-8 characters. CHAP password is required when the cluster CHAP mode is mutual authentication. **Length** : `12 - 64`	string (password)
chap_single_username *optional*	Username for CHAP authentication. This value must be 1 to 64 printable UTF-8 characters. CHAP username is required when the cluster CHAP mode is mutual authentication. **Length** : `1 - 64`	string

Name	Description	Schema
port_name *optional*	Initiator name	string

vcenter_create

Name	Description	Schema
address *optional*	IP address of vCenter host, in IPv4, IPv6, or hostname format.	string (ip-address)
password *optional*	Password to login to vCenter.	string (password)
username *optional*	User name to login to vCenter.	string

vcenter_instance

Properties of a vCenter.

Name	Description	Schema
address *optional*	IP address of vCenter host, in IPv4, IPv6, or hostname format.	string (ip-address)
id *optional*	Unique identifier of the vCenter instance.	string
instance_uuid *optional*	UUID instance of the vCenter.	string
username *optional*	User name to login to vCenter.	string

vcenter_modify

Name	Description	Schema
address *optional*	IP address of vCenter host, in IPv4, IPv6, or hostname format. Must be a new address of the same vCenter.	string (ip-address)

Name	Description	Schema
password *optional*	Password to login to vCenter.	string (password)
username *optional*	User name to login to vCenter. Password needs to be provided to modify the user name.	string

veth_port_instance

This resource type has queriable associations from ip_port, appliance, node

Name	Description	Schema
appliance *optional*	This is the embeddable reference form of appliance_id attribute.	appliance_instance
appliance_id *optional*	Unique identifier of the appliance.	string
current_mtu *optional*	Maximum Transmission Unit (MTU) packet size that the virtual Ethernet port can transmit. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
current_speed *optional*	Virtual Ethernet port transmission speed, in bits/sec (bps). **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
id *optional*	Unique identifier of the virtual Ethernet port instance.	string
ip_ports *optional*	This is the inverse of the resource type ip_port association.	< ip_port_instance > array
is_link_up *optional*	Indicates whether the virtual Ethernet port's link is up. Values are: **true** Link is up. **false** Link is down.	boolean
mac_address *optional*	Virtual Ethernet port MAC address.	string

Name	Description	Schema
name *optional*	Virtual Ethernet port name. This property supports case-insensitive filtering	string
node *optional*	This is the embeddable reference form of node_id attribute.	node_instance
node_id *optional*	Unique identifier of the cluster.	string
vswitch_name *optional*	Name of the virtual switch that holds the virtual Ethernet port.	string
vswitch_port_group_name *optional*	Name of virtual switch port group to which the virtual Ethernet port is assigned.	string
vswitch_port_id *optional*	Unique identifier of the virtual switch port associated with the virtual Ethernet port. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
vswitch_port_name *optional*	Name of the virtual switch port associated with the virtual Ethernet port. This property supports case-insensitive filtering	string

virtual_machine_instance

Properties of a virtual machine. This resource type has queriable associations from policy, virtual_machine

Name	Description	Schema
children *optional*	This is the inverse of the resource type virtual_machine association.	< virtual_machine_instance > array
cpu_count *optional*	Number of virtual CPUs in the VM. Not applicable to VM snapshots. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
description *optional*	Description of the VM in vCenter.	string

Name	Description	Schema
guest_os *optional*	Guest operating system of the VM. Not applicable to VM snapshots.	string
id *optional*	Unique identifier of the VM instance. This value is generated by the appliance.	string
instance_uuid *optional*	UUID instance of the VM in vCenter. This value is stored in the VM and migrates with the VM to other vCenter instances. Not applicable to VM snapshots.	string
is_consistent *optional*	Indicates whether the VM snapshot is crash-consistent.	boolean
is_consistent_snaps_supported *optional*	Indicates whether the VM supports creating crash-consistent snapshots. Not applicable to snapshot VMs.	boolean
memory_mb *optional*	Memory size of the VM, in megabytes. Not applicable to VM snapshots. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
name *optional*	User-assigned name of the VM in vCenter. This property supports case-insensitive filtering	string
parent *optional*	This is the embeddable reference form of parent_id attribute.	virtual_machine_instance
protection_data *optional*		vm_protection_data_instance
protection_policy *optional*	This is the embeddable reference form of protection_policy_id attribute.	policy_instance
protection_policy_id *optional*	Unique identifier of the protection policy assigned to the VM. Not applicable to template and snapshot VMs.	string
status *optional*		VirtualMachineStatusEnum

