



Application

REST API reference

NetApp
September 12, 2025

This PDF was generated from https://docs.netapp.com/us-en/ontap-restapi-9121/application_overview.html on September 12, 2025. Always check docs.netapp.com for the latest.

Table of Contents

| | |
|--|-----|
| Application | 1 |
| Application overview | 1 |
| Overview | 1 |
| APIs | 1 |
| Example | 2 |
| Smart containers | 11 |
| Smart Container Properties | 15 |
| Updating the smart container | 15 |
| Application API limitations | 16 |
| Application API limitations | 16 |
| Retrieve applications | 17 |
| Expensive properties | 17 |
| Query examples | 17 |
| Learn more | 18 |
| Parameters | 18 |
| Response | 23 |
| Error | 30 |
| Definitions | 31 |
| Create an application | 66 |
| Template properties | 66 |
| Required properties | 66 |
| Recommended optional properties | 67 |
| Default property values | 67 |
| Optional components | 67 |
| POST body examples | 67 |
| Learn more | 69 |
| Parameters | 69 |
| Request Body | 70 |
| Response | 80 |
| Error | 81 |
| Definitions | 81 |
| Retrieve application components | 120 |
| Overview | 120 |
| Query examples | 121 |
| Learn more | 121 |
| Parameters | 121 |
| Response | 122 |
| Error | 128 |
| Definitions | 128 |
| Retrieve application component Snapshot copies | 137 |
| Learn more | 137 |
| Parameters | 138 |
| Response | 139 |

| | |
|---|-----|
| Error | 141 |
| Definitions | 141 |
| Create an application component Snapshot copy | 144 |
| Required properties | 144 |
| Recommended optional properties | 144 |
| Learn more | 144 |
| Parameters | 144 |
| Request Body | 145 |
| Response | 147 |
| Error | 147 |
| Definitions | 147 |
| Delete an application component Snapshot copy | 150 |
| Learn more | 150 |
| Parameters | 150 |
| Response | 151 |
| Error | 152 |
| Definitions | 152 |
| Retrieve a Snapshot copy for a specific application component | 154 |
| Learn more | 154 |
| Parameters | 154 |
| Response | 154 |
| Error | 156 |
| Definitions | 157 |
| Restore an application component Snapshot copy | 159 |
| Learn more | 159 |
| Parameters | 159 |
| Response | 160 |
| Error | 161 |
| Definitions | 161 |
| Retrieve an application component | 162 |
| Overview | 163 |
| Access | 163 |
| Learn more | 163 |
| Parameters | 163 |
| Response | 163 |
| Error | 169 |
| Definitions | 170 |
| Manage application Snapshot copies | 178 |
| Application applications application.uuid snapshots endpoint overview | 179 |
| Retrieve an application Snapshot copy | 179 |
| Create an application Snapshot copy | 186 |
| Delete an application Snapshot copy | 193 |
| Retrieve an application Snapshot copy | 196 |
| Restore an application Snapshot copy | 202 |
| Delete an application and all associated data | 205 |

| | |
|---|-----|
| Warning - this deletes it all, including your data | 206 |
| Learn more | 206 |
| Parameters | 206 |
| Response | 207 |
| Error | 208 |
| Definitions | 208 |
| Retrieve an application | 209 |
| Expensive properties | 210 |
| Property overview | 210 |
| Learn more | 210 |
| Parameters | 210 |
| Response | 211 |
| Error | 220 |
| Definitions | 220 |
| Update application properties | 253 |
| Overview | 253 |
| storage_service | 253 |
| size | 253 |
| igroup_name | 253 |
| Application state | 253 |
| Examples | 253 |
| Learn more | 254 |
| Parameters | 254 |
| Request Body | 255 |
| Response | 257 |
| Error | 257 |
| Definitions | 258 |
| Manage application consistency groups | 285 |
| Application consistency-groups endpoint overview | 285 |
| Retrieve details of a collection or consistency group | 306 |
| Create a consistency group | 402 |
| Delete a consistency group | 470 |
| Retrieve a consistency group | 473 |
| Update a consistency group | 565 |
| Manage application consistency group Snapshot copies | 609 |
| Application consistency-groups consistency_group.uuid snapshots endpoint overview | 609 |
| Retrieve consistency group Snapshot copies | 613 |
| Create a consistency group Snapshot copy | 622 |
| Delete a consistency group Snapshot copy | 628 |
| Retrieve a consistency group Snapshot copy | 631 |
| Complete a consistency group Snapshot copy operation | 638 |
| Retrieve application templates | 641 |
| Query examples | 641 |
| Learn more | 642 |
| Parameters | 642 |

| | |
|--|-----|
| Response | 643 |
| Error | 648 |
| Definitions | 648 |
| Retrieve an application template | 674 |
| Template properties | 674 |
| Template prerequisites | 674 |
| Learn more | 674 |
| Parameters | 674 |
| Response | 675 |
| Error | 680 |
| Definitions | 681 |

Application

Application overview

Overview

ONTAP application APIs simplify storage management by using terminology specific to a type of application. This application-specific terminology can be used to provision and manage ONTAP storage objects. A single call using application-specific parameters provisions storage and enables protocol access for an application following NetApp best practices. You can view and manage the ONTAP objects making up the application as a group using the application APIs. The library of available application templates already includes several database and virtualization applications.

APIs

There are several application APIs that must be used to fully manage an application. Templates are used to represent any parameters specific to a given application. Some APIs expose applications in terms of their specific template, while others only expose a generic view that all applications share. The template view is present on the *templates* and *applications* APIs (although these APIs do also include some generic fields). The *components* and *snapshots* APIs are entirely generic and do not differ across types of applications.

The following section provides an overview of each API, followed by a lifecycle example of managing an application to demonstrate how the APIs can be used together.

Template

A template is an ONTAP representation of a specific type of application. Each template represents one type of application, the parameters that can be used to customize it, the layout of its storage, and how it can be accessed. Templates are intended to expose an application in terms specifically applicable to an administrator of a given application. As such, traditional ONTAP storage elements are generally not included in an application template.

The template APIs can be used to discover what templates are currently available. The ONTAP API documentation also includes a model of the templates. The template APIs generally provide the same information as the documentation, but the template APIs might provide more up-to-date details about the default values of template parameters based on the current ONTAP configuration. However, only the ONTAP API documentation includes a full description of each template parameter, its usage, and whether it is optional.

Application

The application APIs are the only interfaces that allow management of an application using template properties.

The application object includes the following three sections:

1. Generic metadata about the application, including common fields such as the name of the application, the template used to provision it, and the generation number of the application.
2. Statistics information about the application, including space and IOPS details about the entire application

and each of its components. These are expensive to collect and should only be requested when needed using a *fields=* query.

3. A template view of the application. The application object itself presents a mutually exclusive list of all possible templates. Only one of these fields can be used per application. The name of the field corresponds to the name of the template used by the application. Currently, the creation of a new application and the modification of the storage service for an existing application are supported through the template parameters.

Component

The component API offers a generic view of the application and how to access the application from the host application. This is the only API that exposes the underlying ONTAP storage elements of which the application is composed. It is read-only; it cannot support modifications specific to the type of application it is presenting.

The component object includes the following details for an application:

1. The NFS export rules for accessing the application from the host.
2. The CIFS share and users that can access the application from the host.
3. The SAN initiators that can access the application from the host.
4. For IP-based protocols, the IP addresses that are best suited for accessing the component.
5. The underlying storage elements that make up the component, such as volumes or LUNs.

Snapshot copy

The Snapshot copy APIs offer full CRUD for application-level Snapshot copies. Application Snapshot copies can be flagged as either crash-consistent or application-consistent. From the perspective of ONTAP, there is no difference between the two. It is the responsibility of the administrator to ensure that the application is in a consistent state before flagging a Snapshot copy as application-consistent. Use of the SnapCenter Backup Management suite is recommended to ensure correct interaction between host applications and ONTAP.

Example

The following example outlines the APIs necessary to manage applications and how they fit together. However, this example does not provide detailed information on each API. See the documentation for the individual APIs for more information.

1) Discover the templates

This documentation, which includes the model of each template as part of the *templates* and *applications* APIs, is the easiest and most comprehensive way to discover the available templates. The *templates* API can also be used to query the system for templates in a programmatic way.

To discover the templates available to provision an Oracle application, the following query is used.

```
# The API:
/api/application/templates

# The query:
name=oracle*

# The call:
curl -X GET "https://<mgmt-ip>/api/application/templates?name=oracle*" -H
"accept: application/json"

# The response:
{
  "records": [
    {
      "name": "oracle_on_nfs", "description": "Oracle using NFS."
    },
    {
      "name": "oracle_on_san", "description": "Oracle using SAN."
    },
    {
      "name": "oracle_rac_on_nfs", "description": "Oracle RAC using NFS."
    },
    {
      "name": "oracle_rac_on_san", "description": "Oracle RAC using SAN."
    }
  ],
  "num_records": 4
}
```

2) Create an application

Now that we know the possible templates, we use one to create an application. The template properties differ from template to template, and can be found by exploring the model of the application object in this documentation. Each call to create an application must include the properties for exactly one template. These properties are provided under the property with the same name as the template. Other than the template properties, the only other required properties to create an application are the SVM and name.



In the following call example, not all of the template properties are included. Where a property is not needed or the default is sufficient, the property can be excluded. In this case using the *oracle_on_nfs* template, the *archive_log*, and *protection_type* are not included. The template name, *oracle_on_nfs*, is specified above the group of template properties, after the names of the application and the SVM.

Creating an application is asynchronous, so the response for this API includes information about the job doing the work. The response header also includes the *location* of where the application can be found if the job is

successful.

Prior to creating an application, the following prerequisites must be met for the protocols associated with the template:

- Licences must be installed.
 - [POST /cluster/licensing/licenses](#)
- Aggregates must exist with enough available space and IOPS to satisfy the requested size.
 - [POST /storage/aggregates](#)
- An SVM must exist with protocol services enabled.
 - [POST /svm/svms](#)
- LIFs must exist. For SAN applications, only High Availability groups where each node has at least on LIF will be considered for placement of storage objects.
 - [POST /network/ip/interfaces](#)
 - [POST /network/fc/interfaces](#)

The following are not required prior to creating an application, but might be necessary before connecting to the application:

- Network routes must be created to access ethernet based LIFs.
 - [POST /network/ip/routes](#)
- For volumes created by this operation to be successfully mounted, ONTAP requirements related to mounting must be met.

```
# The API:
/api/application/applications

# The query:
No query is needed for this command. Optionally, you can specify the
return_timeout or set the return_records flag to alter the behavior of the
command.

# The body:
{
  "name": "my_ora_app",
  "svm": {
    "name": "svm1"
  },
  "oracle_on_nfs": {
    "db": {
      "size": "2GB",
```

```

    "storage_service": {
        "name": "value"
    },
    "nfs_access": [
        {
            "access": "rw",
            "host": "0.0.0.0/0"
        }
    ]
},
"redo_log": {
    "size": "1GB"
},
"ora_home": {
    "size": "1GB"
}
}
}

```

The call:

```

curl -X POST "https://<mgmt-ip>/api/application/applications" -H
"accept: application/hal+json" -H "content-type: application/json" -d '{
"name": "my_ora_app", "svm": { "name": "vs1" }, "oracle_on_nfs": { "db": {
"size": "2GB", "storage_service": { "name": "value" }, "nfs_access": [ {
"access": "rw", "host": "0.0.0.0/0" } ] }, "redo_log": { "size": "1GB" },
"ora_home": { "size": "1GB" } } }'

```

The response:

```

{
  "job": {
    "uuid": "dc0d01dd-df5a-11e7-b5d2-005056b47eb2",
    "id": 94,
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/dc0d01dd-df5a-11e7-b5d2-005056b47eb2"
      }
    }
  }
}
}

```

The response header:

```

date: Tue, 12 Dec 2017 16:38:18 GMT
server: libzapid-httpd
content-type: application/hal+json
location: /api/application/applications/dbc10d87-df5a-11e7-b5d2-
005056b47eb2

```

```
cache-control: no-cache,no-store,must-revalidate
connection: Keep-Alive
keep-alive: timeout=5, max=100
content-length: 203
```

3) Wait for the application to be created

The call to create the application returns information about the job, including a HAL link to retrieve details about the job. The job object includes a state and a message to indicate the progress of the job. When the job is complete, and the application has been fully created, the message indicates success and the *state* of the job property is *success*.

For brevity purposes, the successful job response is shown here. On a real cluster, an application might take several seconds to several minutes to be created, depending on the system load. If the job is not complete, the *message* property includes a short description on the progress of the job, and the *state* indicates *running*.

```
# The API:
/api/cluster/jobs/{uuid}

# The call, provided by the HAL link from step 3:
curl -X GET "https://<mgmt-ip>/api/cluster/jobs/dc0d01dd-df5a-11e7-b5d2-005056b47eb2" -H "accept: application/hal+json"

# The response:
{
  "uuid": "dc0d01dd-df5a-11e7-b5d2-005056b47eb2",
  "state": "success",
  "message": "Complete: Success [0]",
  "code": 0,
  "_links": {
    "self": {
      "href": "/api/cluster/jobs/dc0d01dd-df5a-11e7-b5d2-005056b47eb2"
    }
  }
}
```

4) Retrieve the new application

You can look up the application directly without listing all the applications. Use the *location* header that is included in the response when the application is created.



The following example uses a query to retrieve only a small number of the application's properties.

```
# The API:
/api/application/applications/{uuid}

# The query:
fields=name,template.name,generation,state

# The call:
curl -X GET "https://<mgmt-ip>/api/application/applications/dbc10d87-df5a-11e7-b5d2-005056b47eb2?fields=name,template.name,generation,state" -H
"accept: application/json"

# The response:
{
  "uuid": "dbc10d87-df5a-11e7-b5d2-005056b47eb2",
  "name": "my_ora_app",
  "template": { "name": "oracle_on_nfs" },
  "generation": 2,
  "state": "online"
}
```

5) Discover how to access the application

The components API provides information on how to access the storage that is provisioned for the application.

For brevity, only the names of the components are requested. See the API documentation for more information on the other available fields.

```
# The API:
api/application/applications/{application.uuid}/components

# The query:
fields=name

# The call:
curl -X GET "https://<mgmt-ip>/api/application/applications/dbc10d87-df5a-11e7-b5d2-005056b47eb2/components?fields=name" -H "accept: application/json"

# The response:
{
  "records": [
    { "uuid": "e06fb407-df5a-11e7-b5d2-005056b47eb2", "name": "db" },
    { "uuid": "e0709732-df5a-11e7-b5d2-005056b47eb2", "name": "ora_home" },
    { "uuid": "e07158eb-df5a-11e7-b5d2-005056b47eb2", "name": "redo_log" }
  ],
  "num_records": 3
}
```

6) Update the application

To update the storage service, the same template that is used for creating the application is reused, but with only the `storage_service` properties set. In the generic SAN and NAS templates, the name of each component must also be specified.

In this example, the cluster only supports the *value* storage service, so modifications of the application to a faster storage service fail. Note how the error message indicates the parameter that caused the problem.

Application modification, like application creation, is an asynchronous operation. If a valid command is passed, the API returns information about the job instead of an error.

```
# The API:
/api/application/applications/{uuid}

# The body:
{
  "oracle_on_nfs": { "db": { "storage_service": { "name": "extreme" } } }
}

# The call:
curl -X PATCH "https://<mgmt-ip>/api/application/applications/dbc10d87-
df5a-11e7-b5d2-005056b47eb2" -H "accept: application/hal+json" -H
"content-type: application/json" -d '{ "oracle_on_nfs": { "db": {
"storage_service": { "name": "extreme" } } } }'

# The response:
{
  "error": {
    "message": "Invalid value for parameter \"oracle_on_nfs.db.storage-
service.name\": extreme. Supported values are: value.",
    "code": "65995152"
  }
}
```

7) Manage Snapshot copies

For applications created with the *local protection_type* set to *hourly*, Snapshot copies are automatically taken every hour. These Snapshot copies can be retrieved or restored using the Snapshot copy APIs. Snapshot copies can also be taken on demand using these APIs. It is important to note that the *consistency_type* flag of the Snapshot copy is for record-keeping only: it is the responsibility of the administrator to ensure that the application is in a consistent state prior to flagging a Snapshot copy as *application* consistent.

Take a Snapshot copy manually:

```
# The API:
/api/application/applications/{uuid}/snapshots

# The body:
{
  "name": "little_bobby_tables",
  "consistency_type": "crash"
}

# The call:
curl -X POST "https://<mgmt-ip>/api/application/applications/dbc10d87-
df5a-11e7-b5d2-005056b47eb2/snapshots" -H "accept: application/hal+json"
-H "content-type: application/json" -d '{ "name": "little_bobby_tables",
"consistency_type": "crash"}'

# The response:
{}

# The response header:
date: Tue, 12 Dec 2017 17:40:10 GMT
server: libzapid-httpd
content-type: application/hal+json
location: /api/application/applications/dbc10d87-df5a-11e7-b5d2-
005056b47eb2/snapshots/dbc10d87-df5a-11e7-b5d2-
005056b47eb2_13_little_bobby_tables
cache-control: no-cache,no-store,must-revalidate
connection: Keep-Alive
keep-alive: timeout=5, max=100
content-length: 3
```

In the above example, the response body is empty, and the response header includes the *location* of the newly created Snapshot copy. By default, all POST calls return an empty body unless a job is used to process the creation asynchronously. This behavior can be changed with the query flag *return_records*.

Restoring a Snapshot copy uses an action API. Action paths can also be performed asynchronously as jobs, as with creating or modifying an application. The response header does not include a *location*, because this action is not creating a resource.

```
# The API:
/api/application/applications/{application.uuid}/snapshots/{snapshot.uuid}
/restore

# The call:
curl -X POST "https://<mgmt-ip>/api/application/applications/dbc10d87-
df5a-11e7-b5d2-005056b47eb2/snapshots/dbc10d87-df5a-11e7-b5d2-
005056b47eb2_13_little_bobby_tables/restore" -H "accept:
application/hal+json"

# The response:
{
  "job": {
    "uuid": "00e81690-df64-11e7-b5d2-005056b47eb2",
    "id": 100,
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/00e81690-df64-11e7-b5d2-005056b47eb2"
      }
    }
  }
}

# The response header:
date: Tue, 12 Dec 2017 17:43:46 GMT
cache-control: no-cache,no-store,must-revalidate
server: libzapid-httpd
connection: Keep-Alive
keep-alive: timeout=5, max=100
content-length: 204
content-type: application/hal+json
```

Smart containers

Smart containers are traditional ONTAP storage objects such as FlexVol or FlexGroup created using the application REST API.

- NAS - FlexVolume, FlexGroup, and FlexCache objects
- SAN - LUNs
- NVME - Namespaces
- S3 - Object Store S3 Buckets

The benefits of creating a Smart Container are as follows:

- ONTAP determines the best placement for the storage object based on available performance and space capacity.
 - Access controls can be optionally set.
 - Snapshot copy schedules can be optionally set.
 - A single atomic job that does all the above.
-

Smart containers are similar to generic enterprise applications (NAS, SAN, NVME), but with certain restrictions. Smart containers are restricted to 1 application-component. Any post-provisioning data management operations on smart containers must be performed via PATCH operations corresponding to the object created. However, the POST, GET and DELETE operations that exist for applications will also operate for smart containers.

To create a Smart Container the "smart_container:true" parameter must be provided.

Prior to creating a smart container, the following prerequisites must be met for the protocols associated with the template:

- Licences must be installed.
 - [POST /cluster/licensing/licenses](#)
 - Aggregates must exist with enough available space to satisfy the requested size.
 - [POST /storage/aggregates](#)
 - An SVM must exist with protocol services enabled.
 - [POST /svm/svms](#)
 - LIFs must exist. For SAN objects, only High Availability groups where each node has at least one LIF to be considered for placement of storage objects.
 - [POST /network/ip/interfaces](#)
 - [POST /network/fc/interfaces](#)
-

The following are not required prior to creating a smart container:

- Network routes must be created to access Ethernet-based LIFs.
 - [POST /network/ip/routes](#)
 - To mount volumes by this operation successfully, all ONTAP requirements related to mounting must be met.
-

Example

The following examples outline the APIs necessary to create a smart container. Two types of smart container creation are supported:

- A smart container with new ONTAP storage objects as specified in the JSON body.
- An existing ONTAP volume can be converted into a smart container (supported only on generic SAN and NVME templates). This is an addendum to the example provided on how to create an application.

The API:

/api/application/applications

The query:

No query is needed for this command. Optionally, you can specify the `return_timeout` or set the `return_records` flag to alter the behavior of the command.

The body:

Creates a smart container with new ONTAP storage objects:

```
{
  "name": "my_container",
  "svm": {
    "name": "vs1"
  },
  "template": {
    "name": "nas"
  },
  "smart_container": "true"
  "nas": {
    "application_components": [
      {
        "share_count": "1",
        "name": "myVolume",
        "storage_service": {
          "name": "value"
        },
        "total_size": "100mb"
      }
    ]
  }
}
```

Converting an existing volume into a smart container:

```
{
  "name": "my_container",
  "svm": {
    "name": "vs1"
  },
  "template": {
    "name": "san"
  },
  "smart_container": "true"
}
```

```

"san": {
  "application_components": [
    {
      "name": "existingVolume" #name of an existing volume
    }
  ]
}
}

# The call:
Creates a smart container with new ONTAP storage objects:
curl -X POST "https://<mgmt-ip>/api/application/applications" -H "accept:
application/hal+json" -H "Content-Type: application/json" -d '{"name":
"my_container", "svm": {"name": "vs1"} , "smart_container": true ,
"template": {"name": "nas"} , "nas": {"application_components":
[{"share_count": "1", "name": "myVolume", "storage_service": {"name":
"value"} , "total_size": "100mb"} ] } }'
Converting an existing volume into a smart container:
curl -X POST "https://<mgmt-ip>/api/application/applications" -H "accept:
application/hal+json" -H "Content-Type: application/json" -d '{"name":
"my_container", "svm": {"name": "vs1"} , "smart_container": true ,
"template": {"name": "san"} , "san": {"application_components": [{"name":
"existingVolume"} ] } }'

# The response:
{
  "job": {
    "uuid": "5440db05-77f0-11e9-a5a0-005056bba32f",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/5440db05-77f0-11e9-a5a0-
005056bba32f"
      }
    }
  }
}

# The response header:
date: Tue, 23 May 2019 16:38:18 GMT
server: libzapid-httpd
content-type: application/hal+json
location: /api/application/applications/5440db05-77f0-11e9-a5a0-
005056bba32f
cache-control: no-cache,no-store,must-revalidate
connection: Keep-Alive
keep-alive: timeout=5, max=100

```

Smart Container Properties

- `exclude_aggregates` - This property is available for SAN, NAS and S3 Smart Containers. The list of aggregates specified in this property will be excluded while provisioning the storage object. If no suitable aggregate can be found to place the storage object, smart container provisioning will fail.

These sections are only allowed for smart containers and will return an error when provided on traditional applications. The following is an example of the error returned:

```
{
  "error": {
    "message": "Field \"<field>\" is only supported on smart containers.",
    "code": "65996161"
  }
}
```

Updating the smart container

A smart container can be updated to add more LUNS and/or namespaces, with the same template used to create a smart container being reused, and with the following fields set:

- `lun_count/namespace_count` - represents the total number of LUNS/namespaces in the smart container.
- `os_type` - represents the OS type of the new LUNS/namespaces.
- `total_size` - represents the total size of the new LUNS/namespaces to be added.
- `igroup_name/subsystem` - represents the igroup/subsystem mapping for the new LUNS/namespaces. Updates are allowed only on generic SAN and NVME templates.

```
# The API:
/api/application/applications/{uuid}

# The body:
{
  "san": {
    "application_components": [
      {
        "name": "myVolume",
        "lun_count": 4
        "total_size": "1gb"
        "os-type": "linux",
        "igroup_name": "igroup1"
      }
    ]
  }
}

# The call:
curl -X PATCH "https://<mgmt-ip>/api/application/applications/dbc10d87-
df5a-11e7-b5d2-005056b47eb2" -H "accept: application/hal+json" -H
"content-type: application/json" -d '{ "san": { "application_components":
[{"name": "myVolume", "total_size": "1GB", "lun_count": 4, "os_type":
"linux", "igroup_name": "igroup1"}]}}'
```

Application API limitations

Application API limitations

Template versus generic

Applications can be represented in either template or generic terms. All applications can be represented in generic terms as a list of components. Each component generally maps to a field in the template. For example, Microsoft SQL Server applications have a component named *sql/data* that corresponds to the *db* parameter in the *sql_on_san* template. These mappings are usually straightforward and allow the templates to present application terminology, while the generic view uses the traditional naming schemes for ONTAP storage elements.

The current release supports the creation and modification of applications in template terms, but retrieval is not supported. The mapping from template to generic terms is left to your own discretion.za

ONTAP feature support

Application APIs are interfaces layered on top of traditional ONTAP storage. While the intent is to provide a full management suite through application APIs, some features of the underlying ONTAP objects are not directly supported through application APIs. Applications are provisioned using ONTAP best practices, so the need for additional modifications of the underlying objects should be minimal. If such modifications are necessary, the traditional ONTAP APIs can be used. The */api/application/{application.uuid}/components* API provides a

backing_storage field that can be used to locate the storage objects associated with an application. This API also provides details of the NFS, CIFS, or SAN protocol access objects associated with the application.

The application APIs use the extra information known about the application to coordinate multiple ONTAP objects in unison. When using non-application APIs, certain settings might interfere with the ONTAP object coordination and cause the application APIs to behave unexpectedly. To continue to supply the full ONTAP feature set, these modifications on the underlying objects are allowed, but there is no guarantee that these modifications will not adversely affect the application experience. You should use this feature with caution.

Retrieve applications

GET /application/applications

Introduced In: 9.6

Retrieves applications.

Expensive properties

There is an added computational cost to retrieving values for these properties. They are not included by default in GET results and must be explicitly requested using the `fields` query parameter. See [Requesting specific fields](#) to learn more.

- `<template>` the property corresponding to the `template.name` of the application

Query examples

Numerous queries are available for classifying and sorting applications:

1. Return a list of applications sorted by name.

```
GET /application/applications?order_by=name
```

2. Return a list of applications for a specific SVM.

```
GET /application/applications?svm.name=<name>
```

3. Return a list of all SQL applications.

```
GET /application/applications?template.name=sql*
```

4. Return a list of all applications that can be accessed via SAN.

```
GET /application/applications?template.protocol=san
```

5. Return the top five applications consuming the most IOPS.

```
GET /application/applications?order_by=statistics.iops.total
desc&max_records=5
```

The above examples are not comprehensive. There are many more properties available for queries. Also, multiple queries can be mixed and matched with other query parameters for a large variety of requests. See the per-property documentation below for the full list of supported query parameters.

Learn more

- [DOC /application](#)

Parameters

| Name | Type | In | Required | Description |
|------------------------|--------|-------|----------|----------------------------------|
| uuid | string | query | False | Filter by UUID |
| name | string | query | False | Filter by name |
| svm.name | string | query | False | Filter by svm.name |
| svm.uuid | string | query | False | Filter by svm.uuid |
| template.name | string | query | False | Filter by template.name |
| template.version | string | query | False | Filter by template.version |
| template.protocol | string | query | False | Filter by template.protocol |
| generation | string | query | False | Filter by generation |
| state | string | query | False | Filter by state |
| protection_granularity | string | query | False | Filter by protection granularity |
| rpo.is_supported | string | query | False | Filter by rpo.is_supported |
| rpo.local.name | string | query | False | Filter by rpo.local.name |

| Name | Type | In | Required | Description |
|---------------------------------------|--------|-------|----------|---|
| rpo.local.description | string | query | False | Filter by rpo.local.description |
| rpo.remote.name | string | query | False | Filter by rpo.remote.name |
| rpo.remote.description | string | query | False | Filter by rpo.remote.description |
| rpo.components.name | string | query | False | Filter by rpo.components.name |
| rpo.components.uuid | string | query | False | Filter by rpo.components.uuid |
| rpo.components.rpo.local.name | string | query | False | Filter by rpo.components.rpo.local.name • Introduced in: 9.7 |
| rpo.components.rpo.local.description | string | query | False | Filter by rpo.components.rpo.local.description |
| rpo.components.rpo.remote.name | string | query | False | Filter by rpo.components.rpo.remote.name |
| rpo.components.rpo.remote.description | string | query | False | Filter by rpo.components.rpo.remote.description |
| statistics.space.provisioned | string | query | False | Filter by statistics.space.provisioned |
| statistics.space.used | string | query | False | Filter by statistics.space.used |
| statistics.space.used_percent | string | query | False | Filter by statistics.space.used_percent |

| Name | Type | In | Required | Description |
|--|--------|-------|----------|--|
| statistics.space.used_excluding_reserves | string | query | False | Filter by statistics.space.used_excluding_reserves |
| statistics.space.logical_used | string | query | False | Filter by statistics.space.logical_used |
| statistics.space.reserved_unused | string | query | False | Filter by statistics.space.reserved_unused |
| statistics.space.available | string | query | False | Filter by statistics.space.available |
| statistics.space.savings | string | query | False | Filter by statistics.space.savings |
| statistics.iops.total | string | query | False | Filter by statistics.iops.total |
| statistics.iops.per_tb | string | query | False | Filter by statistics.iops.per_tb |
| statistics.snapshot.reserve | string | query | False | Filter by statistics.snapshot.reserve |
| statistics.snapshot.used | string | query | False | Filter by statistics.snapshot.used |
| statistics.latency.raw | string | query | False | Filter by statistics.latency.raw |
| statistics.latency.average | string | query | False | Filter by statistics.latency.average |
| statistics.statistics_incomplete | string | query | False | Filter by statistics.statistics_incomplete |

| Name | Type | In | Required | Description |
|---|--------|-------|----------|---|
| statistics.shared_storage_pool | string | query | False | Filter by statistics.shared_storage_pool |
| statistics.components.name | string | query | False | Filter by statistics.components.name |
| statistics.components.uuid | string | query | False | Filter by statistics.components.uuid |
| statistics.components.storage_service.name | string | query | False | Filter by statistics.components.storage_service.name |
| statistics.components.space.provisioned | string | query | False | Filter by statistics.components.space.provisioned |
| statistics.components.space.used | string | query | False | Filter by statistics.components.space.used |
| statistics.components.space.used_percent | string | query | False | Filter by statistics.components.space.used_percent |
| statistics.components.space.used_excluding_reserves | string | query | False | Filter by statistics.components.space.used_excluding_reserves |
| statistics.components.space.logical_used | string | query | False | Filter by statistics.components.space.logical_used |
| statistics.components.space.reserved_unused | string | query | False | Filter by statistics.components.space.reserved_unused |

| Name | Type | In | Required | Description |
|---|--------|-------|----------|--|
| statistics.component s.space.available | string | query | False | Filter by statistics.component s.space.available |
| statistics.component s.space.savings | string | query | False | Filter by statistics.component s.space.savings |
| statistics.component s.ios.total | string | query | False | Filter by statistics.component s.ios.total |
| statistics.component s.ios.per_tb | string | query | False | Filter by statistics.component s.ios.per_tb |
| statistics.component s.snapshot.reserve | string | query | False | Filter by statistics.component s.snapshot.reserve |
| statistics.component s.snapshot.used | string | query | False | Filter by statistics.component s.snapshot.used |
| statistics.component s.latency.raw | string | query | False | Filter by statistics.component s.latency.raw |
| statistics.component s.latency.average | string | query | False | Filter by statistics.component s.latency.average |
| statistics.component s.statistics_incomplete | string | query | False | Filter by statistics.component s.statistics_incomplete |
| statistics.component s.shared_storage_pool | string | query | False | Filter by statistics.component s.shared_storage_pool |
| smart_container | string | query | False | Filter by smart_container • Introduced in: 9.7 |

| Name | Type | In | Required | Description |
|----------------|---------------|-------|----------|--|
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |
| return_records | boolean | query | False | <p>The default is true for GET calls. When set to false, only the number of records is returned.</p> <ul style="list-style-type: none"> • Default value: 1 |
| order_by | array[string] | query | False | Order results by specified fields and optional [asc |

Response

Status: 200, Ok

| Name | Type | Description |
|-------------|--------------------------------------|-------------------|
| _links | _links | |
| num_records | integer | Number of records |
| records | array[application] | |

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "snapshots": {
        "href": "/api/resourcelink"
      }
    },
    "creation_timestamp": "string",
    "delete_data": null,
    "generation": 0,
    "name": "string",
    "nas": {
      "application_components": [
        {}
      ],
      "cifs_access": [
        {
          "access": "string",
          "user_or_group": "string"
        }
      ],
      "cifs_share_name": "string",
      "exclude_aggregates": [
        {
          "name": "string",
          "uuid": "string"
        }
      ],
      "nfs_access": [
        {
          "access": "string",
```

```

        "host": "string"
    }
],
"protection_type": {
    "local_policy": "string",
    "local_rpo": "string",
    "remote_rpo": "string"
}
},
"nvme": {
    "components": [
        {
            "name": "string",
            "os_type": "string",
            "performance": {
                "storage_service": {
                    "name": "string"
                }
            },
        },
        "qos": {
            "policy": {
                "name": "string",
                "uuid": "string"
            }
        },
        "subsystem": {
            "hosts": [
                {
                    "nqn": "string"
                }
            ],
            "name": "string",
            "os_type": "string",
            "uuid": "string"
        },
        "tiering": {
            "policy": "string"
        }
    ]
},
"os_type": "string",
"rpo": {
    "local": {
        "name": "string",
        "policy": "string"
    }
}

```

```

    }
  },
  "protection_granularity": "string",
  "rpo": {
    "components": [
      {
        "name": "string",
        "rpo": {
          "local": {
            "description": "string",
            "name": "string"
          },
          "remote": {
            "description": "string",
            "name": "string"
          }
        }
      },
      {
        "name": "string",
        "rpo": {
          "local": {
            "description": "string",
            "name": "string"
          },
          "remote": {
            "description": "string",
            "name": "string"
          }
        }
      }
    ],
    "local": {
      "description": "string",
      "name": "string"
    },
    "remote": {
      "description": "string",
      "name": "string"
    }
  },
  "s3_bucket": {
    "application_components": [
      {
        "access_policies": [
          {
            "actions": [
              "string"
            ],
            "conditions": [
              {
                "delimiters": [
                  "string"
                ],
                "max_keys": [
                  "integer"
                ],
                "operator": "string",

```

```

        "prefixes": [
            "string"
        ],
        "source_ips": [
            "string"
        ],
        "usernames": [
            "string"
        ]
    }
],
"effect": "string",
"principals": [
    "string"
],
"resources": [
    "string"
],
"sid": "string"
}
],
"bucket_endpoint_type": "string",
"comment": "string",
"exclude_aggregates": [
    {
        "name": "string",
        "uuid": "string"
    }
],
"name": "string",
"nas_path": "string",
"qos": {
    "policy": {
        "name": "string",
        "uuid": "string"
    }
},
"storage_service": {
    "name": "string"
},
"uuid": "string",
"versioning_state": "string"
}
]
},
"san": {

```



```

"application_components": [
  {
    "igroup_name": "string",
    "name": "string",
    "os_type": "string",
    "qos": {
      "policy": {
        "name": "string",
        "uuid": "string"
      }
    },
    "storage_service": {
      "name": "string"
    },
    "tiering": {
      "policy": "string"
    }
  }
],
"exclude_aggregates": [
  {
    "name": "string",
    "uuid": "string"
  }
],
"os_type": "string",
"protection_type": {
  "local_policy": "string",
  "local_rpo": "string",
  "remote_rpo": "string"
},
"state": "string",
"statistics": {
  "components": [
    {
      "iops": {
        "per_tb": 0,
        "total": 0
      },
      "latency": {
        "average": 0,
        "raw": 0
      },
      "name": "string",
      "snapshot": {

```

```

        "reserve": 0,
        "used": 0
    },
    "space": {
        "available": 0,
        "logical_used": 0,
        "provisioned": 0,
        "reserved_unused": 0,
        "savings": 0,
        "used": 0,
        "used_excluding_reserves": 0,
        "used_percent": 0
    },
    "storage_service": {
        "name": "string",
        "uuid": "string"
    },
    "uuid": "string"
}
],
"iops": {
    "per_tb": 0,
    "total": 0
},
"latency": {
    "average": 0,
    "raw": 0
},
"snapshot": {
    "reserve": 0,
    "used": 0
},
"space": {
    "available": 0,
    "logical_used": 0,
    "provisioned": 0,
    "reserved_unused": 0,
    "savings": 0,
    "used": 0,
    "used_excluding_reserves": 0,
    "used_percent": 0
}
},
"svm": {
    "name": "string",
    "uuid": "string"
}

```

```

    },
    "template": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "string",
      "protocol": "string",
      "version": 0
    },
    "uuid": "string"
  }
]
}

```

Error

Status: Default, Error

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

Example error

```

{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}

```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| next | href | |
| self | href | |

_links

| Name | Type | Description |
|-----------|----------------------|-------------|
| self | href | |
| snapshots | href | |

storage_service

| Name | Type | Description |
|------|--------|--------------------------------------|
| name | string | The storage service of the database. |

dataset

| Name | Type | Description |
|--------------------|---------------------------------|--|
| element_count | integer | The number of storage elements (LUNs for SAN) of the database to maintain. Must be an even number between 2 and 16. Odd numbers will be rounded up to the next even number within range. |
| replication_factor | integer | The number of data bearing members of the replicaset, including 1 primary and at least 1 secondary. |
| size | integer | The size of the database. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

igroups

initiator_objects

mongo_db_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

protection_type

| Name | Type | Description |
|------------|--------|------------------------------------|
| local_rpo | string | The local RPO of the application. |
| remote_rpo | string | The remote RPO of the application. |

secondary_igroups

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the initiator group for each secondary. |

mongo_db_on_san

MongoDB using SAN.

| Name | Type | Description |
|---------------------|--|--|
| dataset | dataset | |
| os_type | string | The name of the host OS running the application. |
| primary_igroup_name | string | The initiator group for the primary. |
| protection_type | protection_type | |
| secondary_igroups | array[secondary_igroups] | |

export_policy

| Name | Type | Description |
|------|---------|--|
| id | integer | The ID of an existing NFS export policy. |

| Name | Type | Description |
|------|--------|--|
| name | string | The name of an existing NFS export policy. |

component

| Name | Type | Description |
|------|--------|-------------------------------|
| name | string | Name of the source component. |

svm

| Name | Type | Description |
|------|--------|-------------------------|
| name | string | Name of the source SVM. |

origin

| Name | Type | Description |
|-----------|---------------------------|-------------|
| component | component | |
| svm | svm | |

flexcache

| Name | Type | Description |
|----------|------------------------|--|
| dr_cache | boolean | Dr-cache is a FlexCache volume create time option that has the same flexgroup-msid as that of the origin of a FlexCache volume. By default, dr-cache is disabled. The flexgroup-msid of the FlexCache volume does not need to be same as that of the origin of a FlexCache volume. |
| origin | origin | |

policy

| Name | Type | Description |
|------|--------|---|
| name | string | The name of an existing QoS policy. |
| uuid | string | The UUID of an existing QoS policy. Usage: <UUID> |

qos

| Name | Type | Description |
|--------|------------------------|-------------|
| policy | policy | |

retention

| Name | Type | Description |
|---------|--------|--|
| default | string | <p>Specifies the default retention period that is applied to files while committing them to the WORM state without an associated retention period. The retention value represents a duration and must be specified in the ISO-8601 duration format. The retention period can be in years, months, days, hours, and minutes. A duration specified for years, months, and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The retention string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the duration field also accepts the string "infinite" to set an infinite retention period and the string "unspecified" to set an unspecified retention period.</p> |

| Name | Type | Description |
|---------|--------|---|
| maximum | string | Specifies the maximum allowed retention period for files committed to the WORM state on the volume. The retention value represents a duration and must be specified in the ISO-8601 duration format. The retention period can be in years, months, days, hours, and minutes. A duration specified for years, months, and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The retention string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the duration field also accepts the string "infinite" to set an infinite retention period. |

| Name | Type | Description |
|---------|--------|---|
| minimum | string | Specifies the minimum allowed retention period for files committed to the WORM state on the volume. The retention value represents a duration and must be specified in the ISO-8601 duration format. The retention period can be in years, months, days, hours, and minutes. A duration specified for years, month,s and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The retention string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the duration field also accepts the string "infinite" to set an infinite retention period. |

snaplock

| Name | Type | Description |
|---------------------|---------|---|
| append_mode_enabled | boolean | Specifies if the volume append mode is enabled or disabled. When it is enabled, all the files created with write permissions on the volume are, by default, WORM appendable files. The user can append the data to a WORM appendable file but cannot modify the existing contents of the file nor delete the file until it expires. |

| Name | Type | Description |
|-------------------|---------------------------|--|
| autocommit_period | string | Specifies the autocommit period for SnapLock volume. All files which are not modified for a period greater than the autocommit period of the volume are committed to the WORM state. The autocommit period value represents a duration and must be specified in the ISO-8601 duration format. The autocommit period can be in years, months, days, hours, and minutes. A period specified for years, months, and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The period string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the autocommit field also accepts the string "none". |
| retention | retention | |
| snaplock_type | string | The SnapLock type of the smart container. |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the application component. |

object_stores

nas_application_components_tiering

application-components.tiering

| Name | Type | Description |
|--------|--------|--|
| policy | string | The storage tiering type of the application component. |

application_components

| Name | Type | Description |
|-----------------|--|---|
| export_policy | export_policy | |
| flexcache | flexcache | |
| name | string | The name of the application component. |
| qos | qos | |
| scale_out | boolean | Denotes a Flexgroup. |
| share_count | integer | The number of shares in the application component. |
| snaplock | snaplock | |
| storage_service | storage_service | |
| tiering | nas_application_components_tiering | application-components.tiering |
| total_size | integer | The total size of the application component, split across the member shares. Usage: {<integer>[KB MB GB TB PB]} |

app_cifs_access

The list of CIFS access controls. You must provide either 'user_or_group' or 'access' to enable CIFS access.

| Name | Type | Description |
|---------------|--------|---|
| access | string | The CIFS access granted to the user or group. |
| user_or_group | string | The name of the CIFS user or group that will be granted access. |

exclude_aggregates

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the aggregate to exclude. Usage: <aggregate name> |
| uuid | string | The ID of the aggregate to exclude. Usage: <UUID> |

app_nfs_access

The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access.

| Name | Type | Description |
|--------|--------|--|
| access | string | The NFS access granted. |
| host | string | The name of the NFS entity granted access. |

protection_type

| Name | Type | Description |
|--------------|--------|---|
| local_policy | string | The Snapshot copy policy to apply to each volume in the smart container. This property is only supported for smart containers. Usage: <snapshot policy> |
| local_rpo | string | The local RPO of the application. |
| remote_rpo | string | The remote RPO of the application. |

nas

A generic NAS application.

| Name | Type | Description |
|------------------------|---|--|
| application_components | array[application_components] | |
| cifs_access | array[app_cifs_access] | The list of CIFS access controls. You must provide either 'user_or_group' or 'access' to enable CIFS access. |

| Name | Type | Description |
|--------------------|---|--|
| cifs_share_name | string | The name of the CIFS share. Usage: <Share> |
| exclude_aggregates | array[exclude_aggregates] | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| protection_type | protection_type | |

performance

| Name | Type | Description |
|-----------------|---------------------------------|-------------|
| storage_service | storage_service | |

hosts

| Name | Type | Description |
|------|--------|---------------|
| nqn | string | The host NQN. |

zapp_nvme_components_subsystem

components.subsystem

| Name | Type | Description |
|---------|--------------------------------|--|
| hosts | array[hosts] | |
| name | string | The name of the subsystem accessing the component. If neither the name nor the UUID is provided, the name defaults to <application-name>_<component-name>, whether that subsystem already exists or not. |
| os_type | string | The name of the host OS accessing the component. The default value is the host OS that is running the application. |
| uuid | string | The UUID of an existing subsystem to be granted access to the component. |

zapp_nvme_components_tiering

application-components.tiering

| Name | Type | Description |
|--------|--------|--|
| policy | string | The storage tiering type of the application component. |

components

| Name | Type | Description |
|-----------------|--|--|
| name | string | The name of the application component. |
| namespace_count | integer | The number of namespaces in the component. |
| os_type | string | The name of the host OS running the application. |
| performance | performance | |
| qos | qos | |
| subsystem | zapp_nvme_components_subsystem | components.subsystem |
| tiering | zapp_nvme_components_tiering | application-components.tiering |
| total_size | integer | The total size of the component, spread across member namespaces. Usage: {<integer>[KB MB GB TB PB]} |

local

| Name | Type | Description |
|--------|--------|---|
| name | string | The local RPO of the application. |
| policy | string | The Snapshot copy policy to apply to each volume in the smart container. This property is only supported for smart containers. Usage: <snapshot policy> |

rpo

| Name | Type | Description |
|-------|-----------------------|-------------|
| local | local | |

zapp_nvme

An NVME application.

| Name | Type | Description |
|------------|-------------------------------------|--|
| components | array[components] | |
| os_type | string | The name of the host OS running the application. |
| rpo | rpo | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the archive log. |

archive_log

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the archive log. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

db

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the database. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|--|
| name | string | The storage service of the ORACLE_HOME storage volume. |

ora_home

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the ORACLE_HOME storage volume. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|--|
| name | string | The storage service of the redo log group. |

redo_log

| Name | Type | Description |
|-----------------|---------------------------------|--|
| mirrored | boolean | Specifies whether the redo log group should be mirrored. |
| size | integer | The size of the redo log group. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

oracle_on_nfs

Oracle using NFS.

| Name | Type | Description |
|-----------------|---|---|
| archive_log | archive_log | |
| db | db | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| ora_home | ora_home | |
| protection_type | protection_type | |
| redo_log | redo_log | |

oracle_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

oracle_on_san

Oracle using SAN.

| Name | Type | Description |
|-----------------|---------------------------------|--|
| archive_log | archive_log | |
| db | db | |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| ora_home | ora_home | |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |
| redo_log | redo_log | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the Oracle grid binary storage volume. |

grid_binary

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the Oracle grid binary storage volume. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the Oracle CRS volume. |

oracle_crs

| Name | Type | Description |
|-----------------|---------------------------------|--|
| copies | integer | The number of CRS volumes. |
| size | integer | The size of the Oracle CRS/voting storage volume. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

oracle_rac_on_nfs

Oracle RAC using NFS.

| Name | Type | Description |
|-----------------|---|---|
| archive_log | archive_log | |
| db | db | |
| grid_binary | grid_binary | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| ora_home | ora_home | |
| oracle_crs | oracle_crs | |
| protection_type | protection_type | |
| redo_log | redo_log | |

db_sids

| Name | Type | Description |
|-------------|--------|--|
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |

oracle_rac_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

oracle_rac_on_san

Oracle RAC using SAN.

| Name | Type | Description |
|-----------------|----------------------------------|--|
| archive_log | archive_log | |
| db | db | |
| db_sids | array[db_sids] | |
| grid_binary | grid_binary | |
| ora_home | ora_home | |
| oracle_crs | oracle_crs | |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |
| redo_log | redo_log | |

local

| Name | Type | Description |
|-------------|--------|--|
| description | string | A detailed description of the local RPO. This will include details about the Snapshot copy schedule. |

| Name | Type | Description |
|------|--------|---|
| name | string | The local RPO of the component. This indicates how often component Snapshot copies are automatically created. |

remote

| Name | Type | Description |
|-------------|--------|--|
| description | string | A detailed description of the remote RPO. |
| name | string | The remote RPO of the component. A remote RPO of zero indicates that the component is synchronously replicated to another cluster. |

rpo

| Name | Type | Description |
|--------|------------------------|-------------|
| local | local | |
| remote | remote | |

components

| Name | Type | Description |
|------|---------------------|-----------------|
| name | string | Component Name. |
| rpo | rpo | |
| uuid | string | Component UUID. |

local

| Name | Type | Description |
|-------------|--------|--|
| description | string | A detailed description of the local RPO. This will include details about the Snapshot copy schedule. |

| Name | Type | Description |
|------|--------|---|
| name | string | The local RPO of the application. This indicates how often application Snapshot copies are automatically created. |

remote

| Name | Type | Description |
|-------------|--------|--|
| description | string | A detailed description of the remote RPO. |
| name | string | The remote RPO of the application. A remote RPO of zero indicates that the application is synchronously replicated to another cluster. |

rpo

| Name | Type | Description |
|--------------|-------------------------------------|---|
| components | array[components] | |
| is_supported | boolean | Is RPO supported for this application? Generation 1 applications did not support Snapshot copies or MetroCluster. |
| local | local | |
| remote | remote | |

zapp_s3_bucket_application_components_access_policies_conditions

conditions

| Name | Type | Description |
|------------|----------------|----------------------------|
| delimiters | array[string] | |
| max_keys | array[integer] | |
| operator | string | Policy Condition Operator. |
| prefixes | array[string] | |
| source_ips | array[string] | |
| usernames | array[string] | |

zapp_s3_bucket_application_components_access_policies

The list of S3 objectstore policies to be created.

| Name | Type | Description |
|------------|---|---|
| actions | array[string] | |
| conditions | array[zapp_s3_bucket_application_components_access_policies_conditions] | conditions. |
| effect | string | Allow or Deny Access. |
| principals | array[string] | |
| resources | array[string] | |
| sid | string | Statement Identifier Usage: <(size 1..256)> |

zapp_s3_bucket_application_components

The list of application components to be created.

| Name | Type | Description |
|----------------------|--|---|
| access_policies | array[zapp_s3_bucket_application_components_access_policies] | The list of S3 objectstore policies to be created. |
| bucket_endpoint_type | string | The type of bucket. |
| capacity_tier | boolean | Prefer lower latency storage under similar media costs. |
| comment | string | Object Store Server Bucket Description Usage: <(size 1..256)> |
| exclude_aggregates | array[exclude_aggregates] | |
| name | string | The name of the application component. |
| nas_path | string | The path to which the bucket corresponds to. |
| qos | qos | |
| size | integer | The total size of the S3 Bucket, split across the member components. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

| Name | Type | Description |
|------------------|--------|---|
| uuid | string | Object Store Server Bucket UUID Usage: <UUID> |
| versioning_state | string | Bucket Versioning State. For nas type buckets, this field is not set. For s3 type buckets, the default value is disabled. |

zapp_s3_bucket

A generic S3 bucket application.

| Name | Type | Description |
|------------------------|--|---|
| application_components | array[zapp_s3_bucket_application_components] | The list of application components to be created. |

san_application_components_tiering

application-components.tiering

| Name | Type | Description |
|--------|--------|--|
| policy | string | The storage tiering type of the application component. |

application_components

| Name | Type | Description |
|-------------|---------|--|
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| lun_count | integer | The number of LUNs in the application component. |
| name | string | The name of the application component. |

| Name | Type | Description |
|-----------------|------------------------------------|---|
| os_type | string | The name of the host OS running the application. |
| qos | qos | |
| storage_service | storage_service | |
| tiering | san_application_components_tiering | application-components.tiering |
| total_size | integer | The total size of the application component, split across the member LUNs. Usage: {<integer>[KB MB GB TB PB]} |

san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

san

A generic SAN application.

| Name | Type | Description |
|------------------------|-------------------------------|--|
| application_components | array[application_components] | |
| exclude_aggregates | array[exclude_aggregates] | |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |

storage_service

| Name | Type | Description |
|------|--------|--------------------------------|
| name | string | The storage service of the DB. |

db

| Name | Type | Description |
|------|---------|--|
| size | integer | The size of the DB. Usage: {<integer>[KB MB GB TB PB]} |

| Name | Type | Description |
|-----------------|---------------------------------|-------------|
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|------------------------------------|
| name | string | The storage service of the log DB. |

log

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the log DB. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

sql_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

storage_service

| Name | Type | Description |
|------|--------|-------------------------------------|
| name | string | The storage service of the temp DB. |

temp_db

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the temp DB. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

sql_on_san

Microsoft SQL using SAN.

| Name | Type | Description |
|------|--------------------|-------------|
| db | db | |

| Name | Type | Description |
|--------------------|---------------------------------|--|
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| log | log | |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |
| server_cores_count | integer | The number of server cores for the DB. |
| temp_db | temp_db | |

access

| Name | Type | Description |
|-----------------|--------|--------------------------------|
| installer | string | SQL installer admin user name. |
| service_account | string | SQL service account user name. |

sql_on_smb

Microsoft SQL using SMB.

| Name | Type | Description |
|--------------------|---------------------------------|--|
| access | access | |
| db | db | |
| log | log | |
| protection_type | protection_type | |
| server_cores_count | integer | The number of server cores for the DB. |
| temp_db | temp_db | |

iops

| Name | Type | Description |
|--------|---------|---|
| per_tb | integer | The number of IOPS per terabyte of logical space currently being used by the application component. |
| total | integer | The total number of IOPS being used by the application component. |

latency

| Name | Type | Description |
|---------|---------|--|
| average | integer | The cumulative average response time in microseconds for this component. |
| raw | integer | The cumulative response time in microseconds for this component. |

snapshot

| Name | Type | Description |
|---------|---------|--|
| reserve | integer | The amount of space reserved by the system for Snapshot copies. |
| used | integer | The amount of spacing currently in use by the system to store Snapshot copies. |

space

| Name | Type | Description |
|-----------|---------|--|
| available | integer | <p>The available amount of space left in the application component. Note that this field has limited meaning for SAN applications. Space may be considered used from ONTAP's perspective while the host filesystem still considers it available.</p> <ul style="list-style-type: none"> • readOnly: 1 • Introduced in: 9.6 |

| Name | Type | Description |
|-------------------------|---------|--|
| logical_used | integer | The amount of space that would currently be used if no space saving features were enabled. For example, if compression were the only space saving feature enabled, this field would represent the uncompressed amount of space used. |
| provisioned | integer | The originally requested amount of space that was provisioned for the application component. |
| reserved_unused | integer | The amount of space reserved for system features such as Snapshot copies that has not yet been used. |
| savings | integer | The amount of space saved by all enabled space saving features. |
| used | integer | The amount of space that is currently being used by the application component. Note that this includes any space reserved by the system for features such as Snapshot copies. |
| used_excluding_reserves | integer | The amount of space that is currently being used, excluding any space that is reserved by the system for features such as Snapshot copies. |
| used_percent | integer | The percentage of the originally provisioned space that is currently being used by the application component. |

storage_service

| Name | Type | Description |
|------|--------|--|
| name | string | The storage service name. AFF systems support the extreme storage service. All other systems only support value. |

| Name | Type | Description |
|------|--------|---------------------------|
| uuid | string | The storage service UUID. |

components

| Name | Type | Description |
|-----------------------|---------------------------------|---|
| iops | iops | |
| latency | latency | |
| name | string | Component Name. |
| shared_storage_pool | boolean | An application component is considered to use a shared storage pool if storage elements for other components reside on the same aggregate as storage elements for this component. |
| snapshot | snapshot | |
| space | space | |
| statistics_incomplete | boolean | If not all storage elements of the application component are currently available, the returned statistics might only include data from those elements that were available. |
| storage_service | storage_service | |
| uuid | string | Component UUID. |

iops

| Name | Type | Description |
|--------|---------|---|
| per_tb | integer | The number of IOPS per terabyte of logical space currently being used by the application. |
| total | integer | The total number of IOPS being used by the application. |

latency

| Name | Type | Description |
|---------|---------|--|
| average | integer | The cumulative average response time in microseconds for this application. |
| raw | integer | The cumulative response time in microseconds for this application. |

space

| Name | Type | Description |
|-----------------|---------|--|
| available | integer | <p>The available amount of space left in the application. Note that this field has limited meaning for SAN applications. Space may be considered used from ONTAP's perspective while the host filesystem still considers it available.</p> <ul style="list-style-type: none"> • readOnly: 1 • Introduced in: 9.6 |
| logical_used | integer | The amount of space that would currently be used if no space saving features were enabled. For example, if compression were the only space saving feature enabled, this field would represent the uncompressed amount of space used. |
| provisioned | integer | The originally requested amount of space that was provisioned for the application. |
| reserved_unused | integer | The amount of space reserved for system features such as Snapshot copies that has not yet been used. |
| savings | integer | The amount of space saved by all enabled space saving features. |

| Name | Type | Description |
|-------------------------|---------|---|
| used | integer | The amount of space that is currently being used by the application. Note that this includes any space reserved by the system for features such as Snapshot copies. |
| used_excluding_reserves | integer | The amount of space that is currently being used, excluding any space that is reserved by the system for features such as Snapshot copies. |
| used_percent | integer | The percentage of the originally provisioned space that is currently being used by the application. |

statistics

| Name | Type | Description |
|-----------------------|-------------------------------------|--|
| components | array[components] | |
| iops | iops | |
| latency | latency | |
| shared_storage_pool | boolean | An application is considered to use a shared storage pool if storage elements for multiple components reside on the same aggregate. |
| snapshot | snapshot | |
| space | space | |
| statistics_incomplete | boolean | If not all storage elements of the application are currently available, the returned statistics might only include data from those elements that were available. |

svm

| Name | Type | Description |
|------|--------|--|
| name | string | SVM Name. Either the SVM name or UUID must be provided to create an application. |
| uuid | string | SVM UUID. Either the SVM name or UUID must be provided to create an application. |

self_link

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

template

| Name | Type | Description |
|----------|---------------------------|--|
| _links | self_link | |
| name | string | The name of the template that was used to provision this application. |
| protocol | string | The protocol access of the template that was used to provision this application. |
| version | integer | <p>The version of the template that was used to provision this application. The template version changes only if the layout of the application changes over time. For example, redo logs in Oracle RAC templates were updated and provisioned differently in DATA ONTAP 9.3.0 compared to prior releases, so the version number was increased. If layouts change in the future, the changes will be documented along with the corresponding version numbers.</p> <ul style="list-style-type: none"> • readOnly: 1 • Introduced in: 9.6 |

storage_service

| Name | Type | Description |
|------|--------|--------------------------------------|
| name | string | The storage service of the desktops. |

desktops

| Name | Type | Description |
|-----------------|---------------------------------|--|
| count | integer | The number of desktops to support. |
| size | integer | The size of the desktops. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

hyper_v_access

| Name | Type | Description |
|-----------------|--------|--------------------------|
| service_account | string | Hyper-V service account. |

vdi_on_nas

A VDI application using NAS.

| Name | Type | Description |
|-----------------|---|---|
| desktops | desktops | |
| hyper_v_access | hyper_v_access | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| protection_type | protection_type | |

vdi_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

vdi_on_san

A VDI application using SAN.

| Name | Type | Description |
|-----------------|---------------------------------|--|
| desktops | desktops | |
| hypervisor | string | The name of the hypervisor hosting the application. |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| protection_type | protection_type | |

storage_service

| Name | Type | Description |
|------|--------|---------------------------------------|
| name | string | The storage service of the datastore. |

datastore

| Name | Type | Description |
|-----------------|---------------------------------|---|
| count | integer | The number of datastores to support. |
| size | integer | The size of the datastore. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

vsi_on_nas

A VSI application using NAS.

| Name | Type | Description |
|-----------------|---|---|
| datastore | datastore | |
| hyper_v_access | hyper_v_access | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| protection_type | protection_type | |

vsi_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

vsi_on_san

A VSI application using SAN.

| Name | Type | Description |
|-----------------|---------------------------------|--|
| datastore | datastore | |
| hypervisor | string | The name of the hypervisor hosting the application. |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| protection_type | protection_type | |

application

Applications

| Name | Type | Description |
|--------------------|------------------------|---|
| _links | _links | |
| creation_timestamp | string | The time when the application was created. |
| generation | integer | The generation number of the application. This indicates which features are supported on the application. For example, generation 1 applications do not support Snapshot copies. Support for Snapshot copies was added at generation 2. Any future generation numbers and their feature set will be documented. |

| Name | Type | Description |
|------------------------|-----------------------------------|--|
| mongo_db_on_san | mongo_db_on_san | MongoDB using SAN. |
| name | string | Application Name. This field is user supplied when the application is created. |
| nas | nas | A generic NAS application. |
| nvme | zapp_nvme | An NVME application. |
| oracle_on_nfs | oracle_on_nfs | Oracle using NFS. |
| oracle_on_san | oracle_on_san | Oracle using SAN. |
| oracle_rac_on_nfs | oracle_rac_on_nfs | Oracle RAC using NFS. |
| oracle_rac_on_san | oracle_rac_on_san | Oracle RAC using SAN. |
| protection_granularity | string | Protection granularity determines the scope of Snapshot copy operations for the application. Possible values are "application" and "component". If the value is "application", Snapshot copy operations are performed on the entire application. If the value is "component", Snapshot copy operations are performed separately on the application components. |
| rpo | rpo | |
| s3_bucket | zapp_s3_bucket | A generic S3 bucket application. |
| san | san | A generic SAN application. |
| smart_container | boolean | Identifies if this is a smart container or not. |
| sql_on_san | sql_on_san | Microsoft SQL using SAN. |
| sql_on_smb | sql_on_smb | Microsoft SQL using SMB. |

| Name | Type | Description |
|------------|----------------------------|--|
| state | string | The state of the application. For full functionality, applications must be in the online state. Other states indicate that the application is in a transient state and not all operations are supported. |
| statistics | statistics | |
| svm | svm | |
| template | template | |
| uuid | string | Application UUID. This field is generated when the application is created. |
| vdi_on_nas | vdi_on_nas | A VDI application using NAS. |
| vdi_on_san | vdi_on_san | A VDI application using SAN. |
| vsi_on_nas | vsi_on_nas | A VSI application using NAS. |
| vsi_on_san | vsi_on_san | A VSI application using SAN. |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Create an application

POST /application/applications

Introduced In: 9.6

Creates an application.

Template properties

The application APIs appear to be complex and long in this documentation because we document every possible template, of which there are currently 14. When creating an application, only a single template is used, so it is best to focus only on the template of interest. Other than the properties for the chosen template, only the `name` and `svm` of the application must be provided. The following three sections provided guidelines on using the properties of the templates, but the whole idea behind the templates is to automatically follow the best practices of the given application, so the only way to determine the exact list of required properties and default values is to dig in to the model section of the template. The templates are all top level properties of the application object with names matching the values returned by [GET /application/templates](#) .

Required properties

- `svm.uuid` or `svm.name` - The existing SVM in which to create the application.
- `name` - The name for the application.
- `<template>` - Properties for one template must be provided. In general, the following properties are required, however the naming of these may vary slightly from template to template.
 - `<template>.name` - The generic templates require names for the components of the application. Other templates name the components automatically.
 - `<template>.application_component.size` - This generally refers to the size of an application component, which may be spread across multiple underlying storage objects (volumes, LUNs, etc...).
 - One of the following must be specified:
- `nas.nfs_access` or an identifier (name or id) of an existing export-policy.
- `nas.cifs_access`
- `san.application_application.igroup_name`
 - To specify that a NAS application is not to be exposed via NFS nor CIFS:
- `nas.application_component.export_policy.name` is 'none', and
- `nas.application.cifs_share_name` is 'none'.
 - The name of the CIFS share can be provided through the `nas.application.cifs_share_name` attribute. If not provided, the CIFS share name will be the same as the `nas.application_component.name` attribute, including any suffix applied due to creating multiple application components in one post.
 - `san.os_type` - All SAN applications require an `os_type` to be specified in some way. Some templates refer to this as the `hypervisor`.

Recommended optional properties

- `<template>` - The following properties are available in some templates.
 - `san.new_igroups.*` - SAN applications can use existing initiator groups or create new ones. When creating new initiator groups, `new_igroups.name` is required and the other properties may be used to fully specify the new initiator group.

Default property values

If not specified in POST, the follow default property values are assigned. It is recommended that most of these properties be provided explicitly rather than relying upon the defaults. The defaults are intended to make it as easy as possible to provision and connect to an application.

- `template.name` - Defaults to match the `<template>` provided. If specified, the value of this property must match the provided template properties.
- `<template>` - The majority of template properties have default values. The defaults may vary from template to template. See the model of each template for complete details. In general the following patterns are common across all template properties. The location of these properties varies from template to template.
 - `<template>.storage_service.name` - *value*
 - `<template>.protection_type.local_rpo` - *hourly* (Hourly Snapshot copies)
 - `<template>.protection_type.remote_rpo` - *none* (Not MetroCluster)
 - `san.new_igroups.os_type` - Defaults to match the `os_type` provided for the application, but may need to be provided explicitly when using virtualization.

Optional components

A common pattern across many templates are objects that are optional, but once any property in the object is specified, other properties within the object become required. Many applications have optional components. For example, provisioning a database without a component to store the logs is supported. If the properties related to the logs are omitted, no storage will be provisioned for logs. But when the additional component is desired, the size is required. Specifying any other property of a component without specifying the size is not supported. In the model of each template, the required components are indicated with a red '*'. When a `size` property is listed as optional, that means the component itself is optional, and the size should be specified to include that component in the application.

POST body examples

1. Create a generic SAN application that exposes four LUNs to an existing initiator group, *igroup_1*.


```
{
  "name": "app1",
  "svm": { "name": "svm1" },
  "san": {
    "os_type": "linux",
    "application_components": [
      { "name": "component1", "total_size": "10GB", "lun_count": 4,
"igroup_name": "igroup_1" }
    ]
  }
}
```

1. Create an SQL application that can be accessed via initiator *iqn.2017-01.com.example:foo* from a new initiator group, *igroup_2*.

```
{
  "name": "app2",
  "svm": { "name": "svm1" },
  "sql_on_san": {
    "db": { "size": "5GB" },
    "log": { "size": "1GB" },
    "temp_db": { "size": "2GB" },
    "igroup_name": "igroup_2",
    "new_igroups": [
      { "name": "igroup_2", "initiators": [ "iqn.2017-
01.com.example:foo" ] }
    ]
  }
}
```

1. The following body creates the exact same SQL application, but manually provides all the defaults that were excluded from the previous call.



The model of a *sql_on_san* application documents all these default values.

```

{
  "name": "app3",
  "svm": { "name": "svm1" },
  "template": { "name": "sql_on_san" },
  "sql_on_san": {
    "os_type": "windows_2008",
    "server_cores_count": 8,
    "db": { "size": "5GB", "storage_service": { "name": "value" } },
    "log": { "size": "1GB", "storage_service": { "name": "value" } },
    "temp_db": { "size": "2GB", "storage_service": { "name": "value" }
  },
  "igroup_name": "igroup_2",
  "new_igroups": [
    {
      "name": "igroup_2",
      "protocol": "mixed",
      "os_type": "windows",
      "initiators": [ "iqn.a.new.initiator" ]
    }
  ],
  "protection_type": { "local_rpo": "none" }
}

```

Learn more

- [DOC /application](#)
- [Asynchronous operations](#)

Parameters

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|--|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |
| return_records | boolean | query | False | <p>The default is false. If set to true, the records are returned.</p> <ul style="list-style-type: none"> • Default value: |

Request Body

| Name | Type | Description |
|--------------------|------------------------|--|
| _links | _links | |
| creation_timestamp | string | The time when the application was created. |

| Name | Type | Description |
|-------------------|-----------------------------------|---|
| delete_data | boolean | Should application storage elements be deleted? An application is considered to use storage elements from a shared storage pool. Possible values are 'true' and 'false'. If the value is 'true', the application will be deleted in its entirety. If the value is 'false', the storage elements will be disassociated from the application and preserved. The application will then be deleted. |
| generation | integer | The generation number of the application. This indicates which features are supported on the application. For example, generation 1 applications do not support Snapshot copies. Support for Snapshot copies was added at generation 2. Any future generation numbers and their feature set will be documented. |
| mongo_db_on_san | mongo_db_on_san | MongoDB using SAN. |
| name | string | Application Name. This field is user supplied when the application is created. |
| nas | nas | A generic NAS application. |
| nvme | zapp_nvme | An NVME application. |
| oracle_on_nfs | oracle_on_nfs | Oracle using NFS. |
| oracle_on_san | oracle_on_san | Oracle using SAN. |
| oracle_rac_on_nfs | oracle_rac_on_nfs | Oracle RAC using NFS. |
| oracle_rac_on_san | oracle_rac_on_san | Oracle RAC using SAN. |

| Name | Type | Description |
|------------------------|--------------------------------|--|
| protection_granularity | string | Protection granularity determines the scope of Snapshot copy operations for the application. Possible values are "application" and "component". If the value is "application", Snapshot copy operations are performed on the entire application. If the value is "component", Snapshot copy operations are performed separately on the application components. |
| rpo | rpo | |
| s3_bucket | zapp_s3_bucket | A generic S3 bucket application. |
| san | san | A generic SAN application. |
| smart_container | boolean | Identifies if this is a smart container or not. |
| sql_on_san | sql_on_san | Microsoft SQL using SAN. |
| sql_on_smb | sql_on_smb | Microsoft SQL using SMB. |
| state | string | The state of the application. For full functionality, applications must be in the online state. Other states indicate that the application is in a transient state and not all operations are supported. |
| statistics | statistics | |
| svm | svm | |
| template | template | |
| uuid | string | Application UUID. This field is generated when the application is created. |
| vdi_on_nas | vdi_on_nas | A VDI application using NAS. |
| vdi_on_san | vdi_on_san | A VDI application using SAN. |
| vsi_on_nas | vsi_on_nas | A VSI application using NAS. |

| Name | Type | Description |
|------------|----------------------------|------------------------------|
| vsi_on_san | vsi_on_san | A VSI application using SAN. |

Example request

```
{
  "creation_timestamp": "string",
  "generation": 0,
  "name": "string",
  "nas": {
    "application_components": [
      {}
    ],
    "cifs_access": [
      {
        "access": "string",
        "user_or_group": "string"
      }
    ],
    "cifs_share_name": "string",
    "exclude_aggregates": [
      {
        "name": "string",
        "uuid": "string"
      }
    ],
    "nfs_access": [
      {
        "access": "string",
        "host": "string"
      }
    ],
    "protection_type": {
      "local_policy": "string",
      "local_rpo": "string",
      "remote_rpo": "string"
    }
  },
  "nvme": {
    "components": [
      {
        "name": "string",
        "os_type": "string",
        "performance": {
          "storage_service": {
            "name": "string"
          }
        }
      },
      {
        "qos": {
```

```

        "policy": {
            "name": "string",
            "uuid": "string"
        }
    },
    "subsystem": {
        "hosts": [
            {
                "nqn": "string"
            }
        ],
        "name": "string",
        "os_type": "string",
        "uuid": "string"
    },
    "tiering": {
        "control": "string",
        "object_stores": [
            {
                "name": "string"
            }
        ],
        "policy": "string"
    }
},
"os_type": "string",
"rpo": {
    "local": {
        "name": "string",
        "policy": "string"
    }
},
"protection_granularity": "string",
"rpo": {
    "components": [
        {
            "name": "string",
            "rpo": {
                "local": {
                    "description": "string",
                    "name": "string"
                },
                "remote": {
                    "description": "string",

```



```

        "name": "string"
    }
},
    "uuid": "string"
}
],
"local": {
    "description": "string",
    "name": "string"
},
"remote": {
    "description": "string",
    "name": "string"
}
},
"s3_bucket": {
    "application_components": [
        {
            "access_policies": [
                {
                    "actions": [
                        "string"
                    ],
                    "conditions": [
                        {
                            "delimiters": [
                                "string"
                            ],
                            "max_keys": [
                                "integer"
                            ],
                            "operator": "string",
                            "prefixes": [
                                "string"
                            ],
                            "source_ips": [
                                "string"
                            ],
                            "usernames": [
                                "string"
                            ]
                        }
                    ],
                    "effect": "string",
                    "principals": [
                        "string"
                    ]
                }
            ]
        }
    ]
}

```

```

        ],
        "resources": [
            "string"
        ],
        "sid": "string"
    }
],
"bucket_endpoint_type": "string",
"comment": "string",
"exclude_aggregates": [
    {
        "name": "string",
        "uuid": "string"
    }
],
"name": "string",
"nas_path": "string",
"qos": {
    "policy": {
        "name": "string",
        "uuid": "string"
    }
},
"storage_service": {
    "name": "string"
},
"uuid": "string",
"versioning_state": "string"
}
]
},
"san": {
    "application_components": [
        {
            "igroup_name": "string",
            "name": "string",
            "os_type": "string",
            "qos": {
                "policy": {
                    "name": "string",
                    "uuid": "string"
                }
            },
            "storage_service": {
                "name": "string"
            }
        }
    ]
}

```

```

    "tiering": {
      "control": "string",
      "object_stores": [
        {
          "name": "string"
        }
      ],
      "policy": "string"
    }
  ],
  "exclude_aggregates": [
    {
      "name": "string",
      "uuid": "string"
    }
  ],
  "new_igroups": [
    {
      "comment": "string",
      "igroups": [
        {
          "name": "string",
          "uuid": "string"
        }
      ],
      "initiator_objects": [
        {
          "comment": "string",
          "name": "string"
        }
      ],
      "initiators": [
        "string"
      ],
      "name": "string",
      "os_type": "string",
      "protocol": "string"
    }
  ],
  "os_type": "string",
  "protection_type": {
    "local_policy": "string",
    "local_rpo": "string",
    "remote_rpo": "string"
  }
}

```

```

},
"state": "string",
"statistics": {
  "components": [
    {
      "iops": {
        "per_tb": 0,
        "total": 0
      },
      "latency": {
        "average": 0,
        "raw": 0
      },
      "name": "string",
      "snapshot": {
        "reserve": 0,
        "used": 0
      },
      "space": {
        "available": 0,
        "logical_used": 0,
        "provisioned": 0,
        "reserved_unused": 0,
        "savings": 0,
        "used": 0,
        "used_excluding_reserves": 0,
        "used_percent": 0
      },
      "storage_service": {
        "name": "string",
        "uuid": "string"
      },
      "uuid": "string"
    }
  ],
  "iops": {
    "per_tb": 0,
    "total": 0
  },
  "latency": {
    "average": 0,
    "raw": 0
  },
  "snapshot": {
    "reserve": 0,
    "used": 0
  }
}

```

```

    },
    "space": {
      "available": 0,
      "logical_used": 0,
      "provisioned": 0,
      "reserved_unused": 0,
      "savings": 0,
      "used": 0,
      "used_excluding_reserves": 0,
      "used_percent": 0
    }
  },
  "svm": {
    "name": "string",
    "uuid": "string"
  },
  "template": {
    "name": "string",
    "protocol": "string",
    "version": 0
  },
  "uuid": "string"
}

```

Response

Status: 202, Accepted

| Name | Type | Description |
|------|--------------------------|-------------|
| job | job_link | |

Example response

```

{
  "job": {
    "uuid": "string"
  }
}

```

Headers

| Name | Description | Type |
|----------|---|--------|
| Location | Useful for tracking the resource location | string |

Error

Status: Default, Error

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

storage_service

| Name | Type | Description |
|------|--------|--------------------------------------|
| name | string | The storage service of the database. |

dataset

| Name | Type | Description |
|--------------------|---------------------------------|--|
| element_count | integer | The number of storage elements (LUNs for SAN) of the database to maintain. Must be an even number between 2 and 16. Odd numbers will be rounded up to the next even number within range. |
| replication_factor | integer | The number of data bearing members of the replicaset, including 1 primary and at least 1 secondary. |
| size | integer | The size of the database. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

igroups

| Name | Type | Description |
|------|--------|---|
| name | string | The name of an igroup to nest within a parent igroup. Mutually exclusive with initiators and initiator_objects. |
| uuid | string | The UUID of an igroup to nest within a parent igroup Usage: <UUID> |

initiator_objects

| Name | Type | Description |
|---------|--------|--|
| comment | string | A comment available for use by the administrator. |
| name | string | The WWPN, IQN, or Alias of the initiator. Mutually exclusive with nested igroups and the initiators array. |

mongo_db_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|-------------------|--|--|
| comment | string | A comment available for use by the administrator. |
| igroups | array[igroups] | |
| initiator_objects | array[initiator_objects] | |
| initiators | array[string] | |
| name | string | The name of the new initiator group. |
| os_type | string | The name of the host OS accessing the application. The default value is the host OS that is running the application. |
| protocol | string | The protocol of the new initiator group. |

protection_type

| Name | Type | Description |
|------------|--------|------------------------------------|
| local_rpo | string | The local RPO of the application. |
| remote_rpo | string | The remote RPO of the application. |

secondary_igroups

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the initiator group for each secondary. |

mongo_db_on_san

MongoDB using SAN.

| Name | Type | Description |
|---------------------|--|--|
| dataset | dataset | |
| new_igroups | array[mongo_db_on_san_new_igroups] | The list of initiator groups to create. |
| os_type | string | The name of the host OS running the application. |
| primary_igroup_name | string | The initiator group for the primary. |
| protection_type | protection_type | |
| secondary_igroups | array[secondary_igroups] | |

export_policy

| Name | Type | Description |
|------|---------|--|
| id | integer | The ID of an existing NFS export policy. |
| name | string | The name of an existing NFS export policy. |

component

| Name | Type | Description |
|------|--------|-------------------------------|
| name | string | Name of the source component. |

svm

| Name | Type | Description |
|------|--------|-------------------------|
| name | string | Name of the source SVM. |

origin

| Name | Type | Description |
|-----------|---------------------------|-------------|
| component | component | |
| svm | svm | |

flexcache

| Name | Type | Description |
|----------|------------------------|--|
| dr_cache | boolean | Dr-cache is a FlexCache volume create time option that has the same flexgroup-msid as that of the origin of a FlexCache volume. By default, dr-cache is disabled. The flexgroup-msid of the FlexCache volume does not need to be same as that of the origin of a FlexCache volume. |
| origin | origin | |

policy

| Name | Type | Description |
|------|--------|---|
| name | string | The name of an existing QoS policy. |
| uuid | string | The UUID of an existing QoS policy. Usage: <UUID> |

qos

| Name | Type | Description |
|--------|------------------------|-------------|
| policy | policy | |

retention

| Name | Type | Description |
|---------|--------|--|
| default | string | <p>Specifies the default retention period that is applied to files while committing them to the WORM state without an associated retention period. The retention value represents a duration and must be specified in the ISO-8601 duration format. The retention period can be in years, months, days, hours, and minutes. A duration specified for years, months, and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The retention string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the duration field also accepts the string "infinite" to set an infinite retention period and the string "unspecified" to set an unspecified retention period.</p> |

| Name | Type | Description |
|---------|--------|---|
| maximum | string | Specifies the maximum allowed retention period for files committed to the WORM state on the volume. The retention value represents a duration and must be specified in the ISO-8601 duration format. The retention period can be in years, months, days, hours, and minutes. A duration specified for years, months, and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The retention string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the duration field also accepts the string "infinite" to set an infinite retention period. |

| Name | Type | Description |
|---------|--------|---|
| minimum | string | Specifies the minimum allowed retention period for files committed to the WORM state on the volume. The retention value represents a duration and must be specified in the ISO-8601 duration format. The retention period can be in years, months, days, hours, and minutes. A duration specified for years, month,s and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The retention string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the duration field also accepts the string "infinite" to set an infinite retention period. |

snaplock

| Name | Type | Description |
|---------------------|---------|---|
| append_mode_enabled | boolean | Specifies if the volume append mode is enabled or disabled. When it is enabled, all the files created with write permissions on the volume are, by default, WORM appendable files. The user can append the data to a WORM appendable file but cannot modify the existing contents of the file nor delete the file until it expires. |

| Name | Type | Description |
|-------------------|---------------------------|--|
| autocommit_period | string | Specifies the autocommit period for SnapLock volume. All files which are not modified for a period greater than the autocommit period of the volume are committed to the WORM state. The autocommit period value represents a duration and must be specified in the ISO-8601 duration format. The autocommit period can be in years, months, days, hours, and minutes. A period specified for years, months, and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The period string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the autocommit field also accepts the string "none". |
| retention | retention | |
| snaplock_type | string | The SnapLock type of the smart container. |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the application component. |

object_stores

| Name | Type | Description |
|------|--------|--------------------------------------|
| name | string | The name of the object-store to use. |

nas_application_components_tiering

application-components.tiering

| Name | Type | Description |
|---------------|--|--|
| control | string | Storage tiering placement rules for the container(s) |
| object_stores | array[object_stores] | |
| policy | string | The storage tiering type of the application component. |

application_components

| Name | Type | Description |
|-----------------|--|---|
| export_policy | export_policy | |
| flexcache | flexcache | |
| name | string | The name of the application component. |
| qos | qos | |
| scale_out | boolean | Denotes a Flexgroup. |
| share_count | integer | The number of shares in the application component. |
| snaplock | snaplock | |
| storage_service | storage_service | |
| tiering | nas_application_components_tiering | application-components.tiering |
| total_size | integer | The total size of the application component, split across the member shares. Usage: {<integer>[KB MB GB TB PB]} |

app_cifs_access

The list of CIFS access controls. You must provide either 'user_or_group' or 'access' to enable CIFS access.

| Name | Type | Description |
|---------------|--------|---|
| access | string | The CIFS access granted to the user or group. |
| user_or_group | string | The name of the CIFS user or group that will be granted access. |

exclude_aggregates

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the aggregate to exclude. Usage: <aggregate name> |
| uuid | string | The ID of the aggregate to exclude. Usage: <UUID> |

app_nfs_access

The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access.

| Name | Type | Description |
|--------|--------|--|
| access | string | The NFS access granted. |
| host | string | The name of the NFS entity granted access. |

protection_type

| Name | Type | Description |
|--------------|--------|---|
| local_policy | string | The Snapshot copy policy to apply to each volume in the smart container. This property is only supported for smart containers. Usage: <snapshot policy> |
| local_rpo | string | The local RPO of the application. |
| remote_rpo | string | The remote RPO of the application. |

nas

A generic NAS application.

| Name | Type | Description |
|------------------------|---|--|
| application_components | array[application_components] | |
| cifs_access | array[app_cifs_access] | The list of CIFS access controls. You must provide either 'user_or_group' or 'access' to enable CIFS access. |
| cifs_share_name | string | The name of the CIFS share. Usage: <Share> |
| exclude_aggregates | array[exclude_aggregates] | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| protection_type | protection_type | |

performance

| Name | Type | Description |
|-----------------|---------------------------------|-------------|
| storage_service | storage_service | |

hosts

| Name | Type | Description |
|------|--------|---------------|
| nqn | string | The host NQN. |

zapp_nvme_components_subsystem

components.subsystem

| Name | Type | Description |
|-------|--------------------------------|--|
| hosts | array[hosts] | |
| name | string | The name of the subsystem accessing the component. If neither the name nor the UUID is provided, the name defaults to <application-name>_<component-name>, whether that subsystem already exists or not. |

| Name | Type | Description |
|---------|--------|--|
| os_type | string | The name of the host OS accessing the component. The default value is the host OS that is running the application. |
| uuid | string | The UUID of an existing subsystem to be granted access to the component. |

zapp_nvme_components_tiering

application-components.tiering

| Name | Type | Description |
|---------------|--|--|
| control | string | Storage tiering placement rules for the container(s) |
| object_stores | array[object_stores] | |
| policy | string | The storage tiering type of the application component. |

components

| Name | Type | Description |
|-----------------|--|--|
| name | string | The name of the application component. |
| namespace_count | integer | The number of namespaces in the component. |
| os_type | string | The name of the host OS running the application. |
| performance | performance | |
| qos | qos | |
| subsystem | zapp_nvme_components_subsystem | components.subsystem |
| tiering | zapp_nvme_components_tiering | application-components.tiering |
| total_size | integer | The total size of the component, spread across member namespaces. Usage: {<integer>[KB MB GB TB PB]} |

local

| Name | Type | Description |
|--------|--------|---|
| name | string | The local RPO of the application. |
| policy | string | The Snapshot copy policy to apply to each volume in the smart container. This property is only supported for smart containers. Usage: <snapshot policy> |

rpo

| Name | Type | Description |
|-------|-----------------------|-------------|
| local | local | |

zapp_nvme

An NVME application.

| Name | Type | Description |
|------------|-------------------------------------|--|
| components | array[components] | |
| os_type | string | The name of the host OS running the application. |
| rpo | rpo | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the archive log. |

archive_log

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the archive log. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

db

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the database. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|--|
| name | string | The storage service of the ORACLE_HOME storage volume. |

ora_home

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the ORACLE_HOME storage volume. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|--|
| name | string | The storage service of the redo log group. |

redo_log

| Name | Type | Description |
|-----------------|---------------------------------|--|
| mirrored | boolean | Specifies whether the redo log group should be mirrored. |
| size | integer | The size of the redo log group. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

oracle_on_nfs

Oracle using NFS.

| Name | Type | Description |
|-----------------|---|---|
| archive_log | archive_log | |
| db | db | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| ora_home | ora_home | |
| protection_type | protection_type | |
| redo_log | redo_log | |

oracle_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|-------------------|--|--|
| comment | string | A comment available for use by the administrator. |
| igroups | array[igroups] | |
| initiator_objects | array[initiator_objects] | |
| initiators | array[string] | |
| name | string | The name of the new initiator group. |
| os_type | string | The name of the host OS accessing the application. The default value is the host OS that is running the application. |
| protocol | string | The protocol of the new initiator group. |

oracle_on_san

Oracle using SAN.

| Name | Type | Description |
|-------------|-----------------------------|-------------|
| archive_log | archive_log | |
| db | db | |

| Name | Type | Description |
|-----------------|--|--|
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| new_igroups | array[oracle_on_san_new_igroups] | The list of initiator groups to create. |
| ora_home | ora_home | |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |
| redo_log | redo_log | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the Oracle grid binary storage volume. |

grid_binary

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the Oracle grid binary storage volume. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the Oracle CRS volume. |

oracle_crs

| Name | Type | Description |
|-----------------|---------------------------------|--|
| copies | integer | The number of CRS volumes. |
| size | integer | The size of the Oracle CRS/voting storage volume. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

oracle_rac_on_nfs

Oracle RAC using NFS.

| Name | Type | Description |
|-----------------|---|---|
| archive_log | archive_log | |
| db | db | |
| grid_binary | grid_binary | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| ora_home | ora_home | |
| oracle_crs | oracle_crs | |
| protection_type | protection_type | |
| redo_log | redo_log | |

db_sids

| Name | Type | Description |
|-------------|--------|--|
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |

oracle_rac_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|-------------------|--------------------------|--|
| comment | string | A comment available for use by the administrator. |
| igroups | array[igroups] | |
| initiator_objects | array[initiator_objects] | |
| initiators | array[string] | |
| name | string | The name of the new initiator group. |
| os_type | string | The name of the host OS accessing the application. The default value is the host OS that is running the application. |
| protocol | string | The protocol of the new initiator group. |

oracle_rac_on_san

Oracle RAC using SAN.

| Name | Type | Description |
|-----------------|--------------------------------------|--|
| archive_log | archive_log | |
| db | db | |
| db_sids | array[db_sids] | |
| grid_binary | grid_binary | |
| new_igroups | array[oracle_rac_on_san_new_igroups] | The list of initiator groups to create. |
| ora_home | ora_home | |
| oracle_crs | oracle_crs | |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |
| redo_log | redo_log | |

local

| Name | Type | Description |
|-------------|--------|---|
| description | string | A detailed description of the local RPO. This will include details about the Snapshot copy schedule. |
| name | string | The local RPO of the component. This indicates how often component Snapshot copies are automatically created. |

remote

| Name | Type | Description |
|-------------|--------|--|
| description | string | A detailed description of the remote RPO. |
| name | string | The remote RPO of the component. A remote RPO of zero indicates that the component is synchronously replicated to another cluster. |

rpo

| Name | Type | Description |
|--------|------------------------|-------------|
| local | local | |
| remote | remote | |

components

| Name | Type | Description |
|------|---------------------|-----------------|
| name | string | Component Name. |
| rpo | rpo | |
| uuid | string | Component UUID. |

local

| Name | Type | Description |
|-------------|--------|---|
| description | string | A detailed description of the local RPO. This will include details about the Snapshot copy schedule. |
| name | string | The local RPO of the application. This indicates how often application Snapshot copies are automatically created. |

remote

| Name | Type | Description |
|-------------|--------|--|
| description | string | A detailed description of the remote RPO. |
| name | string | The remote RPO of the application. A remote RPO of zero indicates that the application is synchronously replicated to another cluster. |

rpo

| Name | Type | Description |
|--------------|-------------------------------------|---|
| components | array[components] | |
| is_supported | boolean | Is RPO supported for this application? Generation 1 applications did not support Snapshot copies or MetroCluster. |
| local | local | |
| remote | remote | |

zapp_s3_bucket_application_components_access_policies_conditions

conditions

| Name | Type | Description |
|------------|----------------|----------------------------|
| delimiters | array[string] | |
| max_keys | array[integer] | |
| operator | string | Policy Condition Operator. |
| prefixes | array[string] | |

| Name | Type | Description |
|------------|---------------|-------------|
| source_ips | array[string] | |
| usernames | array[string] | |

zapp_s3_bucket_application_components_access_policies

The list of S3 objectstore policies to be created.

| Name | Type | Description |
|------------|---|---|
| actions | array[string] | |
| conditions | array[zapp_s3_bucket_application_components_access_policies_conditions] | conditions. |
| effect | string | Allow or Deny Access. |
| principals | array[string] | |
| resources | array[string] | |
| sid | string | Statement Identifier Usage: <(size 1..256)> |

zapp_s3_bucket_application_components

The list of application components to be created.

| Name | Type | Description |
|----------------------|--|---|
| access_policies | array[zapp_s3_bucket_application_components_access_policies] | The list of S3 objectstore policies to be created. |
| bucket_endpoint_type | string | The type of bucket. |
| capacity_tier | boolean | Prefer lower latency storage under similar media costs. |
| comment | string | Object Store Server Bucket Description Usage: <(size 1..256)> |
| exclude_aggregates | array[exclude_aggregates] | |
| name | string | The name of the application component. |
| nas_path | string | The path to which the bucket corresponds to. |

| Name | Type | Description |
|------------------|---------------------------------|---|
| qos | qos | |
| size | integer | The total size of the S3 Bucket, split across the member components. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |
| uuid | string | Object Store Server Bucket UUID Usage: <UUID> |
| versioning_state | string | Bucket Versioning State. For nas type buckets, this field is not set. For s3 type buckets, the default value is disabled. |

zapp_s3_bucket

A generic S3 bucket application.

| Name | Type | Description |
|------------------------|--|---|
| application_components | array[zapp_s3_bucket_application_components] | The list of application components to be created. |

san_application_components_tiering

application-components.tiering

| Name | Type | Description |
|---------------|--|--|
| control | string | Storage tiering placement rules for the container(s) |
| object_stores | array[object_stores] | |
| policy | string | The storage tiering type of the application component. |

application_components

| Name | Type | Description |
|-----------------|------------------------------------|--|
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| lun_count | integer | The number of LUNs in the application component. |
| name | string | The name of the application component. |
| os_type | string | The name of the host OS running the application. |
| qos | qos | |
| storage_service | storage_service | |
| tiering | san_application_components_tiering | application-components.tiering |
| total_size | integer | The total size of the application component, split across the member LUNs. Usage: {<integer>[KB MB GB TB PB]} |

san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|-------------------|--------------------------|---|
| comment | string | A comment available for use by the administrator. |
| igroups | array[igroups] | |
| initiator_objects | array[initiator_objects] | |
| initiators | array[string] | |
| name | string | The name of the new initiator group. |

| Name | Type | Description |
|----------|--------|--|
| os_type | string | The name of the host OS accessing the application. The default value is the host OS that is running the application. |
| protocol | string | The protocol of the new initiator group. |

san

A generic SAN application.

| Name | Type | Description |
|------------------------|---|--|
| application_components | array[application_components] | |
| exclude_aggregates | array[exclude_aggregates] | |
| new_igroups | array[san_new_igroups] | The list of initiator groups to create. |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |

storage_service

| Name | Type | Description |
|------|--------|--------------------------------|
| name | string | The storage service of the DB. |

db

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the DB. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|------------------------------------|
| name | string | The storage service of the log DB. |

log

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the log DB. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

sql_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|-------------------|--|--|
| comment | string | A comment available for use by the administrator. |
| igroups | array[igroups] | |
| initiator_objects | array[initiator_objects] | |
| initiators | array[string] | |
| name | string | The name of the new initiator group. |
| os_type | string | The name of the host OS accessing the application. The default value is the host OS that is running the application. |
| protocol | string | The protocol of the new initiator group. |

storage_service

| Name | Type | Description |
|------|--------|-------------------------------------|
| name | string | The storage service of the temp DB. |

temp_db

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the temp DB. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

sql_on_san

Microsoft SQL using SAN.

| Name | Type | Description |
|--------------------|---|--|
| db | db | |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| log | log | |
| new_igroups | array[sql_on_san_new_igroups] | The list of initiator groups to create. |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |
| server_cores_count | integer | The number of server cores for the DB. |
| temp_db | temp_db | |

access

| Name | Type | Description |
|-----------------|--------|--------------------------------|
| installer | string | SQL installer admin user name. |
| service_account | string | SQL service account user name. |

sql_on_smb

Microsoft SQL using SMB.

| Name | Type | Description |
|--------------------|---------------------------------|--|
| access | access | |
| db | db | |
| log | log | |
| protection_type | protection_type | |
| server_cores_count | integer | The number of server cores for the DB. |

| Name | Type | Description |
|---------|---------|-------------|
| temp_db | temp_db | |

iops

| Name | Type | Description |
|--------|---------|---|
| per_tb | integer | The number of IOPS per terabyte of logical space currently being used by the application component. |
| total | integer | The total number of IOPS being used by the application component. |

latency

| Name | Type | Description |
|---------|---------|--|
| average | integer | The cumulative average response time in microseconds for this component. |
| raw | integer | The cumulative response time in microseconds for this component. |

snapshot

| Name | Type | Description |
|---------|---------|--|
| reserve | integer | The amount of space reserved by the system for Snapshot copies. |
| used | integer | The amount of spacing currently in use by the system to store Snapshot copies. |

space

| Name | Type | Description |
|-------------------------|---------|--|
| available | integer | <p>The available amount of space left in the application component. Note that this field has limited meaning for SAN applications. Space may be considered used from ONTAP's perspective while the host filesystem still considers it available.</p> <ul style="list-style-type: none"> • readOnly: 1 • Introduced in: 9.6 |
| logical_used | integer | <p>The amount of space that would currently be used if no space saving features were enabled. For example, if compression were the only space saving feature enabled, this field would represent the uncompressed amount of space used.</p> |
| provisioned | integer | <p>The originally requested amount of space that was provisioned for the application component.</p> |
| reserved_unused | integer | <p>The amount of space reserved for system features such as Snapshot copies that has not yet been used.</p> |
| savings | integer | <p>The amount of space saved by all enabled space saving features.</p> |
| used | integer | <p>The amount of space that is currently being used by the application component. Note that this includes any space reserved by the system for features such as Snapshot copies.</p> |
| used_excluding_reserves | integer | <p>The amount of space that is currently being used, excluding any space that is reserved by the system for features such as Snapshot copies.</p> |

| Name | Type | Description |
|--------------|---------|---|
| used_percent | integer | The percentage of the originally provisioned space that is currently being used by the application component. |

storage_service

| Name | Type | Description |
|------|--------|--|
| name | string | The storage service name. AFF systems support the extreme storage service. All other systems only support value. |
| uuid | string | The storage service UUID. |

components

| Name | Type | Description |
|-----------------------|---------------------------------|---|
| iops | iops | |
| latency | latency | |
| name | string | Component Name. |
| shared_storage_pool | boolean | An application component is considered to use a shared storage pool if storage elements for other components reside on the same aggregate as storage elements for this component. |
| snapshot | snapshot | |
| space | space | |
| statistics_incomplete | boolean | If not all storage elements of the application component are currently available, the returned statistics might only include data from those elements that were available. |
| storage_service | storage_service | |
| uuid | string | Component UUID. |

iops

| Name | Type | Description |
|--------|---------|---|
| per_tb | integer | The number of IOPS per terabyte of logical space currently being used by the application. |
| total | integer | The total number of IOPS being used by the application. |

latency

| Name | Type | Description |
|---------|---------|--|
| average | integer | The cumulative average response time in microseconds for this application. |
| raw | integer | The cumulative response time in microseconds for this application. |

space

| Name | Type | Description |
|--------------|---------|--|
| available | integer | <p>The available amount of space left in the application. Note that this field has limited meaning for SAN applications. Space may be considered used from ONTAP's perspective while the host filesystem still considers it available.</p> <ul style="list-style-type: none"> • readOnly: 1 • Introduced in: 9.6 |
| logical_used | integer | The amount of space that would currently be used if no space saving features were enabled. For example, if compression were the only space saving feature enabled, this field would represent the uncompressed amount of space used. |
| provisioned | integer | The originally requested amount of space that was provisioned for the application. |

| Name | Type | Description |
|-------------------------|---------|---|
| reserved_unused | integer | The amount of space reserved for system features such as Snapshot copies that has not yet been used. |
| savings | integer | The amount of space saved by all enabled space saving features. |
| used | integer | The amount of space that is currently being used by the application. Note that this includes any space reserved by the system for features such as Snapshot copies. |
| used_excluding_reserves | integer | The amount of space that is currently being used, excluding any space that is reserved by the system for features such as Snapshot copies. |
| used_percent | integer | The percentage of the originally provisioned space that is currently being used by the application. |

statistics

| Name | Type | Description |
|---------------------|-------------------------------------|---|
| components | array[components] | |
| iops | iops | |
| latency | latency | |
| shared_storage_pool | boolean | An application is considered to use a shared storage pool if storage elements for multiple components reside on the same aggregate. |
| snapshot | snapshot | |
| space | space | |

| Name | Type | Description |
|-----------------------|---------|--|
| statistics_incomplete | boolean | If not all storage elements of the application are currently available, the returned statistics might only include data from those elements that were available. |

svm

| Name | Type | Description |
|------|--------|--|
| name | string | SVM Name. Either the SVM name or UUID must be provided to create an application. |
| uuid | string | SVM UUID. Either the SVM name or UUID must be provided to create an application. |

self_link

template

| Name | Type | Description |
|----------|--------|--|
| name | string | The name of the template that was used to provision this application. |
| protocol | string | The protocol access of the template that was used to provision this application. |

| Name | Type | Description |
|---------|---------|--|
| version | integer | <p>The version of the template that was used to provision this application. The template version changes only if the layout of the application changes over time. For example, redo logs in Oracle RAC templates were updated and provisioned differently in DATA ONTAP 9.3.0 compared to prior releases, so the version number was increased. If layouts change in the future, the changes will be documented along with the corresponding version numbers.</p> <ul style="list-style-type: none"> • readOnly: 1 • Introduced in: 9.6 |

storage_service

| Name | Type | Description |
|------|--------|--------------------------------------|
| name | string | The storage service of the desktops. |

desktops

| Name | Type | Description |
|-----------------|---------------------------------|--|
| count | integer | The number of desktops to support. |
| size | integer | The size of the desktops. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

hyper_v_access

| Name | Type | Description |
|-----------------|--------|--------------------------|
| service_account | string | Hyper-V service account. |

vdi_on_nas

A VDI application using NAS.

| Name | Type | Description |
|-----------------|---|---|
| desktops | desktops | |
| hyper_v_access | hyper_v_access | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| protection_type | protection_type | |

vdi_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|-------------------|--|---|
| comment | string | A comment available for use by the administrator. |
| igroups | array[igroups] | |
| initiator_objects | array[initiator_objects] | |
| initiators | array[string] | |
| name | string | The name of the new initiator group. |
| protocol | string | The protocol of the new initiator group. |

vdi_on_san

A VDI application using SAN.

| Name | Type | Description |
|-------------|--------------------------|--|
| desktops | desktops | |
| hypervisor | string | The name of the hypervisor hosting the application. |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |

| Name | Type | Description |
|-----------------|---|---|
| new_igroups | array[vdi_on_san_new_igroups] | The list of initiator groups to create. |
| protection_type | protection_type | |

storage_service

| Name | Type | Description |
|------|--------|---------------------------------------|
| name | string | The storage service of the datastore. |

datastore

| Name | Type | Description |
|-----------------|---------------------------------|---|
| count | integer | The number of datastores to support. |
| size | integer | The size of the datastore. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

vsi_on_nas

A VSI application using NAS.

| Name | Type | Description |
|-----------------|---|---|
| datastore | datastore | |
| hyper_v_access | hyper_v_access | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| protection_type | protection_type | |

vsi_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|---------|----------------------------------|---|
| comment | string | A comment available for use by the administrator. |
| igroups | array[igroups] | |

| Name | Type | Description |
|-------------------|--|--|
| initiator_objects | array[initiator_objects] | |
| initiators | array[string] | |
| name | string | The name of the new initiator group. |
| protocol | string | The protocol of the new initiator group. |

vsi_on_san

A VSI application using SAN.

| Name | Type | Description |
|-----------------|---|--|
| datastore | datastore | |
| hypervisor | string | The name of the hypervisor hosting the application. |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| new_igroups | array[vsi_on_san_new_igroups] | The list of initiator groups to create. |
| protection_type | protection_type | |

application

Applications

| Name | Type | Description |
|--------------------|------------------------|--|
| _links | _links | |
| creation_timestamp | string | The time when the application was created. |

| Name | Type | Description |
|-------------------|-----------------------------------|---|
| delete_data | boolean | Should application storage elements be deleted? An application is considered to use storage elements from a shared storage pool. Possible values are 'true' and 'false'. If the value is 'true', the application will be deleted in its entirety. If the value is 'false', the storage elements will be disassociated from the application and preserved. The application will then be deleted. |
| generation | integer | The generation number of the application. This indicates which features are supported on the application. For example, generation 1 applications do not support Snapshot copies. Support for Snapshot copies was added at generation 2. Any future generation numbers and their feature set will be documented. |
| mongo_db_on_san | mongo_db_on_san | MongoDB using SAN. |
| name | string | Application Name. This field is user supplied when the application is created. |
| nas | nas | A generic NAS application. |
| nvme | zapp_nvme | An NVME application. |
| oracle_on_nfs | oracle_on_nfs | Oracle using NFS. |
| oracle_on_san | oracle_on_san | Oracle using SAN. |
| oracle_rac_on_nfs | oracle_rac_on_nfs | Oracle RAC using NFS. |
| oracle_rac_on_san | oracle_rac_on_san | Oracle RAC using SAN. |

| Name | Type | Description |
|------------------------|--------------------------------|--|
| protection_granularity | string | Protection granularity determines the scope of Snapshot copy operations for the application. Possible values are "application" and "component". If the value is "application", Snapshot copy operations are performed on the entire application. If the value is "component", Snapshot copy operations are performed separately on the application components. |
| rpo | rpo | |
| s3_bucket | zapp_s3_bucket | A generic S3 bucket application. |
| san | san | A generic SAN application. |
| smart_container | boolean | Identifies if this is a smart container or not. |
| sql_on_san | sql_on_san | Microsoft SQL using SAN. |
| sql_on_smb | sql_on_smb | Microsoft SQL using SMB. |
| state | string | The state of the application. For full functionality, applications must be in the online state. Other states indicate that the application is in a transient state and not all operations are supported. |
| statistics | statistics | |
| svm | svm | |
| template | template | |
| uuid | string | Application UUID. This field is generated when the application is created. |
| vdi_on_nas | vdi_on_nas | A VDI application using NAS. |
| vdi_on_san | vdi_on_san | A VDI application using SAN. |
| vsi_on_nas | vsi_on_nas | A VSI application using NAS. |

| Name | Type | Description |
|------------|----------------------------|------------------------------|
| vsi_on_san | vsi_on_san | A VSI application using SAN. |

job_link

| Name | Type | Description |
|------|--------|---|
| uuid | string | The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation. |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Retrieve application components

GET /application/applications/{application.uuid}/components

Introduced In: 9.6

Retrieves application components.

Overview

The application component object exposes how to access an application. Most application interfaces abstract away the underlying ONTAP storage elements, but this interface exposes what is necessary to connect to and uses the storage that is provisioned for an application. See the application component model for a detailed description of each property.

Query examples

Queries are limited on this API. Most of the details are nested under the `nfs_access`, `cifs_access`, or `san_access` properties, but those properties do not support queries, and properties nested under those properties cannot be requested individually in the current release.

The following query returns all application components with names beginning in *secondary*.

```
GET
/application/applications/{application.uuid}/components?name=secondary*
```

The following query returns all application components at the *extreme* storage service.

```
GET
/application/applications/{application.uuid}/components?storage_service.name=extreme
```

Learn more

- [DOC /application](#)

Parameters

| Name | Type | In | Required | Description |
|----------------------|---------------|-------|----------|---------------------------------------|
| application.uuid | string | path | True | Application UUID |
| uuid | string | query | False | Filter by UUID |
| name | string | query | False | Filter by name |
| storage_service.name | string | query | False | Filter by storage_service.name |
| storage_service.uuid | string | query | False | Filter by storage_service.uuid |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |

| Name | Type | In | Required | Description |
|----------------|---------------|-------|----------|--|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |
| return_records | boolean | query | False | <p>The default is true for GET calls. When set to false, only the number of records is returned.</p> <ul style="list-style-type: none"> • Default value: 1 |
| order_by | array[string] | query | False | Order results by specified fields and optional [asc |

Response

Status: 200, Ok

| Name | Type | Description |
|-------------|--|-------------------|
| _links | _links | |
| num_records | integer | Number of records |
| records | array[application_component] | |

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "application": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "string",
        "uuid": "string"
      },
      "backing_storage": {
        "luns": [
          {
            "creation_timestamp": "string",
            "path": "string",
            "size": 0,
            "uuid": "string"
          }
        ],
        "namespaces": [
          {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "creation_timestamp": "string",
            "name": "string",
```



```

        "size": 0,
        "uuid": "string"
    }
],
"volumes": [
    {
        "creation_timestamp": "string",
        "name": "string",
        "size": 0,
        "uuid": "string"
    }
]
},
"cifs_access": [
    {
        "backing_storage": {
            "type": "string",
            "uuid": "string"
        },
        "ips": [
            "string"
        ],
        "path": "string",
        "permissions": [
            {
                "access": "string",
                "user_or_group": "string"
            }
        ],
        "server": {
            "name": "string"
        },
        "share": {
            "name": "string"
        }
    }
],
"file_system": "string",
"host_management_url": "string",
"host_name": "string",
"name": "string",
"nfs_access": [
    {
        "backing_storage": {
            "type": "string",
            "uuid": "string"
        }
    }
]

```

```

    },
    "export_policy": {
        "name": "string"
    },
    "ips": [
        "string"
    ],
    "path": "string",
    "permissions": [
        {
            "access": "string",
            "host": "string"
        }
    ]
},
],
"nvme_access": [
    {
        "backing_storage": {
            "type": "string",
            "uuid": "string"
        },
        "subsystem_map": {
            "anagrpid": "string",
            "nsid": "string",
            "subsystem": {
                "_links": {
                    "self": {
                        "href": "/api/resourcelink"
                    }
                }
            },
            "hosts": [
                {
                    "_links": {
                        "self": {
                            "self": {
                                "href": "/api/resourcelink"
                            }
                        }
                    }
                },
                "nqn": "string"
            ]
        },
        "name": "string",
        "uuid": "string"
    }
]

```

```

    }
  },
  ],
  "protection_groups": [
    {
      "name": "string",
      "rpo": {
        "local": {
          "description": "string",
          "name": "string"
        },
        "remote": {
          "description": "string",
          "name": "string"
        }
      },
      "uuid": "string"
    }
  ],
  "san_access": [
    {
      "backing_storage": {
        "type": "string",
        "uuid": "string"
      },
      "lun_mappings": [
        {
          "fc": [
            {
              "interface": {
                "_links": {
                  "self": {
                    "href": "/api/resourcelink"
                  }
                }
              },
              "name": "fc_lif1",
              "uuid": "3a09ab42-4da1-32cf-9d35-3385a6101a0b",
              "wwpn": "20:00:00:50:56:b4:13:a8"
            }
          ]
        },
        {
          "igroup": {
            "initiators": [
              "string"
            ],
            "name": "string",

```

```

        "uuid": "string"
    },
    "iscsi": [
        {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "interface": {
                "_links": {
                    "self": {
                        "href": "/api/resourcelink"
                    }
                },
                "ip": {
                    "address": "10.10.10.7"
                },
                "name": "lif1",
                "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
            },
            "port": 3260
        }
    ],
    "lun_id": 0
},
"serial_number": "string"
}
],
"storage_service": {
    "name": "string",
    "uuid": "string"
},
"svm": {
    "name": "string",
    "uuid": "string"
},
"uuid": "string"
}
]
}

```

Error

Status: Default, Error

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| next | href | |
| self | href | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

application

| Name | Type | Description |
|--------|------------------------|-------------------------------------|
| _links | _links | |
| name | string | Application name |
| uuid | string | The application UUID. Valid in URL. |

application_lun_object

LUN object

| Name | Type | Description |
|--------------------|---------|-------------------|
| creation_timestamp | string | LUN creation time |
| path | string | LUN path |
| size | integer | LUN size |
| uuid | string | LUN UUID |

application_namespace_object

Namespace object

| Name | Type | Description |
|--------------------|------------------------|-------------------------|
| _links | _links | |
| creation_timestamp | string | Namespace creation time |
| name | string | Namespace name |
| size | integer | Namespace size |
| uuid | string | Namespace UUID |

application_volume_object

Volume object

| Name | Type | Description |
|--------------------|---------|---------------|
| creation_timestamp | string | Creation time |
| name | string | Name |
| size | integer | Size |
| uuid | string | UUID |

application_backing_storage

| Name | Type | Description |
|------------|---|-------------|
| luns | array[application_lun_object] | |
| namespaces | array[application_namespace_object] | |
| volumes | array[application_volume_object] | |

backing_storage

| Name | Type | Description |
|------|--------|----------------------|
| type | string | Backing storage type |
| uuid | string | Backing storage UUID |

permissions

| Name | Type | Description |
|---------------|--------|-------------------------------------|
| access | string | Access granted to the user or group |
| user_or_group | string | User or group |

server

| Name | Type | Description |
|------|--------|-------------|
| name | string | Server name |

share

| Name | Type | Description |
|------|--------|-------------|
| name | string | Share name |

application_cifs_properties

| Name | Type | Description |
|-----------------|--------------------------------------|---------------|
| backing_storage | backing_storage | |
| ips | array[string] | |
| path | string | Junction path |
| permissions | array[permissions] | |
| server | server | |
| share | share | |

export_policy

| Name | Type | Description |
|------|--------|--------------------|
| name | string | Export policy name |

permissions

| Name | Type | Description |
|--------|--------|----------------------------|
| access | string | Access granted to the host |
| host | string | Host granted access |

application_nfs_properties

| Name | Type | Description |
|-----------------|--------------------------------------|---------------|
| backing_storage | backing_storage | |
| export_policy | export_policy | |
| ips | array[string] | |
| path | string | Junction path |
| permissions | array[permissions] | |

self

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | self | |

hosts

| Name | Type | Description |
|--------|------------------------|-------------|
| _links | _links | |
| nqn | string | Host |

subsystem

| Name | Type | Description |
|--------|--------------------------------|----------------|
| _links | _links | |
| hosts | array[hosts] | |
| name | string | Subsystem name |
| uuid | string | Subsystem UUID |

subsystem_map

Subsystem map object

| Name | Type | Description |
|----------|--------|------------------------|
| anagrpId | string | Subsystem ANA group ID |
| nsid | string | Subsystem namespace ID |

| Name | Type | Description |
|-----------|---------------------------|-------------|
| subsystem | subsystem | |

application_nvme_access

Application NVME access

| Name | Type | Description |
|-----------------|---------------------------------|----------------------|
| backing_storage | backing_storage | |
| is_clone | boolean | Clone |
| subsystem_map | subsystem_map | Subsystem map object |

local

| Name | Type | Description |
|-------------|--------|---|
| description | string | A detailed description of the local RPO. This includes details on the Snapshot copy schedule. |
| name | string | The local RPO of the component. This indicates how often component Snapshot copies are automatically created. |

remote

| Name | Type | Description |
|-------------|--------|--|
| description | string | A detailed description of the remote RPO. |
| name | string | The remote RPO of the component. A remote RPO of zero indicates that the component is synchronously replicated to another cluster. |

rpo

| Name | Type | Description |
|--------|------------------------|-------------|
| local | local | |
| remote | remote | |

application_protection_groups

| Name | Type | Description |
|------|---------------------|-----------------------|
| name | string | Protection group name |
| rpo | rpo | |
| uuid | string | Protection group UUID |

fc_interface_reference

An FC interface.

| Name | Type | Description |
|--------|------------------------|--|
| _links | _links | |
| name | string | The name of the FC interface. |
| uuid | string | The unique identifier of the FC interface. |
| wwpn | string | The WWPN of the FC interface. |

application_san_access_fcp_endpoint

A Fibre Channel Protocol (FCP) access endpoint for the LUN.

| Name | Type | Description |
|-----------|--|------------------|
| interface | fc_interface_reference | An FC interface. |

igroup

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |
| name | string | Igroup name |
| uuid | string | Igroup UUID |

ip

IP information

| Name | Type | Description |
|---------|--------|----------------------|
| address | string | IPv4 or IPv6 address |

interface

| Name | Type | Description |
|--------|------------------------|---|
| _links | _links | |
| ip | ip | IP information |
| name | string | The name of the interface. If only the name is provided, the SVM scope must be provided by the object this object is embedded in. |
| uuid | string | The UUID that uniquely identifies the interface. |

application_san_access_iscsi_endpoint

An iSCSI access endpoint for the LUN.

| Name | Type | Description |
|-----------|---------------------------|---|
| _links | _links | |
| interface | interface | |
| port | integer | The TCP port number of the iSCSI access endpoint. |

application_lun_mapping_object

| Name | Type | Description |
|--------|--|---|
| fc | array[application_san_access_fc_endpoint] | All possible Fibre Channel Protocol (FCP) access endpoints for the LUN. |
| igroup | igroup | |
| iscsi | array[application_san_access_iscsi_endpoint] | All possible iSCSI access endpoints for the LUN. |
| lun_id | integer | LUN ID |

application_san_access

| Name | Type | Description |
|-----------------|---|-------------|
| backing_storage | backing_storage | |
| is_clone | boolean | Clone |
| lun_mappings | array[application_lun_mapping_object] | |

| Name | Type | Description |
|---------------|--------|-------------------|
| serial_number | string | LUN serial number |

storage_service

| Name | Type | Description |
|------|--------|----------------------|
| name | string | Storage service name |
| uuid | string | Storage service UUID |

svm

| Name | Type | Description |
|------|--------|-------------|
| name | string | SVM name |
| uuid | string | SVM UUID |

application_component

Application component

| Name | Type | Description |
|---------------------|--|---|
| _links | _links | |
| application | application | |
| backing_storage | application_backing_storage | |
| cifs_access | array[application_cifs_properties] | |
| file_system | string | Defines the type of file system that will be installed on this application component. |
| host_management_url | string | Host management URL |
| host_name | string | L2 Host FQDN |
| name | string | Application component name |
| nfs_access | array[application_nfs_properties] | |
| nvme_access | array[application_nvme_access] | |
| protection_groups | array[application_protection_groups] | |
| san_access | array[application_san_access] | |

| Name | Type | Description |
|-----------------|---------------------------------|---|
| storage_service | storage_service | |
| svm | svm | |
| uuid | string | The application component UUID. Valid in URL. |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Retrieve application component Snapshot copies

GET

/application/applications/{application.uuid}/components/{component.uuid}/snapshots

Introduced In: 9.6

Retrieves Snapshot copies of an application component.

This endpoint is only supported for Maxdata template applications.

Component Snapshot copies are essentially more granular application Snapshot copies. There is no difference beyond the scope of the operation.