Name	Description	Schema
status_l10n *optional*	Localized message string corresponding to status	string
type *optional*		VirtualMachineTypeEnum
type_l10n *optional*	Localized message string corresponding to type	string
vcenter_instance_uuid *optional*	UUID instance of the vCenter that hosts the VM.	string

virtual_machine_modify

Name	Description	Schema
protection_policy_id *optional*	Unique identifier of the protection policy.	string

virtual_machine_snapshot

Name	Description	Schema
description *optional*	Description of the snapshot. This value must contain 2000 or fewer printable Unicode characters. **Maximal length** : `2000`	string
name *optional*	Name of the snapshot. This value must contain 80 or fewer printable Unicode characters. **Maximal length** : `80`	string

virtual_machine_snapshot_response

The response to a virtual_machine snapshot request.

Name	Description	Schema
id *optional*	Unique id of the new snapshot.	string

virtual_volume_delete

Parameters for virtual volume delete.

Name	Description	Schema
force *optional*	Normally, attempting to delete a bound virtual volume is not permitted. This option overrides that error and allows the delete to continue.	boolean

virtual_volume_instance

A virtual volume. This resource type has queriable associations from appliance, storage_container, migration_session, virtual_volume, host_virtual_volume_mapping

Name	Description	Schema
appliance *optional*	This is the embeddable reference form of appliance_id attribute.	appliance_instance
appliance_id *optional*	The appliance where the virtual volume resides.	string
child_virtual_volumes *optional*	This is the inverse of the resource type virtual_volume association.	< virtual_volume_instance > array
creation_timestamp *optional*	Timestamp of the moment virtual volume was created at.	string (date-time)
creator_type *optional*		StorageCreatorTypeEnum
creator_type_l10n *optional*	Localized message string corresponding to creator_type	string
family_id *optional*	Family id of the virtual volume. This is the id of the primary object at the root of the family tree. For a primary virtual volume this will be the same as the id of the object. For snap-sets and clone vVols it will be set to the source objects family ID.	string

Name	Description	Schema
host_virtual_volume_mappings *optional*	This is the inverse of the resource type host_virtual_volume_mapping association.	< host_virtual_volume_mapping_instance > array
id *optional*	The unique identifier of the virtual volume.	string
io_priority *optional*		IoPriorityEnum
io_priority_l10n *optional*	Localized message string corresponding to io_priority	string
is_readonly *optional*	Indicates whether the virtual volume is read-only.	boolean
location_history *optional*	Filtering on the fields of this embedded resource is not supported.	< location_history_instance > array
migration_session *optional*	This is the embeddable reference form of migration_session_id attribute.	migration_session_instance
migration_session_id *optional*	If the virtual volume is part of a migration activity, the session ID for that migration.	string
name *optional*	The name of the virtual volume, based on metadata provided by vSphere. This property supports case-insensitive filtering	string
parent *optional*	This is the embeddable reference form of parent_id attribute.	virtual_volume_instance
parent_id *optional*	For snapshots and clones, the ID of the parent virtual volume. The parent_id is set when an virtual volume is created and will only change if its parent virtual volume is deleted.	string
profile_id *optional*	The ID of the storage profile governing this virtual volume.	string

Name	Description	Schema
size *optional*	The size of the virtual volume in bytes. **Minimum value** : `0` **Maximum value** : `9223372036854775807`	integer (int64)
source *optional*	This is the embeddable reference form of source_id attribute.	virtual_volume_instance
source_id *optional*	Id of the virtual volume from which the content has been sourced. Data is sourced from another virtual volume when a snapshot or clone is created, or when a refresh or restore occurs. Only applies to snap and clones.	string
source_timestamp *optional*	The source data time-stamp of the virtual volume.	string (date-time)
storage_container *optional*	This is the embeddable reference form of storage_container_id attribute.	storage_container_instance
storage_container_id *optional*	The storage container where the virtual volume resides.	string
target_virtual_volumes *optional*	This is the inverse of the resource type virtual_volume association.	< virtual_volume_instance > array
type *optional*		VirtualVolumeTypeEnum
type_l10n *optional*	Localized message string corresponding to type	string
usage_type *optional*		VirtualVolumeUsageTypeEnum
usage_type_l10n *optional*	Localized message string corresponding to usage_type	string
virtual_machine_uuid *optional*	UUID of the virtual machine that owns this virtual volume.	string

vm_protection_data_instance

Protection data associated with the VM snapshot. Filtering on the fields of this embedded resource is not supported.