Learn more

- [DOC /application/applications/{application.uuid}/snapshots](#)
- [GET /application/applications/{uuid}/snapshots](#)

Parameters

| Name | Type | In | Required | Description |
|------------------|---------------|-------|----------|---------------------------------------|
| application.uuid | string | path | True | Application UUID |
| component.uuid | string | path | True | Application Component UUID |
| component.name | string | query | False | Filter by Application Component Name |
| uuid | string | query | False | Filter by uuid |
| name | string | query | False | Filter by name |
| consistency_type | string | query | False | Filter by consistency_type |
| comment | string | query | False | Filter by comment |
| create_time | string | query | False | Filter by create_time |
| is_partial | string | query | False | Filter by is_partial |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |

| Name | Type | In | Required | Description |
|----------------|---------------|-------|----------|--|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |
| return_records | boolean | query | False | <p>The default is true for GET calls. When set to false, only the number of records is returned.</p> <ul style="list-style-type: none"> • Default value: 1 |
| order_by | array[string] | query | False | Order results by specified fields and optional [asc |

Response

Status: 200, Ok

| Name | Type | Description |
|-------------|---|-------------------|
| _links | _links | |
| num_records | integer | Number of records |
| records | array[application_component_snapshot] | |

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "application": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "string",
        "uuid": "string"
      },
      "comment": "string",
      "component": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "string",
        "uuid": "string"
      },
      "consistency_type": "string",
      "create_time": "string",
      "name": "string",
      "svm": {
        "name": "string",
        "uuid": "string"
      },
      "uuid": "string"
    }
  ]
}
```

```
}  
]  
}
```

Error

Status: Default, Error

| Name | Type | Description |
|-------|-----------------------|-------------|
| error | error | |

Example error

```
{  
  "error": {  
    "arguments": [  
      {  
        "code": "string",  
        "message": "string"  
      }  
    ],  
    "code": "4",  
    "message": "entry doesn't exist",  
    "target": "uuid"  
  }  
}
```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| next | href | |
| self | href | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

application

| Name | Type | Description |
|--------|------------------------|--------------------------------|
| _links | _links | |
| name | string | Application Name |
| uuid | string | Application UUID. Valid in URL |

component

| Name | Type | Description |
|--------|------------------------|----------------|
| _links | _links | |
| name | string | Component Name |
| uuid | string | Component UUID |

svm

| Name | Type | Description |
|------|--------|-------------|
| name | string | SVM Name |
| uuid | string | SVM UUID |

application_component_snapshot

| Name | Type | Description |
|------------------|-----------------------------|---|
| _links | _links | |
| application | application | |
| comment | string | Comment. Valid in POST |
| component | component | |
| consistency_type | string | Consistency Type. This is for categorization only. A Snapshot copy should not be set to application consistent unless the host application is quiesced for the Snapshot copy. Valid in POST |
| create_time | string | Creation Time |
| is_partial | boolean | A partial Snapshot copy means that not all volumes in an application component were included in the Snapshot copy. |
| name | string | Snapshot copy name. Valid in POST |
| svm | svm | |
| uuid | string | Snapshot copy UUID. Valid in URL |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|-------------------|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |

| Name | Type | Description |
|--------|--------|---|
| target | string | The target parameter that caused the error. |

Create an application component Snapshot copy

POST

/application/applications/{application.uuid}/components/{component.uuid}/snapshots

Introduced In: 9.6

Creates a Snapshot copy of an application component.

This endpoint is only supported for Maxdata template applications.

Required properties

- name

Recommended optional properties

- consistency_type - Track whether this snapshot is *application* or *crash* consistent. Component Snapshot copies are essentially more granular application Snapshot copies. There is no difference beyond the scope of the operation.

Learn more

- [DOC /application/applications/{application.uuid}/snapshots](#)
- [GET /application/applications/{uuid}/snapshots](#)
- [DOC /application](#)

Parameters

| Name | Type | In | Required | Description |
|------------------|--------|------|----------|----------------------------|
| application.uuid | string | path | True | Application UUID |
| component.uuid | string | path | True | Application Component UUID |

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|--|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |
| return_records | boolean | query | False | <p>The default is false. If set to true, the records are returned.</p> <ul style="list-style-type: none"> • Default value: |

Request Body

| Name | Type | Description |
|-------------|-----------------------------|------------------------|
| _links | _links | |
| application | application | |
| comment | string | Comment. Valid in POST |

| Name | Type | Description |
|------------------|---------------------------|---|
| component | component | |
| consistency_type | string | Consistency Type. This is for categorization only. A Snapshot copy should not be set to application consistent unless the host application is quiesced for the Snapshot copy. Valid in POST |
| create_time | string | Creation Time |
| is_partial | boolean | A partial Snapshot copy means that not all volumes in an application component were included in the Snapshot copy. |
| name | string | Snapshot copy name. Valid in POST |
| svm | svm | |
| uuid | string | Snapshot copy UUID. Valid in URL |

Example request

```
{
  "application": {
    "name": "string",
    "uuid": "string"
  },
  "comment": "string",
  "component": {
    "name": "string",
    "uuid": "string"
  },
  "consistency_type": "string",
  "create_time": "string",
  "name": "string",
  "svm": {
    "name": "string",
    "uuid": "string"
  },
  "uuid": "string"
}
```

Response

Status: 202, Accepted

| Name | Type | Description |
|------|--------------------------|-------------|
| job | job_link | |

Example response

```
{
  "job": {
    "uuid": "string"
  }
}
```

Headers

| Name | Description | Type |
|----------|---|--------|
| Location | Useful for tracking the resource location | string |

Error

Status: Default, Error

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

application

| Name | Type | Description |
|--------|------------------------|--------------------------------|
| _links | _links | |
| name | string | Application Name |
| uuid | string | Application UUID. Valid in URL |

component

| Name | Type | Description |
|--------|------------------------|----------------|
| _links | _links | |
| name | string | Component Name |
| uuid | string | Component UUID |

svm

| Name | Type | Description |
|------|--------|-------------|
| name | string | SVM Name |
| uuid | string | SVM UUID |

application_component_snapshot

| Name | Type | Description |
|-------------|-----------------------------|------------------------|
| _links | _links | |
| application | application | |
| comment | string | Comment. Valid in POST |
| component | component | |

| Name | Type | Description |
|------------------|---------------------|---|
| consistency_type | string | Consistency Type. This is for categorization only. A Snapshot copy should not be set to application consistent unless the host application is quiesced for the Snapshot copy. Valid in POST |
| create_time | string | Creation Time |
| is_partial | boolean | A partial Snapshot copy means that not all volumes in an application component were included in the Snapshot copy. |
| name | string | Snapshot copy name. Valid in POST |
| svm | svm | |
| uuid | string | Snapshot copy UUID. Valid in URL |

job_link

| Name | Type | Description |
|------|--------|---|
| uuid | string | The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation. |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|-------------------|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |

| Name | Type | Description |
|---------|--------|---|
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Delete an application component Snapshot copy

DELETE

/application/applications/{application.uuid}/components/{component.uuid}/snapshots/{uuid}

Introduced In: 9.6

Delete a Snapshot copy of an application component.

This endpoint is only supported for Maxdata template applications.

Component Snapshot copies are essentially more granular application Snapshot copies. There is no difference beyond the scope of the operation.

Learn more

- [DOC /application/applications/{application.uuid}/snapshots](#)
- [DELETE /application/applications/{application.uuid}/snapshots/{uuid}](#)
- [DOC /application](#)

Parameters

| Name | Type | In | Required | Description |
|------------------|--------|------|----------|----------------------------|
| application.uuid | string | path | True | Application UUID |
| component.uuid | string | path | True | Application Component UUID |
| uuid | string | path | True | Snapshot UUID |

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|--|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |

Response

Status: 202, Accepted

| Name | Type | Description |
|------|--------------------------|-------------|
| job | job_link | |

Example response

```
{
  "job": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "uuid": "string"
  }
}
```

Error

Status: Default, Error

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

job_link

| Name | Type | Description |
|--------|------------------------|---|
| _links | _links | |
| uuid | string | The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation. |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Retrieve a Snapshot copy for a specific application component

GET

/application/applications/{application.uuid}/components/{component.uuid}/snapshots/{uuid}

Introduced In: 9.6

Retrieve a Snapshot copy of an application component.

This endpoint is only supported for Maxdata template applications.

Component Snapshot copies are essentially more granular application Snapshot copies. There is no difference beyond the scope of the operation.

Learn more

- [DOC /application/applications/{application.uuid}/snapshots](#)
- [GET /application/applications/{uuid}/snapshots](#)
- [DOC /application](#)

Parameters

| Name | Type | In | Required | Description |
|------------------|---------------|-------|----------|-------------------------------|
| application.uuid | string | path | True | Application UUID |
| component.uuid | string | path | True | Application Component UUID |
| uuid | string | path | True | Snapshot UUID |
| fields | array[string] | query | False | Specify the fields to return. |

Response

Status: 200, Ok

| Name | Type | Description |
|-------------|-----------------------------|------------------------|
| _links | _links | |
| application | application | |
| comment | string | Comment. Valid in POST |

| Name | Type | Description |
|------------------|---------------------------|---|
| component | component | |
| consistency_type | string | Consistency Type. This is for categorization only. A Snapshot copy should not be set to application consistent unless the host application is quiesced for the Snapshot copy. Valid in POST |
| create_time | string | Creation Time |
| is_partial | boolean | A partial Snapshot copy means that not all volumes in an application component were included in the Snapshot copy. |
| name | string | Snapshot copy name. Valid in POST |
| svm | svm | |
| uuid | string | Snapshot copy UUID. Valid in URL |

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "application": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "string",
    "uuid": "string"
  },
  "comment": "string",
  "component": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "string",
    "uuid": "string"
  },
  "consistency_type": "string",
  "create_time": "string",
  "name": "string",
  "svm": {
    "name": "string",
    "uuid": "string"
  },
  "uuid": "string"
}
```

Error

Status: Default, Error

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

application

| Name | Type | Description |
|--------|------------------------|--------------------------------|
| _links | _links | |
| name | string | Application Name |
| uuid | string | Application UUID. Valid in URL |

component

| Name | Type | Description |
|--------|------------------------|----------------|
| _links | _links | |
| name | string | Component Name |
| uuid | string | Component UUID |

svm

| Name | Type | Description |
|------|--------|-------------|
| name | string | SVM Name |
| uuid | string | SVM UUID |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Restore an application component Snapshot copy

POST

/application/applications/{application.uuid}/components/{component.uuid}/snapshots/{uuid}/restore

Introduced In: 9.6

Restore a Snapshot copy of an application component.

This endpoint is only supported for Maxdata template applications.

Component Snapshot copies are essentially more granular application Snapshot copies. There is no difference beyond the scope of the operation.

Learn more

- [DOC /application/applications/{application.uuid}/snapshots](#)
- [POST /application/applications/{application.uuid}/snapshots/{uuid}/restore](#)
- [DOC /application](#)
- [Asynchronous operations](#)

Parameters

| Name | Type | In | Required | Description |
|------------------|--------|------|----------|----------------------------|
| application.uuid | string | path | True | Application UUID |
| component.uuid | string | path | True | Application Component UUID |
| uuid | string | path | True | Snapshot copy UUID |

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|--|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |
| return_records | boolean | query | False | <p>The default is false. If set to true, the records are returned.</p> <ul style="list-style-type: none"> • Default value: |

Response

Status: 202, Accepted

| Name | Type | Description |
|------|--------------------------|-------------|
| job | job_link | |

Example response

```
{
  "job": {
    "uuid": "string"
  }
}
```

Error

Status: Default, Error

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

job_link

| Name | Type | Description |
|------|--------|---|
| uuid | string | The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation. |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Retrieve an application component

GET /application/applications/{application.uuid}/components/{uuid}

Introduced In: 9.6

Retrieves an application component.

Overview

The application component object exposes how to access an application. Most application interfaces abstract away the underlying ONTAP storage elements, but this interface exposes what is necessary to connect to and uses the storage that is provisioned for an application. See the application component model for a detailed description of each property.

Access

Each application component can be accessed via NFS, CIFS, or SAN. NFS and CIFS access can be enabled simultaneously. Each access section includes a `backing_storage` property. This property is used to correlate the storage elements with the access elements of the application. The `backing_storage` portion of the access section provides the `type` and `uuid` of the backing storage. There is another `backing_storage` property at the same level as the access properties which contains lists of backing storage elements corresponding to the types listed in the access section.

Learn more

- [DOC /application](#)

Parameters

| Name | Type | In | Required | Description |
|------------------|---------------|-------|----------|-------------------------------|
| application.uuid | string | path | True | Application UUID |
| uuid | string | path | True | Application component UUID |
| fields | array[string] | query | False | Specify the fields to return. |

Response

Status: 200, Ok

| Name | Type | Description |
|-----------------|--|---|
| _links | _links | |
| application | application | |
| backing_storage | application_backing_storage | |
| cifs_access | array[application_cifs_properties] | |
| file_system | string | Defines the type of file system that will be installed on this application component. |

| Name | Type | Description |
|---------------------|--|---|
| host_management_url | string | Host management URL |
| host_name | string | L2 Host FQDN |
| name | string | Application component name |
| nfs_access | array[application_nfs_properties] | |
| nvme_access | array[application_nvme_access] | |
| protection_groups | array[application_protection_groups] | |
| san_access | array[application_san_access] | |
| storage_service | storage_service | |
| svm | svm | |
| uuid | string | The application component UUID. Valid in URL. |

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "application": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "string",
    "uuid": "string"
  },
  "backing_storage": {
    "luns": [
      {
        "creation_timestamp": "string",
        "path": "string",
        "size": 0,
        "uuid": "string"
      }
    ],
    "namespaces": [
      {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "creation_timestamp": "string",
        "name": "string",
        "size": 0,
        "uuid": "string"
      }
    ],
    "volumes": [
      {
        "creation_timestamp": "string",
        "name": "string",
        "size": 0,
        "uuid": "string"
      }
    ]
  }
}
```

```

    ]
  },
  "cifs_access": [
    {
      "backing_storage": {
        "type": "string",
        "uuid": "string"
      },
      "ips": [
        "string"
      ],
      "path": "string",
      "permissions": [
        {
          "access": "string",
          "user_or_group": "string"
        }
      ],
      "server": {
        "name": "string"
      },
      "share": {
        "name": "string"
      }
    }
  ],
  "file_system": "string",
  "host_management_url": "string",
  "host_name": "string",
  "name": "string",
  "nfs_access": [
    {
      "backing_storage": {
        "type": "string",
        "uuid": "string"
      },
      "export_policy": {
        "name": "string"
      },
      "ips": [
        "string"
      ],
      "path": "string",
      "permissions": [
        {
          "access": "string",

```

```

        "host": "string"
    }
]
},
"nvme_access": [
{
    "backing_storage": {
        "type": "string",
        "uuid": "string"
    },
    "subsystem_map": {
        "anagrpid": "string",
        "nsid": "string",
        "subsystem": {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "hosts": [
                {
                    "_links": {
                        "self": {
                            "self": {
                                "href": "/api/resourcelink"
                            }
                        }
                    }
                },
                "nqn": "string"
            ]
        },
        "name": "string",
        "uuid": "string"
    }
}
],
"protection_groups": [
{
    "name": "string",
    "rpo": {
        "local": {
            "description": "string",
            "name": "string"
        },

```

```

    "remote": {
      "description": "string",
      "name": "string"
    }
  },
  "uuid": "string"
}
],
"san_access": [
  {
    "backing_storage": {
      "type": "string",
      "uuid": "string"
    },
    "lun_mappings": [
      {
        "fc": [
          {
            "interface": {
              "_links": {
                "self": {
                  "href": "/api/resourcelink"
                }
              },
            },
            "name": "fc_lif1",
            "uuid": "3a09ab42-4da1-32cf-9d35-3385a6101a0b",
            "wwpn": "20:00:00:50:56:b4:13:a8"
          }
        ],
      },
    ],
    "igroup": {
      "initiators": [
        "string"
      ],
      "name": "string",
      "uuid": "string"
    },
    "iscsi": [
      {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
      },
      {
        "interface": {
          "_links": {

```

```

        "self": {
            "href": "/api/resourcelink"
        },
        "ip": {
            "address": "10.10.10.7"
        },
        "name": "lif1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "port": 3260
}
],
"lun_id": 0
}
],
"serial_number": "string"
}
],
"storage_service": {
    "name": "string",
    "uuid": "string"
},
"svm": {
    "name": "string",
    "uuid": "string"
},
"uuid": "string"
}

```

Error

Status: Default, Error

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

application

| Name | Type | Description |
|--------|------------------------|-------------------------------------|
| _links | _links | |
| name | string | Application name |
| uuid | string | The application UUID. Valid in URL. |

application_lun_object

LUN object

| Name | Type | Description |
|--------------------|---------|-------------------|
| creation_timestamp | string | LUN creation time |
| path | string | LUN path |
| size | integer | LUN size |
| uuid | string | LUN UUID |

application_namespace_object

Namespace object

| Name | Type | Description |
|--------------------|------------------------|-------------------------|
| _links | _links | |
| creation_timestamp | string | Namespace creation time |
| name | string | Namespace name |

| Name | Type | Description |
|------|---------|----------------|
| size | integer | Namespace size |
| uuid | string | Namespace UUID |

application_volume_object

Volume object

| Name | Type | Description |
|--------------------|---------|---------------|
| creation_timestamp | string | Creation time |
| name | string | Name |
| size | integer | Size |
| uuid | string | UUID |

application_backing_storage

| Name | Type | Description |
|------------|---|-------------|
| luns | array[application_lun_object] | |
| namespaces | array[application_namespace_object] | |
| volumes | array[application_volume_object] | |

backing_storage

| Name | Type | Description |
|------|--------|----------------------|
| type | string | Backing storage type |
| uuid | string | Backing storage UUID |

permissions

| Name | Type | Description |
|---------------|--------|-------------------------------------|
| access | string | Access granted to the user or group |
| user_or_group | string | User or group |

server

| Name | Type | Description |
|------|--------|-------------|
| name | string | Server name |

share

| Name | Type | Description |
|------|--------|-------------|
| name | string | Share name |

application_cifs_properties

| Name | Type | Description |
|-----------------|--------------------------------------|---------------|
| backing_storage | backing_storage | |
| ips | array[string] | |
| path | string | Junction path |
| permissions | array[permissions] | |
| server | server | |
| share | share | |

export_policy

| Name | Type | Description |
|------|--------|--------------------|
| name | string | Export policy name |

permissions

| Name | Type | Description |
|--------|--------|----------------------------|
| access | string | Access granted to the host |
| host | string | Host granted access |

application_nfs_properties

| Name | Type | Description |
|-----------------|---------------------------------|---------------|
| backing_storage | backing_storage | |
| export_policy | export_policy | |
| ips | array[string] | |
| path | string | Junction path |

| Name | Type | Description |
|-------------|--------------------------------------|-------------|
| permissions | array[permissions] | |

self

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | self | |

hosts

| Name | Type | Description |
|--------|------------------------|-------------|
| _links | _links | |
| nqn | string | Host |

subsystem

| Name | Type | Description |
|--------|--------------------------------|----------------|
| _links | _links | |
| hosts | array[hosts] | |
| name | string | Subsystem name |
| uuid | string | Subsystem UUID |

subsystem_map

Subsystem map object

| Name | Type | Description |
|-----------|---------------------------|------------------------|
| anagrpId | string | Subsystem ANA group ID |
| nsid | string | Subsystem namespace ID |
| subsystem | subsystem | |

application_nvme_access

Application NVME access

| Name | Type | Description |
|-----------------|---------------------------------|----------------------|
| backing_storage | backing_storage | |
| is_clone | boolean | Clone |
| subsystem_map | subsystem_map | Subsystem map object |

local

| Name | Type | Description |
|-------------|--------|---|
| description | string | A detailed description of the local RPO. This includes details on the Snapshot copy schedule. |
| name | string | The local RPO of the component. This indicates how often component Snapshot copies are automatically created. |

remote

| Name | Type | Description |
|-------------|--------|--|
| description | string | A detailed description of the remote RPO. |
| name | string | The remote RPO of the component. A remote RPO of zero indicates that the component is synchronously replicated to another cluster. |

rpo

| Name | Type | Description |
|--------|------------------------|-------------|
| local | local | |
| remote | remote | |

application_protection_groups

| Name | Type | Description |
|------|---------------------|-----------------------|
| name | string | Protection group name |
| rpo | rpo | |

| Name | Type | Description |
|------|--------|-----------------------|
| uuid | string | Protection group UUID |

fc_interface_reference

An FC interface.

| Name | Type | Description |
|--------|------------------------|--|
| _links | _links | |
| name | string | The name of the FC interface. |
| uuid | string | The unique identifier of the FC interface. |
| wwpn | string | The WWPN of the FC interface. |

application_san_access_fcp_endpoint

A Fibre Channel Protocol (FCP) access endpoint for the LUN.

| Name | Type | Description |
|-----------|--|------------------|
| interface | fc_interface_reference | An FC interface. |

igroup

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |
| name | string | Igroup name |
| uuid | string | Igroup UUID |

ip

IP information

| Name | Type | Description |
|---------|--------|----------------------|
| address | string | IPv4 or IPv6 address |

interface

| Name | Type | Description |
|--------|------------------------|-------------|
| _links | _links | |

| Name | Type | Description |
|------|--------------------|---|
| ip | ip | IP information |
| name | string | The name of the interface. If only the name is provided, the SVM scope must be provided by the object this object is embedded in. |
| uuid | string | The UUID that uniquely identifies the interface. |

application_san_access_iscsi_endpoint

An iSCSI access endpoint for the LUN.

| Name | Type | Description |
|-----------|---------------------------|---|
| _links | _links | |
| interface | interface | |
| port | integer | The TCP port number of the iSCSI access endpoint. |

application_lun_mapping_object

| Name | Type | Description |
|--------|--|---|
| fcp | array[application_san_access_fcp_endpoint] | All possible Fibre Channel Protocol (FCP) access endpoints for the LUN. |
| igroup | igroup | |
| iscsi | array[application_san_access_iscsi_endpoint] | All possible iSCSI access endpoints for the LUN. |
| lun_id | integer | LUN ID |

application_san_access

| Name | Type | Description |
|-----------------|---|-------------|
| backing_storage | backing_storage | |
| is_clone | boolean | Clone |
| lun_mappings | array[application_lun_mapping_object] | |

| Name | Type | Description |
|---------------|--------|-------------------|
| serial_number | string | LUN serial number |

storage_service

| Name | Type | Description |
|------|--------|----------------------|
| name | string | Storage service name |
| uuid | string | Storage service UUID |

svm

| Name | Type | Description |
|------|--------|-------------|
| name | string | SVM name |
| uuid | string | SVM UUID |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Manage application Snapshot copies

Application applications application.uuid snapshots endpoint overview

Overview

Applications support Snapshot copies across all member storage elements. These Snapshot copies can be created and restored at any time or as scheduled. Most applications have hourly Snapshot copies enabled by default, unless the RPO setting is overridden during the creation of the application. An application Snapshot copy can be flagged as either *application consistent*, or *crash consistent*. From an ONTAP perspective, there is no difference between these two consistency types. These types are available for record keeping so that Snapshot copies taken after the application is quiesced (application consistent) can be tracked separately from those Snapshot copies taken without first quiescing the application (crash consistent). By default, all application Snapshot copies are flagged to be *crash consistent*, and Snapshot copies taken at a scheduled time are also considered *crash consistent*.

The functionality provided by these APIs is not integrated with the host application. Snapshot copies have limited value without host coordination, so the use of the SnapCenter Backup Management suite is recommended to ensure correct interaction between host applications and ONTAP.

Retrieve an application Snapshot copy

GET /application/applications/{application.uuid}/snapshots

Introduced In: 9.6

Retrieves Snapshot copies of an application.

Query examples

The following query returns all Snapshot copies from May 4, 2017 EST. For readability, the colon (:) is left in this example. For an actual call, they should be escaped as %3A.

```
GET
/application/applications/{application.uuid}/snapshots?create_time=2017-
05-04T00:00:00-05:00..2017-05-04T23:59:59-05:00
```

The following query returns all Snapshot copies that have been flagged as *application consistent*.

```
GET
/application/applications/{application.uuid}/snapshots?consistency_type=ap
plication
```

Learn more

- [DOC /application/applications/{application.uuid}/snapshots](#)
- [DOC /application](#)

Parameters

| Name | Type | In | Required | Description |
|------------------|---------------|-------|----------|--|
| application.uuid | string | path | True | Application UUID |
| uuid | string | query | False | Filter by UUID |
| name | string | query | False | Filter by name |
| consistency_type | string | query | False | Filter by consistency_type |
| components.name | string | query | False | Filter by components.name |
| components.uuid | string | query | False | Filter by components.uuid |
| comment | string | query | False | Filter by comment |
| create_time | string | query | False | Filter by create_time |
| is_partial | string | query | False | Filter by is_partial |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |

| Name | Type | In | Required | Description |
|----------------|---------------|-------|----------|---|
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned. • Default value: 1 |
| order_by | array[string] | query | False | Order results by specified fields and optional [asc |

Response

Status: 200, Ok

| Name | Type | Description |
|-------------|---|-------------------|
| _links | _links | |
| num_records | integer | Number of records |
| records | array[application_snapshot] | |

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "application": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "string",
        "uuid": "string"
      },
      "comment": "string",
      "components": [
        {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "string",
          "uuid": "string"
        }
      ],
      "consistency_type": "string",
      "create_time": "string",
      "name": "string",
      "svm": {
        "name": "string",
        "uuid": "string"
      }
    }
  ]
}
```

```
    },  
    "uuid": "string"  
  }  
]  
}
```

Error

Status: Default, Error

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

Example error

```
{  
  "error": {  
    "arguments": [  
      {  
        "code": "string",  
        "message": "string"  
      }  
    ],  
    "code": "4",  
    "message": "entry doesn't exist",  
    "target": "uuid"  
  }  
}
```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| next | href | |
| self | href | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

application

| Name | Type | Description |
|--------|------------------------|-------------------------------------|
| _links | _links | |
| name | string | Application name |
| uuid | string | The application UUID. Valid in URL. |

components

| Name | Type | Description |
|--------|------------------------|----------------|
| _links | _links | |
| name | string | Component name |
| uuid | string | Component UUID |

svm

| Name | Type | Description |
|------|--------|-------------|
| name | string | SVM name |
| uuid | string | SVM UUID |

application_snapshot

| Name | Type | Description |
|------------------|-------------------------------------|---|
| _links | _links | |
| application | application | |
| comment | string | Comment. Valid in POST. |
| components | array[components] | |
| consistency_type | string | Consistency type. This is for categorization purposes only. A Snapshot copy should not be set to 'application consistent' unless the host application is quiesced for the Snapshot copy. Valid in POST. |
| create_time | string | Creation time |
| is_partial | boolean | A partial Snapshot copy means that not all volumes in an application component were included in the Snapshot copy. |
| name | string | The Snapshot copy name. Valid in POST. |
| svm | svm | |
| uuid | string | The Snapshot copy UUID. Valid in URL. |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|-------------------|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |

| Name | Type | Description |
|--------|--------|---|
| target | string | The target parameter that caused the error. |

Create an application Snapshot copy

POST /application/applications/{application.uuid}/snapshots

Introduced In: 9.6

Creates a Snapshot copy of the application.

Required properties

- name

Recommended optional properties

- `consistency_type` - Track whether this snapshot is *application* or *crash* consistent.

Learn more

- [DOC /application/applications/{application.uuid}/snapshots](#)
- [DOC /application](#)

Parameters

| Name | Type | In | Required | Description |
|------------------|--------|------|----------|------------------|
| application.uuid | string | path | True | Application UUID |

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|--|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |
| return_records | boolean | query | False | <p>The default is false. If set to true, the records are returned.</p> <ul style="list-style-type: none"> • Default value: |

Request Body

| Name | Type | Description |
|-------------|-----------------------------|-------------------------|
| _links | _links | |
| application | application | |
| comment | string | Comment. Valid in POST. |

| Name | Type | Description |
|------------------|-------------------------------------|---|
| components | array[components] | |
| consistency_type | string | Consistency type. This is for categorization purposes only. A Snapshot copy should not be set to 'application consistent' unless the host application is quiesced for the Snapshot copy. Valid in POST. |
| create_time | string | Creation time |
| is_partial | boolean | A partial Snapshot copy means that not all volumes in an application component were included in the Snapshot copy. |
| name | string | The Snapshot copy name. Valid in POST. |
| svm | svm | |
| uuid | string | The Snapshot copy UUID. Valid in URL. |

Example request

```
{
  "application": {
    "name": "string",
    "uuid": "string"
  },
  "comment": "string",
  "components": [
    {
      "name": "string",
      "uuid": "string"
    }
  ],
  "consistency_type": "string",
  "create_time": "string",
  "name": "string",
  "svm": {
    "name": "string",
    "uuid": "string"
  },
  "uuid": "string"
}
```

Response

Status: 202, Accepted

| Name | Type | Description |
|------|--------------------------|-------------|
| job | job_link | |

Example response

```
{
  "job": {
    "uuid": "string"
  }
}
```

Headers

| Name | Description | Type |
|----------|---|--------|
| Location | Useful for tracking the resource location | string |

Error

```
Status: Default, Error
```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

application

| Name | Type | Description |
|--------|------------------------|-------------------------------------|
| _links | _links | |
| name | string | Application name |
| uuid | string | The application UUID. Valid in URL. |

components

| Name | Type | Description |
|--------|------------------------|----------------|
| _links | _links | |
| name | string | Component name |
| uuid | string | Component UUID |

svm

| Name | Type | Description |
|------|--------|-------------|
| name | string | SVM name |
| uuid | string | SVM UUID |

application_snapshot

| Name | Type | Description |
|-------------|-------------------------------------|-------------------------|
| _links | _links | |
| application | application | |
| comment | string | Comment. Valid in POST. |
| components | array[components] | |

| Name | Type | Description |
|------------------|---------------------|---|
| consistency_type | string | Consistency type. This is for categorization purposes only. A Snapshot copy should not be set to 'application consistent' unless the host application is quiesced for the Snapshot copy. Valid in POST. |
| create_time | string | Creation time |
| is_partial | boolean | A partial Snapshot copy means that not all volumes in an application component were included in the Snapshot copy. |
| name | string | The Snapshot copy name. Valid in POST. |
| svm | svm | |
| uuid | string | The Snapshot copy UUID. Valid in URL. |

job_link

| Name | Type | Description |
|------|--------|---|
| uuid | string | The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation. |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|-------------------|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |

| Name | Type | Description |
|---------|--------|---|
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Delete an application Snapshot copy

DELETE /application/applications/{application.uuid}/snapshots/{uuid}

Introduced In: 9.6

Delete a Snapshot copy of an application

Query examples

Individual Snapshot copies can be destroyed with no query parameters, or a range of Snapshot copies can be destroyed at one time using a query.

The following query deletes all application Snapshot copies created before May 4, 2017

```
DELETE
/application/applications/{application.uuid}/snapshots?create_time=<2017-
05-04T00:00:00-05:00
```

Parameters

| Name | Type | In | Required | Description |
|------------------|--------|------|----------|--------------------|
| application.uuid | string | path | True | Application UUID |
| uuid | string | path | True | Snapshot copy UUID |

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|--|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |

Response

Status: 202, Accepted

| Name | Type | Description |
|------|--------------------------|-------------|
| job | job_link | |

Example response

```
{
  "job": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "uuid": "string"
  }
}
```

Error

Status: Default, Error

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

job_link

| Name | Type | Description |
|--------|------------------------|---|
| _links | _links | |
| uuid | string | The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation. |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Retrieve an application Snapshot copy

GET /application/applications/{application.uuid}/snapshots/{uuid}

Introduced In: 9.6

Retrieve a Snapshot copy of an application component.

This endpoint is only supported for Maxdata template applications.

Component Snapshot copies are essentially more granular application Snapshot copies. There is no difference beyond the scope of the operation.

Learn more

- [DOC /application/applications/{application.uuid}/snapshots](#)
- [GET /application/applications/{uuid}/snapshots](#)
- [DOC /application](#)

Parameters

| Name | Type | In | Required | Description |
|------------------|---------------|-------|----------|-------------------------------|
| application.uuid | string | path | True | Application UUID |
| uuid | string | path | True | Snapshot copy UUID |
| fields | array[string] | query | False | Specify the fields to return. |

Response

Status: 200, Ok

| Name | Type | Description |
|------------------|-------------------------------------|---|
| _links | _links | |
| application | application | |
| comment | string | Comment. Valid in POST. |
| components | array[components] | |
| consistency_type | string | Consistency type. This is for categorization purposes only. A Snapshot copy should not be set to 'application consistent' unless the host application is quiesced for the Snapshot copy. Valid in POST. |
| create_time | string | Creation time |

| Name | Type | Description |
|------------|---------------------|--|
| is_partial | boolean | A partial Snapshot copy means that not all volumes in an application component were included in the Snapshot copy. |
| name | string | The Snapshot copy name. Valid in POST. |
| svm | svm | |
| uuid | string | The Snapshot copy UUID. Valid in URL. |

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "application": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "string",
    "uuid": "string"
  },
  "comment": "string",
  "components": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "string",
      "uuid": "string"
    }
  ],
  "consistency_type": "string",
  "create_time": "string",
  "name": "string",
  "svm": {
    "name": "string",
    "uuid": "string"
  },
  "uuid": "string"
}
```

Error

Status: Default, Error

| Name | Type | Description |
|-------|-----------------------|-------------|
| error | error | |

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

application

| Name | Type | Description |
|--------|------------------------|-------------------------------------|
| _links | _links | |
| name | string | Application name |
| uuid | string | The application UUID. Valid in URL. |

components

| Name | Type | Description |
|--------|------------------------|----------------|
| _links | _links | |
| name | string | Component name |
| uuid | string | Component UUID |

svm

| Name | Type | Description |
|------|--------|-------------|
| name | string | SVM name |
| uuid | string | SVM UUID |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Restore an application Snapshot copy

POST /application/applications/{application.uuid}/snapshots/{uuid}/restore

Introduced In: 9.6

Restore an application snapshot

Restoring an application Snapshot copy reverts all storage elements in the Snapshot copy to the state in which the Snapshot copy was in when the Snapshot copy was taken. This restoration does not apply to access settings that might have changed since the Snapshot copy was created.

Learn more

- [DOC /application](#)
- [Asynchronous operations](#)

Parameters

| Name | Type | In | Required | Description |
|------------------|--------|------|----------|--------------------|
| application.uuid | string | path | True | Application UUID |
| uuid | string | path | True | Snapshot copy UUID |

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|--|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |
| return_records | boolean | query | False | <p>The default is false. If set to true, the records are returned.</p> <ul style="list-style-type: none"> • Default value: |

Response

Status: 202, Accepted

| Name | Type | Description |
|------|--------------------------|-------------|
| job | job_link | |

Example response

```
{
  "job": {
    "uuid": "string"
  }
}
```

Error

Status: Default, Error

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

job_link

| Name | Type | Description |
|------|--------|---|
| uuid | string | The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation. |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Delete an application and all associated data

DELETE /application/applications/{uuid}

Introduced In: 9.6

Deletes an application and all associated data.

Warning - this deletes it all, including your data

This deletes everything created with the application, including any volumes, LUNs, NFS export policies, CIFS shares, and initiator groups. Initiator groups are only destroyed if they were created as part of an application and are no longer in use by other applications.

Learn more

- [DOC /application](#)
- [Asynchronous operations](#)

Parameters

| Name | Type | In | Required | Description |
|-------------|---------|-------|----------|---|
| uuid | string | path | True | Application UUID |
| delete_data | boolean | query | False | <p>By default, deleting an application deletes all of the application's data. By setting this parameter to "false", the application's data is preserved, but can no longer be managed through application APIs.</p> <ul style="list-style-type: none">• Introduced in: 9.8• Default value: 1 |

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|--|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |

Response

Status: 202, Accepted

| Name | Type | Description |
|------|--------------------------|-------------|
| job | job_link | |

Example response

```
{
  "job": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "uuid": "string"
  }
}
```

Error

Status: Default, Error

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

job_link

| Name | Type | Description |
|--------|------------------------|---|
| _links | _links | |
| uuid | string | The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation. |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Retrieve an application

GET /application/applications/{uuid}

Introduced In: 9.6

Retrieves an application

Expensive properties

There is an added computational cost to retrieving values for these properties. They are not included by default in GET results and must be explicitly requested using the `fields` query parameter. See [Requesting specific fields](#) to learn more.

- `<template>` the property corresponding to the `template.name` of the application

Property overview

An application includes three main groups of properties.

- Generic properties - such as the `name`, `template.name`, and `state` of the application. These properties are all inexpensive to retrieve and their meaning is consistent for every type of application.
- `statistics.*` - application statistics report live usage data about the application and its components. Various space and IOPS details are included at both the application level and at a per component level. The application model includes a detailed description of each property. These properties are slightly more expensive than the generic properties because live data must be collected from every storage element in the application.
- `<template>` - the property corresponding to the value of the `template.name` returns the contents of the application in the same layout that was used to provision the application. This information is very expensive to retrieve because it requires collecting information about all the storage and access settings for every element of the application. There are a few notable limitations to what can be returned in the `<template>` section:
 - The `new_igroups` array of many SAN templates is not returned by GET. This property allows igroup creation in the same call that creates an application, but is not a property of the application itself. The `new_igroups` array is allowed during PATCH operations, but that does not modify the `new_igroups` of the application. It is another way to allow igroup creation while updating the application to use a different igroup.
 - The `vdi_on_san` and `vdi_on_nas` `desktops.count` property is rounded to the nearest 1000 during creation, and is reported with that rounding applied.
 - The `mongo_db_on_san` `dataset.element_count` property is rounded up to an even number, and is reported with that rounding applied.
 - The `sql_on_san` and `sql_on_smb` `server_cores_count` property is limited to 8 for GET operations. Higher values are accepted by POST, but the impact of the `server_cores_count` property on the application layout currently reaches its limit at 8.

Learn more

- [DOC /application](#)

Parameters

| Name | Type | In | Required | Description |
|--------|---------------|-------|----------|-------------------------------|
| uuid | string | path | True | Application UUID |
| fields | array[string] | query | False | Specify the fields to return. |

Response

Status: 200, Ok

| Name | Type | Description |
|--------------------|-----------------------------------|---|
| _links | _links | |
| creation_timestamp | string | The time when the application was created. |
| generation | integer | The generation number of the application. This indicates which features are supported on the application. For example, generation 1 applications do not support Snapshot copies. Support for Snapshot copies was added at generation 2. Any future generation numbers and their feature set will be documented. |
| mongo_db_on_san | mongo_db_on_san | MongoDB using SAN. |
| name | string | Application Name. This field is user supplied when the application is created. |
| nas | nas | A generic NAS application. |
| nvme | zapp_nvme | An NVME application. |
| oracle_on_nfs | oracle_on_nfs | Oracle using NFS. |
| oracle_on_san | oracle_on_san | Oracle using SAN. |
| oracle_rac_on_nfs | oracle_rac_on_nfs | Oracle RAC using NFS. |
| oracle_rac_on_san | oracle_rac_on_san | Oracle RAC using SAN. |

| Name | Type | Description |
|------------------------|--------------------------------|--|
| protection_granularity | string | Protection granularity determines the scope of Snapshot copy operations for the application. Possible values are "application" and "component". If the value is "application", Snapshot copy operations are performed on the entire application. If the value is "component", Snapshot copy operations are performed separately on the application components. |
| rpo | rpo | |
| s3_bucket | zapp_s3_bucket | A generic S3 bucket application. |
| san | san | A generic SAN application. |
| smart_container | boolean | Identifies if this is a smart container or not. |
| sql_on_san | sql_on_san | Microsoft SQL using SAN. |
| sql_on_smb | sql_on_smb | Microsoft SQL using SMB. |
| state | string | The state of the application. For full functionality, applications must be in the online state. Other states indicate that the application is in a transient state and not all operations are supported. |
| statistics | statistics | |
| svm | svm | |
| template | template | |
| uuid | string | Application UUID. This field is generated when the application is created. |
| vdi_on_nas | vdi_on_nas | A VDI application using NAS. |
| vdi_on_san | vdi_on_san | A VDI application using SAN. |
| vsi_on_nas | vsi_on_nas | A VSI application using NAS. |

| Name | Type | Description |
|------------|----------------------------|------------------------------|
| vsi_on_san | vsi_on_san | A VSI application using SAN. |

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    },
    "snapshots": {
      "href": "/api/resourcelink"
    }
  },
  "creation_timestamp": "string",
  "delete_data": null,
  "generation": 0,
  "name": "string",
  "nas": {
    "application_components": [
      {}
    ],
    "cifs_access": [
      {
        "access": "string",
        "user_or_group": "string"
      }
    ],
    "cifs_share_name": "string",
    "exclude_aggregates": [
      {
        "name": "string",
        "uuid": "string"
      }
    ],
    "nfs_access": [
      {
        "access": "string",
        "host": "string"
      }
    ],
    "protection_type": {
      "local_policy": "string",
      "local_rpo": "string",
      "remote_rpo": "string"
    }
  },
  "nvme": {
    "components": [
```

```

    {
      "name": "string",
      "os_type": "string",
      "performance": {
        "storage_service": {
          "name": "string"
        }
      },
      "qos": {
        "policy": {
          "name": "string",
          "uuid": "string"
        }
      },
      "subsystem": {
        "hosts": [
          {
            "nqn": "string"
          }
        ],
        "name": "string",
        "os_type": "string",
        "uuid": "string"
      },
      "tiering": {
        "policy": "string"
      }
    }
  ],
  "os_type": "string",
  "rpo": {
    "local": {
      "name": "string",
      "policy": "string"
    }
  }
},
"protection_granularity": "string",
"rpo": {
  "components": [
    {
      "name": "string",
      "rpo": {
        "local": {
          "description": "string",
          "name": "string"
        }
      }
    }
  ]
}

```

```

    },
    "remote": {
      "description": "string",
      "name": "string"
    }
  },
  "uuid": "string"
}
],
"local": {
  "description": "string",
  "name": "string"
},
"remote": {
  "description": "string",
  "name": "string"
}
},
"s3_bucket": {
  "application_components": [
    {
      "access_policies": [
        {
          "actions": [
            "string"
          ],
          "conditions": [
            {
              "delimiters": [
                "string"
              ],
              "max_keys": [
                "integer"
              ],
              "operator": "string",
              "prefixes": [
                "string"
              ],
              "source_ips": [
                "string"
              ],
              "usernames": [
                "string"
              ]
            }
          ]
        }
      ]
    }
  ],

```

```

        "effect": "string",
        "principals": [
            "string"
        ],
        "resources": [
            "string"
        ],
        "sid": "string"
    }
],
"bucket_endpoint_type": "string",
"comment": "string",
"exclude_aggregates": [
    {
        "name": "string",
        "uuid": "string"
    }
],
"name": "string",
"nas_path": "string",
"qos": {
    "policy": {
        "name": "string",
        "uuid": "string"
    }
},
"storage_service": {
    "name": "string"
},
"uuid": "string",
"versioning_state": "string"
}
]
},
"san": {
    "application_components": [
        {
            "igroup_name": "string",
            "name": "string",
            "os_type": "string",
            "qos": {
                "policy": {
                    "name": "string",
                    "uuid": "string"
                }
            }
        }
    ],

```

```

    "storage_service": {
      "name": "string"
    },
    "tiering": {
      "policy": "string"
    }
  }
],
"exclude_aggregates": [
  {
    "name": "string",
    "uuid": "string"
  }
],
"os_type": "string",
"protection_type": {
  "local_policy": "string",
  "local_rpo": "string",
  "remote_rpo": "string"
}
},
"state": "string",
"statistics": {
  "components": [
    {
      "iops": {
        "per_tb": 0,
        "total": 0
      },
      "latency": {
        "average": 0,
        "raw": 0
      },
      "name": "string",
      "snapshot": {
        "reserve": 0,
        "used": 0
      },
      "space": {
        "available": 0,
        "logical_used": 0,
        "provisioned": 0,
        "reserved_unused": 0,
        "savings": 0,
        "used": 0,
        "used_excluding_reserves": 0,

```

```

        "used_percent": 0
    },
    "storage_service": {
        "name": "string",
        "uuid": "string"
    },
    "uuid": "string"
}
],
"iops": {
    "per_tb": 0,
    "total": 0
},
"latency": {
    "average": 0,
    "raw": 0
},
"snapshot": {
    "reserve": 0,
    "used": 0
},
"space": {
    "available": 0,
    "logical_used": 0,
    "provisioned": 0,
    "reserved_unused": 0,
    "savings": 0,
    "used": 0,
    "used_excluding_reserves": 0,
    "used_percent": 0
}
},
"svm": {
    "name": "string",
    "uuid": "string"
},
"template": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    }
},
"name": "string",
"protocol": "string",
"version": 0
},

```



```
"uuid": "string"
}
```

Error

Status: Default, Error

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|-----------|----------------------|-------------|
| self | href | |
| snapshots | href | |

storage_service

| Name | Type | Description |
|------|--------|--------------------------------------|
| name | string | The storage service of the database. |

dataset

| Name | Type | Description |
|--------------------|---------------------------------|--|
| element_count | integer | The number of storage elements (LUNs for SAN) of the database to maintain. Must be an even number between 2 and 16. Odd numbers will be rounded up to the next even number within range. |
| replication_factor | integer | The number of data bearing members of the replicaset, including 1 primary and at least 1 secondary. |
| size | integer | The size of the database. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

igroups

initiator_objects

mongo_db_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

protection_type

| Name | Type | Description |
|------------|--------|------------------------------------|
| local_rpo | string | The local RPO of the application. |
| remote_rpo | string | The remote RPO of the application. |

secondary_igroups

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the initiator group for each secondary. |

mongo_db_on_san

MongoDB using SAN.

| Name | Type | Description |
|---------------------|--|--|
| dataset | dataset | |
| os_type | string | The name of the host OS running the application. |
| primary_igroup_name | string | The initiator group for the primary. |
| protection_type | protection_type | |
| secondary_igroups | array[secondary_igroups] | |

export_policy

| Name | Type | Description |
|------|---------|--|
| id | integer | The ID of an existing NFS export policy. |
| name | string | The name of an existing NFS export policy. |

component

| Name | Type | Description |
|------|--------|-------------------------------|
| name | string | Name of the source component. |

svm

| Name | Type | Description |
|------|--------|-------------------------|
| name | string | Name of the source SVM. |

origin

| Name | Type | Description |
|-----------|---------------------------|-------------|
| component | component | |
| svm | svm | |

flexcache

| Name | Type | Description |
|----------|------------------------|--|
| dr_cache | boolean | Dr-cache is a FlexCache volume create time option that has the same flexgroup-msid as that of the origin of a FlexCache volume. By default, dr-cache is disabled. The flexgroup-msid of the FlexCache volume does not need to be same as that of the origin of a FlexCache volume. |
| origin | origin | |

policy

| Name | Type | Description |
|------|--------|---|
| name | string | The name of an existing QoS policy. |
| uuid | string | The UUID of an existing QoS policy. Usage: <UUID> |

qos

| Name | Type | Description |
|--------|------------------------|-------------|
| policy | policy | |

retention

| Name | Type | Description |
|---------|--------|---|
| default | string | Specifies the default retention period that is applied to files while committing them to the WORM state without an associated retention period. The retention value represents a duration and must be specified in the ISO-8601 duration format. The retention period can be in years, months, days, hours, and minutes. A duration specified for years, months, and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The retention string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the duration field also accepts the string "infinite" to set an infinite retention period and the string "unspecified" to set an unspecified retention period. |

| Name | Type | Description |
|---------|--------|---|
| maximum | string | Specifies the maximum allowed retention period for files committed to the WORM state on the volume. The retention value represents a duration and must be specified in the ISO-8601 duration format. The retention period can be in years, months, days, hours, and minutes. A duration specified for years, months, and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The retention string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the duration field also accepts the string "infinite" to set an infinite retention period. |

| Name | Type | Description |
|---------|--------|---|
| minimum | string | Specifies the minimum allowed retention period for files committed to the WORM state on the volume. The retention value represents a duration and must be specified in the ISO-8601 duration format. The retention period can be in years, months, days, hours, and minutes. A duration specified for years, month,s and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The retention string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the duration field also accepts the string "infinite" to set an infinite retention period. |

snaplock

| Name | Type | Description |
|---------------------|---------|---|
| append_mode_enabled | boolean | Specifies if the volume append mode is enabled or disabled. When it is enabled, all the files created with write permissions on the volume are, by default, WORM appendable files. The user can append the data to a WORM appendable file but cannot modify the existing contents of the file nor delete the file until it expires. |

| Name | Type | Description |
|-------------------|---------------------------|--|
| autocommit_period | string | Specifies the autocommit period for SnapLock volume. All files which are not modified for a period greater than the autocommit period of the volume are committed to the WORM state. The autocommit period value represents a duration and must be specified in the ISO-8601 duration format. The autocommit period can be in years, months, days, hours, and minutes. A period specified for years, months, and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The period string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the autocommit field also accepts the string "none". |
| retention | retention | |
| snaplock_type | string | The SnapLock type of the smart container. |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the application component. |

object_stores

nas_application_components_tiering

application-components.tiering

| Name | Type | Description |
|--------|--------|--|
| policy | string | The storage tiering type of the application component. |

application_components

| Name | Type | Description |
|-----------------|--|---|
| export_policy | export_policy | |
| flexcache | flexcache | |
| name | string | The name of the application component. |
| qos | qos | |
| scale_out | boolean | Denotes a Flexgroup. |
| share_count | integer | The number of shares in the application component. |
| snaplock | snaplock | |
| storage_service | storage_service | |
| tiering | nas_application_components_tiering | application-components.tiering |
| total_size | integer | The total size of the application component, split across the member shares. Usage: {<integer>[KB MB GB TB PB]} |

app_cifs_access

The list of CIFS access controls. You must provide either 'user_or_group' or 'access' to enable CIFS access.

| Name | Type | Description |
|---------------|--------|---|
| access | string | The CIFS access granted to the user or group. |
| user_or_group | string | The name of the CIFS user or group that will be granted access. |

exclude_aggregates

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the aggregate to exclude. Usage: <aggregate name> |
| uuid | string | The ID of the aggregate to exclude. Usage: <UUID> |

app_nfs_access

The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access.

| Name | Type | Description |
|--------|--------|--|
| access | string | The NFS access granted. |
| host | string | The name of the NFS entity granted access. |

protection_type

| Name | Type | Description |
|--------------|--------|---|
| local_policy | string | The Snapshot copy policy to apply to each volume in the smart container. This property is only supported for smart containers. Usage: <snapshot policy> |
| local_rpo | string | The local RPO of the application. |
| remote_rpo | string | The remote RPO of the application. |

nas

A generic NAS application.

| Name | Type | Description |
|------------------------|---|--|
| application_components | array[application_components] | |
| cifs_access | array[app_cifs_access] | The list of CIFS access controls. You must provide either 'user_or_group' or 'access' to enable CIFS access. |

| Name | Type | Description |
|--------------------|---|--|
| cifs_share_name | string | The name of the CIFS share. Usage: <Share> |
| exclude_aggregates | array[exclude_aggregates] | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| protection_type | protection_type | |

performance

| Name | Type | Description |
|-----------------|---------------------------------|-------------|
| storage_service | storage_service | |

hosts

| Name | Type | Description |
|------|--------|---------------|
| nqn | string | The host NQN. |

zapp_nvme_components_subsystem

components.subsystem

| Name | Type | Description |
|---------|--------------------------------|--|
| hosts | array[hosts] | |
| name | string | The name of the subsystem accessing the component. If neither the name nor the UUID is provided, the name defaults to <application-name>_<component-name>, whether that subsystem already exists or not. |
| os_type | string | The name of the host OS accessing the component. The default value is the host OS that is running the application. |
| uuid | string | The UUID of an existing subsystem to be granted access to the component. |

zapp_nvme_components_tiering

application-components.tiering

| Name | Type | Description |
|--------|--------|--|
| policy | string | The storage tiering type of the application component. |

components

| Name | Type | Description |
|-----------------|--|--|
| name | string | The name of the application component. |
| namespace_count | integer | The number of namespaces in the component. |
| os_type | string | The name of the host OS running the application. |
| performance | performance | |
| qos | qos | |
| subsystem | zapp_nvme_components_subsystem | components.subsystem |
| tiering | zapp_nvme_components_tiering | application-components.tiering |
| total_size | integer | The total size of the component, spread across member namespaces. Usage: {<integer>[KB MB GB TB PB]} |

local

| Name | Type | Description |
|--------|--------|---|
| name | string | The local RPO of the application. |
| policy | string | The Snapshot copy policy to apply to each volume in the smart container. This property is only supported for smart containers. Usage: <snapshot policy> |

rpo

| Name | Type | Description |
|-------|-----------------------|-------------|
| local | local | |

zapp_nvme

An NVME application.

| Name | Type | Description |
|------------|-------------------------------------|--|
| components | array[components] | |
| os_type | string | The name of the host OS running the application. |
| rpo | rpo | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the archive log. |

archive_log

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the archive log. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

db

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the database. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|--|
| name | string | The storage service of the ORACLE_HOME storage volume. |

ora_home

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the ORACLE_HOME storage volume. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|--|
| name | string | The storage service of the redo log group. |

redo_log

| Name | Type | Description |
|-----------------|---------------------------------|--|
| mirrored | boolean | Specifies whether the redo log group should be mirrored. |
| size | integer | The size of the redo log group. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

oracle_on_nfs

Oracle using NFS.

| Name | Type | Description |
|-----------------|---|---|
| archive_log | archive_log | |
| db | db | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| ora_home | ora_home | |
| protection_type | protection_type | |
| redo_log | redo_log | |

oracle_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

oracle_on_san

Oracle using SAN.

| Name | Type | Description |
|-----------------|---------------------------------|--|
| archive_log | archive_log | |
| db | db | |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| ora_home | ora_home | |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |
| redo_log | redo_log | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the Oracle grid binary storage volume. |

grid_binary

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the Oracle grid binary storage volume. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the Oracle CRS volume. |

oracle_crs

| Name | Type | Description |
|-----------------|---------------------------------|--|
| copies | integer | The number of CRS volumes. |
| size | integer | The size of the Oracle CRS/voting storage volume. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

oracle_rac_on_nfs

Oracle RAC using NFS.

| Name | Type | Description |
|-----------------|---|---|
| archive_log | archive_log | |
| db | db | |
| grid_binary | grid_binary | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| ora_home | ora_home | |
| oracle_crs | oracle_crs | |
| protection_type | protection_type | |
| redo_log | redo_log | |

db_sids

| Name | Type | Description |
|-------------|--------|--|
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |

oracle_rac_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

oracle_rac_on_san

Oracle RAC using SAN.

| Name | Type | Description |
|-----------------|----------------------------------|--|
| archive_log | archive_log | |
| db | db | |
| db_sids | array[db_sids] | |
| grid_binary | grid_binary | |
| ora_home | ora_home | |
| oracle_crs | oracle_crs | |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |
| redo_log | redo_log | |

local

| Name | Type | Description |
|-------------|--------|--|
| description | string | A detailed description of the local RPO. This will include details about the Snapshot copy schedule. |

| Name | Type | Description |
|------|--------|---|
| name | string | The local RPO of the component. This indicates how often component Snapshot copies are automatically created. |

remote

| Name | Type | Description |
|-------------|--------|--|
| description | string | A detailed description of the remote RPO. |
| name | string | The remote RPO of the component. A remote RPO of zero indicates that the component is synchronously replicated to another cluster. |

rpo

| Name | Type | Description |
|--------|------------------------|-------------|
| local | local | |
| remote | remote | |

components

| Name | Type | Description |
|------|---------------------|-----------------|
| name | string | Component Name. |
| rpo | rpo | |
| uuid | string | Component UUID. |

local

| Name | Type | Description |
|-------------|--------|--|
| description | string | A detailed description of the local RPO. This will include details about the Snapshot copy schedule. |

| Name | Type | Description |
|------|--------|---|
| name | string | The local RPO of the application. This indicates how often application Snapshot copies are automatically created. |

remote

| Name | Type | Description |
|-------------|--------|--|
| description | string | A detailed description of the remote RPO. |
| name | string | The remote RPO of the application. A remote RPO of zero indicates that the application is synchronously replicated to another cluster. |

rpo

| Name | Type | Description |
|--------------|-------------------------------------|---|
| components | array[components] | |
| is_supported | boolean | Is RPO supported for this application? Generation 1 applications did not support Snapshot copies or MetroCluster. |
| local | local | |
| remote | remote | |

zapp_s3_bucket_application_components_access_policies_conditions

conditions

| Name | Type | Description |
|------------|----------------|----------------------------|
| delimiters | array[string] | |
| max_keys | array[integer] | |
| operator | string | Policy Condition Operator. |
| prefixes | array[string] | |
| source_ips | array[string] | |
| usernames | array[string] | |

zapp_s3_bucket_application_components_access_policies

The list of S3 objectstore policies to be created.

| Name | Type | Description |
|------------|---|---|
| actions | array[string] | |
| conditions | array[zapp_s3_bucket_application_components_access_policies_conditions] | conditions. |
| effect | string | Allow or Deny Access. |
| principals | array[string] | |
| resources | array[string] | |
| sid | string | Statement Identifier Usage: <(size 1..256)> |

zapp_s3_bucket_application_components

The list of application components to be created.

| Name | Type | Description |
|----------------------|--|---|
| access_policies | array[zapp_s3_bucket_application_components_access_policies] | The list of S3 objectstore policies to be created. |
| bucket_endpoint_type | string | The type of bucket. |
| capacity_tier | boolean | Prefer lower latency storage under similar media costs. |
| comment | string | Object Store Server Bucket Description Usage: <(size 1..256)> |
| exclude_aggregates | array[exclude_aggregates] | |
| name | string | The name of the application component. |
| nas_path | string | The path to which the bucket corresponds to. |
| qos | qos | |
| size | integer | The total size of the S3 Bucket, split across the member components. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

| Name | Type | Description |
|------------------|--------|---|
| uuid | string | Object Store Server Bucket UUID Usage: <UUID> |
| versioning_state | string | Bucket Versioning State. For nas type buckets, this field is not set. For s3 type buckets, the default value is disabled. |

zapp_s3_bucket

A generic S3 bucket application.

| Name | Type | Description |
|------------------------|--|---|
| application_components | array[zapp_s3_bucket_application_components] | The list of application components to be created. |

san_application_components_tiering

application-components.tiering

| Name | Type | Description |
|--------|--------|--|
| policy | string | The storage tiering type of the application component. |

application_components

| Name | Type | Description |
|-------------|---------|--|
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| lun_count | integer | The number of LUNs in the application component. |
| name | string | The name of the application component. |

| Name | Type | Description |
|-----------------|------------------------------------|---|
| os_type | string | The name of the host OS running the application. |
| qos | qos | |
| storage_service | storage_service | |
| tiering | san_application_components_tiering | application-components.tiering |
| total_size | integer | The total size of the application component, split across the member LUNs. Usage: {<integer>[KB MB GB TB PB]} |

san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

san

A generic SAN application.

| Name | Type | Description |
|------------------------|-------------------------------|--|
| application_components | array[application_components] | |
| exclude_aggregates | array[exclude_aggregates] | |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |

storage_service

| Name | Type | Description |
|------|--------|--------------------------------|
| name | string | The storage service of the DB. |

db

| Name | Type | Description |
|------|---------|--|
| size | integer | The size of the DB. Usage: {<integer>[KB MB GB TB PB]} |

| Name | Type | Description |
|-----------------|---------------------------------|-------------|
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|------------------------------------|
| name | string | The storage service of the log DB. |

log

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the log DB. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

sql_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

storage_service

| Name | Type | Description |
|------|--------|-------------------------------------|
| name | string | The storage service of the temp DB. |

temp_db

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the temp DB. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

sql_on_san

Microsoft SQL using SAN.

| Name | Type | Description |
|------|--------------------|-------------|
| db | db | |

| Name | Type | Description |
|--------------------|---------------------------------|--|
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| log | log | |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |
| server_cores_count | integer | The number of server cores for the DB. |
| temp_db | temp_db | |

access

| Name | Type | Description |
|-----------------|--------|--------------------------------|
| installer | string | SQL installer admin user name. |
| service_account | string | SQL service account user name. |

sql_on_smb

Microsoft SQL using SMB.

| Name | Type | Description |
|--------------------|---------------------------------|--|
| access | access | |
| db | db | |
| log | log | |
| protection_type | protection_type | |
| server_cores_count | integer | The number of server cores for the DB. |
| temp_db | temp_db | |

iops

| Name | Type | Description |
|--------|---------|---|
| per_tb | integer | The number of IOPS per terabyte of logical space currently being used by the application component. |
| total | integer | The total number of IOPS being used by the application component. |

latency

| Name | Type | Description |
|---------|---------|--|
| average | integer | The cumulative average response time in microseconds for this component. |
| raw | integer | The cumulative response time in microseconds for this component. |

snapshot

| Name | Type | Description |
|---------|---------|--|
| reserve | integer | The amount of space reserved by the system for Snapshot copies. |
| used | integer | The amount of spacing currently in use by the system to store Snapshot copies. |

space

| Name | Type | Description |
|-----------|---------|--|
| available | integer | <p>The available amount of space left in the application component. Note that this field has limited meaning for SAN applications. Space may be considered used from ONTAP's perspective while the host filesystem still considers it available.</p> <ul style="list-style-type: none"> • readOnly: 1 • Introduced in: 9.6 |

| Name | Type | Description |
|-------------------------|---------|--|
| logical_used | integer | The amount of space that would currently be used if no space saving features were enabled. For example, if compression were the only space saving feature enabled, this field would represent the uncompressed amount of space used. |
| provisioned | integer | The originally requested amount of space that was provisioned for the application component. |
| reserved_unused | integer | The amount of space reserved for system features such as Snapshot copies that has not yet been used. |
| savings | integer | The amount of space saved by all enabled space saving features. |
| used | integer | The amount of space that is currently being used by the application component. Note that this includes any space reserved by the system for features such as Snapshot copies. |
| used_excluding_reserves | integer | The amount of space that is currently being used, excluding any space that is reserved by the system for features such as Snapshot copies. |
| used_percent | integer | The percentage of the originally provisioned space that is currently being used by the application component. |

storage_service

| Name | Type | Description |
|------|--------|--|
| name | string | The storage service name. AFF systems support the extreme storage service. All other systems only support value. |

| Name | Type | Description |
|------|--------|---------------------------|
| uuid | string | The storage service UUID. |

components

| Name | Type | Description |
|-----------------------|---------------------------------|---|
| iops | iops | |
| latency | latency | |
| name | string | Component Name. |
| shared_storage_pool | boolean | An application component is considered to use a shared storage pool if storage elements for other components reside on the same aggregate as storage elements for this component. |
| snapshot | snapshot | |
| space | space | |
| statistics_incomplete | boolean | If not all storage elements of the application component are currently available, the returned statistics might only include data from those elements that were available. |
| storage_service | storage_service | |
| uuid | string | Component UUID. |

iops

| Name | Type | Description |
|--------|---------|---|
| per_tb | integer | The number of IOPS per terabyte of logical space currently being used by the application. |
| total | integer | The total number of IOPS being used by the application. |

latency

| Name | Type | Description |
|---------|---------|--|
| average | integer | The cumulative average response time in microseconds for this application. |
| raw | integer | The cumulative response time in microseconds for this application. |

space

| Name | Type | Description |
|-----------------|---------|--|
| available | integer | <p>The available amount of space left in the application. Note that this field has limited meaning for SAN applications. Space may be considered used from ONTAP's perspective while the host filesystem still considers it available.</p> <ul style="list-style-type: none"> • readOnly: 1 • Introduced in: 9.6 |
| logical_used | integer | The amount of space that would currently be used if no space saving features were enabled. For example, if compression were the only space saving feature enabled, this field would represent the uncompressed amount of space used. |
| provisioned | integer | The originally requested amount of space that was provisioned for the application. |
| reserved_unused | integer | The amount of space reserved for system features such as Snapshot copies that has not yet been used. |
| savings | integer | The amount of space saved by all enabled space saving features. |

| Name | Type | Description |
|-------------------------|---------|---|
| used | integer | The amount of space that is currently being used by the application. Note that this includes any space reserved by the system for features such as Snapshot copies. |
| used_excluding_reserves | integer | The amount of space that is currently being used, excluding any space that is reserved by the system for features such as Snapshot copies. |
| used_percent | integer | The percentage of the originally provisioned space that is currently being used by the application. |

statistics

| Name | Type | Description |
|-----------------------|-------------------------------------|--|
| components | array[components] | |
| iops | iops | |
| latency | latency | |
| shared_storage_pool | boolean | An application is considered to use a shared storage pool if storage elements for multiple components reside on the same aggregate. |
| snapshot | snapshot | |
| space | space | |
| statistics_incomplete | boolean | If not all storage elements of the application are currently available, the returned statistics might only include data from those elements that were available. |

svm

| Name | Type | Description |
|------|--------|--|
| name | string | SVM Name. Either the SVM name or UUID must be provided to create an application. |
| uuid | string | SVM UUID. Either the SVM name or UUID must be provided to create an application. |

self_link

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

template

| Name | Type | Description |
|----------|---------------------------|--|
| _links | self_link | |
| name | string | The name of the template that was used to provision this application. |
| protocol | string | The protocol access of the template that was used to provision this application. |
| version | integer | <p>The version of the template that was used to provision this application. The template version changes only if the layout of the application changes over time. For example, redo logs in Oracle RAC templates were updated and provisioned differently in DATA ONTAP 9.3.0 compared to prior releases, so the version number was increased. If layouts change in the future, the changes will be documented along with the corresponding version numbers.</p> <ul style="list-style-type: none"> • readOnly: 1 • Introduced in: 9.6 |

storage_service

| Name | Type | Description |
|------|--------|--------------------------------------|
| name | string | The storage service of the desktops. |

desktops

| Name | Type | Description |
|-----------------|---------------------------------|--|
| count | integer | The number of desktops to support. |
| size | integer | The size of the desktops. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

hyper_v_access

| Name | Type | Description |
|-----------------|--------|--------------------------|
| service_account | string | Hyper-V service account. |

vdi_on_nas

A VDI application using NAS.

| Name | Type | Description |
|-----------------|---|---|
| desktops | desktops | |
| hyper_v_access | hyper_v_access | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| protection_type | protection_type | |

vdi_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

vdi_on_san

A VDI application using SAN.

| Name | Type | Description |
|-----------------|---------------------------------|--|
| desktops | desktops | |
| hypervisor | string | The name of the hypervisor hosting the application. |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| protection_type | protection_type | |

storage_service

| Name | Type | Description |
|------|--------|---------------------------------------|
| name | string | The storage service of the datastore. |

datastore

| Name | Type | Description |
|-----------------|---------------------------------|---|
| count | integer | The number of datastores to support. |
| size | integer | The size of the datastore. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

vsi_on_nas

A VSI application using NAS.

| Name | Type | Description |
|-----------------|---|---|
| datastore | datastore | |
| hyper_v_access | hyper_v_access | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| protection_type | protection_type | |

vsi_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

vsi_on_san

A VSI application using SAN.

| Name | Type | Description |
|-----------------|---------------------------------|--|
| datastore | datastore | |
| hypervisor | string | The name of the hypervisor hosting the application. |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| protection_type | protection_type | |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Update application properties

PATCH /application/applications/{uuid}

Introduced In: 9.6

Updates the properties of an application.

Overview

Similar to creating an application, modification is done using the template properties of an application. The `storage_service`, `size`, and `igroup_name` of an application may be modified.

`storage_service`

Storage service modifications are processed in place, meaning that the storage can not be moved to a location with more performance headroom to accommodate the request. If the current backing storage of the application is in a location that can support increased performance, the QoS policies associated with the application will be modified to allow it. If not, an error will be returned. A storage service modification to a lower tier of performance is always allowed, but the reverse modification may not be supported if the cluster is over provisioned and the cluster is unlikely to be able to fulfil the original storage service.

`size`

Size modifications are processed in a variety of ways depending on the type of application. For NAS applications, volumes are grown or new volumes are added. For SAN applications, LUNs are grown, new LUNs are added to existing volumes, or new LUNs are added to new volumes. If new storage elements are created, they can be found using the [GET /application/applications/{application.uuid}/components](#) interface. The creation time of each storage object is included, and the newly created objects will use the same naming scheme as the previous objects. Resize follows the best practices associated with the type of application being expanded. Reducing the size of an application is not supported.

`igroup_name`

Modification of the `igroup` name allows an entire application to be mapped from one initiator group to another. Data access will be interrupted as the LUNs are unmapped from the original `igroup` and remapped to the new one.

Application state

During a modification, the `state` property of the application updates to indicate `modifying`. In `modifying` state, statistics are not available and Snapshot copy operations are not allowed. If the modification fails, it is possible for the application to be left in an inconsistent state, with the underlying ONTAP storage elements not matching across a component. When this occurs, the application is left in the `modifying` state until the command is either retried and succeeds or a call to restore the original state is successful.

Examples

1. Change the storage service of the database of the Oracle application to *extreme* and resize the redo logs to 100GB.

```

{
  "oracle_on_nfs": {
    "db": {
      "storage_service": {
        "name": "extreme"
      }
    },
    "redo_log": {
      "size": "100GB"
    }
  }
}

```

2. Change the storage service, size, and igroup of a generic application by component name.

```

{
  "san": {
    "application_components": [
      {
        "name": "component1",
        "storage_service": {
          "name": "value"
        }
      },
      {
        "name": "component2",
        "size": "200GB"
      },
      {
        "name": "component3",
        "igroup_name": "igroup5"
      }
    ]
  }
}

```

Learn more

- [DOC /application](#)
- [Asynchronous operations](#)

Parameters

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|--|
| uuid | string | path | True | Application UUID |
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |

Request Body

| Name | Type | Description |
|--------------------|------------------------|--|
| _links | _links | |
| creation_timestamp | string | The time when the application was created. |

| Name | Type | Description |
|------------------------|-----------------------------------|--|
| generation | integer | The generation number of the application. This indicates which features are supported on the application. For example, generation 1 applications do not support Snapshot copies. Support for Snapshot copies was added at generation 2. Any future generation numbers and their feature set will be documented. |
| mongo_db_on_san | mongo_db_on_san | MongoDB using SAN. |
| nas | nas | A generic NAS application. |
| nvme | zapp_nvme | An NVME application. |
| oracle_on_nfs | oracle_on_nfs | Oracle using NFS. |
| oracle_on_san | oracle_on_san | Oracle using SAN. |
| oracle_rac_on_nfs | oracle_rac_on_nfs | Oracle RAC using NFS. |
| oracle_rac_on_san | oracle_rac_on_san | Oracle RAC using SAN. |
| protection_granularity | string | Protection granularity determines the scope of Snapshot copy operations for the application. Possible values are "application" and "component". If the value is "application", Snapshot copy operations are performed on the entire application. If the value is "component", Snapshot copy operations are performed separately on the application components. |
| rpo | rpo | |
| s3_bucket | zapp_s3_bucket | A generic S3 bucket application. |
| san | san | A generic SAN application. |
| sql_on_san | sql_on_san | Microsoft SQL using SAN. |
| sql_on_smb | sql_on_smb | Microsoft SQL using SMB. |

| Name | Type | Description |
|------------|----------------------------|--|
| state | string | The state of the application. For full functionality, applications must be in the online state. Other states indicate that the application is in a transient state and not all operations are supported. |
| statistics | statistics | |
| template | template | |
| uuid | string | Application UUID. This field is generated when the application is created. |
| vdi_on_nas | vdi_on_nas | A VDI application using NAS. |
| vdi_on_san | vdi_on_san | A VDI application using SAN. |
| vsi_on_nas | vsi_on_nas | A VSI application using NAS. |
| vsi_on_san | vsi_on_san | A VSI application using SAN. |

Response

Status: 202, Accepted

| Name | Type | Description |
|------|--------------------------|-------------|
| job | job_link | |

Example response

```
{
  "job": {
    "uuid": "string"
  }
}
```

Error

Status: Default, Error

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

storage_service

| Name | Type | Description |
|------|--------|--------------------------------------|
| name | string | The storage service of the database. |

dataset

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the database. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

igroups

| Name | Type | Description |
|------|--------|---|
| name | string | The name of an igroup to nest within a parent igroup. Mutually exclusive with initiators and initiator_objects. |
| uuid | string | The UUID of an igroup to nest within a parent igroup Usage: <UUID> |

initiator_objects

| Name | Type | Description |
|---------|--------|--|
| comment | string | A comment available for use by the administrator. |
| name | string | The WWPN, IQN, or Alias of the initiator. Mutually exclusive with nested igroups and the initiators array. |

mongo_db_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|-------------------|--|--|
| comment | string | A comment available for use by the administrator. |
| igroups | array[igroups] | |
| initiator_objects | array[initiator_objects] | |
| initiators | array[string] | |
| name | string | The name of the new initiator group. |
| os_type | string | The name of the host OS accessing the application. The default value is the host OS that is running the application. |
| protocol | string | The protocol of the new initiator group. |

protection_type

| Name | Type | Description |
|-----------|--------|-----------------------------------|
| local_rpo | string | The local RPO of the application. |

secondary_igroups

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the initiator group for each secondary. |

mongo_db_on_san

MongoDB using SAN.

| Name | Type | Description |
|---------------------|--|---|
| dataset | dataset | |
| new_igroups | array[mongo_db_on_san_new_igroups] | The list of initiator groups to create. |
| primary_igroup_name | string | The initiator group for the primary. |

| Name | Type | Description |
|-------------------|--|-------------|
| protection_type | protection_type | |
| secondary_igroups | array[secondary_igroups] | |

export_policy

component

svm

origin

flexcache

policy

qos

retention

snaplock

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the application component. |

object_stores

nas_application_components_tiering

application-components.tiering

application_components

| Name | Type | Description |
|-----------------|--|---|
| name | string | The name of the application component. |
| storage_service | storage_service | |
| tiering | nas_application_components_tiering | application-components.tiering |
| total_size | integer | The total size of the application component, split across the member shares. Usage: {<integer>[KB MB GB TB PB]} |

app_cifs_access

The list of CIFS access controls. You must provide either 'user_or_group' or 'access' to enable CIFS access.

exclude_aggregates

app_nfs_access

The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access.

nas

A generic NAS application.

| Name | Type | Description |
|------------------------|---|-------------|
| application_components | array[application_components] | |
| protection_type | protection_type | |

performance

| Name | Type | Description |
|-----------------|---------------------------------|-------------|
| storage_service | storage_service | |

hosts

| Name | Type | Description |
|------|--------|---------------|
| nqn | string | The host NQN. |

zapp_nvme_components_subsystem

components.subsystem

| Name | Type | Description |
|---------|--------------------------------|--|
| hosts | array[hosts] | |
| name | string | The name of the subsystem accessing the component. If neither the name nor the UUID is provided, the name defaults to <application-name>_<component-name>, whether that subsystem already exists or not. |
| os_type | string | The name of the host OS accessing the component. The default value is the host OS that is running the application. |

| Name | Type | Description |
|------|--------|--|
| uuid | string | The UUID of an existing subsystem to be granted access to the component. |

zapp_nvme_components_tiering

application-components.tiering

components

| Name | Type | Description |
|-----------------|--|--|
| name | string | The name of the application component. |
| namespace_count | integer | The number of namespaces in the component. |
| os_type | string | The name of the host OS running the application. |
| performance | performance | |
| subsystem | zapp_nvme_components_subsystem | components.subsystem |
| tiering | zapp_nvme_components_tiering | application-components.tiering |
| total_size | integer | The total size of the component, spread across member namespaces. Usage: {<integer>[KB MB GB TB PB]} |

local

| Name | Type | Description |
|------|--------|-----------------------------------|
| name | string | The local RPO of the application. |

rpo

| Name | Type | Description |
|-------|-----------------------|-------------|
| local | local | |

zapp_nvme

An NVME application.

| Name | Type | Description |
|------------|-------------------------------------|-------------|
| components | array[components] | |
| rpo | rpo | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the archive log. |

archive_log

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the archive log. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

db

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the database. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|--|
| name | string | The storage service of the ORACLE_HOME storage volume. |

ora_home

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the ORACLE_HOME storage volume. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|--|
| name | string | The storage service of the redo log group. |

redo_log

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the redo log group. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

oracle_on_nfs

Oracle using NFS.

| Name | Type | Description |
|-----------------|---------------------------------|-------------|
| archive_log | archive_log | |
| db | db | |
| ora_home | ora_home | |
| protection_type | protection_type | |
| redo_log | redo_log | |

oracle_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|-------------------|--|--|
| comment | string | A comment available for use by the administrator. |
| igroups | array[igroups] | |
| initiator_objects | array[initiator_objects] | |
| initiators | array[string] | |
| name | string | The name of the new initiator group. |
| os_type | string | The name of the host OS accessing the application. The default value is the host OS that is running the application. |

| Name | Type | Description |
|----------|--------|--|
| protocol | string | The protocol of the new initiator group. |

oracle_on_san

Oracle using SAN.

| Name | Type | Description |
|-----------------|--|--|
| archive_log | archive_log | |
| db | db | |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| new_igroups | array[oracle_on_san_new_igroups] | The list of initiator groups to create. |
| ora_home | ora_home | |
| protection_type | protection_type | |
| redo_log | redo_log | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the Oracle grid binary storage volume. |

grid_binary

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the Oracle grid binary storage volume. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the Oracle CRS volume. |

oracle_crs

| Name | Type | Description |
|-----------------|---------------------------------|-------------|
| storage_service | storage_service | |

oracle_rac_on_nfs

Oracle RAC using NFS.

| Name | Type | Description |
|-----------------|---------------------------------|-------------|
| archive_log | archive_log | |
| db | db | |
| grid_binary | grid_binary | |
| ora_home | ora_home | |
| oracle_crs | oracle_crs | |
| protection_type | protection_type | |
| redo_log | redo_log | |

db_sids

| Name | Type | Description |
|-------------|--------|--|
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |

oracle_rac_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|---------|--------------------------------|---|
| comment | string | A comment available for use by the administrator. |
| igroups | array[igroups] | |

| Name | Type | Description |
|-------------------|--------------------------|--|
| initiator_objects | array[initiator_objects] | |
| initiators | array[string] | |
| name | string | The name of the new initiator group. |
| os_type | string | The name of the host OS accessing the application. The default value is the host OS that is running the application. |
| protocol | string | The protocol of the new initiator group. |

oracle_rac_on_san

Oracle RAC using SAN.

| Name | Type | Description |
|-----------------|--------------------------------------|---|
| archive_log | archive_log | |
| db | db | |
| db_sids | array[db_sids] | |
| grid_binary | grid_binary | |
| new_igroups | array[oracle_rac_on_san_new_igroups] | The list of initiator groups to create. |
| ora_home | ora_home | |
| oracle_crs | oracle_crs | |
| protection_type | protection_type | |
| redo_log | redo_log | |

local

| Name | Type | Description |
|-------------|--------|---|
| description | string | A detailed description of the local RPO. This will include details about the Snapshot copy schedule. |
| name | string | The local RPO of the component. This indicates how often component Snapshot copies are automatically created. |

remote

| Name | Type | Description |
|-------------|--------|--|
| description | string | A detailed description of the remote RPO. |
| name | string | The remote RPO of the component. A remote RPO of zero indicates that the component is synchronously replicated to another cluster. |

rpo

| Name | Type | Description |
|--------|------------------------|-------------|
| local | local | |
| remote | remote | |

components

| Name | Type | Description |
|------|---------------------|-----------------|
| name | string | Component Name. |
| rpo | rpo | |
| uuid | string | Component UUID. |

local

| Name | Type | Description |
|-------------|--------|---|
| description | string | A detailed description of the local RPO. This will include details about the Snapshot copy schedule. |
| name | string | The local RPO of the application. This indicates how often application Snapshot copies are automatically created. |

remote

| Name | Type | Description |
|-------------|--------|---|
| description | string | A detailed description of the remote RPO. |

| Name | Type | Description |
|------|--------|--|
| name | string | The remote RPO of the application. A remote RPO of zero indicates that the application is synchronously replicated to another cluster. |

rpo

| Name | Type | Description |
|--------------|-------------------------------------|---|
| components | array[components] | |
| is_supported | boolean | Is RPO supported for this application? Generation 1 applications did not support Snapshot copies or MetroCluster. |
| local | local | |
| remote | remote | |

zapp_s3_bucket_application_components_access_policies_conditions

conditions

| Name | Type | Description |
|------------|----------------|-------------|
| delimiters | array[string] | |
| max_keys | array[integer] | |
| prefixes | array[string] | |
| source_ips | array[string] | |
| usernames | array[string] | |

zapp_s3_bucket_application_components_access_policies

The list of S3 objectstore policies to be created.

| Name | Type | Description |
|------------|---------------|-------------|
| actions | array[string] | |
| principals | array[string] | |
| resources | array[string] | |

zapp_s3_bucket_application_components

The list of application components to be created.

| Name | Type | Description |
|-----------------|---------------------------------|---|
| name | string | The name of the application component. |
| size | integer | The total size of the S3 Bucket, split across the member components. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |
| uuid | string | Object Store Server Bucket UUID Usage: <UUID> |

zapp_s3_bucket

A generic S3 bucket application.

| Name | Type | Description |
|------------------------|--|---|
| application_components | array[zapp_s3_bucket_application_components] | The list of application components to be created. |

san_application_components_tiering

application-components.tiering

application_components

| Name | Type | Description |
|-------------|---------|--|
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| lun_count | integer | The number of LUNs in the application component. |
| name | string | The name of the application component. |
| os_type | string | The name of the host OS running the application. |

| Name | Type | Description |
|-----------------|--|---|
| storage_service | storage_service | |
| tiering | san_application_components_tiering | application-components.tiering |
| total_size | integer | The total size of the application component, split across the member LUNs. Usage: {<integer>[KB MB GB TB PB]} |

san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|-------------------|--|--|
| comment | string | A comment available for use by the administrator. |
| igroups | array[igroups] | |
| initiator_objects | array[initiator_objects] | |
| initiators | array[string] | |
| name | string | The name of the new initiator group. |
| os_type | string | The name of the host OS accessing the application. The default value is the host OS that is running the application. |
| protocol | string | The protocol of the new initiator group. |

san

A generic SAN application.

| Name | Type | Description |
|------------------------|---|---|
| application_components | array[application_components] | |
| new_igroups | array[san_new_igroups] | The list of initiator groups to create. |
| protection_type | protection_type | |

storage_service

| Name | Type | Description |
|------|--------|--------------------------------|
| name | string | The storage service of the DB. |

db

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the DB. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|------------------------------------|
| name | string | The storage service of the log DB. |

log

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the log DB. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

sql_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|-------------------|--|--|
| comment | string | A comment available for use by the administrator. |
| igroups | array[igroups] | |
| initiator_objects | array[initiator_objects] | |
| initiators | array[string] | |
| name | string | The name of the new initiator group. |
| os_type | string | The name of the host OS accessing the application. The default value is the host OS that is running the application. |

| Name | Type | Description |
|----------|--------|--|
| protocol | string | The protocol of the new initiator group. |

storage_service

| Name | Type | Description |
|------|--------|-------------------------------------|
| name | string | The storage service of the temp DB. |

temp_db

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the temp DB. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

sql_on_san

Microsoft SQL using SAN.

| Name | Type | Description |
|-----------------|---|--|
| db | db | |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| log | log | |
| new_igroups | array[sql_on_san_new_igroups] | The list of initiator groups to create. |
| protection_type | protection_type | |
| temp_db | temp_db | |

access

sql_on_smb

Microsoft SQL using SMB.

| Name | Type | Description |
|-----------------|-----------------|-------------|
| db | db | |
| log | log | |
| protection_type | protection_type | |
| temp_db | temp_db | |

iops

| Name | Type | Description |
|--------|---------|---|
| per_tb | integer | The number of IOPS per terabyte of logical space currently being used by the application component. |
| total | integer | The total number of IOPS being used by the application component. |

latency

| Name | Type | Description |
|---------|---------|--|
| average | integer | The cumulative average response time in microseconds for this component. |
| raw | integer | The cumulative response time in microseconds for this component. |

snapshot

| Name | Type | Description |
|---------|---------|--|
| reserve | integer | The amount of space reserved by the system for Snapshot copies. |
| used | integer | The amount of spacing currently in use by the system to store Snapshot copies. |

space

| Name | Type | Description |
|-------------------------|---------|--|
| available | integer | <p>The available amount of space left in the application component. Note that this field has limited meaning for SAN applications. Space may be considered used from ONTAP's perspective while the host filesystem still considers it available.</p> <ul style="list-style-type: none"> • readOnly: 1 • Introduced in: 9.6 |
| logical_used | integer | <p>The amount of space that would currently be used if no space saving features were enabled. For example, if compression were the only space saving feature enabled, this field would represent the uncompressed amount of space used.</p> |
| provisioned | integer | <p>The originally requested amount of space that was provisioned for the application component.</p> |
| reserved_unused | integer | <p>The amount of space reserved for system features such as Snapshot copies that has not yet been used.</p> |
| savings | integer | <p>The amount of space saved by all enabled space saving features.</p> |
| used | integer | <p>The amount of space that is currently being used by the application component. Note that this includes any space reserved by the system for features such as Snapshot copies.</p> |
| used_excluding_reserves | integer | <p>The amount of space that is currently being used, excluding any space that is reserved by the system for features such as Snapshot copies.</p> |

| Name | Type | Description |
|--------------|---------|---|
| used_percent | integer | The percentage of the originally provisioned space that is currently being used by the application component. |

storage_service

| Name | Type | Description |
|------|--------|--|
| name | string | The storage service name. AFF systems support the extreme storage service. All other systems only support value. |
| uuid | string | The storage service UUID. |

components

| Name | Type | Description |
|-----------------------|---------------------------------|---|
| iops | iops | |
| latency | latency | |
| name | string | Component Name. |
| shared_storage_pool | boolean | An application component is considered to use a shared storage pool if storage elements for other components reside on the same aggregate as storage elements for this component. |
| snapshot | snapshot | |
| space | space | |
| statistics_incomplete | boolean | If not all storage elements of the application component are currently available, the returned statistics might only include data from those elements that were available. |
| storage_service | storage_service | |
| uuid | string | Component UUID. |

iops

| Name | Type | Description |
|--------|---------|---|
| per_tb | integer | The number of IOPS per terabyte of logical space currently being used by the application. |
| total | integer | The total number of IOPS being used by the application. |

latency

| Name | Type | Description |
|---------|---------|--|
| average | integer | The cumulative average response time in microseconds for this application. |
| raw | integer | The cumulative response time in microseconds for this application. |

space

| Name | Type | Description |
|--------------|---------|--|
| available | integer | <p>The available amount of space left in the application. Note that this field has limited meaning for SAN applications. Space may be considered used from ONTAP's perspective while the host filesystem still considers it available.</p> <ul style="list-style-type: none"> • readOnly: 1 • Introduced in: 9.6 |
| logical_used | integer | The amount of space that would currently be used if no space saving features were enabled. For example, if compression were the only space saving feature enabled, this field would represent the uncompressed amount of space used. |
| provisioned | integer | The originally requested amount of space that was provisioned for the application. |

| Name | Type | Description |
|-------------------------|---------|---|
| reserved_unused | integer | The amount of space reserved for system features such as Snapshot copies that has not yet been used. |
| savings | integer | The amount of space saved by all enabled space saving features. |
| used | integer | The amount of space that is currently being used by the application. Note that this includes any space reserved by the system for features such as Snapshot copies. |
| used_excluding_reserves | integer | The amount of space that is currently being used, excluding any space that is reserved by the system for features such as Snapshot copies. |
| used_percent | integer | The percentage of the originally provisioned space that is currently being used by the application. |

statistics

| Name | Type | Description |
|---------------------|-------------------------------------|---|
| components | array[components] | |
| iops | iops | |
| latency | latency | |
| shared_storage_pool | boolean | An application is considered to use a shared storage pool if storage elements for multiple components reside on the same aggregate. |
| snapshot | snapshot | |
| space | space | |

| Name | Type | Description |
|-----------------------|---------|--|
| statistics_incomplete | boolean | If not all storage elements of the application are currently available, the returned statistics might only include data from those elements that were available. |

self_link

template

| Name | Type | Description |
|----------|---------|--|
| protocol | string | The protocol access of the template that was used to provision this application. |
| version | integer | <p>The version of the template that was used to provision this application. The template version changes only if the layout of the application changes over time. For example, redo logs in Oracle RAC templates were updated and provisioned differently in DATA ONTAP 9.3.0 compared to prior releases, so the version number was increased. If layouts change in the future, the changes will be documented along with the corresponding version numbers.</p> <ul style="list-style-type: none"> • readOnly: 1 • Introduced in: 9.6 |

storage_service

| Name | Type | Description |
|------|--------|--------------------------------------|
| name | string | The storage service of the desktops. |

desktops

| Name | Type | Description |
|-------|---------|------------------------------------|
| count | integer | The number of desktops to support. |

| Name | Type | Description |
|-----------------|---------------------------------|-------------|
| storage_service | storage_service | |

hyper_v_access

vdi_on_nas

A VDI application using NAS.

| Name | Type | Description |
|-----------------|---------------------------------|-------------|
| desktops | desktops | |
| protection_type | protection_type | |

vdi_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|-------------------|--|---|
| comment | string | A comment available for use by the administrator. |
| igroups | array[igroups] | |
| initiator_objects | array[initiator_objects] | |
| initiators | array[string] | |
| name | string | The name of the new initiator group. |
| protocol | string | The protocol of the new initiator group. |

vdi_on_san

A VDI application using SAN.

| Name | Type | Description |
|-------------|--------------------------|--|
| desktops | desktops | |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |

| Name | Type | Description |
|-----------------|---|---|
| new_igroups | array[vdi_on_san_new_igroups] | The list of initiator groups to create. |
| protection_type | protection_type | |

storage_service

| Name | Type | Description |
|------|--------|---------------------------------------|
| name | string | The storage service of the datastore. |

datastore

| Name | Type | Description |
|-----------------|---------------------------------|--------------------------------------|
| count | integer | The number of datastores to support. |
| storage_service | storage_service | |

vsi_on_nas

A VSI application using NAS.

| Name | Type | Description |
|-----------------|---------------------------------|-------------|
| datastore | datastore | |
| protection_type | protection_type | |

vsi_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|-------------------|--|---|
| comment | string | A comment available for use by the administrator. |
| igroups | array[igroups] | |
| initiator_objects | array[initiator_objects] | |
| initiators | array[string] | |
| name | string | The name of the new initiator group. |
| protocol | string | The protocol of the new initiator group. |

vsi_on_san

A VSI application using SAN.

| Name | Type | Description |
|-----------------|---|--|
| datastore | datastore | |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| new_igroups | array[vsi_on_san_new_igroups] | The list of initiator groups to create. |
| protection_type | protection_type | |

application

Applications

| Name | Type | Description |
|--------------------|---------------------------------|---|
| _links | _links | |
| creation_timestamp | string | The time when the application was created. |
| generation | integer | The generation number of the application. This indicates which features are supported on the application. For example, generation 1 applications do not support Snapshot copies. Support for Snapshot copies was added at generation 2. Any future generation numbers and their feature set will be documented. |
| mongo_db_on_san | mongo_db_on_san | MongoDB using SAN. |
| nas | nas | A generic NAS application. |
| nvme | zapp_nvme | An NVME application. |
| oracle_on_nfs | oracle_on_nfs | Oracle using NFS. |

| Name | Type | Description |
|------------------------|-----------------------------------|--|
| oracle_on_san | oracle_on_san | Oracle using SAN. |
| oracle_rac_on_nfs | oracle_rac_on_nfs | Oracle RAC using NFS. |
| oracle_rac_on_san | oracle_rac_on_san | Oracle RAC using SAN. |
| protection_granularity | string | Protection granularity determines the scope of Snapshot copy operations for the application. Possible values are "application" and "component". If the value is "application", Snapshot copy operations are performed on the entire application. If the value is "component", Snapshot copy operations are performed separately on the application components. |
| rpo | rpo | |
| s3_bucket | zapp_s3_bucket | A generic S3 bucket application. |
| san | san | A generic SAN application. |
| sql_on_san | sql_on_san | Microsoft SQL using SAN. |
| sql_on_smb | sql_on_smb | Microsoft SQL using SMB. |
| state | string | The state of the application. For full functionality, applications must be in the online state. Other states indicate that the application is in a transient state and not all operations are supported. |
| statistics | statistics | |
| template | template | |
| uuid | string | Application UUID. This field is generated when the application is created. |
| vdi_on_nas | vdi_on_nas | A VDI application using NAS. |
| vdi_on_san | vdi_on_san | A VDI application using SAN. |

| Name | Type | Description |
|------------|----------------------------|------------------------------|
| vsi_on_nas | vsi_on_nas | A VSI application using NAS. |
| vsi_on_san | vsi_on_san | A VSI application using SAN. |

job_link

| Name | Type | Description |
|------|--------|---|
| uuid | string | The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation. |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Manage application consistency groups

Application consistency-groups endpoint overview

Overview

A consistency group is a group of volumes that supports capabilities such as creating a snapshot of all of its member volumes at the same point-in-time with a write-fence, thus ensuring a consistent image of the volumes at that time.

Applications with datasets scoped to a single volume can have its contents saved to a Snapshot copy, replicated, or cloned in a crash-consistent manner implicitly with corresponding native ONTAP volume-granular

operations. Applications with datasets spanning a group of multiple volumes must have such operations performed on the group. Typically, by first fencing writes to all the volumes in the group, flushing any writes pending in queues, executing the intended operation, that is, take Snapshot copy of every volume in the group and when that is complete, unfence and resume writes. A consistency group is the conventional mechanism for providing such group semantics.

Consistency group APIs

The following APIs are used to perform operations related to consistency groups:

– GET /api/application/consistency-groups

– POST /api/application/consistency-groups

– GET /api/application/consistency-groups/{uuid}

– PATCH /api/application/consistency-groups/{uuid}

– DELETE /api/application/consistency-groups/{uuid}

Examples

Retrieving all consistency groups of an SVM

```
# The API:
/api/application/consistency-groups

# The call:
curl -X GET "https://<mgmt-ip>/api/application/consistency-
groups?svm.name=vs1" -H "accept: application/hal+json"

# The response:
{
  "records": [
    {
      "uuid": "6f48d798-0a7f-11ec-a449-005056bbcf9f",
      "name": "voll",
      "_links": {
        "self": {
          "href": "/api/application/consistency-groups/6f48d798-0a7f-11ec-
a449-005056bbcf9f"
        }
      }
    },
    {
      "uuid": "c1b22c85-0a82-11ec-a449-005056bbcf9f",
      "name": "parent_cg",
      "_links": {
        "self": {
          "href": "/api/application/consistency-groups/c1b22c85-0a82-11ec-
```

```

a449-005056bbcf9f"
    }
  },
  {
    "uuid": "c1b270b1-0a82-11ec-a449-005056bbcf9f",
    "name": "child_1",
    "_links": {
      "self": {
        "href": "/api/application/consistency-groups/c1b270b1-0a82-11ec-
a449-005056bbcf9f"
      }
    }
  },
  {
    "uuid": "c1b270c3-0a82-11ec-a449-005056bbcf9f",
    "name": "child_2",
    "_links": {
      "self": {
        "href": "/api/application/consistency-groups/c1b270c3-0a82-11ec-
a449-005056bbcf9f"
      }
    }
  }
],
"num_records": 4,
"_links": {
  "self": {
    "href": "/api/application/consistency-groups"
  }
}
}

```

Retrieving details of all consistency groups of an SVM

Retrieving details of the consistency groups for a specified SVM. These details are considered to be performant and will return within 1 second when 40 records or less are requested.

```

curl -X GET "https://<mgmt-ip>/api/application/consistency-
groups?svm.name=vs1&fields=*&max_records=40"

#### Response:
{
  "records": [
    {
      "uuid": "6f48d798-0a7f-11ec-a449-005056bbcf9f",

```

```

"name": "vol1",
"svm": {
  "uuid": "4853f97a-0a63-11ec-a449-005056bbcf9f",
  "name": "vs1",
  "_links": {
    "self": {
      "href": "/api/svm/svms/4853f97a-0a63-11ec-a449-005056bbcf9f"
    }
  }
},
"space": {
  "size": 108003328,
  "available": 107704320,
  "used": 299008
},
"replicated": false,
"_links": {
  "self": {
    "href": "/api/application/consistency-groups/6f48d798-0a7f-11ec-a449-005056bbcf9f"
  }
}
},
{
  "uuid": "c1b22c85-0a82-11ec-a449-005056bbcf9f",
  "name": "parent_cg",
  "svm": {
    "uuid": "4853f97a-0a63-11ec-a449-005056bbcf9f",
    "name": "vs1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/4853f97a-0a63-11ec-a449-005056bbcf9f"
      }
    }
  }
},
"snapshot_policy": {
  "name": "default-1weekly",
  "uuid": "a30bd0fe-067d-11ec-a449-005056bbcf9f",
  "_links": {
    "self": {
      "href": "/api/storage/snapshot-policies/a30bd0fe-067d-11ec-a449-005056bbcf9f"
    }
  }
}
},
"consistency_groups": [

```

```

{
  "uuid": "c1b270b1-0a82-11ec-a449-005056bbcf9f",
  "name": "child_1",
  "space": {
    "size": 41943040,
    "available": 39346176,
    "used": 499712
  },
  "_links": {
    "self": {
      "href": "/api/application/consistency-groups/c1b270b1-0a82-11ec-a449-005056bbcf9f"
    }
  }
},
{
  "uuid": "c1b270c3-0a82-11ec-a449-005056bbcf9f",
  "name": "child_2",
  "space": {
    "size": 41943040,
    "available": 39350272,
    "used": 495616
  },
  "_links": {
    "self": {
      "href": "/api/application/consistency-groups/c1b270c3-0a82-11ec-a449-005056bbcf9f"
    }
  }
}
],
"space": {
  "size": 83886080,
  "available": 78696448,
  "used": 995328
},
"replicated": false,
"_links": {
  "self": {
    "href": "/api/application/consistency-groups/c1b22c85-0a82-11ec-a449-005056bbcf9f"
  }
}
},
{
  "uuid": "c1b270b1-0a82-11ec-a449-005056bbcf9f",

```

```

"name": "child_1",
"parent_consistency_group": {
  "uuid": "c1b22c85-0a82-11ec-a449-005056bbcf9f",
  "name": "parent_cg",
  "_links": {
    "self": {
      "href": "/api/application/consistency-groups/c1b22c85-0a82-11ec-
a449-005056bbcf9f"
    }
  }
},
"svm": {
  "uuid": "4853f97a-0a63-11ec-a449-005056bbcf9f",
  "name": "vs1",
  "_links": {
    "self": {
      "href": "/api/svm/svms/4853f97a-0a63-11ec-a449-005056bbcf9f"
    }
  }
},
"snapshot_policy": {
  "name": "default",
  "uuid": "a30b60a4-067d-11ec-a449-005056bbcf9f",
  "_links": {
    "self": {
      "href": "/api/storage/snapshot-policies/a30b60a4-067d-11ec-a449-
005056bbcf9f"
    }
  }
},
"space": {
  "size": 41943040,
  "available": 39346176,
  "used": 499712
},
"_links": {
  "self": {
    "href": "/api/application/consistency-groups/c1b270b1-0a82-11ec-
a449-005056bbcf9f"
  }
}
},
{
  "uuid": "c1b270c3-0a82-11ec-a449-005056bbcf9f",
  "name": "child_2",
  "parent_consistency_group": {

```

```

    "uuid": "c1b22c85-0a82-11ec-a449-005056bbcf9f",
    "name": "parent_cg",
    "_links": {
      "self": {
        "href": "/api/application/consistency-groups/c1b22c85-0a82-11ec-
a449-005056bbcf9f"
      }
    },
    "svm": {
      "uuid": "4853f97a-0a63-11ec-a449-005056bbcf9f",
      "name": "vs1",
      "_links": {
        "self": {
          "href": "/api/svm/svms/4853f97a-0a63-11ec-a449-005056bbcf9f"
        }
      }
    },
    "snapshot_policy": {
      "name": "default",
      "uuid": "a30b60a4-067d-11ec-a449-005056bbcf9f",
      "_links": {
        "self": {
          "href": "/api/storage/snapshot-policies/a30b60a4-067d-11ec-a449-
005056bbcf9f"
        }
      }
    },
    "space": {
      "size": 41943040,
      "available": 39350272,
      "used": 495616
    },
    "_links": {
      "self": {
        "href": "/api/application/consistency-groups/c1b270c3-0a82-11ec-
a449-005056bbcf9f"
      }
    }
  ],
  "num_records": 4,
  "_links": {
    "self": {
      "href": "/api/application/consistency-
groups?svm.name=vs1&fields=*&max_records=40"
    }
  }
}

```



```
}  
}  
}
```

Retrieving details of non-nested consistency groups

Retrieves details of the consistency groups without nested consistency groups, or only the parent consistency group for a number of consistency groups of a specified SVM.

```

curl -X GET "https://<mgmt-ip>/api/application/consistency-
groups?svm.name=vs1&parent_consistency_group.uid=null"

#### Response:
{
  "records": [
    {
      "uuid": "6f48d798-0a7f-11ec-a449-005056bbcf9f",
      "name": "vol1",
      "svm": {
        "name": "vs1"
      },
      "_links": {
        "self": {
          "href": "/api/application/consistency-groups/6f48d798-0a7f-11ec-
a449-005056bbcf9f"
        }
      }
    },
    {
      "uuid": "c1b22c85-0a82-11ec-a449-005056bbcf9f",
      "name": "parent_cg",
      "svm": {
        "name": "vs1"
      },
      "_links": {
        "self": {
          "href": "/api/application/consistency-groups/c1b22c85-0a82-11ec-
a449-005056bbcf9f"
        }
      }
    }
  ],
  "num_records": 2,
  "_links": {
    "self": {
      "href": "/api/application/consistency-
groups?svm.name=vs1&parent_consistency_group.uid=null"
    }
  }
}

```

Creating a single consistency group with a new SAN volume

Provisions an application with one consistency group, each with one new SAN volumes, with one LUN, an igroup and no explicit Snapshot copy policy, FabricPool tiering policy, storage service, and QoS policy

specification. The igroup to map a LUN to is specified at LUN-granularity.

```
curl -X POST https://<mgmt-ip>/api/application/consistency-
groups?return_records=true -d '{ "svm": { "name": "vs1" }, "luns": [ {
"name": "/vol/vol1/lun1", "space": { "size": "100mb" }, "os_type":
"linux", "lun_maps": [ { "igroup": { "name": "igroup1", "initiators": [ {
"name": "iqn.2021-07.com.netapp.englab.gdl:scspr2429998001" } ] } } ] } ]
}'

#### Response:
{
  "num_records": 1,
  "records": [
    {
      "uuid": "6f48d798-0a7f-11ec-a449-005056bbcf9f",
      "name": "vol1",
      "svm": {
        "uuid": "4853f97a-0a63-11ec-a449-005056bbcf9f",
        "name": "vs1",
        "_links": {
          "self": {
            "href": "/api/svm/svms/4853f97a-0a63-11ec-a449-005056bbcf9f"
          }
        }
      },
      "luns": [
        {
          "lun_maps": [
            {
              "igroup": {
                "name": "igroup1",
                "initiators": [
                  {
                    "name": "iqn.2021-
07.com.netapp.englab.gdl:scspr2429998001"
                  }
                ]
              }
            }
          ],
          "name": "/vol/vol1/lun1",
          "os_type": "linux",
          "space": {
            "size": 104857600
          }
        }
      ]
    }
  ]
}
```

```

    ]
  }
],
"job": {
  "uuid": "6f4907ae-0a7f-11ec-a449-005056bbcf9f",
  "_links": {
    "self": {
      "href": "/api/cluster/jobs/6f4907ae-0a7f-11ec-a449-005056bbcf9f"
    }
  }
}
}
}

```

Creating an Application with two consistency groups with existing SAN volumes

Provisions an application with two consistency groups, each with two existing SAN volumes, a Snapshot copy policy at application-granularity, and a distinct consistency group granular Snapshot copy policy.

```

curl -X POST https://<mgmt-ip>/api/application/consistency-
groups?return_records=true -d '{ "svm": { "name": "vs1" }, "name":
"parent_cg", "snapshot_policy": { "name": "default-1weekly" },
"consistency_groups": [ { "name": "child_1", "snapshot_policy": { "name":
"default" }, "volumes": [ { "name": "existing_vol1",
"provisioning_options": { "action": "add" } }, { "name": "existing_vol2",
"provisioning_options": { "action": "add" } } ] }, { "name": "child_2",
"snapshot_policy": { "name": "default" }, "volumes": [ { "name":
"existing_vol3", "provisioning_options": { "action": "add" } }, { "name":
"existing_vol4", "provisioning_options": { "action": "add" } } ] } ] }'

```

Response:

```

{
  "num_records": 1,
  "records": [
    {
      "uuid": "c1b22c85-0a82-11ec-a449-005056bbcf9f",
      "name": "parent_cg",
      "svm": {
        "uuid": "4853f97a-0a63-11ec-a449-005056bbcf9f",
        "name": "vs1",
        "_links": {
          "self": {
            "href": "/api/svm/svms/4853f97a-0a63-11ec-a449-005056bbcf9f"
          }
        }
      },
      "snapshot_policy": {

```

```

    "name": "default-1weekly"
  },
  "consistency_groups": [
    {
      "uuid": "c1b270b1-0a82-11ec-a449-005056bbcf9f",
      "name": "child_1",
      "snapshot_policy": {
        "name": "default"
      },
      "volumes": [
        {
          "name": "existing_vol1"
        },
        {
          "name": "existing_vol2"
        }
      ]
    },
    {
      "uuid": "c1b270c3-0a82-11ec-a449-005056bbcf9f",
      "name": "child_2",
      "snapshot_policy": {
        "name": "default"
      },
      "volumes": [
        {
          "name": "existing_vol3"
        },
        {
          "name": "existing_vol4"
        }
      ]
    }
  ]
},
"job": {
  "uuid": "c1b272b9-0a82-11ec-a449-005056bbcf9f",
  "_links": {
    "self": {
      "href": "/api/cluster/jobs/c1b272b9-0a82-11ec-a449-005056bbcf9f"
    }
  }
}
}

```

Retrieving specific details of an existing consistency group

Retrieves the details of an existing consistency group.

```
curl -X GET https://<mgmt-ip>/api/application/consistency-groups/6f48d798-0a7f-11ec-a449-005056bbcf9f

#### Response:
{
  "uuid": "6f48d798-0a7f-11ec-a449-005056bbcf9f",
  "name": "vol1",
  "svm": {
    "uuid": "4853f97a-0a63-11ec-a449-005056bbcf9f",
    "name": "vs1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/4853f97a-0a63-11ec-a449-005056bbcf9f"
      }
    }
  },
  "space": {
    "size": 108003328,
    "available": 107724800,
    "used": 278528
  },
  "replicated": false,
  "_links": {
    "self": {
      "href": "/api/application/consistency-groups/6f48d798-0a7f-11ec-a449-005056bbcf9f"
    }
  }
}
```

Retrieving all details of an existing consistency group

Retrieves all details of an existing consistency group. These details are not considered to be performant and are not guaranteed to return within one second.

```
curl -X GET https://<mgmt-ip>/api/application/consistency-groups/6f48d798-0a7f-11ec-a449-005056bbcf9f?fields=**

#### Response:
{
  "uuid": "6f48d798-0a7f-11ec-a449-005056bbcf9f",
  "name": "vol1",
```

```

"svm": {
  "uuid": "4853f97a-0a63-11ec-a449-005056bbcf9f",
  "name": "vs1",
  "_links": {
    "self": {
      "href": "/api/svm/svms/4853f97a-0a63-11ec-a449-005056bbcf9f"
    }
  }
},
"qos": {
  "policy": {
    "uuid": "b7189398-e572-48ab-8f69-82cd46580812",
    "name": "extreme-fixed",
    "_links": {
      "self": {
        "href": "/api/storage/qos/policies/b7189398-e572-48ab-8f69-82cd46580812"
      }
    }
  }
},
"tiering": {
  "policy": "none"
},
"create_time": "2021-08-31T13:18:24-04:00",
"volumes": [
  {
    "uuid": "6f516c6c-0a7f-11ec-a449-005056bbcf9f",
    "qos": {
      "policy": {
        "uuid": "b7189398-e572-48ab-8f69-82cd46580812",
        "name": "extreme-fixed",
        "_links": {
          "self": {
            "href": "/api/storage/qos/policies/b7189398-e572-48ab-8f69-82cd46580812"
          }
        }
      }
    },
    "tiering": {
      "policy": "none"
    },
    "comment": "",
    "create_time": "2021-08-31T13:18:22-04:00",
    "name": "vol1",
  }
]

```

```

"snapshot_policy": {
  "name": "default",
  "uuid": "a30b60a4-067d-11ec-a449-005056bbcf9f"
},
"space": {
  "size": 108003328,
  "available": 107569152,
  "used": 434176,
  "snapshot": {
    "used": 151552,
    "reserve_percent": 0,
    "autodelete_enabled": false
  }
},
"activity_tracking": {
  "supported": false,
  "unsupported_reason": {
    "message": "Volume activity tracking is not supported on volumes
that contain LUNs.",
    "code": "124518405"
  },
  "state": "off"
},
"_links": {
  "self": {
    "href": "/api/storage/volumes/6f516c6c-0a7f-11ec-a449-
005056bbcf9f"
  }
}
],
"luns": [
  {
    "uuid": "6f51748a-0a7f-11ec-a449-005056bbcf9f",
    "location": {
      "logical_unit": "lun1",
      "node": {
        "name": "johnhil-vsim1",
        "uuid": "6eb682f2-067d-11ec-a449-005056bbcf9f",
        "_links": {
          "self": {
            "href": "/api/cluster/nodes/6eb682f2-067d-11ec-a449-
005056bbcf9f"
          }
        }
      }
    }
  },

```



```

    "volume": {
      "uuid": "6f516c6c-0a7f-11ec-a449-005056bbcf9f",
      "name": "vol1",
      "_links": {
        "self": {
          "href": "/api/storage/volumes/6f516c6c-0a7f-11ec-a449-
005056bbcf9f"
        }
      }
    },
    "lun_maps": [
      {
        "igroup": {
          "uuid": "6f4a4b86-0a7f-11ec-a449-005056bbcf9f",
          "name": "igroup1",
          "os_type": "linux",
          "protocol": "mixed",
          "initiators": [
            {
              "name": "iqn.2021-07.com.netapp.englab.gdl:scspr2429998001"
            }
          ],
          "_links": {
            "self": {
              "href": "/api/protocols/san/igroups/6f4a4b86-0a7f-11ec-a449-
005056bbcf9f"
            }
          }
        },
        "logical_unit_number": 0
      }
    ],
    "name": "/vol/vol1/lun1",
    "auto_delete": false,
    "class": "regular",
    "create_time": "2021-08-31T13:18:24-04:00",
    "os_type": "linux",
    "serial_number": "wIqM6]RfQK3t",
    "space": {
      "size": 104857600,
      "used": 0,
      "guarantee": {
        "requested": false,
        "reserved": false
      }
    }
  }
}

```

```

    },
    "status": {
      "container_state": "online",
      "mapped": true,
      "read_only": false,
      "state": "online"
    },
    "_links": {
      "self": {
        "href": "/api/storage/luns/6f51748a-0a7f-11ec-a449-005056bbcf9f"
      }
    }
  },
  ],
  "space": {
    "size": 108003328,
    "available": 107569152,
    "used": 434176
  },
  "replicated": false,
  "_links": {
    "self": {
      "href": "/api/application/consistency-groups/6f48d798-0a7f-11ec-a449-005056bbcf9f?fields=**"
    }
  }
}

```

Adding LUNs to an existing volume in an existing consistency group

Adds two NVMe namespaces to an existing volume in an existing consistency group, creates a new subsystem, and binds the new namespaces to it.

```
curl -X PATCH 'https://<mgmt-ip>/api/application/consistency-
groups/6f48d798-0a7f-11ec-a449-005056bbcf9f' -d '{ "luns": [ { "name":
"/vol/vol1/new_luns", "provisioning_options": { "count": 2, "action":
"create" }, "space": { "size": "100mb" }, "os_type": "linux", "lun_maps":
[ { "igroup": { "name": "igroup2", "initiators": [ { "name":
"01:02:03:04:05:06:07:01" } ] } } ] } ] }'
```

Response:

```
{
  "job": {
    "uuid": "5306ea44-0a87-11ec-a449-005056bbcf9f",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/5306ea44-0a87-11ec-a449-005056bbcf9f"
      }
    }
  }
}
```

Restoring a consistency group to the contents of an existing snapshot

Restores an existing consistency group to the contents of an existing snapshot of the consistency group.

```
curl -X PATCH 'https://<mgmt-ip>/api/application/consistency-
groups/6f51748a-0a7f-11ec-a449-005056bbcf9f' -d '{ "restore_to": {
"snapshot": { "uuid": "92c6c770-17a1-11eb-b141-005056acd498"} } }' -H
"Accept: Application/hal+json"
```

Response:

```
{
  "job": {
    "uuid": "8907bd9e-1463-11eb-a719-005056ac70af",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/8907bd9e-1463-11eb-a719-005056ac70af"
      }
    }
  }
}
```

Deleting a consistency group

Deletes a consistency group, where all storage originally associated with that consistency group remains in place.

```
curl -X DELETE 'https://<mgmt-ip>/api/application/consistency-  
groups/6f48d798-0a7f-11ec-a449-005056bbcf9f'
```

Response:

```
{  
}
```

Cloning an existing consistency group

The following example clones an existing consistency group with the current contents:

```
curl -X POST 'https://<mgmt-ip>/api/application/consistency-groups' -d '{  
  "name": "clone01_of_cg01", "svm": { "name": "vs_0"}, "clone": { "volume": {  
    "prefix": "my_clone_pfx", "suffix": "my_clone_sfx"}, "split_initiated":  
    true, "parent_consistency_group": { "name": "cg01", "uuid": "ca5e76fb-98c0-  
    11ec-855a-005056a7693b"}, "guarantee": { "type": "none"} } }' -H "accept:  
application/hal+json"
```

Response:

```
{  
  "job": {  
    "uuid": "8c9cabf3-0a88-11ec-a449-005056bbcf9f",  
    "_links": {  
      "self": {  
        "href": "/api/cluster/jobs/8c9cabf3-0a88-11ec-a449-005056bbcf9f"  
      }  
    }  
  }  
}
```

Cloning a consistency group from an existing Snapshot copy

The following example clones an existing consistency group with contents from an existing Snapshot copy:

```
curl -X POST 'https://<mgmt-ip>/api/application/consistency-groups' -d '{
  "name": "clone01_of_cg01", "svm": { "name": "vs_0"}, "clone": { "volume": {
    "prefix": "my_clone_pfx", "suffix": "my_clone_sfx"}, "split_initiated":
    true, "parent_snapshot": { "name":
    "snap01_of_cg01"}, "parent_consistency_group": { "name": "cg01", "uuid":
    "ca5e76fb-98c0-11ec-855a-005056a7693b"}, "guarantee": { "type": "none"} }
}' -H "accept: application/hal+json"
```

Response:

```
{
  "job": {
    "uuid": "8c9cabf3-0a88-11ec-a449-005056bbcf9f",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/8c9cabf3-0a88-11ec-a449-005056bbcf9f"
      }
    }
  }
}
```

Adding namespaces to an existing volume in an existing consistency group

To add two NVMe Namespaces to an existing volume in an existing consistency group, create a new subsystem and bind the new namespaces to it.

```
curl -X PATCH 'https://<mgmt-ip>/api/application/consistency-
groups/6f51748a-0a7f-11ec-a449-005056bbcf9f' -d '{ "namespaces": [ {
"name": "/vol/vol1/new_namespace", "space": { "size": "10M" }, "os_type":
"windows", "provisioning_options": { "count": 2 }, "subsystem_map": {
"subsystem": { "name": "mySubsystem", "hosts": [ { "nqn": "nqn.1992-
08.com.netapp:sn.d04594ef915b4c73b642169e72e4c0b1:subsystem.host1" }, {
"nqn": "nqn.1992-
08.com.netapp:sn.d04594ef915b4c73b642169e72e4c0b1:subsystem.host2" } ] } }
} ] }'
```

Response:

```
{
"job": {
  "uuid": "8c9cabf3-0a88-11ec-a449-005056bbcf9f",
  "_links": {
    "self": {
      "href": "/api/cluster/jobs/8c9cabf3-0a88-11ec-a449-005056bbcf9f"
    }
  }
}
}
```

Add a new volume in an existing consistency group

The following example adds two new volumes to an existing consistency group.

```
curl -X PATCH 'https://<mgmt-ip>/api/application/consistency-
groups/6f51748a-0a7f-11ec-a449-005056bbcf9f' -d '{ "volumes" : [ { "name":
"new_vol_", "provisioning_options": { "count" : "2"}, "space": { "size":
"1gb"} } ] }'
```

Response:

```
{
"job": {
  "uuid": "8c9cabf3-0a88-11ec-a449-005056bbcf9f",
  "_links": {
    "self": {
      "href": "/api/cluster/jobs/8c9cabf3-0a88-11ec-a449-005056bbcf9f"
    }
  }
}
}
```

Adding an existing volume to an existing consistency group

The following example adds an existing volume to an existing consistency group.

```
curl -X PATCH 'https://<mgmt-ip>/api/application/consistency-  
groups/6f51748a-0a7f-11ec-a449-005056bbcf9f' -d '{ "volumes" : [ { "name":  
"existing_vol", "provisioning_options": { "action" : "add"} } ] }'
```

Response:

```
{  
  "job": {  
    "uuid": "8c9cabf3-0a88-11ec-a449-005056bbcf9f",  
    "_links": {  
      "self": {  
        "href": "/api/cluster/jobs/8c9cabf3-0a88-11ec-a449-005056bbcf9f"  
      }  
    }  
  }  
}
```

Retrieve details of a collection or consistency group

GET /application/consistency-groups

Introduced In: 9.10

Retrieve details of a collection or a specific consistency group.

Notes

When volume granular properties, such as, the storage SLC, Fabric Pool tiering are not the same for all the existing volumes of a consistency group, the corresponding property is not reported at consistency group granularity. It is only reported if all the volumes of the consistency group have the same value for that property.

If this consistency group instance is part of a replication relationship, the "replicated" parameter will be true. Otherwise, it is false. Also, the "replicated" parameter will not be present in the output for Nested-consistency groups, it is included only for single and top-level consistency groups. If this consistency group instance is the source of a replication relationship, the "replication_source" parameter will be true. Otherwise, it is false.

Expensive properties

There is an added computational cost to retrieving values for these properties. They are not included by default in GET results and must be explicitly requested using the `fields` query parameter. See [DOC Requesting specific fields](#) to learn more.