Name	Description	Schema
created_by_rule_id *optional*	Unique identifier of the protection rule that created the VM snapshot.	string
created_by_rule_name *optional*	Name of the rule that created the VM snapshot. This value is not updated if the name of the rule changes after snapshot creation.	string
creator_type *optional*		StorageCreatorTypeEnum
creator_type_l10n *optional*	Localized message string corresponding to creator_type	string
expiration_timestamp *optional*	Date when the VM snapshot can be automatically purged.	string (date-time)
parent_id *optional*	VM from which the snapshot was created.	string
source_id *optional*	For VM snapshots, this value is the same as parent_id.	string
source_timestamp *optional*	Time when the snapshot was created.	string (date-time)

volume_attach

Name	Description	Schema
host_group_id *optional*	Unique identifier of the host group to be attached to the volume. Only one of host_id or host_group_id can be supplied.	string

Name	Description	Schema
host_id *optional*	Unique identifier of the host to be attached to the volume. Only one of host_id or host_group_id can be supplied.	string
logical_unit_number *optional*	Logical unit number for the host volume access. **Minimum value** : `0` **Maximum value** : `16383`	integer (int32)

volume_clone

Name	Description	Schema
description *optional*	Description of the clone. This value must contain 128 or fewer printable Unicode characters. **Maximal length** : `128`	string
host_group_id *optional*	Unique identifier of the host group to be attached to the clone. Only one of host_id or host_group_id can be supplied.	string
host_id *optional*	Unique identifier of the host to be attached to the clone. Only one of host_id or host_group_id can be supplied.	string
logical_unit_number *optional*	Optional logical unit number when creating a mapped volume. If no host_id or host_group_id is specified, this property is ignored. **Minimum value** : `0` **Maximum value** : `16383`	integer (int32)
name *optional*	Name of the clone. This value must contain 128 or fewer printable Unicode characters. **Maximal length** : `128`	string
performance_policy_id *optional*	Unique identifier of the performance policy.	string
protection_policy_id *optional*	Unique identifier of the protection policy.	string

volume_clone_response

Unique identifier of the new clone volume.

Name	Schema
id *optional*	string

volume_create

Name	Description	Schema
appliance_id *optional*	Identifier of the appliance on which the volume is provisioned.	string
description *optional*	Description of the volume. This value must contain 128 or fewer printable Unicode characters. **Maximal length** : 128	string
host_group_id *optional*	Unique identifier of the host group to be attached to the volume. If not specified, an unmapped volume is created. Only one of host_id or host_group_id can be supplied.	string
host_id *optional*	Unique identifier of the host to be attached to the volume. If not specified, an unmapped volume is created. Only one of host_id or host_group_id can be supplied.	string
logical_unit_number *optional*	Optional logical unit number when creating a attached volume. If no host_id or host_group_id is specified, this property is ignored. **Minimum value** : 0 **Maximum value** : 16383	integer (int32)
min_size *optional*	Optional minimum size for the volume, in bytes. **Minimum value** : 0 **Maximum value** : 9223372036854775807	integer (int64)
name *required*	Unique name for the volume to be created. This value must contain 128 or fewer printable Unicode characters. **Maximal length** : 128	string
performance_policy_id *optional*	Unique identifier of the performance policy assigned to the volume.	string
protection_policy_id *optional*	Unique identifier of the protection policy assigned to the volume.	string

Name	Description	Schema
sector_size *optional*	Optional sector size, in bytes. Only 512-byte and 4096-byte sectors are supported. **Minimum value** : `512` **Maximum value** : `4096`	integer (int32)
size *required*	Size of the volume to be created, in bytes. Minimum volume size is 1MB. Maximum volume size is 256TB. Size must be a multiple of 8192. **Minimum value** : `1048576` **Maximum value** : `281474976710656`	integer (int64)
volume_group_id *optional*	Volume group to add the volume to. If not specified, the volume is not added to a volume group.	string

volume_detach

Name	Description	Schema
host_group_id *optional*	Unique identifier of the host group to be detached from this volume. Only one of host_id or host_group_id can be supplied.	string
host_id *optional*	Unique identifier of the host to be detached from this volume. Only one of host_id or host_group_id can be supplied.	string

volume_group_add_members

Request to add members to a volume group.