- volumes
- luns
- namespaces

Parameters

| Name | Type | In | Required | Description |
|-------------------------------------|---------|-------|----------|---|
| parent_consistency_group.name | string | query | False | Filter by parent_consistency_group.name |
| parent_consistency_group.uuid | string | query | False | Filter by parent_consistency_group.uuid |
| qos.policy.name | string | query | False | Filter by qos.policy.name |
| qos.policy.uuid | string | query | False | Filter by qos.policy.uuid |
| qos.policy.min_throughput_iops | integer | query | False | Filter by qos.policy.min_throughput_iops |
| qos.policy.min_throughput_mbps | integer | query | False | Filter by qos.policy.min_throughput_mbps |
| qos.policy.max_throughput_mbps | integer | query | False | Filter by qos.policy.max_throughput_mbps |
| qos.policy.max_throughput_iops | integer | query | False | Filter by qos.policy.max_throughput_iops |
| luns.uuid | string | query | False | Filter by luns.uuid |
| luns.create_time | string | query | False | Filter by luns.create_time |
| luns.os_type | string | query | False | Filter by luns.os_type |
| luns.qos.policy.max_throughput_iops | integer | query | False | Filter by luns.qos.policy.max_throughput_iops |
| luns.qos.policy.max_throughput_mbps | integer | query | False | Filter by luns.qos.policy.max_throughput_mbps |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|--|
| luns.qos.policy.min_throughput_mbps | integer | query | False | Filter by luns.qos.policy.min_throughput_mbps |
| luns.qos.policy.min_throughput_iops | integer | query | False | Filter by luns.qos.policy.min_throughput_iops |
| luns.qos.policy.uuid | string | query | False | Filter by luns.qos.policy.uuid |
| luns.qos.policy.name | string | query | False | Filter by luns.qos.policy.name |
| luns.name | string | query | False | Filter by luns.name |
| luns.enabled | boolean | query | False | Filter by luns.enabled |
| luns.lun_maps.logical_unit_number | integer | query | False | Filter by luns.lun_maps.logical_unit_number |
| luns.lun_maps.igroup.initiators.name | string | query | False | Filter by luns.lun_maps.igroup.initiators.name |
| luns.lun_maps.igroup.initiators.comment | string | query | False | Filter by luns.lun_maps.igroup.initiators.comment <ul style="list-style-type: none"> • maxLength: 254 • minLength: 0 |
| luns.lun_maps.igroup.protocol | string | query | False | Filter by luns.lun_maps.igroup.protocol |
| luns.lun_maps.igroup.name | string | query | False | Filter by luns.lun_maps.igroup.name <ul style="list-style-type: none"> • maxLength: 96 • minLength: 1 |

| Name | Type | In | Required | Description |
|-------------------------------------|---------|-------|----------|--|
| luns.lun_maps.igroup.p.uuid | string | query | False | Filter by luns.lun_maps.igroup.p.uuid |
| luns.lun_maps.igroup.p.igroups.name | string | query | False | Filter by luns.lun_maps.igroup.p.igroups.name <ul style="list-style-type: none"> • maxLength: 96 • minLength: 1 |
| luns.lun_maps.igroup.p.igroups.uuid | string | query | False | Filter by luns.lun_maps.igroup.p.igroups.uuid |
| luns.lun_maps.igroup.p.os_type | string | query | False | Filter by luns.lun_maps.igroup.p.os_type |
| luns.lun_maps.igroup.p.comment | string | query | False | Filter by luns.lun_maps.igroup.p.comment <ul style="list-style-type: none"> • Introduced in: 9.11 • maxLength: 254 • minLength: 0 |
| luns.serial_number | string | query | False | Filter by luns.serial_number <ul style="list-style-type: none"> • maxLength: 12 • minLength: 12 |
| luns.comment | string | query | False | Filter by luns.comment <ul style="list-style-type: none"> • maxLength: 254 • minLength: 0 |
| luns.space.used | integer | query | False | Filter by luns.space.used |

| Name | Type | In | Required | Description |
|--------------------------------|---------|-------|----------|---|
| luns.space.size | integer | query | False | Filter by luns.space.size <ul style="list-style-type: none"> • Max value: 140737488355328 • Min value: 4096 |
| luns.space.guarantee.reserved | boolean | query | False | Filter by luns.space.guarantee.reserved <ul style="list-style-type: none"> • Introduced in: 9.11 |
| luns.space.guarantee.requested | boolean | query | False | Filter by luns.space.guarantee.requested <ul style="list-style-type: none"> • Introduced in: 9.11 |
| snapshot_policy.name | string | query | False | Filter by snapshot_policy.name |
| snapshot_policy.uuid | string | query | False | Filter by snapshot_policy.uuid |
| clone.split_initiated | boolean | query | False | Filter by clone.split_initiated <ul style="list-style-type: none"> • Introduced in: 9.12 |
| clone.guarantee.type | string | query | False | Filter by clone.guarantee.type <ul style="list-style-type: none"> • Introduced in: 9.12 |
| clone.volume.suffix | string | query | False | Filter by clone.volume.suffix <ul style="list-style-type: none"> • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|---|
| clone.volume.prefix | string | query | False | Filter by clone.volume.prefix • Introduced in: 9.12 |
| clone.parent_snapshot.name | string | query | False | Filter by clone.parent_snapshot.name • Introduced in: 9.12 |
| clone.parent_consistency_group.name | string | query | False | Filter by clone.parent_consistency_group.name • Introduced in: 9.12 |
| clone.parent_consistency_group.uuid | string | query | False | Filter by clone.parent_consistency_group.uuid • Introduced in: 9.12 |
| consistency_groups.uuid | string | query | False | Filter by consistency_groups.uuid |
| consistency_groups.volumes.name | string | query | False | Filter by consistency_groups.volumes.name • maxLength: 203 • minLength: 1 |
| consistency_groups.volumes.tiering.policy | string | query | False | Filter by consistency_groups.volumes.tiering.policy |
| consistency_groups.volumes.space.available | integer | query | False | Filter by consistency_groups.volumes.space.available |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|--|
| consistency_groups.volumes.space.used | integer | query | False | Filter by consistency_groups.volumes.space.used |
| consistency_groups.volumes.space.size | integer | query | False | Filter by consistency_groups.volumes.space.size |
| consistency_groups.volumes.comment | string | query | False | Filter by consistency_groups.volumes.comment <ul style="list-style-type: none"> • maxLength: 1023 • minLength: 0 |
| consistency_groups.volumes.language | string | query | False | Filter by consistency_groups.volumes.language |
| consistency_groups.volumes.nas.path | string | query | False | Filter by consistency_groups.volumes.nas.path <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.volumes.nas.unix_permissions | integer | query | False | Filter by consistency_groups.volumes.nas.unix_permissions <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.volumes.nas.security_style | string | query | False | Filter by consistency_groups.volumes.nas.security_style <ul style="list-style-type: none"> • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|---|
| consistency_groups.volumes.nas.uid | integer | query | False | Filter by consistency_groups.volumes.nas.uid • Introduced in: 9.12 |
| consistency_groups.volumes.nas.junction_parent.uuid | string | query | False | Filter by consistency_groups.volumes.nas.junction_parent.uuid • Introduced in: 9.12 |
| consistency_groups.volumes.nas.junction_parent.name | string | query | False | Filter by consistency_groups.volumes.nas.junction_parent.name • Introduced in: 9.12 |
| consistency_groups.volumes.nas.gid | integer | query | False | Filter by consistency_groups.volumes.nas.gid • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.allow_suid | boolean | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.allow_suid • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.clients.match | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.clients.match • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|---|
| consistency_groups.volumes.nas.export_policy.rules.protocols | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.protocols • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.allow_device_creation | boolean | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.allow_device_creation • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.anonymous_user | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.anonymous_user • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.ntfs_unix_security | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.ntfs_unix_security • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.chown_mode | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.chown_mode • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|---|
| consistency_groups.volumes.nas.export_policy.rules.index | integer | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.index • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.rw_rule | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.rw_rule • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.ro_rule | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.ro_rule • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.superuser | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.superuser • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.name | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.name • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.uuid | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.uuid • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|--------|-------|----------|--|
| consistency_groups.volumes.nas.cifs.shares.unix_symlink | string | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.unix_symlink <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.name | string | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.name <ul style="list-style-type: none"> Introduced in: 9.12 maxLength: 80 minLength: 1 |
| consistency_groups.volumes.nas.cifs.shares.acls.type | string | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.acls.type <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.acls.user_or_group | string | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.acls.user_or_group <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.acls.permission | string | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.acls.permission <ul style="list-style-type: none"> Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|---|
| consistency_groups.volumes.nas.cifs.shares.encryption | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.encryption <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.file_umask | integer | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.file_umask <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.access_based_enumeration | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.access_based_enumeration <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.vscan_profile | string | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.vscan_profile <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.namespace_caching | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.namespace_caching <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.dir_umask | integer | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.dir_umask <ul style="list-style-type: none"> • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|--|
| consistency_groups.volumes.nas.cifs.shares.show_snapshot | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.show_snapshot <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.no_strict_security | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.no_strict_security <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.oplocks | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.oplocks <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.allow_unencrypted_access | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.allow_unencrypted_access <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.comment | string | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.comment <ul style="list-style-type: none"> Introduced in: 9.12 maxLength: 256 minLength: 1 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|--|
| consistency_groups.volumes.nas.cifs.shares.continuously_available | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.continuously_available • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.change_notify | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.change_notify • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.home_directory | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.home_directory • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.offline_files | string | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.offline_files • Introduced in: 9.12 |
| consistency_groups.volumes.uuid | string | query | False | Filter by consistency_groups.volumes.uuid |
| consistency_groups.volumes.qos.policy.name | string | query | False | Filter by consistency_groups.volumes.qos.policy.name |
| consistency_groups.volumes.qos.policy.uuid | string | query | False | Filter by consistency_groups.volumes.qos.policy.uuid |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|---|
| consistency_groups.volumes.qos.policy.min_throughput_iops | integer | query | False | Filter by consistency_groups.volumes.qos.policy.min_throughput_iops |
| consistency_groups.volumes.qos.policy.min_throughput_mbps | integer | query | False | Filter by consistency_groups.volumes.qos.policy.min_throughput_mbps |
| consistency_groups.volumes.qos.policy.max_throughput_mbps | integer | query | False | Filter by consistency_groups.volumes.qos.policy.max_throughput_mbps |
| consistency_groups.volumes.qos.policy.max_throughput_iops | integer | query | False | Filter by consistency_groups.volumes.qos.policy.max_throughput_iops |
| consistency_groups.volumes.snapshot_policy.name | string | query | False | Filter by consistency_groups.volumes.snapshot_policy.name |
| consistency_groups.volumes.snapshot_policy.uuid | string | query | False | Filter by consistency_groups.volumes.snapshot_policy.uuid |
| consistency_groups.namespaces.uuid | string | query | False | Filter by consistency_groups.namespaces.uuid <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.namespaces.create_time | string | query | False | Filter by consistency_groups.namespaces.create_time <ul style="list-style-type: none"> Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|--|
| consistency_groups.namespaces.auto_delete | boolean | query | False | Filter by consistency_groups.namespaces.auto_delete • Introduced in: 9.12 |
| consistency_groups.namespaces.os_type | string | query | False | Filter by consistency_groups.namespaces.os_type • Introduced in: 9.12 |
| consistency_groups.namespaces.name | string | query | False | Filter by consistency_groups.namespaces.name • Introduced in: 9.12 |
| consistency_groups.namespaces.enabled | boolean | query | False | Filter by consistency_groups.namespaces.enabled • Introduced in: 9.12 |
| consistency_groups.namespaces.subsystem_map.subsystem.os_type | string | query | False | Filter by consistency_groups.namespaces.subsystem_map.subsystem.os_type • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|--------|-------|----------|---|
| consistency_groups.namespaces.subsystem_map.subsystem.comment | string | query | False | Filter by consistency_groups.namespaces.subsystem_map.subsystem.comment <ul style="list-style-type: none"> • Introduced in: 9.12 • maxLength: 255 • minLength: 0 |
| consistency_groups.namespaces.subsystem_map.subsystem.name | string | query | False | Filter by consistency_groups.namespaces.subsystem_map.subsystem.name <ul style="list-style-type: none"> • Introduced in: 9.12 • maxLength: 96 • minLength: 1 |
| consistency_groups.namespaces.subsystem_map.subsystem.uuid | string | query | False | Filter by consistency_groups.namespaces.subsystem_map.subsystem.uuid <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.namespaces.subsystem_map.subsystem.hosts.nqn | string | query | False | Filter by consistency_groups.namespaces.subsystem_map.subsystem.hosts.nqn <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.namespaces.subsystem_map.anagrp_id | string | query | False | Filter by consistency_groups.namespaces.subsystem_map.anagrp_id <ul style="list-style-type: none"> • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|---|
| consistency_groups.namespaces.subsystem_map.nsid | string | query | False | Filter by consistency_groups.namespaces.subsystem_map.nsid <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.namespaces.comment | string | query | False | Filter by consistency_groups.namespaces.comment <ul style="list-style-type: none"> Introduced in: 9.12 maxLength: 254 minLength: 0 |
| consistency_groups.namespaces.status.container_state | string | query | False | Filter by consistency_groups.namespaces.status.container_state <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.namespaces.status.state | string | query | False | Filter by consistency_groups.namespaces.status.state <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.namespaces.status.mapped | boolean | query | False | Filter by consistency_groups.namespaces.status.mapped <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.namespaces.status.read_only | boolean | query | False | Filter by consistency_groups.namespaces.status.read_only <ul style="list-style-type: none"> Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|---|
| consistency_groups.namespaces.space.size | integer | query | False | Filter by consistency_groups.namespaces.space.size <ul style="list-style-type: none"> • Introduced in: 9.12 • Max value: 140737488355328 • Min value: 4096 |
| consistency_groups.namespaces.space.block_size | integer | query | False | Filter by consistency_groups.namespaces.space.block_size <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.namespaces.space.guarantee.reserved | boolean | query | False | Filter by consistency_groups.namespaces.space.guarantee.reserved <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.namespaces.space.guarantee.requested | boolean | query | False | Filter by consistency_groups.namespaces.space.guarantee.requested <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.namespaces.space.used | integer | query | False | Filter by consistency_groups.namespaces.space.used <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.snapshot_policy.name | string | query | False | Filter by consistency_groups.snapshot_policy.name |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|---|
| consistency_groups.snapshot_policy.uuid | string | query | False | Filter by consistency_groups.snapshot_policy.uuid |
| consistency_groups.parent_consistency_group.name | string | query | False | Filter by consistency_groups.parent_consistency_group.name |
| consistency_groups.parent_consistency_group.uuid | string | query | False | Filter by consistency_groups.parent_consistency_group.uuid |
| consistency_groups.qos.policy.name | string | query | False | Filter by consistency_groups.qos.policy.name |
| consistency_groups.qos.policy.uuid | string | query | False | Filter by consistency_groups.qos.policy.uuid |
| consistency_groups.qos.policy.min_throughput_iops | integer | query | False | Filter by consistency_groups.qos.policy.min_throughput_iops |
| consistency_groups.qos.policy.min_throughput_mbps | integer | query | False | Filter by consistency_groups.qos.policy.min_throughput_mbps |
| consistency_groups.qos.policy.max_throughput_mbps | integer | query | False | Filter by consistency_groups.qos.policy.max_throughput_mbps |
| consistency_groups.qos.policy.max_throughput_iops | integer | query | False | Filter by consistency_groups.qos.policy.max_throughput_iops |
| consistency_groups.luns.uuid | string | query | False | Filter by consistency_groups.luns.uuid |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|--|
| consistency_groups.luns.create_time | string | query | False | Filter by consistency_groups.luns.create_time |
| consistency_groups.luns.os_type | string | query | False | Filter by consistency_groups.luns.os_type |
| consistency_groups.luns.qos.policy.max_throughput_iops | integer | query | False | Filter by consistency_groups.luns.qos.policy.max_throughput_iops |
| consistency_groups.luns.qos.policy.max_throughput_mbps | integer | query | False | Filter by consistency_groups.luns.qos.policy.max_throughput_mbps |
| consistency_groups.luns.qos.policy.min_throughput_mbps | integer | query | False | Filter by consistency_groups.luns.qos.policy.min_throughput_mbps |
| consistency_groups.luns.qos.policy.min_throughput_iops | integer | query | False | Filter by consistency_groups.luns.qos.policy.min_throughput_iops |
| consistency_groups.luns.qos.policy.uuid | string | query | False | Filter by consistency_groups.luns.qos.policy.uuid |
| consistency_groups.luns.qos.policy.name | string | query | False | Filter by consistency_groups.luns.qos.policy.name |
| consistency_groups.luns.name | string | query | False | Filter by consistency_groups.luns.name |
| consistency_groups.luns.enabled | boolean | query | False | Filter by consistency_groups.luns.enabled |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|---|
| consistency_groups.luns.lun_maps.logical_unit_number | integer | query | False | Filter by consistency_groups.luns.lun_maps.logical_unit_number |
| consistency_groups.luns.lun_maps.igroup.initiators.name | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.initiators.name |
| consistency_groups.luns.lun_maps.igroup.initiators.comment | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.initiators.comment <ul style="list-style-type: none"> • maxLength: 254 • minLength: 0 |
| consistency_groups.luns.lun_maps.igroup.protocol | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.protocol |
| consistency_groups.luns.lun_maps.igroup.name | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.name <ul style="list-style-type: none"> • maxLength: 96 • minLength: 1 |
| consistency_groups.luns.lun_maps.igroup.uuid | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.uuid |
| consistency_groups.luns.lun_maps.igroup.igroups.name | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.igroups.name <ul style="list-style-type: none"> • maxLength: 96 • minLength: 1 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|---|
| consistency_groups.luns.lun_maps.igroup.uuid | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.uuid |
| consistency_groups.luns.lun_maps.igroup.os_type | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.os_type |
| consistency_groups.luns.lun_maps.igroup.comment | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.comment <ul style="list-style-type: none"> • Introduced in: 9.11 • maxLength: 254 • minLength: 0 |
| consistency_groups.luns.serial_number | string | query | False | Filter by consistency_groups.luns.serial_number <ul style="list-style-type: none"> • maxLength: 12 • minLength: 12 |
| consistency_groups.luns.comment | string | query | False | Filter by consistency_groups.luns.comment <ul style="list-style-type: none"> • maxLength: 254 • minLength: 0 |
| consistency_groups.luns.space.used | integer | query | False | Filter by consistency_groups.luns.space.used |
| consistency_groups.luns.space.size | integer | query | False | Filter by consistency_groups.luns.space.size <ul style="list-style-type: none"> • Max value: 140737488355328 • Min value: 4096 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|--|
| consistency_groups.luns.space.guarantee.reserved | boolean | query | False | Filter by consistency_groups.luns.space.guarantee.reserved • Introduced in: 9.11 |
| consistency_groups.luns.space.guarantee.requested | boolean | query | False | Filter by consistency_groups.luns.space.guarantee.requested • Introduced in: 9.11 |
| consistency_groups.name | string | query | False | Filter by consistency_groups.name |
| consistency_groups.tiering.policy | string | query | False | Filter by consistency_groups.tiering.policy |
| consistency_groups.space.available | integer | query | False | Filter by consistency_groups.space.available |
| consistency_groups.space.used | integer | query | False | Filter by consistency_groups.space.used |
| consistency_groups.space.size | integer | query | False | Filter by consistency_groups.space.size |
| consistency_groups.svm.uuid | string | query | False | Filter by consistency_groups.svm.uuid |
| consistency_groups.svm.name | string | query | False | Filter by consistency_groups.svm.name |
| name | string | query | False | Filter by name |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|--|
| namespaces.uuid | string | query | False | Filter by namespaces.uuid <ul style="list-style-type: none"> • Introduced in: 9.12 |
| namespaces.create_time | string | query | False | Filter by namespaces.create_time <ul style="list-style-type: none"> • Introduced in: 9.12 |
| namespaces.auto_delete | boolean | query | False | Filter by namespaces.auto_delete <ul style="list-style-type: none"> • Introduced in: 9.12 |
| namespaces.os_type | string | query | False | Filter by namespaces.os_type <ul style="list-style-type: none"> • Introduced in: 9.12 |
| namespaces.name | string | query | False | Filter by namespaces.name <ul style="list-style-type: none"> • Introduced in: 9.12 |
| namespaces.enabled | boolean | query | False | Filter by namespaces.enabled <ul style="list-style-type: none"> • Introduced in: 9.12 |
| namespaces.subsystem_map.subsystem.os_type | string | query | False | Filter by namespaces.subsystem_map.subsystem.os_type <ul style="list-style-type: none"> • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--|--------|-------|----------|--|
| namespaces.subsystem_map.subsystem.comment | string | query | False | Filter by namespaces.subsystem_map.subsystem.comment <ul style="list-style-type: none"> • Introduced in: 9.12 • maxLength: 255 • minLength: 0 |
| namespaces.subsystem_map.subsystem.name | string | query | False | Filter by namespaces.subsystem_map.subsystem.name <ul style="list-style-type: none"> • Introduced in: 9.12 • maxLength: 96 • minLength: 1 |
| namespaces.subsystem_map.subsystem.uuid | string | query | False | Filter by namespaces.subsystem_map.subsystem.uuid <ul style="list-style-type: none"> • Introduced in: 9.12 |
| namespaces.subsystem_map.subsystem.hosts.nqn | string | query | False | Filter by namespaces.subsystem_map.subsystem.hosts.nqn <ul style="list-style-type: none"> • Introduced in: 9.12 |
| namespaces.subsystem_map.anagrp_id | string | query | False | Filter by namespaces.subsystem_map.anagrp_id <ul style="list-style-type: none"> • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|-----------------------------------|---------|-------|----------|--|
| namespaces.subsystem_map.nsid | string | query | False | Filter by namespaces.subsystem_map.nsid <ul style="list-style-type: none"> Introduced in: 9.12 |
| namespaces.comment | string | query | False | Filter by namespaces.comment <ul style="list-style-type: none"> Introduced in: 9.12 maxLength: 254 minLength: 0 |
| namespaces.status.container_state | string | query | False | Filter by namespaces.status.container_state <ul style="list-style-type: none"> Introduced in: 9.12 |
| namespaces.status.state | string | query | False | Filter by namespaces.status.state <ul style="list-style-type: none"> Introduced in: 9.12 |
| namespaces.status.mapped | boolean | query | False | Filter by namespaces.status.mapped <ul style="list-style-type: none"> Introduced in: 9.12 |
| namespaces.status.read_only | boolean | query | False | Filter by namespaces.status.read_only <ul style="list-style-type: none"> Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--------------------------------------|---------|-------|----------|--|
| namespaces.space.size | integer | query | False | Filter by namespaces.space.size <ul style="list-style-type: none"> Introduced in: 9.12 Max value: 140737488355328 Min value: 4096 |
| namespaces.space.block_size | integer | query | False | Filter by namespaces.space.block_size <ul style="list-style-type: none"> Introduced in: 9.12 |
| namespaces.space.guarantee.reserved | boolean | query | False | Filter by namespaces.space.guarantee.reserved <ul style="list-style-type: none"> Introduced in: 9.12 |
| namespaces.space.guarantee.requested | boolean | query | False | Filter by namespaces.space.guarantee.requested <ul style="list-style-type: none"> Introduced in: 9.12 |
| namespaces.space.used | integer | query | False | Filter by namespaces.space.used <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.name | string | query | False | Filter by volumes.name <ul style="list-style-type: none"> maxLength: 203 minLength: 1 |
| volumes.tiering.policy | string | query | False | Filter by volumes.tiering.policy |

| Name | Type | In | Required | Description |
|------------------------------|---------|-------|----------|---|
| volumes.space.available | integer | query | False | Filter by volumes.space.available |
| volumes.space.used | integer | query | False | Filter by volumes.space.used |
| volumes.space.size | integer | query | False | Filter by volumes.space.size |
| volumes.comment | string | query | False | Filter by volumes.comment <ul style="list-style-type: none"> • maxLength: 1023 • minLength: 0 |
| volumes.language | string | query | False | Filter by volumes.language |
| volumes.nas.path | string | query | False | Filter by volumes.nas.path <ul style="list-style-type: none"> • Introduced in: 9.12 |
| volumes.nas.unix_permissions | integer | query | False | Filter by volumes.nas.unix_permissions <ul style="list-style-type: none"> • Introduced in: 9.12 |
| volumes.nas.security_style | string | query | False | Filter by volumes.nas.security_style <ul style="list-style-type: none"> • Introduced in: 9.12 |
| volumes.nas.uid | integer | query | False | Filter by volumes.nas.uid <ul style="list-style-type: none"> • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|--|
| volumes.nas.junction_parent.uuid | string | query | False | Filter by volumes.nas.junction_parent.uuid • Introduced in: 9.12 |
| volumes.nas.junction_parent.name | string | query | False | Filter by volumes.nas.junction_parent.name • Introduced in: 9.12 |
| volumes.nas.gid | integer | query | False | Filter by volumes.nas.gid • Introduced in: 9.12 |
| volumes.nas.export_policy.rules.allow_suid | boolean | query | False | Filter by volumes.nas.export_policy.rules.allow_suid • Introduced in: 9.12 |
| volumes.nas.export_policy.rules.clients.match | string | query | False | Filter by volumes.nas.export_policy.rules.clients.match • Introduced in: 9.12 |
| volumes.nas.export_policy.rules.protocols | string | query | False | Filter by volumes.nas.export_policy.rules.protocols • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|--|
| volumes.nas.export_policy.rules.allow_device_creation | boolean | query | False | Filter by volumes.nas.export_policy.rules.allow_device_creation • Introduced in: 9.12 |
| volumes.nas.export_policy.rules.anonymous_user | string | query | False | Filter by volumes.nas.export_policy.rules.anonymous_user • Introduced in: 9.12 |
| volumes.nas.export_policy.rules.ntfs_unix_security | string | query | False | Filter by volumes.nas.export_policy.rules.ntfs_unix_security • Introduced in: 9.12 |
| volumes.nas.export_policy.rules.chown_mode | string | query | False | Filter by volumes.nas.export_policy.rules.chown_mode • Introduced in: 9.12 |
| volumes.nas.export_policy.rules.index | integer | query | False | Filter by volumes.nas.export_policy.rules.index • Introduced in: 9.12 |
| volumes.nas.export_policy.rules.rw_rule | string | query | False | Filter by volumes.nas.export_policy.rules.rw_rule • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|--------|-------|----------|---|
| volumes.nas.export_policy.rules.ro_rule | string | query | False | Filter by volumes.nas.export_policy.rules.ro_rule <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.export_policy.rules.superuser | string | query | False | Filter by volumes.nas.export_policy.rules.superuser <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.export_policy.name | string | query | False | Filter by volumes.nas.export_policy.name <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.export_policy.uuid | string | query | False | Filter by volumes.nas.export_policy.uuid <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.cifs.shares.unix_symlink | string | query | False | Filter by volumes.nas.cifs.shares.unix_symlink <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.cifs.shares.name | string | query | False | Filter by volumes.nas.cifs.shares.name <ul style="list-style-type: none"> Introduced in: 9.12 maxLength: 80 minLength: 1 |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|--|
| volumes.nas.cifs.shares.acls.type | string | query | False | Filter by volumes.nas.cifs.shares.acls.type <ul style="list-style-type: none"> • Introduced in: 9.12 |
| volumes.nas.cifs.shares.acls.user_or_group | string | query | False | Filter by volumes.nas.cifs.shares.acls.user_or_group <ul style="list-style-type: none"> • Introduced in: 9.12 |
| volumes.nas.cifs.shares.acls.permission | string | query | False | Filter by volumes.nas.cifs.shares.acls.permission <ul style="list-style-type: none"> • Introduced in: 9.12 |
| volumes.nas.cifs.shares.encryption | boolean | query | False | Filter by volumes.nas.cifs.shares.encryption <ul style="list-style-type: none"> • Introduced in: 9.12 |
| volumes.nas.cifs.shares.file_umask | integer | query | False | Filter by volumes.nas.cifs.shares.file_umask <ul style="list-style-type: none"> • Introduced in: 9.12 |
| volumes.nas.cifs.shares.access_based_enumeration | boolean | query | False | Filter by volumes.nas.cifs.shares.access_based_enumeration <ul style="list-style-type: none"> • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|--|
| volumes.nas.cifs.shares.vscan_profile | string | query | False | Filter by volumes.nas.cifs.shares.vscan_profile <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.cifs.shares.namespace_caching | boolean | query | False | Filter by volumes.nas.cifs.shares.namespace_caching <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.cifs.shares.dir_umask | integer | query | False | Filter by volumes.nas.cifs.shares.dir_umask <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.cifs.shares.show_snapshot | boolean | query | False | Filter by volumes.nas.cifs.shares.show_snapshot <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.cifs.shares.no_strict_security | boolean | query | False | Filter by volumes.nas.cifs.shares.no_strict_security <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.cifs.shares.oplocks | boolean | query | False | Filter by volumes.nas.cifs.shares.oplocks <ul style="list-style-type: none"> Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|--|
| volumes.nas.cifs.shares.allow_unencrypted_access | boolean | query | False | Filter by volumes.nas.cifs.shares.allow_unencrypted_access • Introduced in: 9.12 |
| volumes.nas.cifs.shares.comment | string | query | False | Filter by volumes.nas.cifs.shares.comment • Introduced in: 9.12 • maxLength: 256 • minLength: 1 |
| volumes.nas.cifs.shares.continuously_available | boolean | query | False | Filter by volumes.nas.cifs.shares.continuously_available • Introduced in: 9.12 |
| volumes.nas.cifs.shares.change_notify | boolean | query | False | Filter by volumes.nas.cifs.shares.change_notify • Introduced in: 9.12 |
| volumes.nas.cifs.shares.home_directory | boolean | query | False | Filter by volumes.nas.cifs.shares.home_directory • Introduced in: 9.12 |
| volumes.nas.cifs.shares.offline_files | string | query | False | Filter by volumes.nas.cifs.shares.offline_files • Introduced in: 9.12 |
| volumes.uuid | string | query | False | Filter by volumes.uuid |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|--|
| volumes.qos.policy.name | string | query | False | Filter by volumes.qos.policy.name |
| volumes.qos.policy.uuid | string | query | False | Filter by volumes.qos.policy.uuid |
| volumes.qos.policy.min_throughput_iops | integer | query | False | Filter by volumes.qos.policy.min_throughput_iops |
| volumes.qos.policy.min_throughput_mbps | integer | query | False | Filter by volumes.qos.policy.min_throughput_mbps |
| volumes.qos.policy.max_throughput_mbps | integer | query | False | Filter by volumes.qos.policy.max_throughput_mbps |
| volumes.qos.policy.max_throughput_iops | integer | query | False | Filter by volumes.qos.policy.max_throughput_iops |
| volumes.snapshot_policy.name | string | query | False | Filter by volumes.snapshot_policy.name |
| volumes.snapshot_policy.uuid | string | query | False | Filter by volumes.snapshot_policy.uuid |
| replication_source | boolean | query | False | Filter by replication_source |
| uuid | string | query | False | Filter by uuid |
| svm.uuid | string | query | False | Filter by svm.uuid |
| svm.name | string | query | False | Filter by svm.name |
| space.available | integer | query | False | Filter by space.available |

| Name | Type | In | Required | Description |
|----------------|---------------|-------|----------|--|
| space.used | integer | query | False | Filter by space.used |
| space.size | integer | query | False | Filter by space.size |
| tiering.policy | string | query | False | Filter by tiering.policy |
| replicated | boolean | query | False | Filter by replicated |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | <p>The default is true for GET calls. When set to false, only the number of records is returned.</p> <ul style="list-style-type: none"> • Default value: 1 |
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached.</p> <ul style="list-style-type: none"> • Max value: 120 • Min value: 0 • Default value: 1 |
| order_by | array[string] | query | False | Order results by specified fields and optional [asc/desc] direction. Default direction is 'asc' for ascending. |

Response

Status: 200, Ok

| Name | Type | Description |
|-------------|----------------------------------|--------------------|
| _links | collection_links | |
| num_records | integer | Number of records. |
| records | array[records] | |

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "application": {
        "component_type": "string",
        "type": "string"
      },
      "clone": {
        "guarantee": {
          "type": "string"
        },
        "parent_consistency_group": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "my_consistency_group",
          "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
        },
        "parent_snapshot": {
          "name": "string"
        },
        "volume": {
          "prefix": "string",
          "suffix": "string"
        }
      },
      "consistency_groups": [
        {
```

```

    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "application": {
      "component_type": "string",
      "type": "string"
    },
    "luns": [
      {
        "comment": "string",
        "create_time": "2018-06-04T19:00:00Z",
        "lun_maps": [
          {
            "igroup": {
              "comment": "string",
              "igroups": [
                {
                  "_links": {
                    "self": {
                      "href": "/api/resourcelink"
                    }
                  },
                  "name": "igroup1",
                  "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
                }
              ],
              "initiators": [
                {
                  "comment": "my comment",
                  "name": "iqn.1998-01.com.corp.iscsi:name1"
                }
              ],
              "name": "igroup1",
              "os_type": "string",
              "protocol": "string",
              "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
            }
          }
        ],
        "name": "/vol/volume1/lun1",
        "os_type": "string",
        "qos": {
          "policy": {
            "_links": {

```

```

        "self": {
            "href": "/api/resourcelink"
        },
        },
        "max_throughput_iops": 10000,
        "max_throughput_mbps": 500,
        "min_throughput_iops": 2000,
        "min_throughput_mbps": 500,
        "name": "performance",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    },
    "serial_number": "string",
    "space": {
        "size": 1073741824
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
],
"name": "string",
"namespaces": [
    {
        "comment": "string",
        "create_time": "2018-06-04T19:00:00Z",
        "name": "/vol/volume1/mtree1/namespace1",
        "os_type": "string",
        "space": {
            "block_size": 512,
            "size": 1073741824
        },
        "status": {
            "container_state": "string",
            "state": "online"
        },
        "subsystem_map": {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "anagrpid": "00103050h",
            "nsid": "00000001h",
            "subsystem": {
                "comment": "string",
                "hosts": [
                    {

```

```

        "nqn": "nqn.1992-01.example.com:string"
    },
    ],
    "name": "subsystem1",
    "os_type": "string",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
],
"parent_consistency_group": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "my_consistency_group",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"qos": {
    "policy": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        }
    },
    "max_throughput_iops": 10000,
    "max_throughput_mbps": 500,
    "min_throughput_iops": 2000,
    "min_throughput_mbps": 500,
    "name": "performance",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
},
"restore_to": {
    "snapshot": {
        "name": "string",
        "uuid": "string"
    }
}
},
"snapshot_policy": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    }
}
}

```



```

    },
    "name": "default",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "space": {
    "available": 5737418,
    "size": 1073741824,
    "used": 5737418
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "tiering": {
    "object_stores": [
      {}
    ],
    "policy": "string"
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
  "volumes": [
    {
      "comment": "string",
      "language": "string",
      "name": "vol_cs_dept",
      "nas": {
        "cifs": {
          "shares": [
            {
              "_links": {
                "self": {
                  "href": "/api/resourcelink"
                }
              },
              "acIs": [
                {
                  "_links": {
                    "self": {
                      "href": "/api/resourcelink"
                    }
                  }
                }
              ]
            }
          ]
        }
      }
    }
  ],

```

```

        "permission": "string",
        "type": "string",
        "user_or_group": "ENGDOMAIN\\ad_user"
    }
],
"comment": "HR Department Share",
"dir_umask": 22,
"file_umask": 22,
"name": "HR_SHARE",
"offline_files": "string",
"unix_symlink": "string",
"vscan_profile": "string"
}
]
},
"export_policy": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "string",
    "rules": [
        {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "anonymous_user": "string",
            "chown_mode": "string",
            "clients": [
                {
                    "match": "0.0.0.0/0"
                }
            ],
            "index": 0,
            "ntfs_unix_security": "string",
            "protocols": [
                "string"
            ],
            "ro_rule": [
                "string"
            ],
            "rw_rule": [
                "string"
            ]
        }
    ]
}

```

```

        ],
        "superuser": [
            "string"
        ]
    },
    ],
    "uuid": "string"
},
"junction_parent": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    },
    "name": "vs1_root",
    "uuid": "75c9cfb0-3eb4-11eb-9fb4-005056bb088a"
},
"path": "/user/my_volume",
"security_style": "string",
"unix_permissions": 755
},
"qos": {
    "policy": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        }
    },
    },
    "max_throughput_iops": 10000,
    "max_throughput_mbps": 500,
    "min_throughput_iops": 2000,
    "min_throughput_mbps": 500,
    "name": "performance",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
},
"snapshot_policy": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    }
    },
    "name": "default",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"tiering": {

```

```

        "object_stores": [
            {}
        ],
        "policy": "string"
    },
    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
}
]
}
],
"luns": [
    {
        "comment": "string",
        "create_time": "2018-06-04T19:00:00Z",
        "lun_maps": [
            {
                "igroup": {
                    "comment": "string",
                    "igroups": [
                        {
                            "_links": {
                                "self": {
                                    "href": "/api/resourcelink"
                                }
                            },
                            "name": "igroup1",
                            "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
                        }
                    ],
                    "name": "igroup1",
                    "os_type": "string",
                    "protocol": "string",
                    "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
                }
            }
        ],
        "name": "/vol/volume1/lun1",
        "os_type": "string",
        "qos": {
            "policy": {

```

```

        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        "max_throughput_iops": 10000,
        "max_throughput_mbps": 500,
        "min_throughput_iops": 2000,
        "min_throughput_mbps": 500,
        "name": "performance",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
},
"serial_number": "string",
"space": {
    "size": 1073741824
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
],
"name": "string",
"namespaces": [
    {
        "comment": "string",
        "create_time": "2018-06-04T19:00:00Z",
        "name": "/vol/volumel/qtreel/namespace1",
        "os_type": "string",
        "space": {
            "block_size": 512,
            "size": 1073741824
        },
        "status": {
            "container_state": "string",
            "state": "online"
        },
        "subsystem_map": {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "anagrp_id": "00103050h",
            "nsid": "00000001h",
            "subsystem": {
                "comment": "string",
                "hosts": [

```

```

        {
            "nqn": "nqn.1992-01.example.com:string"
        }
    ],
    "name": "subsystem1",
    "os_type": "string",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
],
"parent_consistency_group": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "my_consistency_group",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"qos": {
    "policy": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        "max_throughput_iops": 10000,
        "max_throughput_mbps": 500,
        "min_throughput_iops": 2000,
        "min_throughput_mbps": 500,
        "name": "performance",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
},
"restore_to": {
    "snapshot": {
        "name": "string",
        "uuid": "string"
    }
},
"snapshot_policy": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    }
}

```

```

    }
  },
  "name": "default",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"space": {
  "available": 5737418,
  "size": 1073741824,
  "used": 5737418
},
"svm": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "svm1",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"tiering": {
  "object_stores": [
    {}
  ],
  "policy": "string"
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"volumes": [
  {
    "comment": "string",
    "language": "string",
    "name": "vol_cs_dept",
    "nas": {
      "cifs": {
        "shares": [
          {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "acls": [
              {
                "_links": {
                  "self": {
                    "href": "/api/resourcelink"
                  }
                }
              }
            ]
          }
        ]
      }
    }
  }
]

```

```

        },
        "permission": "string",
        "type": "string",
        "user_or_group": "ENGDOMAIN\\ad_user"
    }
],
"comment": "HR Department Share",
"dir_umask": 22,
"file_umask": 22,
"name": "HR_SHARE",
"offline_files": "string",
"unix_symlink": "string",
"vscan_profile": "string"
}
]
},
"export_policy": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "string",
    "rules": [
        {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "anonymous_user": "string",
            "chown_mode": "string",
            "clients": [
                {
                    "match": "0.0.0.0/0"
                }
            ],
            "index": 0,
            "ntfs_unix_security": "string",
            "protocols": [
                "string"
            ],
            "ro_rule": [
                "string"
            ],
            "rw_rule": [

```



```

        "string"
    ],
    "superuser": [
        "string"
    ]
}
],
"uuid": "string"
},
"junction_parent": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "vsl_root",
    "uuid": "75c9cfb0-3eb4-11eb-9fb4-005056bb088a"
},
"path": "/user/my_volume",
"security_style": "string",
"unix_permissions": 755
},
"qos": {
    "policy": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        }
    },
    "max_throughput_iops": 10000,
    "max_throughput_mbps": 500,
    "min_throughput_iops": 2000,
    "min_throughput_mbps": 500,
    "name": "performance",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
},
"snapshot_policy": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "default",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},

```

```

        "tiering": {
            "object_stores": [
                {}
            ],
            "policy": "string"
        },
        "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
    }
]
}

```

Error

Status: Default, Error

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

Example error

```

{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}

```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

collection_links

| Name | Type | Description |
|------|----------------------|-------------|
| next | href | |
| self | href | |

self_link

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

application

| Name | Type | Description |
|----------------|--------|----------------------------------|
| component_type | string | Nested consistency group tag. |
| type | string | Top level consistency group tag. |

guarantee

| Name | Type | Description |
|------|--------|--|
| type | string | The type of space guarantee of this volume in the aggregate. |

parent_consistency_group

Consistency group that is to be cloned.

| Name | Type | Description |
|--------|---------------------------|---|
| _links | self_link | |
| name | string | The name of the consistency group. |
| uuid | string | The unique identifier of the consistency group. |

parent_snapshot

| Name | Type | Description |
|------|--------|--|
| name | string | Name of an existing Snapshot copy of a parent consistency group. |

volume

Volume name suffix/prefix for the cloned volumes.

| Name | Type | Description |
|--------|--------|--|
| prefix | string | Volume name prefix for cloned volumes. |
| suffix | string | Volume name suffix for cloned volumes. |

clone

Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy.

| Name | Type | Description |
|--------------------------|--|---|
| guarantee | guarantee | |
| parent_consistency_group | parent_consistency_group | Consistency group that is to be cloned. |
| parent_snapshot | parent_snapshot | |
| split_initiated | boolean | Splits volumes after cloning. Default is false. |
| volume | volume | Volume name suffix/prefix for the cloned volumes. |

source

The source LUN for a LUN clone operation. This can be specified using property `clone.source.uuid` or `clone.source.name`. If both properties are supplied, they must refer to the same LUN.

Valid in POST to create a new LUN as a clone of the source.

Valid in PATCH to overwrite an existing LUN's data as a clone of another.

clone

This sub-object is used in POST to create a new LUN as a clone of an existing LUN, or PATCH to overwrite an existing LUN as a clone of another. Setting a property in this sub-object indicates that a LUN clone is desired. Consider the following other properties when cloning a LUN: `auto_delete`, `qos_policy`, `space.guarantee.requested` and

`space.scsi_thin_provisioning_support_enabled`.

When used in a PATCH, the patched LUN's data is over-written as a clone of the source and the following properties are preserved from the patched LUN unless otherwise specified as part of the PATCH: `class`, `auto_delete`, `lun_maps`, `serial_number`, `status.state`, and `uuid`.

Persistent reservations for the patched LUN are also preserved.

igroups

| Name | Type | Description |
|---------------------|---------------------------|---|
| <code>_links</code> | self_link | |
| <code>name</code> | string | The name of the initiator group. |
| <code>uuid</code> | string | The unique identifier of the initiator group. |

initiators

The initiators that are members of the initiator group.

| Name | Type | Description |
|----------------------|--------|--|
| <code>comment</code> | string | A comment available for use by the administrator. |
| <code>name</code> | string | Name of initiator that is a member of the initiator group. |

igroup

The initiator group that directly owns the initiator, which is where modification of the initiator is supported. This property will only be populated when the initiator is a member of a nested initiator group.

| Name | Type | Description |
|-------------------------|-------------------------------------|--|
| <code>comment</code> | string | A comment available for use by the administrator. Valid in POST and PATCH. |
| <code>igroups</code> | array[igroups] | Separate igroup definitions to include in this group. |
| <code>initiators</code> | array[initiators] | The initiators that are members of the group. |

| Name | Type | Description |
|----------|--------|---|
| name | string | The name of the initiator group. Required in POST; optional in PATCH. |
| os_type | string | The host operating system of the initiator group. All initiators in the group should be hosts of the same operating system. Required in POST; optional in PATCH. |
| protocol | string | <p>The protocols supported by the initiator group. This restricts the type of initiators that can be added to the initiator group. Optional in POST; if not supplied, this defaults to <i>mixed</i>.</p> <p>The protocol of an initiator group cannot be changed after creation of the group.</p> |
| uuid | string | The unique identifier of the initiator group. |

lun_maps

A LUN map is an association between a LUN and an initiator group.

When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.

| Name | Type | Description |
|--------|------------------------|---|
| igroup | igroup | The initiator group that directly owns the initiator, which is where modification of the initiator is supported. This property will only be populated when the initiator is a member of a nested initiator group. |

| Name | Type | Description |
|---------------------|---------|---|
| logical_unit_number | integer | <p>The logical unit number assigned to the LUN when mapped to the specified initiator group. The number is used to identify the LUN to initiators in the initiator group when communicating through the Fibre Channel Protocol or iSCSI. Optional in POST; if no value is provided, ONTAP assigns the lowest available value.</p> <ul style="list-style-type: none"> • Introduced in: 9.6 • readCreate: 1 |

provisioning_options

Options that are applied to the operation.

| Name | Type | Description |
|--------|---------|---|
| action | string | Operation to perform |
| count | integer | Number of elements to perform the operation on. |

policy

The QoS policy

| Name | Type | Description |
|---------------------|---------------------------|---|
| _links | self_link | |
| max_throughput_iops | integer | Specifies the maximum throughput in IOPS, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH. |
| max_throughput_mbps | integer | Specifies the maximum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH. |

| Name | Type | Description |
|---------------------|---------|---|
| min_throughput_iops | integer | Specifies the minimum throughput in IOPS, 0 means none. Setting "min_throughput" is supported on AFF platforms only, unless FabricPool tiering policies are set. This is mutually exclusive with name and UUID during POST and PATCH. |
| min_throughput_mbps | integer | Specifies the minimum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH. |
| name | string | The QoS policy group name. This is mutually exclusive with UUID and other QoS attributes during POST and PATCH. |
| uuid | string | The QoS policy group UUID. This is mutually exclusive with name and other QoS attributes during POST and PATCH. |

qos

| Name | Type | Description |
|--------|------------------------|----------------|
| policy | policy | The QoS policy |

guarantee

Properties that request and report the space guarantee for the LUN.

| Name | Type | Description |
|-----------|---------|--|
| requested | boolean | The requested space reservation policy for the LUN. If <i>true</i> , a space reservation is requested for the LUN; if <i>false</i> , the LUN is thin provisioned. Guaranteeing a space reservation request for a LUN requires that the volume in which the LUN resides is also space reserved and that the fractional reserve for the volume is 100%. Valid in POST and PATCH. |

| Name | Type | Description |
|----------|---------|---|
| reserved | boolean | <p>Reports if the LUN is space guaranteed.</p> <p>If <i>true</i>, a space guarantee is requested and the containing volume and aggregate support the request. If <i>false</i>, a space guarantee is not requested or a space guarantee is requested and either the containing volume or aggregate do not support the request.</p> |

space

The storage space related properties of the LUN.

| Name | Type | Description |
|-----------|---------------------------|---|
| guarantee | guarantee | Properties that request and report the space guarantee for the LUN. |
| size | integer | <p>The total provisioned size of the LUN. The LUN size can be increased but not reduced using the REST interface. The maximum and minimum sizes listed here are the absolute maximum and absolute minimum sizes, in bytes. The actual minimum and maximum sizes vary depending on the ONTAP version, ONTAP platform, and the available space in the containing volume and aggregate. For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.</p> <ul style="list-style-type: none"> • example: 1073741824 • format: int64 • Max value: 140737488355328 • Min value: 4096 • Introduced in: 9.6 |

| Name | Type | Description |
|------|---------|---|
| used | integer | <p>The amount of space consumed by the main data stream of the LUN.</p> <p>This value is the total space consumed in the volume by the LUN, including filesystem overhead, but excluding prefix and suffix streams. Due to internal filesystem overhead and the many ways SAN filesystems and applications utilize blocks within a LUN, this value does not necessarily reflect actual consumption/availability from the perspective of the filesystem or application. Without specific knowledge of how the LUN blocks are utilized outside of ONTAP, this property should not be used as an indicator for an out-of-space condition.</p> <p>For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.</p> <ul style="list-style-type: none"> • format: int64 • Introduced in: 9.6 • readOnly: 1 |

luns

A LUN is the logical representation of storage in a storage area network (SAN).

In ONTAP, a LUN is located within a volume. Optionally, it can be located within a qtree in a volume.

A LUN can be created to a specified size using thin or thick provisioning. A LUN can then be renamed, resized, cloned, and moved to a different volume. LUNs support the assignment of a quality of service (QoS) policy for performance management or a QoS policy can be assigned to the volume containing the LUN. See the LUN object model to learn more about each of the properties supported by the LUN REST API.

A LUN must be mapped to an initiator group to grant access to the initiator group's initiators (client hosts). Initiators can then access the LUN and perform I/O over a Fibre Channel (FC) fabric using the Fibre Channel Protocol or a TCP/IP network using iSCSI.

| Name | Type | Description |
|-------------|-----------------|---|
| comment | string | A configurable comment available for use by the administrator. Valid in POST and PATCH. |
| create_time | string | The time the LUN was created. |
| enabled | boolean | The enabled state of the LUN. LUNs can be disabled to prevent access to the LUN. Certain error conditions also cause the LUN to become disabled. If the LUN is disabled, you can consult the <code>state</code> property to determine if the LUN is administratively disabled (<i>offline</i>) or has become disabled as a result of an error. A LUN in an error condition can be brought online by setting the <code>enabled</code> property to <i>true</i> or brought administratively offline by setting the <code>enabled</code> property to <i>false</i> . Upon creation, a LUN is enabled by default. Valid in PATCH. |
| lun_maps | array[lun_maps] | An array of LUN maps. A LUN map is an association between a LUN and an initiator group. When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups. |
| name | string | The fully qualified path name of the LUN composed of the <code>"/vol"</code> prefix, the volume name, the <code>qtree</code> name (optional), and the base name of the LUN. Valid in POST and PATCH. |

| Name | Type | Description |
|---------------|--------|--|
| os_type | string | <p>The operating system type of the LUN.</p> <p>Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.</p> |
| qos | qos | |
| serial_number | string | <p>The LUN serial number. The serial number is generated by ONTAP when the LUN is created.</p> <ul style="list-style-type: none"> • maxLength: 12 • minLength: 12 • readOnly: 1 • Introduced in: 9.10 |
| space | space | The storage space related properties of the LUN. |
| uuid | string | <p>The unique identifier of the LUN. The UUID is generated by ONTAP when the LUN is created.</p> <ul style="list-style-type: none"> • example: 1cd8a442-86d1-11e0-ae1c-123478563412 • readOnly: 1 • Introduced in: 9.10 |

guarantee

Properties that request and report the space guarantee for the NVMe namespace.

| Name | Type | Description |
|-----------|---------|--|
| requested | boolean | <p>The requested space reservation policy for the NVMe namespace. If <i>true</i>, a space reservation is requested for the namespace; if <i>false</i>, the namespace is thin provisioned. Guaranteeing a space reservation request for a namespace requires that the volume in which the namespace resides also be space reserved and that the fractional reserve for the volume be 100%.</p> <p>The space reservation policy for an NVMe namespace is determined by ONTAP.</p> <ul style="list-style-type: none"> • Introduced in: 9.6 |
| reserved | boolean | <p>Reports if the NVMe namespace is space guaranteed.</p> <p>This property is <i>true</i> if a space guarantee is requested and the containing volume and aggregate support the request. This property is <i>false</i> if a space guarantee is not requested or if a space guarantee is requested and either the containing volume and aggregate do not support the request.</p> |

space

The storage space related properties of the NVMe namespace.

| Name | Type | Description |
|------------|---------|---|
| block_size | integer | <p>The size of blocks in the namespace, in bytes.</p> <p>Valid in POST when creating an NVMe namespace that is not a clone of another. Disallowed in POST when creating a namespace clone. Valid in POST.</p> |

| Name | Type | Description |
|-----------|---------------------------|--|
| guarantee | guarantee | Properties that request and report the space guarantee for the NVMe namespace. |
| size | integer | <p>The total provisioned size of the NVMe namespace. Valid in POST and PATCH. The NVMe namespace size can be increased but not reduced using the REST interface.</p> <p>The maximum and minimum sizes listed here are the absolute maximum and absolute minimum sizes, in bytes. The maximum size is variable with respect to large NVMe namespace support in ONTAP. If large namespaces are supported, the maximum size is 128 TB (140737488355328 bytes) and if not supported, the maximum size is just under 16 TB (17557557870592 bytes). The minimum size supported is always 4096 bytes.</p> <p>For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.</p> <ul style="list-style-type: none"> • example: 1073741824 • format: int64 • Max value: 140737488355328 • Min value: 4096 • Introduced in: 9.6 |

| Name | Type | Description |
|------|---------|--|
| used | integer | <p>The amount of space consumed by the main data stream of the NVMe namespace.</p> <p>This value is the total space consumed in the volume by the NVMe namespace, including filesystem overhead, but excluding prefix and suffix streams. Due to internal filesystem overhead and the many ways NVMe filesystems and applications utilize blocks within a namespace, this value does not necessarily reflect actual consumption/availability from the perspective of the filesystem or application. Without specific knowledge of how the namespace blocks are utilized outside of ONTAP, this property should not be used as an indicator for an out-of-space condition.</p> <p>For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.</p> <ul style="list-style-type: none"> • format: int64 • Introduced in: 9.6 • readOnly: 1 |

status

Status information about the NVMe namespace.

| Name | Type | Description |
|-----------------|--------|---|
| container_state | string | The state of the volume and aggregate that contain the NVMe namespace. Namespaces are only available when their containers are available. |

| Name | Type | Description |
|-----------|---------|--|
| mapped | boolean | Reports if the NVMe namespace is mapped to an NVMe subsystem. There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the <code>fields</code> query parameter. See Requesting specific fields to learn more. |
| read_only | boolean | Reports if the NVMe namespace allows only read access. |
| state | string | The state of the NVMe namespace. Normal states for a namespace are <i>online</i> and <i>offline</i> . Other states indicate errors. |

consistency_group_nvme_host

The NVMe host provisioned to access NVMe namespaces mapped to a subsystem.

| Name | Type | Description |
|------|--------|---|
| nqn | string | The NVMe qualified name (NQN) used to identify the NVMe storage target. Not allowed in POST when the <code>records</code> property is used. |

consistency_group_nvme_subsystem

An NVMe subsystem maintains configuration state and namespace access control for a set of NVMe-connected hosts.

| Name | Type | Description |
|---------|--|---|
| comment | string | A configurable comment for the NVMe subsystem. Optional in POST and PATCH. |
| hosts | array[consistency_group_nvme_host] | The NVMe hosts configured for access to the NVMe subsystem. Optional in POST. |

| Name | Type | Description |
|---------|--------|--|
| name | string | The name of the NVMe subsystem. Once created, an NVMe subsystem cannot be renamed. Required in POST. |
| os_type | string | The host operating system of the NVMe subsystem's hosts. Required in POST. |
| uuid | string | The unique identifier of the NVMe subsystem. |

subsystem_map

The NVMe subsystem with which the NVMe namespace is associated. A namespace can be mapped to zero (0) or one (1) subsystems.

There is an added computational cost to retrieving property values for `subsystem_map`. They are not populated for either a collection GET or an instance GET unless explicitly requested using the `fields` query parameter.

| Name | Type | Description |
|----------|---------------------------|--|
| _links | self_link | |
| anagrpId | string | <p>The Asymmetric Namespace Access Group ID (ANAGRPID) of the NVMe namespace.</p> <p>The format for an ANAGRPID is 8 hexadecimal digits (zero-filled) followed by a lower case "h".</p> <p>There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the <code>fields</code> query parameter. See Requesting specific fields to learn more.</p> |

| Name | Type | Description |
|-----------|--|--|
| nsid | string | <p>The NVMe namespace identifier. This is an identifier used by an NVMe controller to provide access to the NVMe namespace.</p> <p>The format for an NVMe namespace identifier is 8 hexadecimal digits (zero-filled) followed by a lower case "h".</p> |
| subsystem | consistency_group_nvme_subsystem | An NVMe subsystem maintains configuration state and namespace access control for a set of NVMe-connected hosts. |

namespaces

An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the storage virtual machine using the NVMe over Fabrics protocol.

In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.

An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.

An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.

| Name | Type | Description |
|-------------|---------|--|
| auto_delete | boolean | <p>This property marks the NVMe namespace for auto deletion when the volume containing the namespace runs out of space. This is most commonly set on namespace clones.</p> <p>When set to <i>true</i>, the NVMe namespace becomes eligible for automatic deletion when the volume runs out of space. Auto deletion only occurs when the volume containing the namespace is also configured for auto deletion and free space in the volume decreases below a particular threshold.</p> <p>This property is optional in POST and PATCH. The default value for a new NVMe namespace is <i>false</i>.</p> <p>There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the <code>fields</code> query parameter. See Requesting specific fields to learn more.</p> |
| comment | string | A configurable comment available for use by the administrator. Valid in POST and PATCH. |
| create_time | string | The time the NVMe namespace was created. |
| enabled | boolean | The enabled state of the NVMe namespace. Certain error conditions cause the namespace to become disabled. If the namespace is disabled, you can check the <code>state</code> property to determine what error disabled the namespace. An NVMe namespace is enabled automatically when it is created. |

| Name | Type | Description |
|---------------|---------------|---|
| name | string | <p>The fully qualified path name of the NVMe namespace composed of a "/vol" prefix, the volume name, the (optional) qtree name and base name of the namespace. Valid in POST.</p> <p>NVMe namespaces do not support rename, or movement between volumes.</p> |
| os_type | string | <p>The operating system type of the NVMe namespace.</p> <p>Required in POST when creating an NVMe namespace that is not a clone of another. Disallowed in POST when creating a namespace clone.</p> |
| space | space | The storage space related properties of the NVMe namespace. |
| status | status | Status information about the NVMe namespace. |
| subsystem_map | subsystem_map | <p>The NVMe subsystem with which the NVMe namespace is associated. A namespace can be mapped to zero (0) or one (1) subsystems.</p> <p>There is an added computational cost to retrieving property values for subsystem_map. They are not populated for either a collection GET or an instance GET unless explicitly requested using the <code>fields</code> query parameter.</p> |
| uuid | string | The unique identifier of the NVMe namespace. |

parent_consistency_group

The parent consistency group.

| Name | Type | Description |
|--------|---------------------------|---|
| _links | self_link | |
| name | string | The name of the consistency group. |
| uuid | string | The unique identifier of the consistency group. |

storage_service

Determines the placement of any storage object created during this operation.

| Name | Type | Description |
|------|--------|--|
| name | string | Storage service name. If not specified, the default value is the most performant for the platform. |

provisioning_options

Options that are applied to the operation.

| Name | Type | Description |
|-----------------|---------------------------------|---|
| action | string | Operation to perform |
| storage_service | storage_service | Determines the placement of any storage object created during this operation. |

snapshot

A consistency group's Snapshot copy

| Name | Type | Description |
|------|--------|--|
| name | string | The name of the consistency group's Snapshot copy to restore to. |
| uuid | string | The UUID of the consistency group's Snapshot copy to restore to. |

restore_to

Use to restore a consistency group to a previous Snapshot copy

| Name | Type | Description |
|----------|--------------------------|-------------------------------------|
| snapshot | snapshot | A consistency group's Snapshot copy |

[_links](#)

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

snapshot_policy_reference

This is a reference to the Snapshot copy policy.

| Name | Type | Description |
|------------------------|------------------------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

space

Space information for the consistency group.

| Name | Type | Description |
|-----------|---------|---|
| available | integer | The amount of space available in the consistency group, in bytes. |
| size | integer | The total provisioned size of the consistency group, in bytes. |
| used | integer | The amount of space consumed in the consistency group, in bytes. |

svm

The Storage Virtual Machine (SVM) in which the consistency group is located.

| Name | Type | Description |
|------------------------|------------------------|-----------------------------------|
| _links | _links | |
| name | string | The name of the SVM. |
| uuid | string | The unique identifier of the SVM. |

object_stores

tiering

The tiering placement and policy definitions for volumes in this consistency group.

| Name | Type | Description |
|---------------|--|---|
| object_stores | array[object_stores] | Object stores to use. Used for placement. |
| policy | string | <p>Policy that determines whether the user data blocks of a volume in a FabricPool will be tiered to the cloud store when they become cold.</p> <p>FabricPool combines flash (performance tier) with a cloud store into a single aggregate. Temperature of a volume block increases if it is accessed frequently and decreases when it is not. Valid in POST or PATCH.</p> <p>all &dash; Allows tiering of both Snapshot copies and active file system user data to the cloud store as soon as possible by ignoring the temperature on the volume blocks.</p> <p>auto &dash; Allows tiering of both snapshot and active file system user data to the cloud store</p> <p>none &dash; Volume blocks are not be tiered to the cloud store.</p> <p>snapshot_only &dash; Allows tiering of only the volume Snapshot copies not associated with the active file system.</p> <p>The default tiering policy is "snapshot-only" for a FlexVol volume and "none" for a FlexGroup volume. The default minimum cooling period for the "snapshot-only" tiering policy is 2 days and for the "auto" tiering policy it is 31 days.</p> |

acls

The permissions that users and groups have on a CIFS share.

| Name | Type | Description |
|------------------------|------------------------|---|
| _links | _links | |
| permission | string | <p>Specifies the access rights that a user or group has on the defined CIFS Share. The following values are allowed:</p> <ul style="list-style-type: none"> • no_access - User does not have CIFS share access • read - User has only read access • change - User has change access • full_control - User has full_control access |
| type | string | <p>Specifies the type of the user or group to add to the access control list of a CIFS share. The following values are allowed:</p> <ul style="list-style-type: none"> • windows - Windows user or group • unix_user - UNIX user • unix_group - UNIX group |
| user_or_group | string | Specifies the user or group name to add to the access control list of a CIFS share. |

consistency_group_cifs_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

| Name | Type | Description |
|--------------------------|------------------------|--|
| _links | _links | |
| access_based_enumeration | boolean | Specifies whether all folders inside this share are visible to a user based on that individual user's access right; prevents the display of folders or other shared resources that the user does not have access to. |

| Name | Type | Description |
|--------------------------|------------------------------|---|
| acls | array [acls] | |
| allow_unencrypted_access | boolean | Specifies whether or not the SMB2 clients are allowed to access the encrypted share. |
| change_notify | boolean | Specifies whether CIFS clients can request for change notifications for directories on this share. |
| comment | string | Specify the CIFS share descriptions. |
| continuously_available | boolean | Specifies whether or not the clients connecting to this share can open files in a persistent manner. Files opened in this way are protected from disruptive events, such as, failover and giveback. |
| dir_umask | integer | Directory mode creation mask to be viewed as an octal number. |
| encryption | boolean | Specifies whether SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share. |
| file_umask | integer | File mode creation mask to be viewed as an octal number. |

| Name | Type | Description |
|-------------------|---------|---|
| home_directory | boolean | <p>Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively.</p> <ul style="list-style-type: none"> • Default value: • Introduced in: 9.12 • readCreate: 1 |
| name | string | <p>Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.</p> |
| namespace_caching | boolean | <p>Specifies whether or not the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.</p> |

| Name | Type | Description |
|--------------------|---------|--|
| no_strict_security | boolean | Specifies whether or not CIFS clients can follow Unix symlinks outside the share boundaries. |
| offline_files | string | <p>Offline Files The supported values are:</p> <ul style="list-style-type: none"> • none - Clients are not permitted to cache files for offline access. • manual - Clients may cache files that are explicitly selected by the user for offline access. • documents - Clients may automatically cache files that are used by the user for offline access. • programs - Clients may automatically cache files that are used by the user for offline access and may use those files in an offline mode even if the share is available. |
| oplocks | boolean | Specifies whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations. |
| show_snapshot | boolean | Specifies whether or not the Snapshot copies can be viewed and traversed by clients. |
| unix_symlink | string | <p>Controls the access of UNIX symbolic links to CIFS clients. The supported values are:</p> <ul style="list-style-type: none"> • local - Enables only local symbolic links which is within the same CIFS share. • widelink - Enables both local symlinks and widelinks. • disable - Disables local symlinks and widelinks. |

| Name | Type | Description |
|---------------|--------|---|
| vscan_profile | string | <p>Vscan File-Operations Profile The supported values are:</p> <ul style="list-style-type: none"> • no_scan - Virus scans are never triggered for accesses to this share. • standard - Virus scans can be triggered by open, close, and rename operations. • strict - Virus scans can be triggered by open, read, close, and rename operations. • writes_only - Virus scans can be triggered only when a file that has been modified is closed. |

cifs

| Name | Type | Description |
|--------|---|-------------|
| shares | array[consistency_group_cifs_share] | |

export_clients

| Name | Type | Description |
|-------|--------|--|
| match | string | <p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"> • As a hostname; for instance, host1 • As an IPv4 address; for instance, 10.1.12.24 • As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1 • As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24 • As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64 • As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0 • As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng • As a domain name preceded by the . character; for instance, .example.com |

export_rules

| Name | Type | Description |
|-----------------------|------------------------|--|
| _links | _links | |
| allow_device_creation | boolean | Specifies whether or not device creation is allowed. |
| allow_suid | boolean | Specifies whether or not SetUID bits in SETATTR Op is to be honored. |
| anonymous_user | string | User ID To Which Anonymous Users Are Mapped. |

| Name | Type | Description |
|--------------------|---|---|
| chown_mode | string | Specifies who is authorized to change the ownership mode of a file. |
| clients | array[export_clients] | Array of client matches |
| index | integer | Index of the rule within the export policy. |
| ntfs_unix_security | string | NTFS export UNIX security options. |
| protocols | array[string] | |
| ro_rule | array[string] | Authentication flavors that the read-only access rule governs |
| rw_rule | array[string] | Authentication flavors that the read/write access rule governs |
| superuser | array[string] | Authentication flavors that the superuser security type governs |

export_policy

The policy associated with volumes to export them for protocol access.

| Name | Type | Description |
|--------|---------------------------------------|---|
| _links | self_link | |
| name | string | Name of the export policy. |
| rules | array[export_rules] | The set of rules that govern the export policy. |
| uuid | string | Identifier for the export policy. |

junction_parent

| Name | Type | Description |
|--------|---------------------------|-------------|
| _links | self_link | |

| Name | Type | Description |
|------|--------|--|
| name | string | The name of the parent volume that contains the junction inode of this volume. The junction parent volume must belong to the same SVM that owns this volume. |
| uuid | string | Unique identifier for the parent volume. |

nas

The CIFS share policy and/or export policies for this volume.

| Name | Type | Description |
|-----------------|---------------------------------|---|
| cifs | cifs | |
| export_policy | export_policy | The policy associated with volumes to export them for protocol access. |
| gid | integer | The UNIX group ID of the volume. Valid in POST or PATCH. |
| junction_parent | junction_parent | |
| path | string | The fully-qualified path in the owning SVM's namespace at which the volume is mounted. The path is case insensitive and must be unique within an SVM's namespace. Path must begin with '/' and must not end with '/'. Only one volume can be mounted at any given junction path. An empty path in POST creates an unmounted volume. An empty path in PATCH deactivates and unmounts the volume. Taking a volume offline or restricted state removes its junction path. This attribute is reported in GET only when the volume is mounted. |

| Name | Type | Description |
|------------------|---------|---|
| security_style | string | Security style associated with the volume. Valid in POST or PATCH. mixed ‐ Mixed-style security ntfs ‐ NTFS/Windows-style security unified ‐ Unified-style security, unified UNIX, NFS and CIFS permissions unix ‐ UNIX-style security. |
| uid | integer | The UNIX user ID of the volume. Valid in POST or PATCH. |
| unix_permissions | integer | UNIX permissions to be viewed as an octal number, consisting of 4 digits derived by adding up bits 4 (read), 2 (write), and 1 (execute). First digit selects the set user ID (4), set group ID (2), and sticky (1) attributes. Second digit selects permission for the owner of the file. Third selects permissions for other users in the same group while the fourth selects permissions for other users not in the group. Valid in POST or PATCH. For security style "mixed" or "unix", the default setting is 0755 in octal (493 in decimal) and for security style "ntfs", the default setting is 0000. In cases where only owner, group, and other permissions are given (as in 755, representing the second, third and fourth digit), the first digit is assumed to be zero. |

provisioning_options

Options that are applied to the operation.

| Name | Type | Description |
|--------|---------|---|
| action | string | Operation to perform |
| count | integer | Number of elements to perform the operation on. |

| Name | Type | Description |
|-----------------|---------------------------------|---|
| storage_service | storage_service | Determines the placement of any storage object created during this operation. |

qos

The QoS policy for this volume.

| Name | Type | Description |
|--------|------------------------|----------------|
| policy | policy | The QoS policy |

space

| Name | Type | Description |
|-----------|---------|--|
| available | integer | The available space, in bytes. |
| size | integer | Total provisioned size, in bytes. |
| used | integer | The virtual space used (includes volume reserves) before storage efficiency, in bytes. |

tiering

The tiering placement and policy definitions for this volume.

| Name | Type | Description |
|---------------|--|---|
| object_stores | array[object_stores] | Object stores to use. Used for placement. |

| Name | Type | Description |
|--------|--------|---|
| policy | string | <p>Policy that determines whether the user data blocks of a volume in a FabricPool will be tiered to the cloud store when they become cold.</p> <p>FabricPool combines flash (performance tier) with a cloud store into a single aggregate. Temperature of a volume block increases if it is accessed frequently and decreases when it is not. Valid in POST or PATCH.</p> <p>all &dash; Allows tiering of both Snapshot copies and active file system user data to the cloud store as soon as possible by ignoring the temperature on the volume blocks.</p> <p>auto &dash; Allows tiering of both snapshot and active file system user data to the cloud store</p> <p>none &dash; Volume blocks are not be tiered to the cloud store.</p> <p>snapshot_only &dash; Allows tiering of only the volume Snapshot copies not associated with the active file system.</p> <p>The default tiering policy is "snapshot-only" for a FlexVol volume and "none" for a FlexGroup volume. The default minimum cooling period for the "snapshot-only" tiering policy is 2 days and for the "auto" tiering policy it is 31 days.</p> |

volumes

| Name | Type | Description |
|---------|--------|---|
| comment | string | A comment for the volume. Valid in POST or PATCH. |

| Name | Type | Description |
|-----------------|---|--|
| language | string | Language encoding setting for volume. If no language is specified, the volume inherits its SVM language encoding setting. |
| name | string | Volume name. The name of volume must start with an alphabetic character (a to z or A to Z) or an underscore (_). The name must be 197 or fewer characters in length for FlexGroups, and 203 or fewer characters in length for all other types of volumes. Volume names must be unique within an SVM. Required on POST. |
| nas | nas | The CIFS share policy and/or export policies for this volume. |
| qos | qos | The QoS policy for this volume. |
| snapshot_policy | snapshot_policy_reference | This is a reference to the Snapshot copy policy. |
| space | space | |
| tiering | tiering | The tiering placement and policy definitions for this volume. |
| uuid | string | <p>Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move.</p> <ul style="list-style-type: none"> • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • readOnly: 1 • Introduced in: 9.8 |

consistency_groups

| Name | Type | Description |
|-------------|-----------------------------|-------------|
| _links | self_link | |
| application | application | |

| Name | Type | Description |
|------|-------------|--|
| luns | array[luns] | The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group. |
| name | string | <p>Name of the consistency group. The consistency group name must be unique within an SVM.</p> <p>If not provided and the consistency group contains only one volume, the name will be generated based on the volume name. If the consistency group contains more than one volume, the name is required.</p> |

| Name | Type | Description |
|--------------------------|--------------------------|--|
| namespaces | array[namespaces] | <p>An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.</p> <p>An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.</p> <p>An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.</p> <ul style="list-style-type: none"> • maxItems: 16 • minItems: 0 • uniqueItems: 1 • Introduced in: 9.10 |
| parent_consistency_group | parent_consistency_group | The parent consistency group. |
| qos | qos | |
| restore_to | restore_to | Use to restore a consistency group to a previous Snapshot copy |

| Name | Type | Description |
|-----------------|---|--|
| snapshot_policy | snapshot_policy_reference | This is a reference to the Snapshot copy policy. |
| space | space | Space information for the consistency group. |
| svm | svm | The Storage Virtual Machine (SVM) in which the consistency group is located. |
| tiering | tiering | The tiering placement and policy definitions for volumes in this consistency group. |
| uuid | string | <p>The unique identifier of the consistency group. The UUID is generated by ONTAP when the consistency group is created.</p> <ul style="list-style-type: none"> • example: 1cd8a442-86d1-11e0-ae1c-123478563412 • Introduced in: 9.10 • readOnly: 1 |
| volumes | array[volumes] | <p>A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group.</p> <p>The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group.</p> <p>The total number of volumes across all child consistency groups contained in a consistency group is constrained by the same limit.</p> |

consistency_group_cifs_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are

tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

| Name | Type | Description |
|--------------------------|-------------------------------|--|
| _links | _links | |
| access_based_enumeration | boolean | Specifies whether all folders inside this share are visible to a user based on that individual user's access right; prevents the display of folders or other shared resources that the user does not have access to. |
| acls | array[acls] | |
| allow_unencrypted_access | boolean | Specifies whether or not the SMB2 clients are allowed to access the encrypted share. |
| change_notify | boolean | Specifies whether CIFS clients can request for change notifications for directories on this share. |
| comment | string | Specify the CIFS share descriptions. |
| continuously_available | boolean | Specifies whether or not the clients connecting to this share can open files in a persistent manner. Files opened in this way are protected from disruptive events, such as, failover and giveback. |
| dir_umask | integer | Directory mode creation mask to be viewed as an octal number. |
| encryption | boolean | Specifies whether SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share. |
| file_umask | integer | File mode creation mask to be viewed as an octal number. |

| Name | Type | Description |
|-------------------|---------|---|
| home_directory | boolean | <p>Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively.</p> <ul style="list-style-type: none"> • Default value: 1 • Introduced in: 9.12 • readCreate: 1 |
| name | string | <p>Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.</p> |
| namespace_caching | boolean | <p>Specifies whether or not the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.</p> |

| Name | Type | Description |
|--------------------|---------|--|
| no_strict_security | boolean | Specifies whether or not CIFS clients can follow Unix symlinks outside the share boundaries. |
| offline_files | string | <p>Offline Files The supported values are:</p> <ul style="list-style-type: none"> • none - Clients are not permitted to cache files for offline access. • manual - Clients may cache files that are explicitly selected by the user for offline access. • documents - Clients may automatically cache files that are used by the user for offline access. • programs - Clients may automatically cache files that are used by the user for offline access and may use those files in an offline mode even if the share is available. |
| oplocks | boolean | Specifies whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations. |
| show_snapshot | boolean | Specifies whether or not the Snapshot copies can be viewed and traversed by clients. |
| unix_symlink | string | <p>Controls the access of UNIX symbolic links to CIFS clients. The supported values are:</p> <ul style="list-style-type: none"> • local - Enables only local symbolic links which is within the same CIFS share. • widelink - Enables both local symlinks and widelinks. • disable - Disables local symlinks and widelinks. |

| Name | Type | Description |
|---------------|--------|---|
| vscan_profile | string | <p>Vscan File-Operations Profile The supported values are:</p> <ul style="list-style-type: none"> • no_scan - Virus scans are never triggered for accesses to this share. • standard - Virus scans can be triggered by open, close, and rename operations. • strict - Virus scans can be triggered by open, read, close, and rename operations. • writes_only - Virus scans can be triggered only when a file that has been modified is closed. |

export_clients

| Name | Type | Description |
|-------|--------|--|
| match | string | <p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"> • As a hostname; for instance, host1 • As an IPv4 address; for instance, 10.1.12.24 • As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1 • As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24 • As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64 • As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0 • As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng • As a domain name preceded by the . character; for instance, .example.com |

records

| Name | Type | Description |
|-------------|-----------------------------|--|
| _links | self_link | |
| application | application | |
| clone | clone | Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy. |

| Name | Type | Description |
|--------------------|---------------------------|--|
| consistency_groups | array[consistency_groups] | A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A consistency group can only be associated with one direct parent consistency group. |
| luns | array[luns] | The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group. |
| name | string | <p>Name of the consistency group. The consistency group name must be unique within an SVM.</p> <p>If not provided and the consistency group contains only one volume, the name will be generated based on the volume name. If the consistency group contains more than one volume, the name is required.</p> |

| Name | Type | Description |
|--------------------------|--------------------------|--|
| namespaces | array[namespaces] | <p>An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.</p> <p>An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.</p> <p>An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.</p> <ul style="list-style-type: none"> • maxItems: 16 • minItems: 0 • uniqueItems: 1 • Introduced in: 9.10 |
| parent_consistency_group | parent_consistency_group | The parent consistency group. |
| qos | qos | |
| replicated | boolean | Indicates whether or not replication has been enabled on this consistency group. |

| Name | Type | Description |
|--------------------|---|---|
| replication_source | boolean | Indicates whether or not this consistency group is the source for replication. |
| restore_to | restore_to | Use to restore a consistency group to a previous Snapshot copy |
| snapshot_policy | snapshot_policy_reference | This is a reference to the Snapshot copy policy. |
| space | space | Space information for the consistency group. |
| svm | svm | The Storage Virtual Machine (SVM) in which the consistency group is located. |
| tiering | tiering | The tiering placement and policy definitions for volumes in this consistency group. |
| uuid | string | <p>The unique identifier of the consistency group. The UUID is generated by ONTAP when the consistency group is created.</p> <ul style="list-style-type: none"> • example: 1cd8a442-86d1-11e0-ae1c-123478563412 • Introduced in: 9.6 • readOnly: 1 |

| Name | Type | Description |
|---------|----------------|--|
| volumes | array[volumes] | <p>A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group.</p> <p>The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group.</p> <p>The total number of volumes across all child consistency groups contained in a consistency group is constrained by the same limit.</p> |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|------------------------|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Create a consistency group

POST /application/consistency-groups

Introduced In: 9.10

Creates a consistency group with one or more consistency groups having:

- new SAN volumes,
- existing SAN, NVMe or NAS FlexVol volumes in a new or existing consistency group

Required properties

- `svm.uuid` or `svm.name` - Existing SVM in which to create the group.
- `volumes`, `luns` or `namespaces`

Naming Conventions

Consistency groups

- `name` or `consistency_groups[].name`, if specified
- derived from `volumes[0].name`, if only one volume is specified, same as volume name

Volume

- `volumes[].name`, if specified
- derived from volume prefix in `luns[].name`
- derived from `cg[].name`, suffixed by "`_#`" where "`#`" is a system generated unique number
- suffixed by "`_#`" where "`#`" is a system generated unique number, if `provisioning_options.count` is provided

LUN

- `luns[].name`, if specified
- derived from `volumes[].name`, suffixed by "`_#`" where "`#`" is a system generated unique number
- suffixed by "`_#`" where "`#`" is a system generated unique number, if `provisioning_options.count` is provided

NVMe Namespace

- `namespaces[].name`, if specified
- derived from `volumes[].name`, suffixed by "`_#`" where "`#`" is a system generated unique number
- suffixed by "`_#`" where "`#`" is a system generated unique number, if `provisioning_options.count` is provided

Related ONTAP commands

There are no ONTAP commands for managing consistency group.

Parameters

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|--|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |
| return_records | boolean | query | False | <p>The default is false. If set to true, the records are returned.</p> <ul style="list-style-type: none"> • Default value: |

Request Body

| Name | Type | Description |
|-------------|-----------------------------|--|
| application | application | |
| clone | clone | Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy. |

| Name | Type | Description |
|--------------------|---------------------------|--|
| consistency_groups | array[consistency_groups] | A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A consistency group can only be associated with one direct parent consistency group. |
| luns | array[luns] | The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group. |
| name | string | <p>Name of the consistency group. The consistency group name must be unique within an SVM.</p> <p>If not provided and the consistency group contains only one volume, the name will be generated based on the volume name. If the consistency group contains more than one volume, the name is required.</p> |

| Name | Type | Description |
|----------------------|----------------------|--|
| namespaces | array[namespaces] | <p>An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.</p> <p>An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.</p> <p>An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.</p> <ul style="list-style-type: none"> • maxItems: 16 • minItems: 0 • uniqueItems: 1 • Introduced in: 9.10 |
| provisioning_options | provisioning_options | Options that are applied to the operation. |
| qos | qos | |
| restore_to | restore_to | Use to restore a consistency group to a previous Snapshot copy |

| Name | Type | Description |
|-----------------|---|--|
| snapshot_policy | snapshot_policy_reference | This is a reference to the Snapshot copy policy. |
| svm | svm | The Storage Virtual Machine (SVM) in which the consistency group is located. |
| tiering | tiering | The tiering placement and policy definitions for volumes in this consistency group. |
| volumes | array[volumes] | <p>A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group.</p> <p>The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group.</p> <p>The total number of volumes across all child consistency groups contained in a consistency group is constrained by the same limit.</p> |

Example request

```
{
  "application": {
    "component_type": "string",
    "type": "string"
  },
  "clone": {
    "guarantee": {
      "type": "string"
    },
    "parent_consistency_group": {
      "name": "my_consistency_group",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "parent_snapshot": {
      "name": "string"
    },
    "volume": {
      "prefix": "string",
      "suffix": "string"
    }
  },
  "consistency_groups": [
    {
      "application": {
        "component_type": "string",
        "type": "string"
      },
      "luns": [
        {
          "clone": {
            "source": {
              "name": "/vol/volume1/lun1",
              "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
            }
          },
          "comment": "string",
          "create_time": "2018-06-04T19:00:00Z",
          "enabled": null,
          "lun_maps": [
            {
              "igroup": {
                "comment": "string",
                "igroups": [
                  {
```

```

        "name": "igroup1",
        "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
    },
    ],
    "initiators": [
        {
            "comment": "my comment",
            "name": "iqn.1998-01.com.corp.iscsi:name1"
        }
    ],
    "name": "igroup1",
    "os_type": "string",
    "protocol": "string",
    "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
}
}
],
"name": "/vol/volume1/lun1",
"os_type": "string",
"provisioning_options": {
    "action": "string"
},
"serial_number": "string",
"space": {
    "guarantee": {
        "reserved": null
    },
    "size": 1073741824
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
],
"name": "string",
"namespaces": [
    {
        "comment": "string",
        "create_time": "2018-06-04T19:00:00Z",
        "name": "/vol/volume1/mtree1/namespace1",
        "os_type": "string",
        "provisioning_options": {
            "action": "string"
        },
        "space": {
            "block_size": 512,
            "guarantee": {
                "reserved": null
            }
        }
    }
]

```

```

    },
    "size": 1073741824
  },
  "subsystem_map": {
    "anagrp_id": "00103050h",
    "nsid": "00000001h",
    "subsystem": {
      "comment": "string",
      "hosts": [
        {
          "nqn": "nqn.1992-01.example.com:string"
        }
      ],
      "name": "subsystem1",
      "os_type": "string",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
],
"provisioning_options": {
  "action": "string",
  "storage_service": {
    "name": "string"
  }
},
"qos": {
  "policy": {
    "max_throughput_iops": 10000,
    "max_throughput_mbps": 500,
    "min_throughput_iops": 2000,
    "min_throughput_mbps": 500,
    "name": "performance",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
},
"restore_to": {
  "snapshot": {
    "name": "string",
    "uuid": "string"
  }
},
"snapshot_policy": {
  "name": "default",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}

```

```

},
"svm": {
  "name": "svm1",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"tiering": {
  "control": "string",
  "object_stores": [
    {
      "name": "string"
    }
  ],
  "policy": "string"
},
"volumes": [
  {
    "comment": "string",
    "language": "string",
    "name": "vol_cs_dept",
    "nas": {
      "cifs": {
        "shares": [
          {
            "acls": [
              {
                "permission": "string",
                "type": "string",
                "user_or_group": "ENGDOMAIN\\ad_user"
              }
            ],
            "comment": "HR Department Share",
            "dir_umask": 22,
            "file_umask": 22,
            "name": "HR_SHARE",
            "offline_files": "string",
            "unix_symlink": "string",
            "vscan_profile": "string"
          }
        ]
      }
    },
    "export_policy": {
      "name": "string",
      "rules": [
        {
          "anonymous_user": "string",
          "chown_mode": "string",

```



```

        "clients": [
            {
                "match": "0.0.0.0/0"
            }
        ],
        "index": 0,
        "ntfs_unix_security": "string",
        "protocols": [
            "string"
        ],
        "ro_rule": [
            "string"
        ],
        "rw_rule": [
            "string"
        ],
        "superuser": [
            "string"
        ]
    }
],
    "uuid": "string"
},
    "junction_parent": {
        "name": "vs1_root",
        "uuid": "75c9cfb0-3eb4-11eb-9fb4-005056bb088a"
    },
    "path": "/user/my_volume",
    "security_style": "string",
    "unix_permissions": 755
},
    "provisioning_options": {
        "action": "string",
        "storage_service": {
            "name": "string"
        }
    }
},
    "qos": {
        "policy": {
            "max_throughput_iops": 10000,
            "max_throughput_mbps": 500,
            "min_throughput_iops": 2000,
            "min_throughput_mbps": 500,
            "name": "performance",
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        }
    }
}

```

```

    },
    "snapshot_policy": {
      "name": "default",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "tiering": {
      "control": "string",
      "object_stores": [
        {
          "name": "string"
        }
      ],
      "policy": "string"
    },
    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
  }
]
}
],
"luns": [
  {
    "clone": {
      "source": {
        "name": "/vol/volume1/lun1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    },
    "comment": "string",
    "create_time": "2018-06-04T19:00:00Z",
    "enabled": null,
    "lun_maps": [
      {
        "igroup": {
          "comment": "string",
          "igroups": [
            {
              "name": "igroup1",
              "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
            }
          ]
        },
        "initiators": [
          {
            "comment": "my comment",
            "name": "iqn.1998-01.com.corp.iscsi:namel"
          }
        ]
      }
    ]
  }
]

```

```

        "name": "igroup1",
        "os_type": "string",
        "protocol": "string",
        "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
    }
}
],
"name": "/vol/volume1/lun1",
"os_type": "string",
"provisioning_options": {
    "action": "string"
},
"serial_number": "string",
"space": {
    "guarantee": {
        "reserved": null
    },
    "size": 1073741824
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
],
"name": "string",
"namespaces": [
{
    "comment": "string",
    "create_time": "2018-06-04T19:00:00Z",
    "name": "/vol/volume1/mtree1/namespacel",
    "os_type": "string",
    "provisioning_options": {
        "action": "string"
    },
    "space": {
        "block_size": 512,
        "guarantee": {
            "reserved": null
        },
        "size": 1073741824
    },
    "subsystem_map": {
        "anagrp_id": "00103050h",
        "nsid": "00000001h",
        "subsystem": {
            "comment": "string",
            "hosts": [
                {

```

```

        "nqn": "nqn.1992-01.example.com:string"
    }
    ],
    "name": "subsystem1",
    "os_type": "string",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
],
"provisioning_options": {
    "action": "string",
    "storage_service": {
        "name": "string"
    }
},
"qos": {
    "policy": {
        "max_throughput_iops": 10000,
        "max_throughput_mbps": 500,
        "min_throughput_iops": 2000,
        "min_throughput_mbps": 500,
        "name": "performance",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
},
"replicated": null,
"replication_source": null,
"restore_to": {
    "snapshot": {
        "name": "string",
        "uuid": "string"
    }
},
"snapshot_policy": {
    "name": "default",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"tiering": {
    "control": "string",
    "object_stores": [

```

```

    {
      "name": "string"
    }
  ],
  "policy": "string"
},
"volumes": [
  {
    "comment": "string",
    "language": "string",
    "name": "vol_cs_dept",
    "nas": {
      "cifs": {
        "shares": [
          {
            "acls": [
              {
                "permission": "string",
                "type": "string",
                "user_or_group": "ENGDOMAIN\\ad_user"
              }
            ],
            "comment": "HR Department Share",
            "dir_umask": 22,
            "file_umask": 22,
            "name": "HR_SHARE",
            "offline_files": "string",
            "unix_symlink": "string",
            "vscan_profile": "string"
          }
        ]
      },
      "export_policy": {
        "name": "string",
        "rules": [
          {
            "anonymous_user": "string",
            "chown_mode": "string",
            "clients": [
              {
                "match": "0.0.0.0/0"
              }
            ],
            "index": 0,
            "ntfs_unix_security": "string",
            "protocols": [

```

```

        "string"
    ],
    "ro_rule": [
        "string"
    ],
    "rw_rule": [
        "string"
    ],
    "superuser": [
        "string"
    ]
}
],
"uuid": "string"
},
"junction_parent": {
    "name": "vs1_root",
    "uuid": "75c9cfb0-3eb4-11eb-9fb4-005056bb088a"
},
"path": "/user/my_volume",
"security_style": "string",
"unix_permissions": 755
},
"provisioning_options": {
    "action": "string",
    "storage_service": {
        "name": "string"
    }
},
"qos": {
    "policy": {
        "max_throughput_iops": 10000,
        "max_throughput_mbps": 500,
        "min_throughput_iops": 2000,
        "min_throughput_mbps": 500,
        "name": "performance",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
},
"snapshot_policy": {
    "name": "default",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"tiering": {
    "control": "string",
    "object_stores": [

```

```
{
  {
    "name": "string"
  }
],
  "policy": "string"
},
  "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
}
]
```

Response

Status: 202, Accepted

| Name | Type | Description |
|------|----------|-------------|
| job | job_link | |

Example response