Name	Description	Schema
volume_ids *required*	A list of primary or clone volumes to be added to the volume group. Snapshots cannot be added to a volume group. All the volumes should be on the same appliance as the current members of the volume group. This list cannot be empty.	< string > array

volume_group_clone

Clone volume group request.

Name	Description	Schema
description *optional*	Description for the clone volume group. If description is not specified, the description for the snapshot set will not be set.	string
is_replication_destination *optional*	A boolean flag to indicate whether the clone volume group is a destination of a replication session. This parameter defaults to false, if not specified. **Default** : `false`	boolean
name *required*	Unique name for the clone volume group.	string
protection_policy_id *optional*	Unique identifier of the protection policy you want to assign to the clone volume group.	string

volume_group_clone_response

Response for volume group clone action

Name	Description	Schema
id *optional*	Unique identifier of the new instance created.	string

volume_group_create

Create volume group request.

Name	Description	Schema
description *optional*	Description for the volume group. The description should not be more than 256 characters long and should not have any unprintable characters. If description is not specified, the description for the volume group will not be set. **Maximal length** : `256`	string
is_write_order_consistent *optional*	A boolean flag to indicate whether snapshot sets of the volume group will be write-order consistent. This parameter defaults to true, if not specified. **Default** : `true`	boolean

Name	Description	Schema
name *required*	Unique name for the volume group. The name should contain no special HTTP characters and no unprintable characters. Although the case of the name provided is reserved, uniqueness check is case-insensitive, so the same name in two different cases is not considered unique. **Maximal length** : 128	string
protection_policy_id *optional*	Unique identifier of an optional protection policy to assign to the volume group.	string
volume_ids *optional*	A list of identifiers of existing volumes that should be added to the volume group. All the volumes must be on the same Cyclone appliance and should not be part of another volume group. If a list of volumes is not specified or if the specified list is empty, an empty volume group of type Volume will be created.	< string > array

volume_group_delete

Delete volume group request.

Name	Description	Schema
delete_members *optional*	By default, the members of a volume group being deleted are only removed. Set this optional parameter to true to override this behavior and also delete the members after they are removed from the volume group. This parameter defaults to false, if not specified. **Default** : `false`	boolean

volume_group_instance

Information about a volume group. This resource type has queriable associations from policy, migration_session, volume

Name	Description	Schema
creation_timestamp *optional*	The time at which the volume group was created.	string (date-time)

Name	Description	Schema
description *optional*	Description for the volume group.	string
id *optional*	Unique identifier of the volume group.	string
is_importing *optional*	Indicates whether the volume group is being imported.	boolean
is_protectable *optional*	This is a derived field that is set internally. It enables/disables the following functionality: • Whether a protection_policy can be applied to the group. • Whether manual snapshots can be taken. • Whether clones of the group can be created.	boolean
is_replication_destination *optional*	Indicates whether this volume group is a replication destination. A replication destination will be created by the system when a replication session is created. When there is an active replication session, all the user operations are restricted including modification, deletion, host operation, snapshot, clone, etc. After the replication session is deleted, the replication destination will remain as it is until the end user changes it to be a non-replication destination. After the change, it becomes a primary volume group. If the end user keeps it as a replication destination, when the replication session is recreated, the replication destination could potentially be reused in the new session to avoid a time-consuming full sync. This property is only valid for primary and clone volume groups. **Default** : `false`	boolean
is_write_order_consistent *optional*	For a primary or a clone volume group, this property determines whether snapshot sets of the group will be write order consistent. For a snapshot set, this property indicates whether the snapshot set is write-order consistent.	boolean
location_history *optional*	A list of locations. The list of locations includes the move to the current appliance. Filtering on the fields of this embedded resource is not supported.	< location_history_instance > array

Name	Description	Schema
migration_session *optional*	This is the embeddable reference form of migration_session_id attribute.	migration_session_instance
migration_session_id *optional*	Unique identifier of the migration session assigned to the volume group when it is part of a migration activity.	string
name *optional*	Name of the volume group. This property supports case-insensitive filtering	string
placement_rule *optional*		VGPlacementRule
protection_data *optional*		protection_data_instance
protection_policy *optional*	This is the embeddable reference form of protection_policy_id attribute.	policy_instance
protection_policy_id *optional*	Unique identifier of the protection policy assigned to the volume group. This attribute is only applicable to primary and clone volume groups.	string
type *optional*		VolumeTypeEnum
type_l10n *optional*	Localized message string corresponding to type	string
volumes *optional*	List of the volumes that are associated with this volume_group.	< volume_instance > array

volume_group_modify

Modify volume group request.

Name	Description	Schema
description *optional*	New description for the volume group. The description should not have any unprintable characters. If an empty string is specified, the description will be cleared. **Maximal length** : 256	string
force *optional*	Normally a replication destination volume group cannot be modified since it is controlled by replication. However, there can be cases where replication has failed or is no longer active and the replication destination volume group needs to be cleaned up. With the force option, the user will be allowed to remove the protection policy from the replication destination volume group provided that the replication session has never been synchronized. This parameter defaults to false, if not specified. **Default** : false	boolean
is_replication_destination *optional*	New value for is_replication_destination property. is_replication_destination property of all the volumes in the volume group will be modified to the specified value. Modification of is_replication will not be transactional in nature. If the command only succeeds in modifying the is_replication_destination property of a subset of volumes, is_replication_destination property for the volume group will be set to true. Modification of this property is idempotent. This parameter is only valid when modifying a primary or a clone volume group, only when the volume group is no longer the destination of a replication session, and may only be set to false.	boolean
is_write_order_consistent *optional*	A boolean flag to indicate whether snapshot sets of the volume group will be write-order consistent. This parameter is only valid when modifying a primary or a clone volume group.	boolean
name *optional*	New name for the volume group. The name should contain no special HTTP characters and no unprintable characters. Although the case of the name provided is reserved, uniqueness check is case-insensitive, so the same name in two different cases is not considered unique. **Maximal length** : 128	string

Name	Description	Schema
protection_policy_id *optional*	Unique identifier of the protection policy to assign to a primary or clone volume group. If an empty string is specified, protection policy will be removed from the volume group.	string

volume_group_refresh

Refresh volume group request.

Name	Description	Schema
backup_snap_profile *optional*		volume_group_snapshot
create_backup_snap *optional*	This parameter specifies whether a backup snapshot set of the target volume group needs to be created before refreshing it. This parameter defaults to true, if not specified. **Default** : `true`	boolean
from_object_id *required*	Unique identifier of the volume group to refresh from. This is referred to as the source volume group.	string

volume_group_refresh_response

volume group refresh response.

Name	Description	Schema
backup_snapshot_id *optional*	Unique identifier of the backup snapshot set. This parameter will not be available if the **create_backup_snap** flag was set to false.	string

volume_group_remove_members

Request to remove members from a volume group.

Name	Description	Schema
volume_ids *required*	A list of volumes that need to be removed from the volume group. This list cannot be empty.	< string > array

volume_group_restore

Restore volume group request.

Name	Description	Schema
backup_snap_profile *optional*		volume_group_snapshot
create_backup_snap *optional*	This parameter specifies whether a backup snapshot set of the target volume group needs to be created before attempting restore. This parameter defaults to true, if not specified. **Default** : `true`	boolean
from_snap_id *required*	Unique identifier of the snapshot set to restore from. This is referred to as the source volume group.	string

volume_group_restore_response

volume group restore response.

Name	Description	Schema
backup_snapshot_id *optional*	Unique identifier of the backup snapshot set. This parameter will not be available if the **create_backup_snap** was set to false.	string

volume_group_snapshot

Snapshot volume group request.

Name	Description	Schema
description *optional*	Optional description for the snapshot set. If description is not specified, the description for the snapshot set will not be set.	string
name *required*	Unique name of the snapshot set to be created.	string

volume_group_snapshot_response

Unique identifier of the new snapshot volume.