```
{
  "job": {
    "uuid": "string"
  }
}
```

Headers

| Name | Description | Type |
|----------|---|--------|
| Location | Useful for tracking the resource location | string |

Response

Status: 201, Created

Error

Status: Default

ONTAP Error Response Codes

| Error Code | Description |
|------------|--|
| 53411842 | Consistency group does not exist. |
| 53411843 | A consistency group with specified UUID was not found. |
| 53411844 | Specified consistency group was not found in the specified SVM. |
| 53411845 | The specified UUID and name refer to different consistency groups. |
| 53411846 | Either name or UUID must be provided. |
| 53411853 | Fields provided in the request conflict with each other. |
| 53411856 | Field provided is only supported when provisioning new objects. |
| 53411857 | LUNs that are not members of the application are not supported by this API. LUNs can be added to an application by adding the volume containing the LUNs to the application. |
| 53411860 | An object with the same identifier in the same scope exists. |
| 53411861 | Volume specified does not exist in provided volume array. |
| 53411862 | Modifying existing igroups is not supported using this API. |
| 53411864 | Request content insufficient to add an existing volume to an application. |
| 53411865 | Volumes contained in one consistency group can not be added to a different consistency group. |
| 53411866 | LUNs are not supported on FlexGroups volumes. |
| 53411867 | LUN name is too long after appending a unique suffix. |
| 53411869 | Volume name is too long after appending a unique suffix. |
| 53411870 | When using the "round_robin" layout, the volume count must not be greater than the LUN count. |

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

self_link

application

| Name | Type | Description |
|----------------|--------|----------------------------------|
| component_type | string | Nested consistency group tag. |
| type | string | Top level consistency group tag. |

guarantee

| Name | Type | Description |
|------|--------|--|
| type | string | The type of space guarantee of this volume in the aggregate. |

parent_consistency_group

Consistency group that is to be cloned.

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the consistency group. |
| uuid | string | The unique identifier of the consistency group. |

parent_snapshot

| Name | Type | Description |
|------|--------|--|
| name | string | Name of an existing Snapshot copy of a parent consistency group. |

volume

Volume name suffix/prefix for the cloned volumes.

| Name | Type | Description |
|--------|--------|--|
| prefix | string | Volume name prefix for cloned volumes. |
| suffix | string | Volume name suffix for cloned volumes. |

clone

Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy.

| Name | Type | Description |
|--------------------------|--|---|
| guarantee | guarantee | |
| parent_consistency_group | parent_consistency_group | Consistency group that is to be cloned. |
| parent_snapshot | parent_snapshot | |
| split_initiated | boolean | Splits volumes after cloning. Default is false. |
| volume | volume | Volume name suffix/prefix for the cloned volumes. |

source

The source LUN for a LUN clone operation. This can be specified using property `clone.source.uuid` or `clone.source.name`. If both properties are supplied, they must refer to the same LUN.

Valid in POST to create a new LUN as a clone of the source.

Valid in PATCH to overwrite an existing LUN's data as a clone of another.

| Name | Type | Description |
|------|--------|---|
| name | string | The fully qualified path name of the clone source LUN composed of a "/vol" prefix, the volume name, the (optional) qtree name, and base name of the LUN. Valid in POST and PATCH. |
| uuid | string | The unique identifier of the clone source LUN. Valid in POST and PATCH. |

clone

This sub-object is used in POST to create a new LUN as a clone of an existing LUN, or PATCH to overwrite an existing LUN as a clone of another. Setting a property in this sub-object indicates that a LUN clone is desired. Consider the following other properties when cloning a LUN: `auto_delete`, `qos_policy`, `space.guarantee.requested` and `space.scsi_thin_provisioning_support_enabled`.

When used in a PATCH, the patched LUN's data is over-written as a clone of the source and the following properties are preserved from the patched LUN unless otherwise specified as part of the PATCH: `class`, `auto_delete`, `lun_maps`, `serial_number`, `status.state`, and `uuid`.

Persistent reservations for the patched LUN are also preserved.

| Name | Type | Description |
|--------|------------------------|---|
| source | source | <p>The source LUN for a LUN clone operation. This can be specified using property <code>clone.source.uuid</code> or <code>clone.source.name</code>. If both properties are supplied, they must refer to the same LUN.</p> <p>Valid in POST to create a new LUN as a clone of the source.</p> <p>Valid in PATCH to overwrite an existing LUN's data as a clone of another.</p> |

igroups

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the initiator group. |
| uuid | string | The unique identifier of the initiator group. |

initiators

The initiators that are members of the initiator group.

| Name | Type | Description |
|---------|--------|--|
| comment | string | A comment available for use by the administrator. |
| name | string | Name of initiator that is a member of the initiator group. |

igroup

The initiator group that directly owns the initiator, which is where modification of the initiator is supported. This property will only be populated when the initiator is a member of a nested initiator group.

| Name | Type | Description |
|------------|-------------------|---|
| comment | string | A comment available for use by the administrator. Valid in POST and PATCH. |
| igroups | array[igroups] | Separate igroup definitions to include in this igroup. |
| initiators | array[initiators] | The initiators that are members of the group. |
| name | string | The name of the initiator group. Required in POST; optional in PATCH. |
| os_type | string | The host operating system of the initiator group. All initiators in the group should be hosts of the same operating system. Required in POST; optional in PATCH. |
| protocol | string | <p>The protocols supported by the initiator group. This restricts the type of initiators that can be added to the initiator group. Optional in POST; if not supplied, this defaults to <i>mixed</i>.</p> <p>The protocol of an initiator group cannot be changed after creation of the group.</p> |
| uuid | string | The unique identifier of the initiator group. |

lun_maps

A LUN map is an association between a LUN and an initiator group.

When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.

| Name | Type | Description |
|---------------------|------------------------|---|
| igroup | igroup | The initiator group that directly owns the initiator, which is where modification of the initiator is supported. This property will only be populated when the initiator is a member of a nested initiator group. |
| logical_unit_number | integer | <p>The logical unit number assigned to the LUN when mapped to the specified initiator group. The number is used to identify the LUN to initiators in the initiator group when communicating through the Fibre Channel Protocol or iSCSI. Optional in POST; if no value is provided, ONTAP assigns the lowest available value.</p> <ul style="list-style-type: none"> • Introduced in: 9.6 • readCreate: 1 |

provisioning_options

Options that are applied to the operation.

| Name | Type | Description |
|--------|---------|---|
| action | string | Operation to perform |
| count | integer | Number of elements to perform the operation on. |

policy

The QoS policy

qos

| Name | Type | Description |
|--------|------------------------|----------------|
| policy | policy | The QoS policy |

guarantee

Properties that request and report the space guarantee for the LUN.

| Name | Type | Description |
|-----------|---------|--|
| requested | boolean | The requested space reservation policy for the LUN. If <i>true</i> , a space reservation is requested for the LUN; if <i>false</i> , the LUN is thin provisioned. Guaranteeing a space reservation request for a LUN requires that the volume in which the LUN resides is also space reserved and that the fractional reserve for the volume is 100%. Valid in POST and PATCH. |

space

The storage space related properties of the LUN.

| Name | Type | Description |
|-----------|---------------------------|---|
| guarantee | guarantee | Properties that request and report the space guarantee for the LUN. |
| size | integer | <p>The total provisioned size of the LUN. The LUN size can be increased but not reduced using the REST interface. The maximum and minimum sizes listed here are the absolute maximum and absolute minimum sizes, in bytes. The actual minimum and maximum sizes vary depending on the ONTAP version, ONTAP platform, and the available space in the containing volume and aggregate. For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.</p> <ul style="list-style-type: none"> • example: 1073741824 • format: int64 • Max value: 140737488355328 • Min value: 4096 • Introduced in: 9.6 |

luns

A LUN is the logical representation of storage in a storage area network (SAN).

In ONTAP, a LUN is located within a volume. Optionally, it can be located within a qtree in a volume.

A LUN can be created to a specified size using thin or thick provisioning. A LUN can then be renamed, resized, cloned, and moved to a different volume. LUNs support the assignment of a quality of service (QoS) policy for performance management or a QoS policy can be assigned to the volume containing the LUN. See the LUN object model to learn more about each of the properties supported by the LUN REST API.

A LUN must be mapped to an initiator group to grant access to the initiator group's initiators (client hosts). Initiators can then access the LUN and perform I/O over a Fibre Channel (FC) fabric using the Fibre Channel Protocol or a TCP/IP network using iSCSI.

| Name | Type | Description |
|-------------|--------|---|
| clone | clone | <p>This sub-object is used in POST to create a new LUN as a clone of an existing LUN, or PATCH to overwrite an existing LUN as a clone of another. Setting a property in this sub-object indicates that a LUN clone is desired. Consider the following other properties when cloning a LUN: <code>auto_delete</code>, <code>qos_policy</code>, <code>space.guarantee.requested</code> and <code>space.scsi_thin_provisioning_support_enabled</code>.</p> <p>When used in a PATCH, the patched LUN's data is overwritten as a clone of the source and the following properties are preserved from the patched LUN unless otherwise specified as part of the PATCH: <code>class</code>, <code>auto_delete</code>, <code>lun_maps</code>, <code>serial_number</code>, <code>status.state</code>, and <code>uuid</code>.</p> <p>Persistent reservations for the patched LUN are also preserved.</p> |
| comment | string | A configurable comment available for use by the administrator. Valid in POST and PATCH. |
| create_time | string | The time the LUN was created. |

| Name | Type | Description |
|----------------------|----------------------|--|
| lun_maps | array[lun_maps] | <p>An array of LUN maps.</p> <p>A LUN map is an association between a LUN and an initiator group. When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.</p> |
| name | string | The fully qualified path name of the LUN composed of the "/vol" prefix, the volume name, the qtree name (optional), and the base name of the LUN. Valid in POST and PATCH. |
| os_type | string | <p>The operating system type of the LUN.</p> <p>Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.</p> |
| provisioning_options | provisioning_options | Options that are applied to the operation. |
| qos | qos | |
| serial_number | string | <p>The LUN serial number. The serial number is generated by ONTAP when the LUN is created.</p> <ul style="list-style-type: none"> • maxLength: 12 • minLength: 12 • readOnly: 1 • Introduced in: 9.10 |
| space | space | The storage space related properties of the LUN. |

| Name | Type | Description |
|------|--------|--|
| uuid | string | <p>The unique identifier of the LUN. The UUID is generated by ONTAP when the LUN is created.</p> <ul style="list-style-type: none"> • example: 1cd8a442-86d1-11e0-ae1c-123478563412 • readOnly: 1 • Introduced in: 9.10 |

guarantee

Properties that request and report the space guarantee for the NVMe namespace.

| Name | Type | Description |
|-----------|---------|--|
| requested | boolean | <p>The requested space reservation policy for the NVMe namespace. If <i>true</i>, a space reservation is requested for the namespace; if <i>false</i>, the namespace is thin provisioned. Guaranteeing a space reservation request for a namespace requires that the volume in which the namespace resides also be space reserved and that the fractional reserve for the volume be 100%.</p> <p>The space reservation policy for an NVMe namespace is determined by ONTAP.</p> <ul style="list-style-type: none"> • Introduced in: 9.6 |

space

The storage space related properties of the NVMe namespace.

| Name | Type | Description |
|------------|---------|---|
| block_size | integer | <p>The size of blocks in the namespace, in bytes.</p> <p>Valid in POST when creating an NVMe namespace that is not a clone of another. Disallowed in POST when creating a namespace clone. Valid in POST.</p> |

| Name | Type | Description |
|-----------|---------------------------|--|
| guarantee | guarantee | Properties that request and report the space guarantee for the NVMe namespace. |
| size | integer | <p>The total provisioned size of the NVMe namespace. Valid in POST and PATCH. The NVMe namespace size can be increased but not reduced using the REST interface.</p> <p>The maximum and minimum sizes listed here are the absolute maximum and absolute minimum sizes, in bytes. The maximum size is variable with respect to large NVMe namespace support in ONTAP. If large namespaces are supported, the maximum size is 128 TB (140737488355328 bytes) and if not supported, the maximum size is just under 16 TB (17557557870592 bytes). The minimum size supported is always 4096 bytes.</p> <p>For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.</p> <ul style="list-style-type: none"> • example: 1073741824 • format: int64 • Max value: 140737488355328 • Min value: 4096 • Introduced in: 9.6 |

status

Status information about the NVMe namespace.

consistency_group_nvme_host

The NVMe host provisioned to access NVMe namespaces mapped to a subsystem.

| Name | Type | Description |
|------|--------|---|
| nqn | string | The NVMe qualified name (NQN) used to identify the NVMe storage target. Not allowed in POST when the <code>records</code> property is used. |

consistency_group_nvme_subsystem

An NVMe subsystem maintains configuration state and namespace access control for a set of NVMe-connected hosts.

| Name | Type | Description |
|---------|--|--|
| comment | string | A configurable comment for the NVMe subsystem. Optional in POST and PATCH. |
| hosts | array[consistency_group_nvme_host] | The NVMe hosts configured for access to the NVMe subsystem. Optional in POST. |
| name | string | The name of the NVMe subsystem. Once created, an NVMe subsystem cannot be renamed. Required in POST. |
| os_type | string | The host operating system of the NVMe subsystem's hosts. Required in POST. |
| uuid | string | The unique identifier of the NVMe subsystem. |

subsystem_map

The NVMe subsystem with which the NVMe namespace is associated. A namespace can be mapped to zero (0) or one (1) subsystems.

There is an added computational cost to retrieving property values for `subsystem_map`. They are not populated for either a collection GET or an instance GET unless explicitly requested using the `fields` query parameter.

| Name | Type | Description |
|-----------|--|--|
| anagrpid | string | <p>The Asymmetric Namespace Access Group ID (ANAGRPID) of the NVMe namespace.</p> <p>The format for an ANAGRPID is 8 hexadecimal digits (zero-filled) followed by a lower case "h".</p> <p>There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the <code>fields</code> query parameter. See Requesting specific fields to learn more.</p> |
| nsid | string | <p>The NVMe namespace identifier. This is an identifier used by an NVMe controller to provide access to the NVMe namespace.</p> <p>The format for an NVMe namespace identifier is 8 hexadecimal digits (zero-filled) followed by a lower case "h".</p> |
| subsystem | consistency_group_nvme_subsystem | An NVMe subsystem maintains configuration state and namespace access control for a set of NVMe-connected hosts. |

namespaces

An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the storage virtual machine using the NVMe over Fabrics protocol.

In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.

An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.

An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.

| Name | Type | Description |
|-------------|---------|--|
| auto_delete | boolean | <p>This property marks the NVMe namespace for auto deletion when the volume containing the namespace runs out of space. This is most commonly set on namespace clones.</p> <p>When set to <i>true</i>, the NVMe namespace becomes eligible for automatic deletion when the volume runs out of space. Auto deletion only occurs when the volume containing the namespace is also configured for auto deletion and free space in the volume decreases below a particular threshold.</p> <p>This property is optional in POST and PATCH. The default value for a new NVMe namespace is <i>false</i>.</p> <p>There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the <code>fields</code> query parameter. See Requesting specific fields to learn more.</p> |
| comment | string | A configurable comment available for use by the administrator. Valid in POST and PATCH. |
| create_time | string | The time the NVMe namespace was created. |
| enabled | boolean | The enabled state of the NVMe namespace. Certain error conditions cause the namespace to become disabled. If the namespace is disabled, you can check the <code>state</code> property to determine what error disabled the namespace. An NVMe namespace is enabled automatically when it is created. |

| Name | Type | Description |
|----------------------|--------------------------------------|--|
| name | string | <p>The fully qualified path name of the NVMe namespace composed of a "/vol" prefix, the volume name, the (optional) qtree name and base name of the namespace. Valid in POST.</p> <p>NVMe namespaces do not support rename, or movement between volumes.</p> |
| os_type | string | <p>The operating system type of the NVMe namespace.</p> <p>Required in POST when creating an NVMe namespace that is not a clone of another. Disallowed in POST when creating a namespace clone.</p> |
| provisioning_options | provisioning_options | Options that are applied to the operation. |
| space | space | The storage space related properties of the NVMe namespace. |
| subsystem_map | subsystem_map | <p>The NVMe subsystem with which the NVMe namespace is associated. A namespace can be mapped to zero (0) or one (1) subsystems.</p> <p>There is an added computational cost to retrieving property values for <code>subsystem_map</code>. They are not populated for either a collection GET or an instance GET unless explicitly requested using the <code>fields</code> query parameter.</p> |
| uuid | string | The unique identifier of the NVMe namespace. |

parent_consistency_group

The parent consistency group.

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the consistency group. |
| uuid | string | The unique identifier of the consistency group. |

storage_service

Determines the placement of any storage object created during this operation.

| Name | Type | Description |
|------|--------|--|
| name | string | Storage service name. If not specified, the default value is the most performant for the platform. |

provisioning_options

Options that are applied to the operation.

| Name | Type | Description |
|-----------------|---------------------------------|---|
| action | string | Operation to perform |
| storage_service | storage_service | Determines the placement of any storage object created during this operation. |

policy

The QoS policy

| Name | Type | Description |
|---------------------|---------|---|
| max_throughput_iops | integer | Specifies the maximum throughput in IOPS, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH. |
| max_throughput_mbps | integer | Specifies the maximum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH. |

| Name | Type | Description |
|---------------------|---------|---|
| min_throughput_iops | integer | Specifies the minimum throughput in IOPS, 0 means none. Setting "min_throughput" is supported on AFF platforms only, unless FabricPool tiering policies are set. This is mutually exclusive with name and UUID during POST and PATCH. |
| min_throughput_mbps | integer | Specifies the minimum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH. |
| name | string | The QoS policy group name. This is mutually exclusive with UUID and other QoS attributes during POST and PATCH. |
| uuid | string | The QoS policy group UUID. This is mutually exclusive with name and other QoS attributes during POST and PATCH. |

snapshot

A consistency group's Snapshot copy

| Name | Type | Description |
|------|--------|--|
| name | string | The name of the consistency group's Snapshot copy to restore to. |
| uuid | string | The UUID of the consistency group's Snapshot copy to restore to. |

restore_to

Use to restore a consistency group to a previous Snapshot copy

| Name | Type | Description |
|----------|--------------------------|-------------------------------------|
| snapshot | snapshot | A consistency group's Snapshot copy |

_links

snapshot_policy_reference

This is a reference to the Snapshot copy policy.

| Name | Type | Description |
|------|--------|-------------|
| name | string | |
| uuid | string | |

space

Space information for the consistency group.

| Name | Type | Description |
|-----------|---------|---|
| available | integer | The amount of space available in the consistency group, in bytes. |
| size | integer | The total provisioned size of the consistency group, in bytes. |
| used | integer | The amount of space consumed in the consistency group, in bytes. |

svm

The Storage Virtual Machine (SVM) in which the consistency group is located.

| Name | Type | Description |
|------|--------|-----------------------------------|
| name | string | The name of the SVM. |
| uuid | string | The unique identifier of the SVM. |

object_stores

| Name | Type | Description |
|------|--------|--|
| name | string | The name of the object store to use. Used for placement. |

tiering

The tiering placement and policy definitions for volumes in this consistency group.

| Name | Type | Description |
|---------------|----------------------|---|
| control | string | Storage tiering placement rules for the object. |
| object_stores | array[object_stores] | Object stores to use. Used for placement. |
| policy | string | <p>Policy that determines whether the user data blocks of a volume in a FabricPool will be tiered to the cloud store when they become cold.</p> <p>FabricPool combines flash (performance tier) with a cloud store into a single aggregate. Temperature of a volume block increases if it is accessed frequently and decreases when it is not. Valid in POST or PATCH.</p> <p>all &dash; Allows tiering of both Snapshot copies and active file system user data to the cloud store as soon as possible by ignoring the temperature on the volume blocks.</p> <p>auto &dash; Allows tiering of both snapshot and active file system user data to the cloud store</p> <p>none &dash; Volume blocks are not be tiered to the cloud store.</p> <p>snapshot_only &dash; Allows tiering of only the volume Snapshot copies not associated with the active file system.</p> <p>The default tiering policy is "snapshot-only" for a FlexVol volume and "none" for a FlexGroup volume. The default minimum cooling period for the "snapshot-only" tiering policy is 2 days and for the "auto" tiering policy it is 31 days.</p> |

acls

The permissions that users and groups have on a CIFS share.

| Name | Type | Description |
|------------------------|------------------------|---|
| _links | _links | |
| permission | string | <p>Specifies the access rights that a user or group has on the defined CIFS Share. The following values are allowed:</p> <ul style="list-style-type: none"> • no_access - User does not have CIFS share access • read - User has only read access • change - User has change access • full_control - User has full_control access |
| type | string | <p>Specifies the type of the user or group to add to the access control list of a CIFS share. The following values are allowed:</p> <ul style="list-style-type: none"> • windows - Windows user or group • unix_user - UNIX user • unix_group - UNIX group |
| user_or_group | string | Specifies the user or group name to add to the access control list of a CIFS share. |

consistency_group_cifs_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

| Name | Type | Description |
|--------------------------|------------------------|--|
| _links | _links | |
| access_based_enumeration | boolean | Specifies whether all folders inside this share are visible to a user based on that individual user's access right; prevents the display of folders or other shared resources that the user does not have access to. |

| Name | Type | Description |
|--------------------------|------------------------------|---|
| acls | array [acls] | |
| allow_unencrypted_access | boolean | Specifies whether or not the SMB2 clients are allowed to access the encrypted share. |
| change_notify | boolean | Specifies whether CIFS clients can request for change notifications for directories on this share. |
| comment | string | Specify the CIFS share descriptions. |
| continuously_available | boolean | Specifies whether or not the clients connecting to this share can open files in a persistent manner. Files opened in this way are protected from disruptive events, such as, failover and giveback. |
| dir_umask | integer | Directory mode creation mask to be viewed as an octal number. |
| encryption | boolean | Specifies whether SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share. |
| file_umask | integer | File mode creation mask to be viewed as an octal number. |

| Name | Type | Description |
|-------------------|---------|---|
| home_directory | boolean | <p>Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively.</p> <ul style="list-style-type: none"> • Default value: 1 • Introduced in: 9.12 • readCreate: 1 |
| name | string | <p>Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.</p> |
| namespace_caching | boolean | <p>Specifies whether or not the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.</p> |

| Name | Type | Description |
|--------------------|---------|--|
| no_strict_security | boolean | Specifies whether or not CIFS clients can follow Unix symlinks outside the share boundaries. |
| offline_files | string | <p>Offline Files The supported values are:</p> <ul style="list-style-type: none"> • none - Clients are not permitted to cache files for offline access. • manual - Clients may cache files that are explicitly selected by the user for offline access. • documents - Clients may automatically cache files that are used by the user for offline access. • programs - Clients may automatically cache files that are used by the user for offline access and may use those files in an offline mode even if the share is available. |
| oplocks | boolean | Specifies whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations. |
| show_snapshot | boolean | Specifies whether or not the Snapshot copies can be viewed and traversed by clients. |
| unix_symlink | string | <p>Controls the access of UNIX symbolic links to CIFS clients. The supported values are:</p> <ul style="list-style-type: none"> • local - Enables only local symbolic links which is within the same CIFS share. • widelink - Enables both local symlinks and widelinks. • disable - Disables local symlinks and widelinks. |

| Name | Type | Description |
|---------------|--------|---|
| vscan_profile | string | <p>Vscan File-Operations Profile The supported values are:</p> <ul style="list-style-type: none"> • no_scan - Virus scans are never triggered for accesses to this share. • standard - Virus scans can be triggered by open, close, and rename operations. • strict - Virus scans can be triggered by open, read, close, and rename operations. • writes_only - Virus scans can be triggered only when a file that has been modified is closed. |

cifs

| Name | Type | Description |
|--------|-------------------------------------|-------------|
| shares | array[consistency_group_cifs_share] | |

export_clients

| Name | Type | Description |
|-------|--------|--|
| match | string | <p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"> • As a hostname; for instance, host1 • As an IPv4 address; for instance, 10.1.12.24 • As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1 • As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24 • As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64 • As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0 • As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng • As a domain name preceded by the . character; for instance, .example.com |

export_rules

| Name | Type | Description |
|-----------------------|---------|--|
| allow_device_creation | boolean | Specifies whether or not device creation is allowed. |
| allow_suid | boolean | Specifies whether or not SetUID bits in SETATTR Op is to be honored. |
| anonymous_user | string | User ID To Which Anonymous Users Are Mapped. |

| Name | Type | Description |
|--------------------|---|---|
| chown_mode | string | Specifies who is authorized to change the ownership mode of a file. |
| clients | array[export_clients] | Array of client matches |
| index | integer | Index of the rule within the export policy. |
| ntfs_unix_security | string | NTFS export UNIX security options. |
| protocols | array[string] | |
| ro_rule | array[string] | Authentication flavors that the read-only access rule governs |
| rw_rule | array[string] | Authentication flavors that the read/write access rule governs |
| superuser | array[string] | Authentication flavors that the superuser security type governs |

export_policy

The policy associated with volumes to export them for protocol access.

| Name | Type | Description |
|-------|---------------------------------------|---|
| name | string | Name of the export policy. |
| rules | array[export_rules] | The set of rules that govern the export policy. |
| uuid | string | Identifier for the export policy. |

junction_parent

| Name | Type | Description |
|------|--------|--|
| name | string | The name of the parent volume that contains the junction inode of this volume. The junction parent volume must belong to the same SVM that owns this volume. |

| Name | Type | Description |
|------|--------|--|
| uuid | string | Unique identifier for the parent volume. |

nas

The CIFS share policy and/or export policies for this volume.

| Name | Type | Description |
|-----------------|---------------------------------|---|
| cifs | cifs | |
| export_policy | export_policy | The policy associated with volumes to export them for protocol access. |
| gid | integer | The UNIX group ID of the volume. Valid in POST or PATCH. |
| junction_parent | junction_parent | |
| path | string | The fully-qualified path in the owning SVM's namespace at which the volume is mounted. The path is case insensitive and must be unique within an SVM's namespace. Path must begin with '/' and must not end with '/'. Only one volume can be mounted at any given junction path. An empty path in POST creates an unmounted volume. An empty path in PATCH deactivates and unmounts the volume. Taking a volume offline or restricted state removes its junction path. This attribute is reported in GET only when the volume is mounted. |
| security_style | string | Security style associated with the volume. Valid in POST or PATCH. mixed ‐ Mixed-style security ntfs ‐ NTFS/Windows-style security unified ‐ Unified-style security, unified UNIX, NFS and CIFS permissions unix ‐ UNIX-style security. |
| uid | integer | The UNIX user ID of the volume. Valid in POST or PATCH. |

| Name | Type | Description |
|------------------|---------|---|
| unix_permissions | integer | UNIX permissions to be viewed as an octal number, consisting of 4 digits derived by adding up bits 4 (read), 2 (write), and 1 (execute). First digit selects the set user ID (4), set group ID (2), and sticky (1) attributes. Second digit selects permission for the owner of the file. Third selects permissions for other users in the same group while the fourth selects permissions for other users not in the group. Valid in POST or PATCH. For security style "mixed" or "unix", the default setting is 0755 in octal (493 in decimal) and for security style "ntfs", the default setting is 0000. In cases where only owner, group, and other permissions are given (as in 755, representing the second, third and fourth digit), the first digit is assumed to be zero. |

provisioning_options

Options that are applied to the operation.

| Name | Type | Description |
|-----------------|---------------------------------|---|
| action | string | Operation to perform |
| count | integer | Number of elements to perform the operation on. |
| storage_service | storage_service | Determines the placement of any storage object created during this operation. |

qos

The QoS policy for this volume.

| Name | Type | Description |
|--------|------------------------|----------------|
| policy | policy | The QoS policy |

space

| Name | Type | Description |
|------|---------|-----------------------------------|
| size | integer | Total provisioned size, in bytes. |

tiering

The tiering placement and policy definitions for this volume.

| Name | Type | Description |
|---------------|--|---|
| control | string | Storage tiering placement rules for the object. |
| object_stores | array[object_stores] | Object stores to use. Used for placement. |

| Name | Type | Description |
|--------|--------|---|
| policy | string | <p>Policy that determines whether the user data blocks of a volume in a FabricPool will be tiered to the cloud store when they become cold.</p> <p>FabricPool combines flash (performance tier) with a cloud store into a single aggregate. Temperature of a volume block increases if it is accessed frequently and decreases when it is not. Valid in POST or PATCH.</p> <p>all &dash; Allows tiering of both Snapshot copies and active file system user data to the cloud store as soon as possible by ignoring the temperature on the volume blocks.</p> <p>auto &dash; Allows tiering of both snapshot and active file system user data to the cloud store</p> <p>none &dash; Volume blocks are not be tiered to the cloud store.</p> <p>snapshot_only &dash; Allows tiering of only the volume Snapshot copies not associated with the active file system.</p> <p>The default tiering policy is "snapshot-only" for a FlexVol volume and "none" for a FlexGroup volume. The default minimum cooling period for the "snapshot-only" tiering policy is 2 days and for the "auto" tiering policy it is 31 days.</p> |

volumes

| Name | Type | Description |
|---------|--------|---|
| comment | string | A comment for the volume. Valid in POST or PATCH. |

| Name | Type | Description |
|----------------------|---|--|
| language | string | Language encoding setting for volume. If no language is specified, the volume inherits its SVM language encoding setting. |
| name | string | Volume name. The name of volume must start with an alphabetic character (a to z or A to Z) or an underscore (_). The name must be 197 or fewer characters in length for FlexGroups, and 203 or fewer characters in length for all other types of volumes. Volume names must be unique within an SVM. Required on POST. |
| nas | nas | The CIFS share policy and/or export policies for this volume. |
| provisioning_options | provisioning_options | Options that are applied to the operation. |
| qos | qos | The QoS policy for this volume. |
| snapshot_policy | snapshot_policy_reference | This is a reference to the Snapshot copy policy. |
| space | space | |
| tiering | tiering | The tiering placement and policy definitions for this volume. |
| uuid | string | <p>Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move.</p> <ul style="list-style-type: none"> • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • readOnly: 1 • Introduced in: 9.8 |

consistency_groups

| Name | Type | Description |
|-------------|-------------------------------|--|
| application | application | |
| luns | array[luns] | The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group. |
| name | string | <p>Name of the consistency group. The consistency group name must be unique within an SVM.</p> <p>If not provided and the consistency group contains only one volume, the name will be generated based on the volume name. If the consistency group contains more than one volume, the name is required.</p> |

| Name | Type | Description |
|----------------------|----------------------|--|
| namespaces | array[namespaces] | <p>An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.</p> <p>An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.</p> <p>An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.</p> <ul style="list-style-type: none"> • maxItems: 16 • minItems: 0 • uniqueItems: 1 • Introduced in: 9.10 |
| provisioning_options | provisioning_options | Options that are applied to the operation. |
| qos | qos | |

| Name | Type | Description |
|-----------------|---|--|
| restore_to | restore_to | Use to restore a consistency group to a previous Snapshot copy |
| snapshot_policy | snapshot_policy_reference | This is a reference to the Snapshot copy policy. |
| svm | svm | The Storage Virtual Machine (SVM) in which the consistency group is located. |
| tiering | tiering | The tiering placement and policy definitions for volumes in this consistency group. |
| volumes | array[volumes] | <p>A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group.</p> <p>The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group.</p> <p>The total number of volumes across all child consistency groups contained in a consistency group is constrained by the same limit.</p> |

svm

The Storage Virtual Machine (SVM) in which the consistency group is located.

| Name | Type | Description |
|--------|------------------------|-----------------------------------|
| _links | _links | |
| name | string | The name of the SVM. |
| uuid | string | The unique identifier of the SVM. |

consistency_group_cifs_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

| Name | Type | Description |
|--------------------------|------------------------------|--|
| _links | _links | |
| access_based_enumeration | boolean | Specifies whether all folders inside this share are visible to a user based on that individual user's access right; prevents the display of folders or other shared resources that the user does not have access to. |
| acls | array [acls] | |
| allow_unencrypted_access | boolean | Specifies whether or not the SMB2 clients are allowed to access the encrypted share. |
| change_notify | boolean | Specifies whether CIFS clients can request for change notifications for directories on this share. |
| comment | string | Specify the CIFS share descriptions. |
| continuously_available | boolean | Specifies whether or not the clients connecting to this share can open files in a persistent manner. Files opened in this way are protected from disruptive events, such as, failover and giveback. |
| dir_umask | integer | Directory mode creation mask to be viewed as an octal number. |
| encryption | boolean | Specifies whether SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share. |
| file_umask | integer | File mode creation mask to be viewed as an octal number. |

| Name | Type | Description |
|-------------------|---------|---|
| home_directory | boolean | <p>Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively.</p> <ul style="list-style-type: none"> • Default value: 1 • Introduced in: 9.12 • readCreate: 1 |
| name | string | <p>Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.</p> |
| namespace_caching | boolean | <p>Specifies whether or not the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.</p> |

| Name | Type | Description |
|--------------------|---------|--|
| no_strict_security | boolean | Specifies whether or not CIFS clients can follow Unix symlinks outside the share boundaries. |
| offline_files | string | <p>Offline Files The supported values are:</p> <ul style="list-style-type: none"> • none - Clients are not permitted to cache files for offline access. • manual - Clients may cache files that are explicitly selected by the user for offline access. • documents - Clients may automatically cache files that are used by the user for offline access. • programs - Clients may automatically cache files that are used by the user for offline access and may use those files in an offline mode even if the share is available. |
| oplocks | boolean | Specifies whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations. |
| show_snapshot | boolean | Specifies whether or not the Snapshot copies can be viewed and traversed by clients. |
| unix_symlink | string | <p>Controls the access of UNIX symbolic links to CIFS clients. The supported values are:</p> <ul style="list-style-type: none"> • local - Enables only local symbolic links which is within the same CIFS share. • widelink - Enables both local symlinks and widelinks. • disable - Disables local symlinks and widelinks. |

| Name | Type | Description |
|---------------|--------|---|
| vscan_profile | string | <p>Vscan File-Operations Profile The supported values are:</p> <ul style="list-style-type: none"> • no_scan - Virus scans are never triggered for accesses to this share. • standard - Virus scans can be triggered by open, close, and rename operations. • strict - Virus scans can be triggered by open, read, close, and rename operations. • writes_only - Virus scans can be triggered only when a file that has been modified is closed. |

export_clients

| Name | Type | Description |
|-------|--------|--|
| match | string | <p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"> • As a hostname; for instance, host1 • As an IPv4 address; for instance, 10.1.12.24 • As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1 • As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24 • As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64 • As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0 • As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng • As a domain name preceded by the . character; for instance, .example.com |

consistency_group

| Name | Type | Description |
|-------------|-----------------------------|--|
| application | application | |
| clone | clone | Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy. |

| Name | Type | Description |
|--------------------|---------------------------|--|
| consistency_groups | array[consistency_groups] | A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A consistency group can only be associated with one direct parent consistency group. |
| luns | array[luns] | The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group. |
| name | string | <p>Name of the consistency group. The consistency group name must be unique within an SVM.</p> <p>If not provided and the consistency group contains only one volume, the name will be generated based on the volume name. If the consistency group contains more than one volume, the name is required.</p> |

| Name | Type | Description |
|----------------------|----------------------|--|
| namespaces | array[namespaces] | <p>An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.</p> <p>An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.</p> <p>An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.</p> <ul style="list-style-type: none"> • maxItems: 16 • minItems: 0 • uniqueItems: 1 • Introduced in: 9.10 |
| provisioning_options | provisioning_options | Options that are applied to the operation. |
| qos | qos | |

| Name | Type | Description |
|-----------------|---|--|
| restore_to | restore_to | Use to restore a consistency group to a previous Snapshot copy |
| snapshot_policy | snapshot_policy_reference | This is a reference to the Snapshot copy policy. |
| svm | svm | The Storage Virtual Machine (SVM) in which the consistency group is located. |
| tiering | tiering | The tiering placement and policy definitions for volumes in this consistency group. |
| volumes | array[volumes] | <p>A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group.</p> <p>The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group.</p> <p>The total number of volumes across all child consistency groups contained in a consistency group is constrained by the same limit.</p> |

consistency_group_cifs_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

| Name | Type | Description |
|--------|------------------------|-------------|
| _links | _links | |

| Name | Type | Description |
|--------------------------|------------------------------|--|
| access_based_enumeration | boolean | Specifies whether all folders inside this share are visible to a user based on that individual user's access right; prevents the display of folders or other shared resources that the user does not have access to. |
| acls | array [acls] | |
| allow_unencrypted_access | boolean | Specifies whether or not the SMB2 clients are allowed to access the encrypted share. |
| change_notify | boolean | Specifies whether CIFS clients can request for change notifications for directories on this share. |
| comment | string | Specify the CIFS share descriptions. |
| continuously_available | boolean | Specifies whether or not the clients connecting to this share can open files in a persistent manner. Files opened in this way are protected from disruptive events, such as, failover and giveback. |
| dir_umask | integer | Directory mode creation mask to be viewed as an octal number. |
| encryption | boolean | Specifies whether SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share. |
| file_umask | integer | File mode creation mask to be viewed as an octal number. |

| Name | Type | Description |
|-------------------|---------|---|
| home_directory | boolean | <p>Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively.</p> <ul style="list-style-type: none"> • Default value: 1 • Introduced in: 9.12 • readCreate: 1 |
| name | string | <p>Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.</p> |
| namespace_caching | boolean | <p>Specifies whether or not the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.</p> |

| Name | Type | Description |
|--------------------|---------|--|
| no_strict_security | boolean | Specifies whether or not CIFS clients can follow Unix symlinks outside the share boundaries. |
| offline_files | string | <p>Offline Files The supported values are:</p> <ul style="list-style-type: none"> • none - Clients are not permitted to cache files for offline access. • manual - Clients may cache files that are explicitly selected by the user for offline access. • documents - Clients may automatically cache files that are used by the user for offline access. • programs - Clients may automatically cache files that are used by the user for offline access and may use those files in an offline mode even if the share is available. |
| oplocks | boolean | Specifies whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations. |
| show_snapshot | boolean | Specifies whether or not the Snapshot copies can be viewed and traversed by clients. |
| unix_symlink | string | <p>Controls the access of UNIX symbolic links to CIFS clients. The supported values are:</p> <ul style="list-style-type: none"> • local - Enables only local symbolic links which is within the same CIFS share. • widelink - Enables both local symlinks and widelinks. • disable - Disables local symlinks and widelinks. |

| Name | Type | Description |
|---------------|--------|---|
| vscan_profile | string | <p>Vscan File-Operations Profile The supported values are:</p> <ul style="list-style-type: none"> • no_scan - Virus scans are never triggered for accesses to this share. • standard - Virus scans can be triggered by open, close, and rename operations. • strict - Virus scans can be triggered by open, read, close, and rename operations. • writes_only - Virus scans can be triggered only when a file that has been modified is closed. |

export_clients

| Name | Type | Description |
|-------|--------|--|
| match | string | <p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"> • As a hostname; for instance, host1 • As an IPv4 address; for instance, 10.1.12.24 • As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1 • As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24 • As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64 • As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0 • As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng • As a domain name preceded by the . character; for instance, .example.com |

consistency_group_cifs_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

| Name | Type | Description |
|--------|------------------------|-------------|
| _links | _links | |

| Name | Type | Description |
|--------------------------|------------------------------|--|
| access_based_enumeration | boolean | Specifies whether all folders inside this share are visible to a user based on that individual user's access right; prevents the display of folders or other shared resources that the user does not have access to. |
| acls | array [acls] | |
| allow_unencrypted_access | boolean | Specifies whether or not the SMB2 clients are allowed to access the encrypted share. |
| change_notify | boolean | Specifies whether CIFS clients can request for change notifications for directories on this share. |
| comment | string | Specify the CIFS share descriptions. |
| continuously_available | boolean | Specifies whether or not the clients connecting to this share can open files in a persistent manner. Files opened in this way are protected from disruptive events, such as, failover and giveback. |
| dir_umask | integer | Directory mode creation mask to be viewed as an octal number. |
| encryption | boolean | Specifies whether SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share. |
| file_umask | integer | File mode creation mask to be viewed as an octal number. |

| Name | Type | Description |
|-------------------|---------|---|
| home_directory | boolean | <p>Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively.</p> <ul style="list-style-type: none"> • Default value: 1 • Introduced in: 9.12 • readCreate: 1 |
| name | string | <p>Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.</p> |
| namespace_caching | boolean | <p>Specifies whether or not the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.</p> |

| Name | Type | Description |
|--------------------|---------|--|
| no_strict_security | boolean | Specifies whether or not CIFS clients can follow Unix symlinks outside the share boundaries. |
| offline_files | string | <p>Offline Files The supported values are:</p> <ul style="list-style-type: none"> • none - Clients are not permitted to cache files for offline access. • manual - Clients may cache files that are explicitly selected by the user for offline access. • documents - Clients may automatically cache files that are used by the user for offline access. • programs - Clients may automatically cache files that are used by the user for offline access and may use those files in an offline mode even if the share is available. |
| oplocks | boolean | Specifies whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations. |
| show_snapshot | boolean | Specifies whether or not the Snapshot copies can be viewed and traversed by clients. |
| unix_symlink | string | <p>Controls the access of UNIX symbolic links to CIFS clients. The supported values are:</p> <ul style="list-style-type: none"> • local - Enables only local symbolic links which is within the same CIFS share. • widelink - Enables both local symlinks and widelinks. • disable - Disables local symlinks and widelinks. |

| Name | Type | Description |
|---------------|--------|---|
| vscan_profile | string | <p>Vscan File-Operations Profile The supported values are:</p> <ul style="list-style-type: none"> • no_scan - Virus scans are never triggered for accesses to this share. • standard - Virus scans can be triggered by open, close, and rename operations. • strict - Virus scans can be triggered by open, read, close, and rename operations. • writes_only - Virus scans can be triggered only when a file that has been modified is closed. |

job_link

| Name | Type | Description |
|------|--------|---|
| uuid | string | The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation. |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Delete a consistency group

DELETE /application/consistency-groups/{uuid}

Introduced In: 9.10

Deletes a consistency group.



this will not delete any associated volumes or LUNs. To remove those elements, you can use the appropriate object endpoint.

Related ONTAP commands

There are no ONTAP commands for managing consistency groups.

Parameters

| Name | Type | In | Required | Description |
|-------------|---------|-------|----------|---|
| uuid | string | path | True | The unique identifier of the consistency group to delete. |
| delete_data | boolean | query | False | Delete the underlying storage as well as the consistency group association. This parameter should be used with caution. <ul style="list-style-type: none">• Default value: |

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|--|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |

Response

Status: 200, Ok

Response

Status: 202, Accepted

Error

Status: Default

ONTAP Error Response Codes

| Error Code | Description |
|------------|--|
| 53411842 | Consistency group does not exist. |
| 53411843 | A consistency group with specified UUID was not found. |
| 53411844 | Specified consistency group was not found in the specified SVM. |
| 53411845 | The specified UUID and name refer to different consistency groups. |
| 53411846 | Either name or UUID must be provided. |

| Name | Type | Description |
|-------|-----------------------|-------------|
| error | error | |

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Retrieve a consistency group

GET /application/consistency-groups/{uuid}

Introduced In: 9.10

Retrieves a single consistency group.

Expensive properties

There is an added computational cost to retrieving values for these properties. They are not included by default in GET results and must be explicitly requested using the `fields` query parameter. See [DOC Requesting specific fields](#) to learn more.

- `volumes`
- `luns`
- `namespaces`

Related ONTAP commands

There are no ONTAP commands for managing consistency groups.

Parameters

| Name | Type | In | Required | Description |
|-------------------------------------|---------|-------|----------|---|
| uuid | string | path | True | The unique identifier of the group to retrieve. |
| parent_consistency_group.name | string | query | False | Filter by parent_consistency_group.name |
| parent_consistency_group.uuid | string | query | False | Filter by parent_consistency_group.uuid |
| qos.policy.name | string | query | False | Filter by qos.policy.name |
| qos.policy.uuid | string | query | False | Filter by qos.policy.uuid |
| qos.policy.min_throughput_iops | integer | query | False | Filter by qos.policy.min_throughput_iops |
| qos.policy.min_throughput_mbps | integer | query | False | Filter by qos.policy.min_throughput_mbps |
| qos.policy.max_throughput_mbps | integer | query | False | Filter by qos.policy.max_throughput_mbps |
| qos.policy.max_throughput_iops | integer | query | False | Filter by qos.policy.max_throughput_iops |
| luns.uuid | string | query | False | Filter by luns.uuid |
| luns.create_time | string | query | False | Filter by luns.create_time |
| luns.os_type | string | query | False | Filter by luns.os_type |
| luns.qos.policy.max_throughput_iops | integer | query | False | Filter by luns.qos.policy.max_throughput_iops |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|--|
| luns.qos.policy.max_throughput_mbps | integer | query | False | Filter by luns.qos.policy.max_throughput_mbps |
| luns.qos.policy.min_throughput_mbps | integer | query | False | Filter by luns.qos.policy.min_throughput_mbps |
| luns.qos.policy.min_throughput_iops | integer | query | False | Filter by luns.qos.policy.min_throughput_iops |
| luns.qos.policy.uuid | string | query | False | Filter by luns.qos.policy.uuid |
| luns.qos.policy.name | string | query | False | Filter by luns.qos.policy.name |
| luns.name | string | query | False | Filter by luns.name |
| luns.enabled | boolean | query | False | Filter by luns.enabled |
| luns.lun_maps.logical_unit_number | integer | query | False | Filter by luns.lun_maps.logical_unit_number |
| luns.lun_maps.igroup.initiators.name | string | query | False | Filter by luns.lun_maps.igroup.initiators.name |
| luns.lun_maps.igroup.initiators.comment | string | query | False | Filter by luns.lun_maps.igroup.initiators.comment <ul style="list-style-type: none"> • maxLength: 254 • minLength: 0 |
| luns.lun_maps.igroup.protocol | string | query | False | Filter by luns.lun_maps.igroup.protocol |

| Name | Type | In | Required | Description |
|---------------------------------------|--------|-------|----------|---|
| luns.lun_maps.igrou p.name | string | query | False | Filter by luns.lun_maps.igrou p.name <ul style="list-style-type: none"> • maxLength: 96 • minLength: 1 |
| luns.lun_maps.igrou p.uuid | string | query | False | Filter by luns.lun_maps.igrou p.uuid |
| luns.lun_maps.igrou p.igroups.name | string | query | False | Filter by luns.lun_maps.igrou p.igroups.name <ul style="list-style-type: none"> • maxLength: 96 • minLength: 1 |
| luns.lun_maps.igrou p.igroups.uuid | string | query | False | Filter by luns.lun_maps.igrou p.igroups.uuid |
| luns.lun_maps.igrou p.os_type | string | query | False | Filter by luns.lun_maps.igrou p.os_type |
| luns.lun_maps.igrou p.comment | string | query | False | Filter by luns.lun_maps.igrou p.comment <ul style="list-style-type: none"> • Introduced in: 9.11 • maxLength: 254 • minLength: 0 |
| luns.serial_number | string | query | False | Filter by luns.serial_number <ul style="list-style-type: none"> • maxLength: 12 • minLength: 12 |
| luns.comment | string | query | False | Filter by luns.comment <ul style="list-style-type: none"> • maxLength: 254 • minLength: 0 |

| Name | Type | In | Required | Description |
|--------------------------------|---------|-------|----------|---|
| luns.space.used | integer | query | False | Filter by luns.space.used |
| luns.space.size | integer | query | False | Filter by luns.space.size <ul style="list-style-type: none"> • Max value: 140737488355328 • Min value: 4096 |
| luns.space.guarantee.reserved | boolean | query | False | Filter by luns.space.guarantee.reserved <ul style="list-style-type: none"> • Introduced in: 9.11 |
| luns.space.guarantee.requested | boolean | query | False | Filter by luns.space.guarantee.requested <ul style="list-style-type: none"> • Introduced in: 9.11 |
| snapshot_policy.name | string | query | False | Filter by snapshot_policy.name |
| snapshot_policy.uuid | string | query | False | Filter by snapshot_policy.uuid |
| clone.split_initiated | boolean | query | False | Filter by clone.split_initiated <ul style="list-style-type: none"> • Introduced in: 9.12 |
| clone.guarantee.type | string | query | False | Filter by clone.guarantee.type <ul style="list-style-type: none"> • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|-------------------------------------|--------|-------|----------|---|
| clone.volume.suffix | string | query | False | Filter by clone.volume.suffix <ul style="list-style-type: none"> • Introduced in: 9.12 |
| clone.volume.prefix | string | query | False | Filter by clone.volume.prefix <ul style="list-style-type: none"> • Introduced in: 9.12 |
| clone.parent_snapshot.name | string | query | False | Filter by clone.parent_snapshot.name <ul style="list-style-type: none"> • Introduced in: 9.12 |
| clone.parent_consistency_group.name | string | query | False | Filter by clone.parent_consistency_group.name <ul style="list-style-type: none"> • Introduced in: 9.12 |
| clone.parent_consistency_group.uuid | string | query | False | Filter by clone.parent_consistency_group.uuid <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.uuid | string | query | False | Filter by consistency_groups.uuid |
| consistency_groups.application.type | string | query | False | Filter by consistency_groups.application.type <ul style="list-style-type: none"> • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|--|
| consistency_groups.application.component_type | string | query | False | Filter by consistency_groups.application.component_type <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.volumes.name | string | query | False | Filter by consistency_groups.volumes.name <ul style="list-style-type: none"> maxLength: 203 minLength: 1 |
| consistency_groups.volumes.tiering.policy | string | query | False | Filter by consistency_groups.volumes.tiering.policy |
| consistency_groups.volumes.space.available | integer | query | False | Filter by consistency_groups.volumes.space.available |
| consistency_groups.volumes.space.used | integer | query | False | Filter by consistency_groups.volumes.space.used |
| consistency_groups.volumes.space.size | integer | query | False | Filter by consistency_groups.volumes.space.size |
| consistency_groups.volumes.comment | string | query | False | Filter by consistency_groups.volumes.comment <ul style="list-style-type: none"> maxLength: 1023 minLength: 0 |
| consistency_groups.volumes.language | string | query | False | Filter by consistency_groups.volumes.language |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|--|
| consistency_groups.volumes.nas.path | string | query | False | Filter by consistency_groups.volumes.nas.path • Introduced in: 9.12 |
| consistency_groups.volumes.nas.unix_permissions | integer | query | False | Filter by consistency_groups.volumes.nas.unix_permissions • Introduced in: 9.12 |
| consistency_groups.volumes.nas.security_style | string | query | False | Filter by consistency_groups.volumes.nas.security_style • Introduced in: 9.12 |
| consistency_groups.volumes.nas.uid | integer | query | False | Filter by consistency_groups.volumes.nas.uid • Introduced in: 9.12 |
| consistency_groups.volumes.nas.junction_parent.uuid | string | query | False | Filter by consistency_groups.volumes.nas.junction_parent.uuid • Introduced in: 9.12 |
| consistency_groups.volumes.nas.junction_parent.name | string | query | False | Filter by consistency_groups.volumes.nas.junction_parent.name • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|--|
| consistency_groups.volumes.nas.gid | integer | query | False | Filter by consistency_groups.volumes.nas.gid <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.allow_su_id | boolean | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.allow_su_id <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.clients.match | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.clients.match <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.protocols | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.protocols <ul style="list-style-type: none"> • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.allow_device_creation | boolean | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.allow_device_creation <ul style="list-style-type: none"> • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|--|
| consistency_groups.volumes.nas.export_policy.rules.anonymous_user | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.anonymous_user • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.ntfs_unix_security | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.ntfs_unix_security • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.chown_mode | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.chown_mode • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.index | integer | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.index • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.rw_rule | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.rw_rule • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.rules.ro_rule | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.ro_rule • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--|--------|-------|----------|---|
| consistency_groups.volumes.nas.export_policy.rules.superuser | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.rules.superuser • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.name | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.name • Introduced in: 9.12 |
| consistency_groups.volumes.nas.export_policy.uuid | string | query | False | Filter by consistency_groups.volumes.nas.export_policy.uuid • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.unix_symlink | string | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.unix_symlink • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.name | string | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.name • Introduced in: 9.12 • maxLength: 80 • minLength: 1 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|---|
| consistency_groups.volumes.nas.cifs.shares.acls.type | string | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.acls.type <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.acls.user_or_group | string | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.acls.user_or_group <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.acls.permission | string | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.acls.permission <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.encryption | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.encryption <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.file_umask | integer | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.file_umask <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.access_based_enumeration | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.access_based_enumeration <ul style="list-style-type: none"> Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|--|
| consistency_groups.volumes.nas.cifs.shares.vscan_profile | string | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.vscan_profile • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.namespace_caching | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.namespace_caching • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.dir_umask | integer | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.dir_umask • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.show_snapshot | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.show_snapshot • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.no_strict_security | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.no_strict_security • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.oplocks | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.oplocks • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|---|
| consistency_groups.volumes.nas.cifs.shares.allow_unencrypted_access | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.allow_unencrypted_access • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.comment | string | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.comment • Introduced in: 9.12 • maxLength: 256 • minLength: 1 |
| consistency_groups.volumes.nas.cifs.shares.continuously_available | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.continuously_available • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.change_notify | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.change_notify • Introduced in: 9.12 |
| consistency_groups.volumes.nas.cifs.shares.home_directory | boolean | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.home_directory • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|---|
| consistency_groups.volumes.nas.cifs.shares.offline_files | string | query | False | Filter by consistency_groups.volumes.nas.cifs.shares.offline_files • Introduced in: 9.12 |
| consistency_groups.volumes.uuid | string | query | False | Filter by consistency_groups.volumes.uuid |
| consistency_groups.volumes.qos.policy.name | string | query | False | Filter by consistency_groups.volumes.qos.policy.name |
| consistency_groups.volumes.qos.policy.uuid | string | query | False | Filter by consistency_groups.volumes.qos.policy.uuid |
| consistency_groups.volumes.qos.policy.min_throughput_iops | integer | query | False | Filter by consistency_groups.volumes.qos.policy.min_throughput_iops |
| consistency_groups.volumes.qos.policy.min_throughput_mbps | integer | query | False | Filter by consistency_groups.volumes.qos.policy.min_throughput_mbps |
| consistency_groups.volumes.qos.policy.max_throughput_mbps | integer | query | False | Filter by consistency_groups.volumes.qos.policy.max_throughput_mbps |
| consistency_groups.volumes.qos.policy.max_throughput_iops | integer | query | False | Filter by consistency_groups.volumes.qos.policy.max_throughput_iops |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|---|
| consistency_groups.volumes.snapshot_policy.name | string | query | False | Filter by consistency_groups.volumes.snapshot_policy.name |
| consistency_groups.volumes.snapshot_policy.uuid | string | query | False | Filter by consistency_groups.volumes.snapshot_policy.uuid |
| consistency_groups.namespaces.uuid | string | query | False | Filter by consistency_groups.namespaces.uuid <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.namespaces.create_time | string | query | False | Filter by consistency_groups.namespaces.create_time <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.namespaces.auto_delete | boolean | query | False | Filter by consistency_groups.namespaces.auto_delete <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.namespaces.os_type | string | query | False | Filter by consistency_groups.namespaces.os_type <ul style="list-style-type: none"> Introduced in: 9.12 |
| consistency_groups.namespaces.name | string | query | False | Filter by consistency_groups.namespaces.name <ul style="list-style-type: none"> Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|--|
| consistency_groups.namespaces.enabled | boolean | query | False | Filter by consistency_groups.namespaces.enabled • Introduced in: 9.12 |
| consistency_groups.namespaces.subsystem_map.subsystem.os_type | string | query | False | Filter by consistency_groups.namespaces.subsystem_map.subsystem.os_type • Introduced in: 9.12 |
| consistency_groups.namespaces.subsystem_map.subsystem.comment | string | query | False | Filter by consistency_groups.namespaces.subsystem_map.subsystem.comment • Introduced in: 9.12 • maxLength: 255 • minLength: 0 |
| consistency_groups.namespaces.subsystem_map.subsystem.name | string | query | False | Filter by consistency_groups.namespaces.subsystem_map.subsystem.name • Introduced in: 9.12 • maxLength: 96 • minLength: 1 |
| consistency_groups.namespaces.subsystem_map.subsystem.uuid | string | query | False | Filter by consistency_groups.namespaces.subsystem_map.subsystem.uuid • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|--------|-------|----------|--|
| consistency_groups.namespaces.subsystem_map.subsystem.hosts.nqn | string | query | False | Filter by consistency_groups.namespaces.subsystem_map.subsystem.hosts.nqn • Introduced in: 9.12 |
| consistency_groups.namespaces.subsystem_map.anagrpid | string | query | False | Filter by consistency_groups.namespaces.subsystem_map.anagrpid • Introduced in: 9.12 |
| consistency_groups.namespaces.subsystem_map.nsid | string | query | False | Filter by consistency_groups.namespaces.subsystem_map.nsid • Introduced in: 9.12 |
| consistency_groups.namespaces.comment | string | query | False | Filter by consistency_groups.namespaces.comment • Introduced in: 9.12 • maxLength: 254 • minLength: 0 |
| consistency_groups.namespaces.status.container_state | string | query | False | Filter by consistency_groups.namespaces.status.container_state • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|--|
| consistency_groups.namespaces.status.state | string | query | False | Filter by consistency_groups.namespaces.status.state • Introduced in: 9.12 |
| consistency_groups.namespaces.status.mapped | boolean | query | False | Filter by consistency_groups.namespaces.status.mapped • Introduced in: 9.12 |
| consistency_groups.namespaces.status.read_only | boolean | query | False | Filter by consistency_groups.namespaces.status.read_only • Introduced in: 9.12 |
| consistency_groups.namespaces.space.size | integer | query | False | Filter by consistency_groups.namespaces.space.size • Introduced in: 9.12 • Max value: 140737488355328 • Min value: 4096 |
| consistency_groups.namespaces.space.block_size | integer | query | False | Filter by consistency_groups.namespaces.space.block_size • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|--|
| consistency_groups.namespaces.space.guarantee.reserved | boolean | query | False | Filter by consistency_groups.namespaces.space.guarantee.reserved • Introduced in: 9.12 |
| consistency_groups.namespaces.space.guarantee.requested | boolean | query | False | Filter by consistency_groups.namespaces.space.guarantee.requested • Introduced in: 9.12 |
| consistency_groups.namespaces.space.used | integer | query | False | Filter by consistency_groups.namespaces.space.used • Introduced in: 9.12 |
| consistency_groups.snapshot_policy.name | string | query | False | Filter by consistency_groups.snapshot_policy.name |
| consistency_groups.snapshot_policy.uuid | string | query | False | Filter by consistency_groups.snapshot_policy.uuid |
| consistency_groups.parent_consistency_group.name | string | query | False | Filter by consistency_groups.parent_consistency_group.name |
| consistency_groups.parent_consistency_group.uuid | string | query | False | Filter by consistency_groups.parent_consistency_group.uuid |
| consistency_groups.qos.policy.name | string | query | False | Filter by consistency_groups.qos.policy.name |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|--|
| consistency_groups.qos.policy.uuid | string | query | False | Filter by consistency_groups.qos.policy.uuid |
| consistency_groups.qos.policy.min_throughput_iops | integer | query | False | Filter by consistency_groups.qos.policy.min_throughput_iops |
| consistency_groups.qos.policy.min_throughput_mbps | integer | query | False | Filter by consistency_groups.qos.policy.min_throughput_mbps |
| consistency_groups.qos.policy.max_throughput_mbps | integer | query | False | Filter by consistency_groups.qos.policy.max_throughput_mbps |
| consistency_groups.qos.policy.max_throughput_iops | integer | query | False | Filter by consistency_groups.qos.policy.max_throughput_iops |
| consistency_groups.luns.uuid | string | query | False | Filter by consistency_groups.luns.uuid |
| consistency_groups.luns.create_time | string | query | False | Filter by consistency_groups.luns.create_time |
| consistency_groups.luns.os_type | string | query | False | Filter by consistency_groups.luns.os_type |
| consistency_groups.luns.qos.policy.max_throughput_iops | integer | query | False | Filter by consistency_groups.luns.qos.policy.max_throughput_iops |
| consistency_groups.luns.qos.policy.max_throughput_mbps | integer | query | False | Filter by consistency_groups.luns.qos.policy.max_throughput_mbps |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|---|
| consistency_groups.luns.qos.policy.min_throughput_mbps | integer | query | False | Filter by consistency_groups.luns.qos.policy.min_throughput_mbps |
| consistency_groups.luns.qos.policy.min_throughput_iops | integer | query | False | Filter by consistency_groups.luns.qos.policy.min_throughput_iops |
| consistency_groups.luns.qos.policy.uuid | string | query | False | Filter by consistency_groups.luns.qos.policy.uuid |
| consistency_groups.luns.qos.policy.name | string | query | False | Filter by consistency_groups.luns.qos.policy.name |
| consistency_groups.luns.name | string | query | False | Filter by consistency_groups.luns.name |
| consistency_groups.luns.enabled | boolean | query | False | Filter by consistency_groups.luns.enabled |
| consistency_groups.luns.lun_maps.logical_unit_number | integer | query | False | Filter by consistency_groups.luns.lun_maps.logical_unit_number |
| consistency_groups.luns.lun_maps.igroup.initiators.name | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.initiators.name |
| consistency_groups.luns.lun_maps.igroup.initiators.comment | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.initiators.comment <ul style="list-style-type: none"> • maxLength: 254 • minLength: 0 |

| Name | Type | In | Required | Description |
|--|--------|-------|----------|---|
| consistency_groups.luns.lun_maps.igroup.protocol | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.protocol |
| consistency_groups.luns.lun_maps.igroup.name | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.name <ul style="list-style-type: none"> • maxLength: 96 • minLength: 1 |
| consistency_groups.luns.lun_maps.igroup.uuid | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.uuid |
| consistency_groups.luns.lun_maps.igroup.igroups.name | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.igroups.name <ul style="list-style-type: none"> • maxLength: 96 • minLength: 1 |
| consistency_groups.luns.lun_maps.igroup.igroups.uuid | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.igroups.uuid |
| consistency_groups.luns.lun_maps.igroup.os_type | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.os_type |
| consistency_groups.luns.lun_maps.igroup.comment | string | query | False | Filter by consistency_groups.luns.lun_maps.igroup.comment <ul style="list-style-type: none"> • Introduced in: 9.11 • maxLength: 254 • minLength: 0 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|--|
| consistency_groups.luns.serial_number | string | query | False | Filter by consistency_groups.luns.serial_number <ul style="list-style-type: none"> • maxLength: 12 • minLength: 12 |
| consistency_groups.luns.comment | string | query | False | Filter by consistency_groups.luns.comment <ul style="list-style-type: none"> • maxLength: 254 • minLength: 0 |
| consistency_groups.luns.space.used | integer | query | False | Filter by consistency_groups.luns.space.used |
| consistency_groups.luns.space.size | integer | query | False | Filter by consistency_groups.luns.space.size <ul style="list-style-type: none"> • Max value: 140737488355328 • Min value: 4096 |
| consistency_groups.luns.space.guarantee.reserved | boolean | query | False | Filter by consistency_groups.luns.space.guarantee.reserved <ul style="list-style-type: none"> • Introduced in: 9.11 |
| consistency_groups.luns.space.guarantee.requested | boolean | query | False | Filter by consistency_groups.luns.space.guarantee.requested <ul style="list-style-type: none"> • Introduced in: 9.11 |
| consistency_groups.name | string | query | False | Filter by consistency_groups.name |

| Name | Type | In | Required | Description |
|------------------------------------|---------|-------|----------|--|
| consistency_groups.tiering.policy | string | query | False | Filter by consistency_groups.tiering.policy |
| consistency_groups.space.available | integer | query | False | Filter by consistency_groups.space.available |
| consistency_groups.space.used | integer | query | False | Filter by consistency_groups.space.used |
| consistency_groups.space.size | integer | query | False | Filter by consistency_groups.space.size |
| consistency_groups.svm.uuid | string | query | False | Filter by consistency_groups.svm.uuid |
| consistency_groups.svm.name | string | query | False | Filter by consistency_groups.svm.name |
| name | string | query | False | Filter by name |
| namespaces.uuid | string | query | False | Filter by namespaces.uuid <ul style="list-style-type: none"> • Introduced in: 9.12 |
| namespaces.create_time | string | query | False | Filter by namespaces.create_time <ul style="list-style-type: none"> • Introduced in: 9.12 |
| namespaces.auto_delete | boolean | query | False | Filter by namespaces.auto_delete <ul style="list-style-type: none"> • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|--|
| namespaces.os_type | string | query | False | Filter by namespaces.os_type <ul style="list-style-type: none"> Introduced in: 9.12 |
| namespaces.name | string | query | False | Filter by namespaces.name <ul style="list-style-type: none"> Introduced in: 9.12 |
| namespaces.enabled | boolean | query | False | Filter by namespaces.enabled <ul style="list-style-type: none"> Introduced in: 9.12 |
| namespaces.subsystem_map.subsystem.os_type | string | query | False | Filter by namespaces.subsystem_map.subsystem.os_type <ul style="list-style-type: none"> Introduced in: 9.12 |
| namespaces.subsystem_map.subsystem.comment | string | query | False | Filter by namespaces.subsystem_map.subsystem.comment <ul style="list-style-type: none"> Introduced in: 9.12 maxLength: 255 minLength: 0 |
| namespaces.subsystem_map.subsystem.name | string | query | False | Filter by namespaces.subsystem_map.subsystem.name <ul style="list-style-type: none"> Introduced in: 9.12 maxLength: 96 minLength: 1 |

| Name | Type | In | Required | Description |
|--|--------|-------|----------|---|
| namespaces.subsystem_map.subsystem.uuid | string | query | False | Filter by namespaces.subsystem_map.subsystem.uuid • Introduced in: 9.12 |
| namespaces.subsystem_map.subsystem.hosts.nqn | string | query | False | Filter by namespaces.subsystem_map.subsystem.hosts.nqn • Introduced in: 9.12 |
| namespaces.subsystem_map.anagrp_id | string | query | False | Filter by namespaces.subsystem_map.anagrp_id • Introduced in: 9.12 |
| namespaces.subsystem_map.nsid | string | query | False | Filter by namespaces.subsystem_map.nsid • Introduced in: 9.12 |
| namespaces.comment | string | query | False | Filter by namespaces.comment • Introduced in: 9.12 • maxLength: 254 • minLength: 0 |
| namespaces.status.container_state | string | query | False | Filter by namespaces.status.container_state • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|-------------------------------------|---------|-------|----------|---|
| namespaces.status.state | string | query | False | Filter by namespaces.status.state • Introduced in: 9.12 |
| namespaces.status.mapped | boolean | query | False | Filter by namespaces.status.mapped • Introduced in: 9.12 |
| namespaces.status.read_only | boolean | query | False | Filter by namespaces.status.read_only • Introduced in: 9.12 |
| namespaces.space.size | integer | query | False | Filter by namespaces.space.size • Introduced in: 9.12 • Max value: 140737488355328 • Min value: 4096 |
| namespaces.space.block_size | integer | query | False | Filter by namespaces.space.block_size • Introduced in: 9.12 |
| namespaces.space.guarantee.reserved | boolean | query | False | Filter by namespaces.space.guarantee.reserved • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--------------------------------------|---------|-------|----------|--|
| namespaces.space.guarantee.requested | boolean | query | False | Filter by namespaces.space.guarantee.requested <ul style="list-style-type: none"> Introduced in: 9.12 |
| namespaces.space.used | integer | query | False | Filter by namespaces.space.used <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.name | string | query | False | Filter by volumes.name <ul style="list-style-type: none"> maxLength: 203 minLength: 1 |
| volumes.tiering.policy | string | query | False | Filter by volumes.tiering.policy |
| volumes.space.available | integer | query | False | Filter by volumes.space.available |
| volumes.space.used | integer | query | False | Filter by volumes.space.used |
| volumes.space.size | integer | query | False | Filter by volumes.space.size |
| volumes.comment | string | query | False | Filter by volumes.comment <ul style="list-style-type: none"> maxLength: 1023 minLength: 0 |
| volumes.language | string | query | False | Filter by volumes.language |

| Name | Type | In | Required | Description |
|----------------------------------|---------|-------|----------|---|
| volumes.nas.path | string | query | False | Filter by volumes.nas.path • Introduced in: 9.12 |
| volumes.nas.unix_permissions | integer | query | False | Filter by volumes.nas.unix_permissions • Introduced in: 9.12 |
| volumes.nas.security_style | string | query | False | Filter by volumes.nas.security_style • Introduced in: 9.12 |
| volumes.nas.uid | integer | query | False | Filter by volumes.nas.uid • Introduced in: 9.12 |
| volumes.nas.junction_parent.uuid | string | query | False | Filter by volumes.nas.junction_parent.uuid • Introduced in: 9.12 |
| volumes.nas.junction_parent.name | string | query | False | Filter by volumes.nas.junction_parent.name • Introduced in: 9.12 |
| volumes.nas.gid | integer | query | False | Filter by volumes.nas.gid • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|---|---------|-------|----------|--|
| volumes.nas.export_policy.rules.allow_suid | boolean | query | False | Filter by volumes.nas.export_policy.rules.allow_suid • Introduced in: 9.12 |
| volumes.nas.export_policy.rules.clients.match | string | query | False | Filter by volumes.nas.export_policy.rules.clients.match • Introduced in: 9.12 |
| volumes.nas.export_policy.rules.protocols | string | query | False | Filter by volumes.nas.export_policy.rules.protocols • Introduced in: 9.12 |
| volumes.nas.export_policy.rules.allow_device_creation | boolean | query | False | Filter by volumes.nas.export_policy.rules.allow_device_creation • Introduced in: 9.12 |
| volumes.nas.export_policy.rules.anonymous_user | string | query | False | Filter by volumes.nas.export_policy.rules.anonymous_user • Introduced in: 9.12 |
| volumes.nas.export_policy.rules.ntfs_unix_security | string | query | False | Filter by volumes.nas.export_policy.rules.ntfs_unix_security • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|---|
| volumes.nas.export_policy.rules.chown_mode | string | query | False | Filter by volumes.nas.export_policy.rules.chown_mode • Introduced in: 9.12 |
| volumes.nas.export_policy.rules.index | integer | query | False | Filter by volumes.nas.export_policy.rules.index • Introduced in: 9.12 |
| volumes.nas.export_policy.rules.rw_rule | string | query | False | Filter by volumes.nas.export_policy.rules.rw_rule • Introduced in: 9.12 |
| volumes.nas.export_policy.rules.ro_rule | string | query | False | Filter by volumes.nas.export_policy.rules.ro_rule • Introduced in: 9.12 |
| volumes.nas.export_policy.rules.superuser | string | query | False | Filter by volumes.nas.export_policy.rules.superuser • Introduced in: 9.12 |
| volumes.nas.export_policy.name | string | query | False | Filter by volumes.nas.export_policy.name • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--|--------|-------|----------|---|
| volumes.nas.export_policy.uuid | string | query | False | Filter by volumes.nas.export_policy.uuid <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.cifs.shares.unix_symlink | string | query | False | Filter by volumes.nas.cifs.shares.unix_symlink <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.cifs.shares.name | string | query | False | Filter by volumes.nas.cifs.shares.name <ul style="list-style-type: none"> Introduced in: 9.12 maxLength: 80 minLength: 1 |
| volumes.nas.cifs.shares.acls.type | string | query | False | Filter by volumes.nas.cifs.shares.acls.type <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.cifs.shares.acls.user_or_group | string | query | False | Filter by volumes.nas.cifs.shares.acls.user_or_group <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.cifs.shares.acls.permission | string | query | False | Filter by volumes.nas.cifs.shares.acls.permission <ul style="list-style-type: none"> Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|--|
| volumes.nas.cifs.shares.encryption | boolean | query | False | Filter by volumes.nas.cifs.shares.encryption <ul style="list-style-type: none"> • Introduced in: 9.12 |
| volumes.nas.cifs.shares.file_umask | integer | query | False | Filter by volumes.nas.cifs.shares.file_umask <ul style="list-style-type: none"> • Introduced in: 9.12 |
| volumes.nas.cifs.shares.access_based_enumeration | boolean | query | False | Filter by volumes.nas.cifs.shares.access_based_enumeration <ul style="list-style-type: none"> • Introduced in: 9.12 |
| volumes.nas.cifs.shares.vscan_profile | string | query | False | Filter by volumes.nas.cifs.shares.vscan_profile <ul style="list-style-type: none"> • Introduced in: 9.12 |
| volumes.nas.cifs.shares.namespace_caching | boolean | query | False | Filter by volumes.nas.cifs.shares.namespace_caching <ul style="list-style-type: none"> • Introduced in: 9.12 |
| volumes.nas.cifs.shares.dir_umask | integer | query | False | Filter by volumes.nas.cifs.shares.dir_umask <ul style="list-style-type: none"> • Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|---|
| volumes.nas.cifs.shares.show_snapshot | boolean | query | False | Filter by volumes.nas.cifs.shares.show_snapshot <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.cifs.shares.no_strict_security | boolean | query | False | Filter by volumes.nas.cifs.shares.no_strict_security <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.cifs.shares.oplocks | boolean | query | False | Filter by volumes.nas.cifs.shares.oplocks <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.cifs.shares.allow_unencrypted_access | boolean | query | False | Filter by volumes.nas.cifs.shares.allow_unencrypted_access <ul style="list-style-type: none"> Introduced in: 9.12 |
| volumes.nas.cifs.shares.comment | string | query | False | Filter by volumes.nas.cifs.shares.comment <ul style="list-style-type: none"> Introduced in: 9.12 maxLength: 256 minLength: 1 |
| volumes.nas.cifs.shares.continuously_available | boolean | query | False | Filter by volumes.nas.cifs.shares.continuously_available <ul style="list-style-type: none"> Introduced in: 9.12 |

| Name | Type | In | Required | Description |
|--|---------|-------|----------|---|
| volumes.nas.cifs.shares.change_notify | boolean | query | False | Filter by volumes.nas.cifs.shares.change_notify • Introduced in: 9.12 |
| volumes.nas.cifs.shares.home_directory | boolean | query | False | Filter by volumes.nas.cifs.shares.home_directory • Introduced in: 9.12 |
| volumes.nas.cifs.shares.offline_files | string | query | False | Filter by volumes.nas.cifs.shares.offline_files • Introduced in: 9.12 |
| volumes.uuid | string | query | False | Filter by volumes.uuid |
| volumes.qos.policy.name | string | query | False | Filter by volumes.qos.policy.name |
| volumes.qos.policy.uuid | string | query | False | Filter by volumes.qos.policy.uuid |
| volumes.qos.policy.min_throughput_iops | integer | query | False | Filter by volumes.qos.policy.min_throughput_iops |
| volumes.qos.policy.min_throughput_mbps | integer | query | False | Filter by volumes.qos.policy.min_throughput_mbps |
| volumes.qos.policy.max_throughput_mbps | integer | query | False | Filter by volumes.qos.policy.max_throughput_mbps |

| Name | Type | In | Required | Description |
|--|---------------|-------|----------|---|
| volumes.qos.policy.max_throughput_iops | integer | query | False | Filter by volumes.qos.policy.max_throughput_iops |
| volumes.snapshot_policy.name | string | query | False | Filter by volumes.snapshot_policy.name |
| volumes.snapshot_policy.uuid | string | query | False | Filter by volumes.snapshot_policy.uuid |
| replication_source | boolean | query | False | Filter by replication_source |
| svm.uuid | string | query | False | Filter by svm.uuid |
| svm.name | string | query | False | Filter by svm.name |
| space.available | integer | query | False | Filter by space.available |
| space.used | integer | query | False | Filter by space.used |
| space.size | integer | query | False | Filter by space.size |
| tiering.policy | string | query | False | Filter by tiering.policy |
| replicated | boolean | query | False | Filter by replicated |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | <p>The default is true for GET calls. When set to false, only the number of records is returned.</p> <ul style="list-style-type: none"> • Default value: 1 |

| Name | Type | In | Required | Description |
|----------------|---------------|-------|----------|--|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached.</p> <ul style="list-style-type: none"> • Max value: 120 • Min value: 0 • Default value: 1 |
| order_by | array[string] | query | False | Order results by specified fields and optional [asc |

Response

Status: 200, Ok

| Name | Type | Description |
|--------------------|---|--|
| _links | self_link | |
| application | application | |
| clone | clone | Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy. |
| consistency_groups | array[consistency_groups] | A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A consistency group can only be associated with one direct parent consistency group. |

| Name | Type | Description |
|------|-------------|--|
| luns | array[luns] | The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group. |
| name | string | <p>Name of the consistency group. The consistency group name must be unique within an SVM.</p> <p>If not provided and the consistency group contains only one volume, the name will be generated based on the volume name. If the consistency group contains more than one volume, the name is required.</p> |

| Name | Type | Description |
|--------------------------|--------------------------|--|
| namespaces | array[namespaces] | <p>An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.</p> <p>An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.</p> <p>An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.</p> <ul style="list-style-type: none"> • maxItems: 16 • minItems: 0 • uniqueItems: 1 • Introduced in: 9.10 |
| parent_consistency_group | parent_consistency_group | The parent consistency group. |
| qos | qos | |
| replicated | boolean | Indicates whether or not replication has been enabled on this consistency group. |

| Name | Type | Description |
|--------------------|---|--|
| replication_source | boolean | Indicates whether or not this consistency group is the source for replication. |
| restore_to | restore_to | Use to restore a consistency group to a previous Snapshot copy |
| snapshot_policy | snapshot_policy_reference | This is a reference to the Snapshot copy policy. |
| space | space | Space information for the consistency group. |
| svm | svm | The Storage Virtual Machine (SVM) in which the consistency group is located. |
| tiering | tiering | The tiering placement and policy definitions for volumes in this consistency group. |
| uuid | string | <p>The unique identifier of the consistency group. The UUID is generated by ONTAP when the consistency group is created.</p> <ul style="list-style-type: none"> • example: 1cd8a442-86d1-11e0-ae1c-123478563412 • Introduced in: 9.10 • readOnly: 1 |

| Name | Type | Description |
|---------|----------------|--|
| volumes | array[volumes] | <p>A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group.</p> <p>The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group.</p> <p>The total number of volumes across all child consistency groups contained in a consistency group is constrained by the same limit.</p> |

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "application": {
    "component_type": "string",
    "type": "string"
  },
  "clone": {
    "guarantee": {
      "type": "string"
    }
  },
  "parent_consistency_group": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "my_consistency_group",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "parent_snapshot": {
    "name": "string"
  },
  "volume": {
    "prefix": "string",
    "suffix": "string"
  }
},
"consistency_groups": [
  {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "application": {
      "component_type": "string",
      "type": "string"
    },
    "luns": [
      {
```



```

"comment": "string",
"create_time": "2018-06-04T19:00:00Z",
"lun_maps": [
  {
    "igroup": {
      "comment": "string",
      "igroups": [
        {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "igroup1",
          "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
        }
      ],
      "initiators": [
        {
          "comment": "my comment",
          "name": "iqn.1998-01.com.corp.iscsi:name1"
        }
      ],
      "name": "igroup1",
      "os_type": "string",
      "protocol": "string",
      "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
    }
  }
],
"name": "/vol/volume1/lun1",
"os_type": "string",
"qos": {
  "policy": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "max_throughput_iops": 10000,
    "max_throughput_mbps": 500,
    "min_throughput_iops": 2000,
    "min_throughput_mbps": 500,
    "name": "performance",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
}

```

```

    },
    "serial_number": "string",
    "space": {
        "size": 1073741824
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
],
"name": "string",
"namespaces": [
    {
        "comment": "string",
        "create_time": "2018-06-04T19:00:00Z",
        "name": "/vol/volume1/qtree1/namespace1",
        "os_type": "string",
        "space": {
            "block_size": 512,
            "size": 1073741824
        },
        "status": {
            "container_state": "string",
            "state": "online"
        },
        "subsystem_map": {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "anagrp_id": "00103050h",
            "nsid": "00000001h",
            "subsystem": {
                "comment": "string",
                "hosts": [
                    {
                        "nqn": "nqn.1992-01.example.com:string"
                    }
                ],
                "name": "subsystem1",
                "os_type": "string",
                "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
            }
        },
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
],

```

```

"parent_consistency_group": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "my_consistency_group",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"qos": {
  "policy": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "max_throughput_iops": 10000,
    "max_throughput_mbps": 500,
    "min_throughput_iops": 2000,
    "min_throughput_mbps": 500,
    "name": "performance",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "restore_to": {
    "snapshot": {
      "name": "string",
      "uuid": "string"
    }
  },
  "snapshot_policy": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "default",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "space": {
    "available": 5737418,
    "size": 1073741824,
    "used": 5737418
  },
  "svm": {
    "_links": {

```

```

        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"tiering": {
    "object_stores": [
        {}
    ],
    "policy": "string"
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"volumes": [
    {
        "comment": "string",
        "language": "string",
        "name": "vol_cs_dept",
        "nas": {
            "cifs": {
                "shares": [
                    {
                        "_links": {
                            "self": {
                                "href": "/api/resourcelink"
                            }
                        },
                        "acls": [
                            {
                                "_links": {
                                    "self": {
                                        "href": "/api/resourcelink"
                                    }
                                },
                                "permission": "string",
                                "type": "string",
                                "user_or_group": "ENGDOMAIN\\ad_user"
                            }
                        ],
                        "comment": "HR Department Share",
                        "dir_umask": 22,
                        "file_umask": 22,
                        "name": "HR_SHARE",
                        "offline_files": "string",
                        "unix_symlink": "string",

```

```

        "vscan_profile": "string"
    }
]
},
"export_policy": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "string",
    "rules": [
        {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "anonymous_user": "string",
            "chown_mode": "string",
            "clients": [
                {
                    "match": "0.0.0.0/0"
                }
            ],
            "index": 0,
            "ntfs_unix_security": "string",
            "protocols": [
                "string"
            ],
            "ro_rule": [
                "string"
            ],
            "rw_rule": [
                "string"
            ],
            "superuser": [
                "string"
            ]
        }
    ],
    "uuid": "string"
},
"junction_parent": {
    "_links": {
        "self": {

```

```

        "href": "/api/resourcelink"
    },
    },
    "name": "vs1_root",
    "uuid": "75c9cfb0-3eb4-11eb-9fb4-005056bb088a"
},
"path": "/user/my_volume",
"security_style": "string",
"unix_permissions": 755
},
"qos": {
    "policy": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        "max_throughput_iops": 10000,
        "max_throughput_mbps": 500,
        "min_throughput_iops": 2000,
        "min_throughput_mbps": 500,
        "name": "performance",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    },
    "snapshot_policy": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        },
        "name": "default",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "tiering": {
        "object_stores": [
            {}
        ],
        "policy": "string"
    },
    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
}
]
}
],
"luns": [

```

```

{
  "comment": "string",
  "create_time": "2018-06-04T19:00:00Z",
  "lun_maps": [
    {
      "igroup": {
        "comment": "string",
        "igroups": [
          {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "name": "igroup1",
            "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
          }
        ],
        "initiators": [
          {
            "comment": "my comment",
            "name": "iqn.1998-01.com.corp.iscsi:name1"
          }
        ],
        "name": "igroup1",
        "os_type": "string",
        "protocol": "string",
        "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
      }
    }
  ],
  "name": "/vol/volume1/lun1",
  "os_type": "string",
  "qos": {
    "policy": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      }
    },
    "max_throughput_iops": 10000,
    "max_throughput_mbps": 500,
    "min_throughput_iops": 2000,
    "min_throughput_mbps": 500,
    "name": "performance",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
}

```

```

    }
  },
  "serial_number": "string",
  "space": {
    "size": 1073741824
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
],
"name": "string",
"namespaces": [
  {
    "comment": "string",
    "create_time": "2018-06-04T19:00:00Z",
    "name": "/vol/volume1/qtree1/namespacel",
    "os_type": "string",
    "space": {
      "block_size": 512,
      "size": 1073741824
    },
    "status": {
      "container_state": "string",
      "state": "online"
    },
    "subsystem_map": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "anagrpid": "00103050h",
      "nsid": "00000001h",
      "subsystem": {
        "comment": "string",
        "hosts": [
          {
            "nqn": "nqn.1992-01.example.com:string"
          }
        ],
        "name": "subsystem1",
        "os_type": "string",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
]
}

```



```

],
"parent_consistency_group": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "my_consistency_group",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"qos": {
  "policy": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "max_throughput_iops": 10000,
    "max_throughput_mbps": 500,
    "min_throughput_iops": 2000,
    "min_throughput_mbps": 500,
    "name": "performance",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "restore_to": {
    "snapshot": {
      "name": "string",
      "uuid": "string"
    }
  },
  "snapshot_policy": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "default",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "space": {
    "available": 5737418,
    "size": 1073741824,
    "used": 5737418
  },
  "svm": {

```

```

    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "tiering": {
    "object_stores": [
      {}
    ],
    "policy": "string"
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
  "volumes": [
    {
      "comment": "string",
      "language": "string",
      "name": "vol_cs_dept",
      "nas": {
        "cifs": {
          "shares": [
            {
              "_links": {
                "self": {
                  "href": "/api/resourcelink"
                }
              },
              "acls": [
                {
                  "_links": {
                    "self": {
                      "href": "/api/resourcelink"
                    }
                  },
                  "permission": "string",
                  "type": "string",
                  "user_or_group": "ENGDOMAIN\\ad_user"
                }
              ],
              "comment": "HR Department Share",
              "dir_umask": 22,
              "file_umask": 22,
              "name": "HR_SHARE",
              "offline_files": "string",

```

```

        "unix_symlink": "string",
        "vscan_profile": "string"
    }
]
},
"export_policy": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "string",
    "rules": [
        {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "anonymous_user": "string",
            "chown_mode": "string",
            "clients": [
                {
                    "match": "0.0.0.0/0"
                }
            ],
            "index": 0,
            "ntfs_unix_security": "string",
            "protocols": [
                "string"
            ],
            "ro_rule": [
                "string"
            ],
            "rw_rule": [
                "string"
            ],
            "superuser": [
                "string"
            ]
        }
    ],
    "uuid": "string"
},
"junction_parent": {
    "_links": {

```

```

        "self": {
            "href": "/api/resourcelink"
        },
        "name": "vs1_root",
        "uuid": "75c9cfb0-3eb4-11eb-9fb4-005056bb088a"
    },
    "path": "/user/my_volume",
    "security_style": "string",
    "unix_permissions": 755
},
"qos": {
    "policy": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        "max_throughput_iops": 10000,
        "max_throughput_mbps": 500,
        "min_throughput_iops": 2000,
        "min_throughput_mbps": 500,
        "name": "performance",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
},
"snapshot_policy": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "default",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"tiering": {
    "object_stores": [
        {}
    ],
    "policy": "string"
},
"uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
}
]
}

```

Error

Status: Default

ONTAP Error Response Codes

| Error Code | Description |
|------------|--|
| 53411842 | Consistency group does not exist. |
| 53411843 | A consistency group with specified UUID was not found. |
| 53411844 | Specified consistency group was not found in the specified SVM. |
| 53411845 | The specified UUID and name refer to different consistency groups. |
| 53411846 | Either name or UUID must be provided. |

| Name | Type | Description |
|-------|-----------------------|-------------|
| error | error | |

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

self_link

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

application

| Name | Type | Description |
|----------------|--------|----------------------------------|
| component_type | string | Nested consistency group tag. |
| type | string | Top level consistency group tag. |

guarantee

| Name | Type | Description |
|------|--------|--|
| type | string | The type of space guarantee of this volume in the aggregate. |

parent_consistency_group

Consistency group that is to be cloned.

| Name | Type | Description |
|--------|---------------------------|---|
| _links | self_link | |
| name | string | The name of the consistency group. |
| uuid | string | The unique identifier of the consistency group. |

parent_snapshot

| Name | Type | Description |
|------|--------|--|
| name | string | Name of an existing Snapshot copy of a parent consistency group. |

volume

Volume name suffix/prefix for the cloned volumes.

| Name | Type | Description |
|--------|--------|--|
| prefix | string | Volume name prefix for cloned volumes. |
| suffix | string | Volume name suffix for cloned volumes. |

clone

Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy.

| Name | Type | Description |
|--------------------------|--|---|
| guarantee | guarantee | |
| parent_consistency_group | parent_consistency_group | Consistency group that is to be cloned. |
| parent_snapshot | parent_snapshot | |
| split_initiated | boolean | Splits volumes after cloning. Default is false. |
| volume | volume | Volume name suffix/prefix for the cloned volumes. |

source

The source LUN for a LUN clone operation. This can be specified using property `clone.source.uuid` or `clone.source.name`. If both properties are supplied, they must refer to the same LUN.

Valid in POST to create a new LUN as a clone of the source.

Valid in PATCH to overwrite an existing LUN's data as a clone of another.

clone

This sub-object is used in POST to create a new LUN as a clone of an existing LUN, or PATCH to overwrite an existing LUN as a clone of another. Setting a property in this sub-object indicates that a LUN clone is desired. Consider the following other properties when cloning a LUN: `auto_delete`, `qos_policy`, `space.guarantee.requested` and `space.scsi_thin_provisioning_support_enabled`.

When used in a PATCH, the patched LUN's data is over-written as a clone of the source and the following properties are preserved from the patched LUN unless otherwise specified as part of the PATCH: `class`, `auto_delete`, `lun_maps`, `serial_number`, `status.state`, and `uuid`.

Persistent reservations for the patched LUN are also preserved.

igroups

| Name | Type | Description |
|--------|---------------------------|---|
| _links | self_link | |
| name | string | The name of the initiator group. |
| uuid | string | The unique identifier of the initiator group. |

initiators

The initiators that are members of the initiator group.

| Name | Type | Description |
|---------|--------|--|
| comment | string | A comment available for use by the administrator. |
| name | string | Name of initiator that is a member of the initiator group. |

igroup

The initiator group that directly owns the initiator, which is where modification of the initiator is supported. This property will only be populated when the initiator is a member of a nested initiator group.

| Name | Type | Description |
|------------|-------------------------------------|--|
| comment | string | A comment available for use by the administrator. Valid in POST and PATCH. |
| igroups | array[igroups] | Separate igroup definitions to include in this igroup. |
| initiators | array[initiators] | The initiators that are members of the group. |
| name | string | The name of the initiator group. Required in POST; optional in PATCH. |

| Name | Type | Description |
|----------|--------|---|
| os_type | string | The host operating system of the initiator group. All initiators in the group should be hosts of the same operating system. Required in POST; optional in PATCH. |
| protocol | string | <p>The protocols supported by the initiator group. This restricts the type of initiators that can be added to the initiator group. Optional in POST; if not supplied, this defaults to <i>mixed</i>.</p> <p>The protocol of an initiator group cannot be changed after creation of the group.</p> |
| uuid | string | The unique identifier of the initiator group. |

lun_maps

A LUN map is an association between a LUN and an initiator group.