Name	Schema
id *optional*	string

volume_instance

Details about a volume, including snapshots and clones of volumes. This resource type has queriable associations from appliance, policy, migration_session, host_volume_mapping, volume_group

Name	Description	Schema
appliance *optional*	This is the embeddable reference form of appliance_id attribute.	appliance_instance
appliance_id *optional*	Unique identifier of the appliance on which the volume is provisioned.	string
creation_timestamp *optional*	Time when the volume was created.	string (date-time)
description *optional*	Description of the volume. This value must contain 128 or fewer printable Unicode characters. **Maximal length** : 128	string
id *optional*	Unique identifier of the volume instance.	string
is_replication_destination *optional*	Indicates whether this volume is a replication destination. A replication destination will be created by the system when a replication session is created. When there is an active replication session, all the user operations are restricted including modification, deletion, host operation, snapshot, clone, etc. After the replication session is deleted, the replication destination volume will remain as it is until the end user changes it to be a non-replication destination. After the change, it becomes a primary volume. If the end user keeps it as a replication destination, when the replication session is recreated, the replication destination volume could potentially be reused in the new session to avoid a time-consuming full sync. This property is only valid for primary and clone volumes. **Default** : `false`	boolean

Name	Description	Schema
location_history *optional*	Filtering on the fields of this embedded resource is not supported.	< location_history_instance > array
mapped_volumes *optional*	This is the inverse of the resource type host_volume_mapping association.	< host_volume_mapping_instance > array
migration_session *optional*	This is the embeddable reference form of migration_session_id attribute.	migration_session_instance
migration_session_id *optional*	Unique identifier of the migration session assigned to the volume if it is part of a migration activity.	string
name *optional*	Name of the volume. This value must contain 128 or fewer printable Unicode characters. This property supports case-insensitive filtering **Maximal length** : 128	string
node_affinity *optional*	Node affinity. Node which offers optimized IO for volume, values are:	NodeAffinityEnum
node_affinity_l10n *optional*	Localized message string corresponding to node_affinity	string
performance_policy_id *optional*	Unique identifier of the performance policy assigned to the volume.	string
protection_data *optional*		protection_data_instance
protection_policy *optional*	This is the embeddable reference form of protection_policy_id attribute.	policy_instance
protection_policy_id *optional*	Unique identifier of the protection policy assigned to the volume. Only applicable to primary and clone volumes.	string

Name	Description	Schema
size *optional*	Size of the volume in bytes. Minimum volume size is 1MB. Maximum volume size is 256TB. Size must be a multiple of 8192. **Minimum value** : 1048576 **Maximum value** : 281474976710656	integer (int64)
state *optional*		VolumeStateEnum
state_l10n *optional*	Localized message string corresponding to state	string
type *optional*		VolumeTypeEnum
type_l10n *optional*	Localized message string corresponding to type	string
volume_groups *optional*	List of the volume_groups that are associated with this volume.	< volume_group_instance > array
wwn *optional*	World wide name of the volume.	string

volume_modify

Name	Description	Schema
description *optional*	New description of the volume. This value must contain 128 or fewer printable Unicode characters. **Maximal length** : 128	string
expiration_timestamp *optional*	New expiration time of the snapshot. Expired snapshots are deleted by the snapshot aging service that runs periodically in the background. If not specified, the snapshot never expires. Use a maximum timestamp value to set an expiration to never expire.	string (date-time)

Name	Description	Schema
force *optional*	Normally a replication destination volume cannot be modified since it is controlled by replication. However, there can be cases where replication has failed or is no longer active and the replication destination volume needs to be cleaned up. With the force option, the user will be allowed to remove the protection policy from the replication destination volume provided that the replication session has never been synchronized and the last_sync_timestamp property is empty. This parameter defaults to false, if not specified. **Default** : `false`	boolean
is_replication_destination *optional*	New value for is_replication_destination property. The modification is only supported for primary and clone volume, only when the current value is true and there is no longer a replication session using this volume as a destination, and only to false.	boolean
name *optional*	New name of the volume. This value must contain 128 or fewer printable Unicode characters. **Maximal length** : `128`	string
node_affinity *optional*	Set which node will optimized for IO.	NodeAffinityEnum
performance_policy_id *optional*	Unique identifier of the performance policy assigned to the volume.	string
protection_policy_id *optional*	Unique identifier of the protection policy assigned to the volume.	string
size *optional*	New size of the volume in bytes, must be a multiple of 8192, must be bigger than the current volume size. Maximum volume size is 256TB. **Minimum value** : `8192` **Maximum value** : `281474976710656`	integer (int64)

volume_refresh

Name	Description	Schema
backup_snap_profile *optional*	Profile for the backup snapshot.	volume_snapshot
create_backup_snap *optional*	Indicates whether to create a backup snapshot of the volume before refreshing. **Default** : `false`	boolean
from_object_id *required*	Unique identifier of the source object of the refresh operation. The refresh operation only refreshes the data.	string

volume_refresh_response

Unique identifier of the backup snapshot if one is created.

Name	Schema
backup_snapshot_id *optional*	string

volume_restore

Name	Description	Schema
backup_snap_profile *optional*	Profile for the backup snapshot.	volume_snapshot
create_backup_snap *optional*	Indicates whether to create a backup snapshot of the volume before restoring. **Default** : `true`	boolean
from_snap_id *required*	Unique identifier of the source snapshot for the restore operation.	string

volume_restore_response

Unique identifier of the backup snapshot if one is created.

Name	Schema
backup_snapshot_id *optional*	string

volume_snapshot

Name	Description	Schema
creator_type *optional*		StorageCreatorTypeEnum
description *optional*	Description of the snapshot. This value must contain 128 or fewer printable Unicode characters. **Maximal length** : 128	string
expiration_timestamp *optional*	Expiration time of the snapshot. Expired snapshots are deleted by the snapshot aging service that runs periodically in the background. If not specified, the snapshot never expires. Use a maximum timestamp value to set an expiration to never expire.	string (date-time)
name *optional*	Name of the snapshot to be created. This value must contain 128 or fewer printable Unicode characters. The default name of the volume snapshot is the date and time when the snapshot is taken. **Maximal length** : 128	string
performance_policy_id *optional*		string

volume_snapshot_response

Unique identifier of the new snapshot volume.

Name	Schema
id *optional*	string

vvol_error_response

Name	Description	Schema
description *optional*		string
error_code *optional*	**Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)

wear_metrics_by_drive_instance

Wear metrics for the drives collected at twenty second interval.

Polymorphism : Inheritance
Discriminator : entity

Name	Description	Schema
drive_id *optional*	Reference to the associated drive which these metrics were recorded.	string
entity *required*		MetricsEntityEnum
entity_l10n *optional*	Localized message string corresponding to entity	string
percent_endurance_remaining *optional*	The percentage of drive wear remaining.	number (float)
repeat_count *optional*	Number of times the metrics is repeated. **Minimum value** : `0` **Maximum value** : `2147483647`	integer (int32)
timestamp *optional*	End of sample period.	string (date-time)

x509_certificate_decommission

x509 certificate decommission operation request body.

Name	Description	Schema
scope *required*	Scope of the certificate to be decommissioned, for example, remote system global id, serial number and such.	string

Name	Description	Schema
service *required*		X509CertificateServiceEnum

x509_certificate_exchange

x509 certificate exchange opertation request body.

Name	Description	Schema
address *required*	Peer's ip v4 or v6 address or dns name.	string (ip-address)
password *required*	Password used in basic authentication to remote PowerStore cluster.	string (password)
port *required*	Peer's port number. **Minimum value** : `0` **Maximum value** : `65535`	integer (int32)
service *required*		X509CertificateServiceEnum
username *required*	Username used in basic authentication to remote PowerStore cluster.	string

x509_certificate_instance

Name	Description	Schema
id *optional*	Unique identifier of X509 Certificate instance.	string
is_current *optional*	Indicates whether this is the current X509 Certificate to be used by the service or this X509 Certificate will be used in the future. When is_current is false for a X509 Certificate, this X509 Certificate will not be picked up by the service. Potential usage of this attribute is to prepare for the certificate roll-over/rotation.	boolean
is_valid *optional*	Indicates whether this is a valid X509 Certificate. When X509 Certificate is expired or X509 Certificate of server type missing either a private key or a valid certificate entry, it will be false.	boolean

Name	Description	Schema
members *optional*	Member certificates included in this x509_certificate. Member certificates should be remained in an ordered sequence. Filtering on the fields of this embedded resource is not supported.	< member_certificate_instance > array
service *optional*		X509CertificateServiceEnum
service_l10n *optional*	Localized message string corresponding to service	string
type *optional*		X509CertificateUsageTypeEnum
type_l10n *optional*	Localized message string corresponding to type	string