When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.

| Name | Type | Description |
|--------|------------------------|---|
| igroup | igroup | The initiator group that directly owns the initiator, which is where modification of the initiator is supported. This property will only be populated when the initiator is a member of a nested initiator group. |

| Name | Type | Description |
|---------------------|---------|---|
| logical_unit_number | integer | <p>The logical unit number assigned to the LUN when mapped to the specified initiator group. The number is used to identify the LUN to initiators in the initiator group when communicating through the Fibre Channel Protocol or iSCSI. Optional in POST; if no value is provided, ONTAP assigns the lowest available value.</p> <ul style="list-style-type: none"> • Introduced in: 9.6 • readCreate: 1 |

provisioning_options

Options that are applied to the operation.

| Name | Type | Description |
|--------|---------|---|
| action | string | Operation to perform |
| count | integer | Number of elements to perform the operation on. |

policy

The QoS policy

| Name | Type | Description |
|---------------------|---------------------------|---|
| _links | self_link | |
| max_throughput_iops | integer | Specifies the maximum throughput in IOPS, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH. |
| max_throughput_mbps | integer | Specifies the maximum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH. |

| Name | Type | Description |
|---------------------|---------|---|
| min_throughput_iops | integer | Specifies the minimum throughput in IOPS, 0 means none. Setting "min_throughput" is supported on AFF platforms only, unless FabricPool tiering policies are set. This is mutually exclusive with name and UUID during POST and PATCH. |
| min_throughput_mbps | integer | Specifies the minimum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH. |
| name | string | The QoS policy group name. This is mutually exclusive with UUID and other QoS attributes during POST and PATCH. |
| uuid | string | The QoS policy group UUID. This is mutually exclusive with name and other QoS attributes during POST and PATCH. |

qos

| Name | Type | Description |
|--------|------------------------|----------------|
| policy | policy | The QoS policy |

guarantee

Properties that request and report the space guarantee for the LUN.

| Name | Type | Description |
|-----------|---------|--|
| requested | boolean | The requested space reservation policy for the LUN. If <i>true</i> , a space reservation is requested for the LUN; if <i>false</i> , the LUN is thin provisioned. Guaranteeing a space reservation request for a LUN requires that the volume in which the LUN resides is also space reserved and that the fractional reserve for the volume is 100%. Valid in POST and PATCH. |

| Name | Type | Description |
|----------|---------|---|
| reserved | boolean | <p>Reports if the LUN is space guaranteed.</p> <p>If <i>true</i>, a space guarantee is requested and the containing volume and aggregate support the request. If <i>false</i>, a space guarantee is not requested or a space guarantee is requested and either the containing volume or aggregate do not support the request.</p> |

space

The storage space related properties of the LUN.

| Name | Type | Description |
|-----------|---------------------------|---|
| guarantee | guarantee | Properties that request and report the space guarantee for the LUN. |
| size | integer | <p>The total provisioned size of the LUN. The LUN size can be increased but not reduced using the REST interface. The maximum and minimum sizes listed here are the absolute maximum and absolute minimum sizes, in bytes. The actual minimum and maximum sizes vary depending on the ONTAP version, ONTAP platform, and the available space in the containing volume and aggregate. For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.</p> <ul style="list-style-type: none"> • example: 1073741824 • format: int64 • Max value: 140737488355328 • Min value: 4096 • Introduced in: 9.6 |

| Name | Type | Description |
|------|---------|---|
| used | integer | <p>The amount of space consumed by the main data stream of the LUN.</p> <p>This value is the total space consumed in the volume by the LUN, including filesystem overhead, but excluding prefix and suffix streams. Due to internal filesystem overhead and the many ways SAN filesystems and applications utilize blocks within a LUN, this value does not necessarily reflect actual consumption/availability from the perspective of the filesystem or application. Without specific knowledge of how the LUN blocks are utilized outside of ONTAP, this property should not be used as an indicator for an out-of-space condition.</p> <p>For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.</p> <ul style="list-style-type: none"> • format: int64 • Introduced in: 9.6 • readOnly: 1 |

luns

A LUN is the logical representation of storage in a storage area network (SAN).

In ONTAP, a LUN is located within a volume. Optionally, it can be located within a qtree in a volume.

A LUN can be created to a specified size using thin or thick provisioning. A LUN can then be renamed, resized, cloned, and moved to a different volume. LUNs support the assignment of a quality of service (QoS) policy for performance management or a QoS policy can be assigned to the volume containing the LUN. See the LUN object model to learn more about each of the properties supported by the LUN REST API.

A LUN must be mapped to an initiator group to grant access to the initiator group's initiators (client hosts). Initiators can then access the LUN and perform I/O over a Fibre Channel (FC) fabric using the Fibre Channel Protocol or a TCP/IP network using iSCSI.

| Name | Type | Description |
|-------------|-----------------|---|
| comment | string | A configurable comment available for use by the administrator. Valid in POST and PATCH. |
| create_time | string | The time the LUN was created. |
| enabled | boolean | The enabled state of the LUN. LUNs can be disabled to prevent access to the LUN. Certain error conditions also cause the LUN to become disabled. If the LUN is disabled, you can consult the <code>state</code> property to determine if the LUN is administratively disabled (<i>offline</i>) or has become disabled as a result of an error. A LUN in an error condition can be brought online by setting the <code>enabled</code> property to <i>true</i> or brought administratively offline by setting the <code>enabled</code> property to <i>false</i> . Upon creation, a LUN is enabled by default. Valid in PATCH. |
| lun_maps | array[lun_maps] | An array of LUN maps. A LUN map is an association between a LUN and an initiator group. When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups. |
| name | string | The fully qualified path name of the LUN composed of the <code>"/vol"</code> prefix, the volume name, the <code>qtree</code> name (optional), and the base name of the LUN. Valid in POST and PATCH. |

| Name | Type | Description |
|---------------|--------|--|
| os_type | string | <p>The operating system type of the LUN.</p> <p>Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.</p> |
| qos | qos | |
| serial_number | string | <p>The LUN serial number. The serial number is generated by ONTAP when the LUN is created.</p> <ul style="list-style-type: none"> • maxLength: 12 • minLength: 12 • readOnly: 1 • Introduced in: 9.10 |
| space | space | The storage space related properties of the LUN. |
| uuid | string | <p>The unique identifier of the LUN. The UUID is generated by ONTAP when the LUN is created.</p> <ul style="list-style-type: none"> • example: 1cd8a442-86d1-11e0-ae1c-123478563412 • readOnly: 1 • Introduced in: 9.10 |

guarantee

Properties that request and report the space guarantee for the NVMe namespace.

| Name | Type | Description |
|-----------|---------|--|
| requested | boolean | <p>The requested space reservation policy for the NVMe namespace. If <i>true</i>, a space reservation is requested for the namespace; if <i>false</i>, the namespace is thin provisioned. Guaranteeing a space reservation request for a namespace requires that the volume in which the namespace resides also be space reserved and that the fractional reserve for the volume be 100%.</p> <p>The space reservation policy for an NVMe namespace is determined by ONTAP.</p> <ul style="list-style-type: none"> • Introduced in: 9.6 |
| reserved | boolean | <p>Reports if the NVMe namespace is space guaranteed.</p> <p>This property is <i>true</i> if a space guarantee is requested and the containing volume and aggregate support the request. This property is <i>false</i> if a space guarantee is not requested or if a space guarantee is requested and either the containing volume and aggregate do not support the request.</p> |

space

The storage space related properties of the NVMe namespace.

| Name | Type | Description |
|------------|---------|---|
| block_size | integer | <p>The size of blocks in the namespace, in bytes.</p> <p>Valid in POST when creating an NVMe namespace that is not a clone of another. Disallowed in POST when creating a namespace clone. Valid in POST.</p> |

| Name | Type | Description |
|-----------|---------------------------|--|
| guarantee | guarantee | Properties that request and report the space guarantee for the NVMe namespace. |
| size | integer | <p>The total provisioned size of the NVMe namespace. Valid in POST and PATCH. The NVMe namespace size can be increased but not reduced using the REST interface.</p> <p>The maximum and minimum sizes listed here are the absolute maximum and absolute minimum sizes, in bytes. The maximum size is variable with respect to large NVMe namespace support in ONTAP. If large namespaces are supported, the maximum size is 128 TB (140737488355328 bytes) and if not supported, the maximum size is just under 16 TB (17557557870592 bytes). The minimum size supported is always 4096 bytes.</p> <p>For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.</p> <ul style="list-style-type: none"> • example: 1073741824 • format: int64 • Max value: 140737488355328 • Min value: 4096 • Introduced in: 9.6 |

| Name | Type | Description |
|------|---------|--|
| used | integer | <p>The amount of space consumed by the main data stream of the NVMe namespace.</p> <p>This value is the total space consumed in the volume by the NVMe namespace, including filesystem overhead, but excluding prefix and suffix streams. Due to internal filesystem overhead and the many ways NVMe filesystems and applications utilize blocks within a namespace, this value does not necessarily reflect actual consumption/availability from the perspective of the filesystem or application. Without specific knowledge of how the namespace blocks are utilized outside of ONTAP, this property should not be used as an indicator for an out-of-space condition.</p> <p>For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.</p> <ul style="list-style-type: none"> • format: int64 • Introduced in: 9.6 • readOnly: 1 |

status

Status information about the NVMe namespace.

| Name | Type | Description |
|-----------------|--------|---|
| container_state | string | The state of the volume and aggregate that contain the NVMe namespace. Namespaces are only available when their containers are available. |

| Name | Type | Description |
|-----------|---------|--|
| mapped | boolean | Reports if the NVMe namespace is mapped to an NVMe subsystem. There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the <code>fields</code> query parameter. See Requesting specific fields to learn more. |
| read_only | boolean | Reports if the NVMe namespace allows only read access. |
| state | string | The state of the NVMe namespace. Normal states for a namespace are <i>online</i> and <i>offline</i> . Other states indicate errors. |

consistency_group_nvme_host

The NVMe host provisioned to access NVMe namespaces mapped to a subsystem.

| Name | Type | Description |
|------|--------|---|
| nqn | string | The NVMe qualified name (NQN) used to identify the NVMe storage target. Not allowed in POST when the <code>records</code> property is used. |

consistency_group_nvme_subsystem

An NVMe subsystem maintains configuration state and namespace access control for a set of NVMe-connected hosts.

| Name | Type | Description |
|---------|--|---|
| comment | string | A configurable comment for the NVMe subsystem. Optional in POST and PATCH. |
| hosts | array[consistency_group_nvme_host] | The NVMe hosts configured for access to the NVMe subsystem. Optional in POST. |

| Name | Type | Description |
|---------|--------|--|
| name | string | The name of the NVMe subsystem. Once created, an NVMe subsystem cannot be renamed. Required in POST. |
| os_type | string | The host operating system of the NVMe subsystem's hosts. Required in POST. |
| uuid | string | The unique identifier of the NVMe subsystem. |

subsystem_map

The NVMe subsystem with which the NVMe namespace is associated. A namespace can be mapped to zero (0) or one (1) subsystems.

There is an added computational cost to retrieving property values for `subsystem_map`. They are not populated for either a collection GET or an instance GET unless explicitly requested using the `fields` query parameter.

| Name | Type | Description |
|----------|---------------------------|--|
| _links | self_link | |
| anagrpId | string | <p>The Asymmetric Namespace Access Group ID (ANAGRPID) of the NVMe namespace.</p> <p>The format for an ANAGRPID is 8 hexadecimal digits (zero-filled) followed by a lower case "h".</p> <p>There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the <code>fields</code> query parameter. See Requesting specific fields to learn more.</p> |

| Name | Type | Description |
|-----------|--|--|
| nsid | string | <p>The NVMe namespace identifier. This is an identifier used by an NVMe controller to provide access to the NVMe namespace.</p> <p>The format for an NVMe namespace identifier is 8 hexadecimal digits (zero-filled) followed by a lower case "h".</p> |
| subsystem | consistency_group_nvme_subsystem | An NVMe subsystem maintains configuration state and namespace access control for a set of NVMe-connected hosts. |

namespaces

An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the storage virtual machine using the NVMe over Fabrics protocol.

In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.

An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.

An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.

| Name | Type | Description |
|-------------|---------|--|
| auto_delete | boolean | <p>This property marks the NVMe namespace for auto deletion when the volume containing the namespace runs out of space. This is most commonly set on namespace clones.</p> <p>When set to <i>true</i>, the NVMe namespace becomes eligible for automatic deletion when the volume runs out of space. Auto deletion only occurs when the volume containing the namespace is also configured for auto deletion and free space in the volume decreases below a particular threshold.</p> <p>This property is optional in POST and PATCH. The default value for a new NVMe namespace is <i>false</i>.</p> <p>There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the <code>fields</code> query parameter. See Requesting specific fields to learn more.</p> |
| comment | string | A configurable comment available for use by the administrator. Valid in POST and PATCH. |
| create_time | string | The time the NVMe namespace was created. |
| enabled | boolean | The enabled state of the NVMe namespace. Certain error conditions cause the namespace to become disabled. If the namespace is disabled, you can check the <code>state</code> property to determine what error disabled the namespace. An NVMe namespace is enabled automatically when it is created. |

| Name | Type | Description |
|---------------|---------------|---|
| name | string | <p>The fully qualified path name of the NVMe namespace composed of a "/vol" prefix, the volume name, the (optional) qtree name and base name of the namespace. Valid in POST.</p> <p>NVMe namespaces do not support rename, or movement between volumes.</p> |
| os_type | string | <p>The operating system type of the NVMe namespace.</p> <p>Required in POST when creating an NVMe namespace that is not a clone of another. Disallowed in POST when creating a namespace clone.</p> |
| space | space | The storage space related properties of the NVMe namespace. |
| status | status | Status information about the NVMe namespace. |
| subsystem_map | subsystem_map | <p>The NVMe subsystem with which the NVMe namespace is associated. A namespace can be mapped to zero (0) or one (1) subsystems.</p> <p>There is an added computational cost to retrieving property values for subsystem_map. They are not populated for either a collection GET or an instance GET unless explicitly requested using the <code>fields</code> query parameter.</p> |
| uuid | string | The unique identifier of the NVMe namespace. |

parent_consistency_group

The parent consistency group.

| Name | Type | Description |
|--------|---------------------------|---|
| _links | self_link | |
| name | string | The name of the consistency group. |
| uuid | string | The unique identifier of the consistency group. |

storage_service

Determines the placement of any storage object created during this operation.

| Name | Type | Description |
|------|--------|--|
| name | string | Storage service name. If not specified, the default value is the most performant for the platform. |

provisioning_options

Options that are applied to the operation.

| Name | Type | Description |
|-----------------|---------------------------------|---|
| action | string | Operation to perform |
| storage_service | storage_service | Determines the placement of any storage object created during this operation. |

snapshot

A consistency group's Snapshot copy

| Name | Type | Description |
|------|--------|--|
| name | string | The name of the consistency group's Snapshot copy to restore to. |
| uuid | string | The UUID of the consistency group's Snapshot copy to restore to. |

restore_to

Use to restore a consistency group to a previous Snapshot copy

| Name | Type | Description |
|----------|--------------------------|-------------------------------------|
| snapshot | snapshot | A consistency group's Snapshot copy |

[_links](#)

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

snapshot_policy_reference

This is a reference to the Snapshot copy policy.

| Name | Type | Description |
|------------------------|------------------------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

space

Space information for the consistency group.

| Name | Type | Description |
|-----------|---------|---|
| available | integer | The amount of space available in the consistency group, in bytes. |
| size | integer | The total provisioned size of the consistency group, in bytes. |
| used | integer | The amount of space consumed in the consistency group, in bytes. |

svm

The Storage Virtual Machine (SVM) in which the consistency group is located.

| Name | Type | Description |
|------------------------|------------------------|-----------------------------------|
| _links | _links | |
| name | string | The name of the SVM. |
| uuid | string | The unique identifier of the SVM. |

object_stores

tiering

The tiering placement and policy definitions for volumes in this consistency group.

| Name | Type | Description |
|---------------|--|---|
| object_stores | array[object_stores] | Object stores to use. Used for placement. |
| policy | string | <p>Policy that determines whether the user data blocks of a volume in a FabricPool will be tiered to the cloud store when they become cold.</p> <p>FabricPool combines flash (performance tier) with a cloud store into a single aggregate. Temperature of a volume block increases if it is accessed frequently and decreases when it is not. Valid in POST or PATCH.</p> <p>all &dash; Allows tiering of both Snapshot copies and active file system user data to the cloud store as soon as possible by ignoring the temperature on the volume blocks.</p> <p>auto &dash; Allows tiering of both snapshot and active file system user data to the cloud store</p> <p>none &dash; Volume blocks are not be tiered to the cloud store.</p> <p>snapshot_only &dash; Allows tiering of only the volume Snapshot copies not associated with the active file system.</p> <p>The default tiering policy is "snapshot-only" for a FlexVol volume and "none" for a FlexGroup volume. The default minimum cooling period for the "snapshot-only" tiering policy is 2 days and for the "auto" tiering policy it is 31 days.</p> |

acls

The permissions that users and groups have on a CIFS share.

| Name | Type | Description |
|------------------------|------------------------|---|
| _links | _links | |
| permission | string | <p>Specifies the access rights that a user or group has on the defined CIFS Share. The following values are allowed:</p> <ul style="list-style-type: none"> • no_access - User does not have CIFS share access • read - User has only read access • change - User has change access • full_control - User has full_control access |
| type | string | <p>Specifies the type of the user or group to add to the access control list of a CIFS share. The following values are allowed:</p> <ul style="list-style-type: none"> • windows - Windows user or group • unix_user - UNIX user • unix_group - UNIX group |
| user_or_group | string | <p>Specifies the user or group name to add to the access control list of a CIFS share.</p> |

consistency_group_cifs_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

| Name | Type | Description |
|--------------------------|------------------------|---|
| _links | _links | |
| access_based_enumeration | boolean | <p>Specifies whether all folders inside this share are visible to a user based on that individual user's access right; prevents the display of folders or other shared resources that the user does not have access to.</p> |

| Name | Type | Description |
|--------------------------|------------------------------|---|
| acls | array [acls] | |
| allow_unencrypted_access | boolean | Specifies whether or not the SMB2 clients are allowed to access the encrypted share. |
| change_notify | boolean | Specifies whether CIFS clients can request for change notifications for directories on this share. |
| comment | string | Specify the CIFS share descriptions. |
| continuously_available | boolean | Specifies whether or not the clients connecting to this share can open files in a persistent manner. Files opened in this way are protected from disruptive events, such as, failover and giveback. |
| dir_umask | integer | Directory mode creation mask to be viewed as an octal number. |
| encryption | boolean | Specifies whether SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share. |
| file_umask | integer | File mode creation mask to be viewed as an octal number. |

| Name | Type | Description |
|-------------------|---------|---|
| home_directory | boolean | <p>Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively.</p> <ul style="list-style-type: none"> • Default value: 1 • Introduced in: 9.12 • readCreate: 1 |
| name | string | <p>Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.</p> |
| namespace_caching | boolean | <p>Specifies whether or not the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.</p> |

| Name | Type | Description |
|--------------------|---------|--|
| no_strict_security | boolean | Specifies whether or not CIFS clients can follow Unix symlinks outside the share boundaries. |
| offline_files | string | <p>Offline Files The supported values are:</p> <ul style="list-style-type: none"> • none - Clients are not permitted to cache files for offline access. • manual - Clients may cache files that are explicitly selected by the user for offline access. • documents - Clients may automatically cache files that are used by the user for offline access. • programs - Clients may automatically cache files that are used by the user for offline access and may use those files in an offline mode even if the share is available. |
| oplocks | boolean | Specifies whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations. |
| show_snapshot | boolean | Specifies whether or not the Snapshot copies can be viewed and traversed by clients. |
| unix_symlink | string | <p>Controls the access of UNIX symbolic links to CIFS clients. The supported values are:</p> <ul style="list-style-type: none"> • local - Enables only local symbolic links which is within the same CIFS share. • widelink - Enables both local symlinks and widelinks. • disable - Disables local symlinks and widelinks. |

| Name | Type | Description |
|---------------|--------|---|
| vscan_profile | string | <p>Vscan File-Operations Profile The supported values are:</p> <ul style="list-style-type: none"> • no_scan - Virus scans are never triggered for accesses to this share. • standard - Virus scans can be triggered by open, close, and rename operations. • strict - Virus scans can be triggered by open, read, close, and rename operations. • writes_only - Virus scans can be triggered only when a file that has been modified is closed. |

cifs

| Name | Type | Description |
|--------|-------------------------------------|-------------|
| shares | array[consistency_group_cifs_share] | |

export_clients

| Name | Type | Description |
|-------|--------|--|
| match | string | <p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"> • As a hostname; for instance, host1 • As an IPv4 address; for instance, 10.1.12.24 • As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1 • As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24 • As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64 • As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0 • As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng • As a domain name preceded by the . character; for instance, .example.com |

export_rules

| Name | Type | Description |
|-----------------------|------------------------|--|
| _links | _links | |
| allow_device_creation | boolean | Specifies whether or not device creation is allowed. |
| allow_suid | boolean | Specifies whether or not SetUID bits in SETATTR Op is to be honored. |
| anonymous_user | string | User ID To Which Anonymous Users Are Mapped. |

| Name | Type | Description |
|--------------------|---|---|
| chown_mode | string | Specifies who is authorized to change the ownership mode of a file. |
| clients | array[export_clients] | Array of client matches |
| index | integer | Index of the rule within the export policy. |
| ntfs_unix_security | string | NTFS export UNIX security options. |
| protocols | array[string] | |
| ro_rule | array[string] | Authentication flavors that the read-only access rule governs |
| rw_rule | array[string] | Authentication flavors that the read/write access rule governs |
| superuser | array[string] | Authentication flavors that the superuser security type governs |

export_policy

The policy associated with volumes to export them for protocol access.

| Name | Type | Description |
|--------|---------------------------------------|---|
| _links | self_link | |
| name | string | Name of the export policy. |
| rules | array[export_rules] | The set of rules that govern the export policy. |
| uuid | string | Identifier for the export policy. |

junction_parent

| Name | Type | Description |
|--------|---------------------------|-------------|
| _links | self_link | |

| Name | Type | Description |
|------|--------|--|
| name | string | The name of the parent volume that contains the junction inode of this volume. The junction parent volume must belong to the same SVM that owns this volume. |
| uuid | string | Unique identifier for the parent volume. |

nas

The CIFS share policy and/or export policies for this volume.

| Name | Type | Description |
|-----------------|---------------------------------|---|
| cifs | cifs | |
| export_policy | export_policy | The policy associated with volumes to export them for protocol access. |
| gid | integer | The UNIX group ID of the volume. Valid in POST or PATCH. |
| junction_parent | junction_parent | |
| path | string | The fully-qualified path in the owning SVM's namespace at which the volume is mounted. The path is case insensitive and must be unique within an SVM's namespace. Path must begin with '/' and must not end with '/'. Only one volume can be mounted at any given junction path. An empty path in POST creates an unmounted volume. An empty path in PATCH deactivates and unmounts the volume. Taking a volume offline or restricted state removes its junction path. This attribute is reported in GET only when the volume is mounted. |

| Name | Type | Description |
|------------------|---------|---|
| security_style | string | Security style associated with the volume. Valid in POST or PATCH. mixed ‐ Mixed-style security ntfs ‐ NTFS/Windows-style security unified ‐ Unified-style security, unified UNIX, NFS and CIFS permissions unix ‐ UNIX-style security. |
| uid | integer | The UNIX user ID of the volume. Valid in POST or PATCH. |
| unix_permissions | integer | UNIX permissions to be viewed as an octal number, consisting of 4 digits derived by adding up bits 4 (read), 2 (write), and 1 (execute). First digit selects the set user ID (4), set group ID (2), and sticky (1) attributes. Second digit selects permission for the owner of the file. Third selects permissions for other users in the same group while the fourth selects permissions for other users not in the group. Valid in POST or PATCH. For security style "mixed" or "unix", the default setting is 0755 in octal (493 in decimal) and for security style "ntfs", the default setting is 0000. In cases where only owner, group, and other permissions are given (as in 755, representing the second, third and fourth digit), the first digit is assumed to be zero. |

provisioning_options

Options that are applied to the operation.

| Name | Type | Description |
|--------|---------|---|
| action | string | Operation to perform |
| count | integer | Number of elements to perform the operation on. |

| Name | Type | Description |
|-----------------|---------------------------------|---|
| storage_service | storage_service | Determines the placement of any storage object created during this operation. |

qos

The QoS policy for this volume.

| Name | Type | Description |
|--------|------------------------|----------------|
| policy | policy | The QoS policy |

space

| Name | Type | Description |
|-----------|---------|--|
| available | integer | The available space, in bytes. |
| size | integer | Total provisioned size, in bytes. |
| used | integer | The virtual space used (includes volume reserves) before storage efficiency, in bytes. |

tiering

The tiering placement and policy definitions for this volume.

| Name | Type | Description |
|---------------|--|---|
| object_stores | array[object_stores] | Object stores to use. Used for placement. |

| Name | Type | Description |
|--------|--------|---|
| policy | string | <p>Policy that determines whether the user data blocks of a volume in a FabricPool will be tiered to the cloud store when they become cold.</p> <p>FabricPool combines flash (performance tier) with a cloud store into a single aggregate. Temperature of a volume block increases if it is accessed frequently and decreases when it is not. Valid in POST or PATCH.</p> <p>all &dash; Allows tiering of both Snapshot copies and active file system user data to the cloud store as soon as possible by ignoring the temperature on the volume blocks.</p> <p>auto &dash; Allows tiering of both snapshot and active file system user data to the cloud store</p> <p>none &dash; Volume blocks are not be tiered to the cloud store.</p> <p>snapshot_only &dash; Allows tiering of only the volume Snapshot copies not associated with the active file system.</p> <p>The default tiering policy is "snapshot-only" for a FlexVol volume and "none" for a FlexGroup volume. The default minimum cooling period for the "snapshot-only" tiering policy is 2 days and for the "auto" tiering policy it is 31 days.</p> |

volumes

| Name | Type | Description |
|---------|--------|---|
| comment | string | A comment for the volume. Valid in POST or PATCH. |

| Name | Type | Description |
|-----------------|---|--|
| language | string | Language encoding setting for volume. If no language is specified, the volume inherits its SVM language encoding setting. |
| name | string | Volume name. The name of volume must start with an alphabetic character (a to z or A to Z) or an underscore (_). The name must be 197 or fewer characters in length for FlexGroups, and 203 or fewer characters in length for all other types of volumes. Volume names must be unique within an SVM. Required on POST. |
| nas | nas | The CIFS share policy and/or export policies for this volume. |
| qos | qos | The QoS policy for this volume. |
| snapshot_policy | snapshot_policy_reference | This is a reference to the Snapshot copy policy. |
| space | space | |
| tiering | tiering | The tiering placement and policy definitions for this volume. |
| uuid | string | <p>Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move.</p> <ul style="list-style-type: none"> • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • readOnly: 1 • Introduced in: 9.8 |

consistency_groups

| Name | Type | Description |
|-------------|-----------------------------|-------------|
| _links | self_link | |
| application | application | |

| Name | Type | Description |
|------|-------------|--|
| luns | array[luns] | The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group. |
| name | string | <p>Name of the consistency group. The consistency group name must be unique within an SVM.</p> <p>If not provided and the consistency group contains only one volume, the name will be generated based on the volume name. If the consistency group contains more than one volume, the name is required.</p> |

| Name | Type | Description |
|--------------------------|--------------------------|--|
| namespaces | array[namespaces] | <p>An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.</p> <p>An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.</p> <p>An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.</p> <ul style="list-style-type: none"> • maxItems: 16 • minItems: 0 • uniqueItems: 1 • Introduced in: 9.10 |
| parent_consistency_group | parent_consistency_group | The parent consistency group. |
| qos | qos | |
| restore_to | restore_to | Use to restore a consistency group to a previous Snapshot copy |

| Name | Type | Description |
|-----------------|---|--|
| snapshot_policy | snapshot_policy_reference | This is a reference to the Snapshot copy policy. |
| space | space | Space information for the consistency group. |
| svm | svm | The Storage Virtual Machine (SVM) in which the consistency group is located. |
| tiering | tiering | The tiering placement and policy definitions for volumes in this consistency group. |
| uuid | string | <p>The unique identifier of the consistency group. The UUID is generated by ONTAP when the consistency group is created.</p> <ul style="list-style-type: none"> • example: 1cd8a442-86d1-11e0-ae1c-123478563412 • Introduced in: 9.10 • readOnly: 1 |
| volumes | array[volumes] | <p>A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group.</p> <p>The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group.</p> <p>The total number of volumes across all child consistency groups contained in a consistency group is constrained by the same limit.</p> |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Update a consistency group

PATCH /application/consistency-groups/{uuid}

Introduced In: 9.10

Updates a consistency group.



that this operation will never delete storage elements. You can specify only elements that should be added to the consistency group regardless of existing storage objects.

Related ONTAP commands

N/A. There are no ONTAP commands for managing consistency groups.

Parameters

| Name | Type | In | Required | Description |
|------|--------|------|----------|---|
| uuid | string | path | True | The unique identifier of the consistency group to modify. |

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|--|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |

Request Body

| Name | Type | Description |
|--------------------|---|--|
| application | application | |
| consistency_groups | array[consistency_groups] | A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A consistency group can only be associated with one direct parent consistency group. |

| Name | Type | Description |
|------------|-------------------|--|
| luns | array[luns] | <p>The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group.</p> |
| namespaces | array[namespaces] | <p>An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.</p> <p>An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.</p> <p>An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.</p> <ul style="list-style-type: none"> • maxItems: 16 • minItems: 0 • uniqueItems: 1 • Introduced in: 9.10 |

| Name | Type | Description |
|----------------------|---|--|
| provisioning_options | provisioning_options | Options that are applied to the operation. |
| qos | qos | |
| restore_to | restore_to | Use to restore a consistency group to a previous Snapshot copy |
| snapshot_policy | snapshot_policy_reference | This is a reference to the Snapshot copy policy. |
| volumes | array[volumes] | <p>A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group.</p> <p>The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group.</p> <p>The total number of volumes across all child consistency groups contained in a consistency group is constrained by the same limit.</p> |

Example request

```
{
  "application": {
    "component_type": "string",
    "type": "string"
  },
  "consistency_groups": [
    {
      "application": {
        "component_type": "string",
        "type": "string"
      },
      "luns": [
        {
          "clone": {
            "source": {
              "name": "/vol/volume1/lun1",
              "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
            }
          },
          "comment": "string",
          "create_time": "2018-06-04T19:00:00Z",
          "enabled": null,
          "lun_maps": [
            {
              "igroup": {
                "comment": "string",
                "igroups": [
                  {
                    "name": "igroup1",
                    "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
                  }
                ]
              },
              "initiators": [
                {
                  "comment": "my comment",
                  "name": "iqn.1998-01.com.corp.iscsi:name1"
                }
              ],
              "name": "igroup1",
              "os_type": "string",
              "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
            }
          ]
        }
      ]
    }
  ],
}
```

```

    "provisioning_options": {
      "action": "string"
    },
    "serial_number": "string",
    "space": {
      "guarantee": {
        "reserved": null
      },
      "size": 1073741824
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
],
"namespaces": [
  {
    "comment": "string",
    "create_time": "2018-06-04T19:00:00Z",
    "provisioning_options": {
      "action": "string"
    },
    "space": {
      "guarantee": {
        "reserved": null
      },
      "size": 1073741824
    },
    "subsystem_map": {
      "anagrpid": "00103050h",
      "nsid": "00000001h",
      "subsystem": {
        "comment": "string",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
],
"provisioning_options": {
  "action": "string",
  "storage_service": {
    "name": "string"
  }
},
"qos": {
  "policy": {
    "max_throughput_iops": 10000,

```

```

        "max_throughput_mbps": 500,
        "min_throughput_iops": 2000,
        "min_throughput_mbps": 500,
        "name": "performance",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
},
"restore_to": {
    "snapshot": {
        "name": "string",
        "uuid": "string"
    }
},
"snapshot_policy": {
    "name": "default",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"volumes": [
    {
        "comment": "string",
        "name": "vol_cs_dept",
        "nas": {
            "cifs": {
                "shares": [
                    {
                        "comment": "HR Department Share",
                        "dir_umask": 22,
                        "file_umask": 22,
                        "home_directory": null,
                        "offline_files": "string",
                        "unix_symlink": "string",
                        "vscan_profile": "string"
                    }
                ]
            }
        },
        "export_policy": {
            "name": "string",
            "rules": [
                {
                    "anonymous_user": "string",
                    "chown_mode": "string",
                    "clients": [
                        {
                            "match": "0.0.0.0/0"
                        }
                    ]
                }
            ]
        }
    }
]

```



```

        "index": 0,
        "ntfs_unix_security": "string",
        "protocols": [
            "string"
        ],
        "ro_rule": [
            "string"
        ],
        "rw_rule": [
            "string"
        ],
        "superuser": [
            "string"
        ]
    }
},
    "uuid": "string"
}
},
"provisioning_options": {
    "action": "string",
    "storage_service": {
        "name": "string"
    }
},
"qos": {
    "policy": {
        "max_throughput_iops": 10000,
        "max_throughput_mbps": 500,
        "min_throughput_iops": 2000,
        "min_throughput_mbps": 500,
        "name": "performance",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
},
"snapshot_policy": {
    "name": "default",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"tiering": {
    "control": "string",
    "object_stores": [
        {
            "name": "string"
        }
    ]
}
]

```

```

    },
    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
  }
]
},
"luns": [
  {
    "clone": {
      "source": {
        "name": "/vol/volume1/lun1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    },
    "comment": "string",
    "create_time": "2018-06-04T19:00:00Z",
    "enabled": null,
    "lun_maps": [
      {
        "igroup": {
          "comment": "string",
          "igroups": [
            {
              "name": "igroup1",
              "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
            }
          ]
        },
        "initiators": [
          {
            "comment": "my comment",
            "name": "iqn.1998-01.com.corp.iscsi:name1"
          }
        ],
        "name": "igroup1",
        "os_type": "string",
        "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
      }
    ]
  },
  {
    "provisioning_options": {
      "action": "string"
    },
    "serial_number": "string",
    "space": {
      "guarantee": {
        "reserved": null
      }
    }
  }
]
}

```

```

    },
    "size": 1073741824
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
],
"namespaces": [
  {
    "comment": "string",
    "create_time": "2018-06-04T19:00:00Z",
    "provisioning_options": {
      "action": "string"
    },
    "space": {
      "guarantee": {
        "reserved": null
      },
      "size": 1073741824
    },
    "subsystem_map": {
      "anagrp_id": "00103050h",
      "nsid": "00000001h",
      "subsystem": {
        "comment": "string",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
],
"provisioning_options": {
  "action": "string",
  "storage_service": {
    "name": "string"
  }
},
"qos": {
  "policy": {
    "max_throughput_iops": 10000,
    "max_throughput_mbps": 500,
    "min_throughput_iops": 2000,
    "min_throughput_mbps": 500,
    "name": "performance",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
},

```

```

"replicated": null,
"replication_source": null,
"restore_to": {
  "snapshot": {
    "name": "string",
    "uuid": "string"
  }
},
"snapshot_policy": {
  "name": "default",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"volumes": [
  {
    "comment": "string",
    "name": "vol_cs_dept",
    "nas": {
      "cifs": {
        "shares": [
          {
            "comment": "HR Department Share",
            "dir_umask": 22,
            "file_umask": 22,
            "home_directory": null,
            "offline_files": "string",
            "unix_symlink": "string",
            "vscan_profile": "string"
          }
        ]
      }
    },
    "export_policy": {
      "name": "string",
      "rules": [
        {
          "anonymous_user": "string",
          "chown_mode": "string",
          "clients": [
            {
              "match": "0.0.0.0/0"
            }
          ],
          "index": 0,
          "ntfs_unix_security": "string",
          "protocols": [
            "string"
          ]
        }
      ]
    }
  }
]

```

```

        "ro_rule": [
            "string"
        ],
        "rw_rule": [
            "string"
        ],
        "superuser": [
            "string"
        ]
    }
],
    "uuid": "string"
}
},
"provisioning_options": {
    "action": "string",
    "storage_service": {
        "name": "string"
    }
},
"qos": {
    "policy": {
        "max_throughput_iops": 10000,
        "max_throughput_mbps": 500,
        "min_throughput_iops": 2000,
        "min_throughput_mbps": 500,
        "name": "performance",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
},
"snapshot_policy": {
    "name": "default",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"tiering": {
    "control": "string",
    "object_stores": [
        {
            "name": "string"
        }
    ]
},
"uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
}
]
}

```

Response

Status: 200, Ok

Response

Status: 202, Accepted

Error

Status: Default

ONTAP Error Response Codes

| Error Code | Description |
|------------|--|
| 53411842 | Consistency group does not exist. |
| 53411843 | A consistency group with specified UUID was not found. |
| 53411844 | Specified consistency group was not found in the specified SVM. |
| 53411845 | The specified UUID and name refer to different consistency groups. |
| 53411846 | Either name or UUID must be provided. |
| 53411852 | A consistency group with the same identifier in the same scope exists. |
| 53411853 | Fields provided in the request conflict with each other. |
| 53411856 | Field provided is only supported when provisioning new objects. |
| 53411857 | LUNs that are not members of the application are not supported by this API. LUNs can be added to an application by adding the volume containing the LUNs to the application. |
| 53411860 | An object with the same identifier in the same scope exists. |
| 53411861 | Volume specified does not exist in provided volume array. |
| 53411862 | Modifying existing igroups is not supported using this API. |
| 53411864 | Request content insufficient to add an existing volume to an application. |

| Error Code | Description |
|------------|---|
| 53411865 | Volumes contained in one consistency group cannot be added to a different consistency group. |
| 53411866 | LUNs are not supported on FlexGroup volumes. |
| 53411867 | LUN name is too long after appending a unique suffix. |
| 53411869 | Volume name is too long after appending a unique suffix. |
| 53411870 | When using the "round_robin" layout, the volume count must not be greater than the LUN count. |

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

self_link

application

| Name | Type | Description |
|----------------|--------|----------------------------------|
| component_type | string | Nested consistency group tag. |
| type | string | Top level consistency group tag. |

guarantee

| Name | Type | Description |
|------|--------|--|
| type | string | The type of space guarantee of this volume in the aggregate. |

parent_consistency_group

Consistency group that is to be cloned.

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the consistency group. |
| uuid | string | The unique identifier of the consistency group. |

parent_snapshot

| Name | Type | Description |
|------|--------|--|
| name | string | Name of an existing Snapshot copy of a parent consistency group. |

volume

Volume name suffix/prefix for the cloned volumes.

| Name | Type | Description |
|--------|--------|--|
| prefix | string | Volume name prefix for cloned volumes. |
| suffix | string | Volume name suffix for cloned volumes. |

clone

Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy.

| Name | Type | Description |
|--------------------------|--|---|
| guarantee | guarantee | |
| parent_consistency_group | parent_consistency_group | Consistency group that is to be cloned. |
| parent_snapshot | parent_snapshot | |
| split_initiated | boolean | Splits volumes after cloning. Default is false. |
| volume | volume | Volume name suffix/prefix for the cloned volumes. |

source

The source LUN for a LUN clone operation. This can be specified using property `clone.source.uuid` or `clone.source.name`. If both properties are supplied, they must refer to the same LUN.

Valid in POST to create a new LUN as a clone of the source.

Valid in PATCH to overwrite an existing LUN's data as a clone of another.

| Name | Type | Description |
|------|--------|---|
| name | string | The fully qualified path name of the clone source LUN composed of a "/vol" prefix, the volume name, the (optional) qtree name, and base name of the LUN. Valid in POST and PATCH. |
| uuid | string | The unique identifier of the clone source LUN. Valid in POST and PATCH. |

clone

This sub-object is used in POST to create a new LUN as a clone of an existing LUN, or PATCH to overwrite an existing LUN as a clone of another. Setting a property in this sub-object indicates that a LUN clone is desired. Consider the following other properties when cloning a LUN: `auto_delete`, `qos_policy`, `space.guarantee.requested` and `space.scsi_thin_provisioning_support_enabled`.

When used in a PATCH, the patched LUN's data is over-written as a clone of the source and the following properties are preserved from the patched LUN unless otherwise specified as part of the PATCH: `class`, `auto_delete`, `lun_maps`, `serial_number`, `status.state`, and `uuid`.

Persistent reservations for the patched LUN are also preserved.

| Name | Type | Description |
|--------|------------------------|---|
| source | source | <p>The source LUN for a LUN clone operation. This can be specified using property <code>clone.source.uuid</code> or <code>clone.source.name</code>. If both properties are supplied, they must refer to the same LUN.</p> <p>Valid in POST to create a new LUN as a clone of the source.</p> <p>Valid in PATCH to overwrite an existing LUN's data as a clone of another.</p> |

igroups

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the initiator group. |
| uuid | string | The unique identifier of the initiator group. |

initiators

The initiators that are members of the initiator group.

| Name | Type | Description |
|---------|--------|--|
| comment | string | A comment available for use by the administrator. |
| name | string | Name of initiator that is a member of the initiator group. |

igroup

The initiator group that directly owns the initiator, which is where modification of the initiator is supported. This property will only be populated when the initiator is a member of a nested initiator group.

| Name | Type | Description |
|------------|-------------------------------------|--|
| comment | string | A comment available for use by the administrator. Valid in POST and PATCH. |
| igroups | array[igroups] | Separate igroup definitions to include in this igroup. |
| initiators | array[initiators] | The initiators that are members of the group. |
| name | string | The name of the initiator group. Required in POST; optional in PATCH. |
| os_type | string | The host operating system of the initiator group. All initiators in the group should be hosts of the same operating system. Required in POST; optional in PATCH. |
| uuid | string | The unique identifier of the initiator group. |

lun_maps

A LUN map is an association between a LUN and an initiator group.

When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.

| Name | Type | Description |
|--------|------------------------|---|
| igroup | igroup | The initiator group that directly owns the initiator, which is where modification of the initiator is supported. This property will only be populated when the initiator is a member of a nested initiator group. |

provisioning_options

Options that are applied to the operation.

| Name | Type | Description |
|--------|---------|---|
| action | string | Operation to perform |
| count | integer | Number of elements to perform the operation on. |

policy

The QoS policy

qos

| Name | Type | Description |
|--------|------------------------|----------------|
| policy | policy | The QoS policy |

guarantee

Properties that request and report the space guarantee for the LUN.

| Name | Type | Description |
|-----------|---------|--|
| requested | boolean | The requested space reservation policy for the LUN. If <i>true</i> , a space reservation is requested for the LUN; if <i>false</i> , the LUN is thin provisioned. Guaranteeing a space reservation request for a LUN requires that the volume in which the LUN resides is also space reserved and that the fractional reserve for the volume is 100%. Valid in POST and PATCH. |

space

The storage space related properties of the LUN.

| Name | Type | Description |
|-----------|---------------------------|---|
| guarantee | guarantee | Properties that request and report the space guarantee for the LUN. |

| Name | Type | Description |
|------|---------|---|
| size | integer | <p>The total provisioned size of the LUN. The LUN size can be increased but not reduced using the REST interface. The maximum and minimum sizes listed here are the absolute maximum and absolute minimum sizes, in bytes. The actual minimum and maximum sizes vary depending on the ONTAP version, ONTAP platform, and the available space in the containing volume and aggregate. For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.</p> <ul style="list-style-type: none"> • example: 1073741824 • format: int64 • Max value: 140737488355328 • Min value: 4096 • Introduced in: 9.6 |

luns

A LUN is the logical representation of storage in a storage area network (SAN).

In ONTAP, a LUN is located within a volume. Optionally, it can be located within a qtree in a volume.

A LUN can be created to a specified size using thin or thick provisioning. A LUN can then be renamed, resized, cloned, and moved to a different volume. LUNs support the assignment of a quality of service (QoS) policy for performance management or a QoS policy can be assigned to the volume containing the LUN. See the LUN object model to learn more about each of the properties supported by the LUN REST API.

A LUN must be mapped to an initiator group to grant access to the initiator group's initiators (client hosts). Initiators can then access the LUN and perform I/O over a Fibre Channel (FC) fabric using the Fibre Channel Protocol or a TCP/IP network using iSCSI.

| Name | Type | Description |
|-------------|-----------------------------------|---|
| clone | clone | <p>This sub-object is used in POST to create a new LUN as a clone of an existing LUN, or PATCH to overwrite an existing LUN as a clone of another. Setting a property in this sub-object indicates that a LUN clone is desired. Consider the following other properties when cloning a LUN: <code>auto_delete</code>, <code>qos_policy</code>, <code>space.guarantee.requested</code> and <code>space.scsi_thin_provisioning_support_enabled</code>.</p> <p>When used in a PATCH, the patched LUN's data is overwritten as a clone of the source and the following properties are preserved from the patched LUN unless otherwise specified as part of the PATCH: <code>class</code>, <code>auto_delete</code>, <code>lun_maps</code>, <code>serial_number</code>, <code>status.state</code>, and <code>uuid</code>.</p> <p>Persistent reservations for the patched LUN are also preserved.</p> |
| comment | string | A configurable comment available for use by the administrator. Valid in POST and PATCH. |
| create_time | string | The time the LUN was created. |
| lun_maps | array[lun_maps] | <p>An array of LUN maps.</p> <p>A LUN map is an association between a LUN and an initiator group. When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.</p> |

| Name | Type | Description |
|----------------------|--------------------------------------|--|
| provisioning_options | provisioning_options | Options that are applied to the operation. |
| qos | qos | |
| serial_number | string | <p>The LUN serial number. The serial number is generated by ONTAP when the LUN is created.</p> <ul style="list-style-type: none"> • maxLength: 12 • minLength: 12 • readOnly: 1 • Introduced in: 9.10 |
| space | space | The storage space related properties of the LUN. |
| uuid | string | <p>The unique identifier of the LUN. The UUID is generated by ONTAP when the LUN is created.</p> <ul style="list-style-type: none"> • example: 1cd8a442-86d1-11e0-ae1c-123478563412 • readOnly: 1 • Introduced in: 9.10 |

guarantee

Properties that request and report the space guarantee for the NVMe namespace.

| Name | Type | Description |
|-----------|---------|--|
| requested | boolean | <p>The requested space reservation policy for the NVMe namespace. If <i>true</i>, a space reservation is requested for the namespace; if <i>false</i>, the namespace is thin provisioned. Guaranteeing a space reservation request for a namespace requires that the volume in which the namespace resides also be space reserved and that the fractional reserve for the volume be 100%.</p> <p>The space reservation policy for an NVMe namespace is determined by ONTAP.</p> <ul style="list-style-type: none"> • Introduced in: 9.6 |

space

The storage space related properties of the NVMe namespace.

| Name | Type | Description |
|-----------|---------------------------|--|
| guarantee | guarantee | Properties that request and report the space guarantee for the NVMe namespace. |

| Name | Type | Description |
|------|---------|--|
| size | integer | <p>The total provisioned size of the NVMe namespace. Valid in POST and PATCH. The NVMe namespace size can be increased but not reduced using the REST interface.</p> <p>The maximum and minimum sizes listed here are the absolute maximum and absolute minimum sizes, in bytes. The maximum size is variable with respect to large NVMe namespace support in ONTAP. If large namespaces are supported, the maximum size is 128 TB (140737488355328 bytes) and if not supported, the maximum size is just under 16 TB (17557557870592 bytes). The minimum size supported is always 4096 bytes.</p> <p>For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.</p> <ul style="list-style-type: none"> • example: 1073741824 • format: int64 • Max value: 140737488355328 • Min value: 4096 • Introduced in: 9.6 |

status

Status information about the NVMe namespace.

consistency_group_nvme_host

The NVMe host provisioned to access NVMe namespaces mapped to a subsystem.

consistency_group_nvme_subsystem

An NVMe subsystem maintains configuration state and namespace access control for a set of NVMe-connected hosts.

| Name | Type | Description |
|---------|--------|--|
| comment | string | A configurable comment for the NVMe subsystem. Optional in POST and PATCH. |
| uuid | string | The unique identifier of the NVMe subsystem. |

subsystem_map

The NVMe subsystem with which the NVMe namespace is associated. A namespace can be mapped to zero (0) or one (1) subsystems.

There is an added computational cost to retrieving property values for `subsystem_map`. They are not populated for either a collection GET or an instance GET unless explicitly requested using the `fields` query parameter.

| Name | Type | Description |
|-----------|--|--|
| anagrpId | string | <p>The Asymmetric Namespace Access Group ID (ANAGRPID) of the NVMe namespace.</p> <p>The format for an ANAGRPID is 8 hexadecimal digits (zero-filled) followed by a lower case "h".</p> <p>There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the <code>fields</code> query parameter. See Requesting specific fields to learn more.</p> |
| nsid | string | <p>The NVMe namespace identifier. This is an identifier used by an NVMe controller to provide access to the NVMe namespace.</p> <p>The format for an NVMe namespace identifier is 8 hexadecimal digits (zero-filled) followed by a lower case "h".</p> |
| subsystem | consistency_group_nvme_subsystem | An NVMe subsystem maintains configuration state and namespace access control for a set of NVMe-connected hosts. |

namespaces

An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the storage virtual machine using the NVMe over Fabrics protocol.

In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.

An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.

An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.

| Name | Type | Description |
|-------------|---------|--|
| auto_delete | boolean | <p>This property marks the NVMe namespace for auto deletion when the volume containing the namespace runs out of space. This is most commonly set on namespace clones.</p> <p>When set to <i>true</i>, the NVMe namespace becomes eligible for automatic deletion when the volume runs out of space. Auto deletion only occurs when the volume containing the namespace is also configured for auto deletion and free space in the volume decreases below a particular threshold.</p> <p>This property is optional in POST and PATCH. The default value for a new NVMe namespace is <i>false</i>.</p> <p>There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the <code>fields</code> query parameter. See Requesting specific fields to learn more.</p> |

| Name | Type | Description |
|----------------------|--------------------------------------|--|
| comment | string | A configurable comment available for use by the administrator. Valid in POST and PATCH. |
| create_time | string | The time the NVMe namespace was created. |
| enabled | boolean | The enabled state of the NVMe namespace. Certain error conditions cause the namespace to become disabled. If the namespace is disabled, you can check the <code>state</code> property to determine what error disabled the namespace. An NVMe namespace is enabled automatically when it is created. |
| provisioning_options | provisioning_options | Options that are applied to the operation. |
| space | space | The storage space related properties of the NVMe namespace. |
| subsystem_map | subsystem_map | <p>The NVMe subsystem with which the NVMe namespace is associated. A namespace can be mapped to zero (0) or one (1) subsystems.</p> <p>There is an added computational cost to retrieving property values for <code>subsystem_map</code>. They are not populated for either a collection GET or an instance GET unless explicitly requested using the <code>fields</code> query parameter.</p> |
| uuid | string | The unique identifier of the NVMe namespace. |

parent_consistency_group

The parent consistency group.

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the consistency group. |
| uuid | string | The unique identifier of the consistency group. |

storage_service

Determines the placement of any storage object created during this operation.

| Name | Type | Description |
|------|--------|--|
| name | string | Storage service name. If not specified, the default value is the most performant for the platform. |

provisioning_options

Options that are applied to the operation.

| Name | Type | Description |
|-----------------|---------------------------------|---|
| action | string | Operation to perform |
| storage_service | storage_service | Determines the placement of any storage object created during this operation. |

policy

The QoS policy

| Name | Type | Description |
|---------------------|---------|---|
| max_throughput_iops | integer | Specifies the maximum throughput in IOPS, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH. |
| max_throughput_mbps | integer | Specifies the maximum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH. |

| Name | Type | Description |
|---------------------|---------|---|
| min_throughput_iops | integer | Specifies the minimum throughput in IOPS, 0 means none. Setting "min_throughput" is supported on AFF platforms only, unless FabricPool tiering policies are set. This is mutually exclusive with name and UUID during POST and PATCH. |
| min_throughput_mbps | integer | Specifies the minimum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH. |
| name | string | The QoS policy group name. This is mutually exclusive with UUID and other QoS attributes during POST and PATCH. |
| uuid | string | The QoS policy group UUID. This is mutually exclusive with name and other QoS attributes during POST and PATCH. |

snapshot

A consistency group's Snapshot copy

| Name | Type | Description |
|------|--------|--|
| name | string | The name of the consistency group's Snapshot copy to restore to. |
| uuid | string | The UUID of the consistency group's Snapshot copy to restore to. |

restore_to

Use to restore a consistency group to a previous Snapshot copy

| Name | Type | Description |
|----------|--------------------------|-------------------------------------|
| snapshot | snapshot | A consistency group's Snapshot copy |

_links

snapshot_policy_reference

This is a reference to the Snapshot copy policy.

| Name | Type | Description |
|------|--------|-------------|
| name | string | |
| uuid | string | |

space

Space information for the consistency group.

| Name | Type | Description |
|-----------|---------|---|
| available | integer | The amount of space available in the consistency group, in bytes. |
| size | integer | The total provisioned size of the consistency group, in bytes. |
| used | integer | The amount of space consumed in the consistency group, in bytes. |

svm

The Storage Virtual Machine (SVM) in which the consistency group is located.

| Name | Type | Description |
|------|--------|-----------------------------------|
| name | string | The name of the SVM. |
| uuid | string | The unique identifier of the SVM. |

object_stores

| Name | Type | Description |
|------|--------|--|
| name | string | The name of the object store to use. Used for placement. |

tiering

The tiering placement and policy definitions for volumes in this consistency group.

| Name | Type | Description |
|---------------|--|---|
| control | string | Storage tiering placement rules for the object. |
| object_stores | array[object_stores] | Object stores to use. Used for placement. |

acls

The permissions that users and groups have on a CIFS share.

| Name | Type | Description |
|------------|------------------------|--|
| _links | _links | |
| permission | string | Specifies the access rights that a user or group has on the defined CIFS Share. The following values are allowed: <ul style="list-style-type: none"> • no_access - User does not have CIFS share access • read - User has only read access • change - User has change access • full_control - User has full_control access |

consistency_group_cifs_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

| Name | Type | Description |
|--------------------------|------------------------|--|
| _links | _links | |
| access_based_enumeration | boolean | Specifies whether all folders inside this share are visible to a user based on that individual user's access right; prevents the display of folders or other shared resources that the user does not have access to. |

| Name | Type | Description |
|--------------------------|---------|---|
| allow_unencrypted_access | boolean | Specifies whether or not the SMB2 clients are allowed to access the encrypted share. |
| change_notify | boolean | Specifies whether CIFS clients can request for change notifications for directories on this share. |
| comment | string | Specify the CIFS share descriptions. |
| continuously_available | boolean | Specifies whether or not the clients connecting to this share can open files in a persistent manner. Files opened in this way are protected from disruptive events, such as, failover and giveback. |
| dir_umask | integer | Directory mode creation mask to be viewed as an octal number. |
| encryption | boolean | Specifies whether SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share. |
| file_umask | integer | File mode creation mask to be viewed as an octal number. |
| namespace_caching | boolean | Specifies whether or not the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers. |
| no_strict_security | boolean | Specifies whether or not CIFS clients can follow Unix symlinks outside the share boundaries. |

| Name | Type | Description |
|---------------|---------|--|
| offline_files | string | <p>Offline Files The supported values are:</p> <ul style="list-style-type: none"> • none - Clients are not permitted to cache files for offline access. • manual - Clients may cache files that are explicitly selected by the user for offline access. • documents - Clients may automatically cache files that are used by the user for offline access. • programs - Clients may automatically cache files that are used by the user for offline access and may use those files in an offline mode even if the share is available. |
| oplocks | boolean | <p>Specifies whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations.</p> |
| show_snapshot | boolean | <p>Specifies whether or not the Snapshot copies can be viewed and traversed by clients.</p> |
| unix_symlink | string | <p>Controls the access of UNIX symbolic links to CIFS clients. The supported values are:</p> <ul style="list-style-type: none"> • local - Enables only local symbolic links which is within the same CIFS share. • widelink - Enables both local symlinks and widelinks. • disable - Disables local symlinks and widelinks. |

| Name | Type | Description |
|---------------|--------|---|
| vscan_profile | string | <p>Vscan File-Operations Profile The supported values are:</p> <ul style="list-style-type: none"> • no_scan - Virus scans are never triggered for accesses to this share. • standard - Virus scans can be triggered by open, close, and rename operations. • strict - Virus scans can be triggered by open, read, close, and rename operations. • writes_only - Virus scans can be triggered only when a file that has been modified is closed. |

cifs

| Name | Type | Description |
|--------|-------------------------------------|-------------|
| shares | array[consistency_group_cifs_share] | |

export_clients

| Name | Type | Description |
|-------|--------|--|
| match | string | <p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"> • As a hostname; for instance, host1 • As an IPv4 address; for instance, 10.1.12.24 • As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1 • As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24 • As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64 • As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0 • As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng • As a domain name preceded by the . character; for instance, .example.com |

export_rules

| Name | Type | Description |
|-----------------------|---------|--|
| allow_device_creation | boolean | Specifies whether or not device creation is allowed. |
| allow_suid | boolean | Specifies whether or not SetUID bits in SETATTR Op is to be honored. |
| anonymous_user | string | User ID To Which Anonymous Users Are Mapped. |

| Name | Type | Description |
|--------------------|---|---|
| chown_mode | string | Specifies who is authorized to change the ownership mode of a file. |
| clients | array[export_clients] | Array of client matches |
| index | integer | Index of the rule within the export policy. |
| ntfs_unix_security | string | NTFS export UNIX security options. |
| protocols | array[string] | |
| ro_rule | array[string] | Authentication flavors that the read-only access rule governs |
| rw_rule | array[string] | Authentication flavors that the read/write access rule governs |
| superuser | array[string] | Authentication flavors that the superuser security type governs |

export_policy

The policy associated with volumes to export them for protocol access.

| Name | Type | Description |
|-------|---------------------------------------|---|
| name | string | Name of the export policy. |
| rules | array[export_rules] | The set of rules that govern the export policy. |
| uuid | string | Identifier for the export policy. |

junction_parent

| Name | Type | Description |
|------|--------|--|
| name | string | The name of the parent volume that contains the junction inode of this volume. The junction parent volume must belong to the same SVM that owns this volume. |

| Name | Type | Description |
|------|--------|--|
| uuid | string | Unique identifier for the parent volume. |

nas

The CIFS share policy and/or export policies for this volume.

| Name | Type | Description |
|---------------|-------------------------------|--|
| cifs | cifs | |
| export_policy | export_policy | The policy associated with volumes to export them for protocol access. |

provisioning_options

Options that are applied to the operation.

| Name | Type | Description |
|-----------------|---------------------------------|---|
| action | string | Operation to perform |
| count | integer | Number of elements to perform the operation on. |
| storage_service | storage_service | Determines the placement of any storage object created during this operation. |

qos

The QoS policy for this volume.

| Name | Type | Description |
|--------|------------------------|----------------|
| policy | policy | The QoS policy |

space

| Name | Type | Description |
|------|---------|-----------------------------------|
| size | integer | Total provisioned size, in bytes. |

tiering

The tiering placement and policy definitions for this volume.

| Name | Type | Description |
|---------------|--|---|
| control | string | Storage tiering placement rules for the object. |
| object_stores | array[object_stores] | Object stores to use. Used for placement. |

volumes

| Name | Type | Description |
|----------------------|---|--|
| comment | string | A comment for the volume. Valid in POST or PATCH. |
| name | string | Volume name. The name of volume must start with an alphabetic character (a to z or A to Z) or an underscore (_). The name must be 197 or fewer characters in length for FlexGroups, and 203 or fewer characters in length for all other types of volumes. Volume names must be unique within an SVM. Required on POST. |
| nas | nas | The CIFS share policy and/or export policies for this volume. |
| provisioning_options | provisioning_options | Options that are applied to the operation. |
| qos | qos | The QoS policy for this volume. |
| snapshot_policy | snapshot_policy_reference | This is a reference to the Snapshot copy policy. |
| space | space | |
| tiering | tiering | The tiering placement and policy definitions for this volume. |

| Name | Type | Description |
|------|--------|---|
| uuid | string | <p>Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move.</p> <ul style="list-style-type: none"> • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • readOnly: 1 • Introduced in: 9.8 |

consistency_groups

| Name | Type | Description |
|-------------|-------------------------------|--|
| application | application | |
| luns | array[luns] | <p>The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group.</p> |

| Name | Type | Description |
|----------------------|----------------------|--|
| namespaces | array[namespaces] | <p>An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.</p> <p>An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.</p> <p>An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.</p> <ul style="list-style-type: none"> • maxItems: 16 • minItems: 0 • uniqueItems: 1 • Introduced in: 9.10 |
| provisioning_options | provisioning_options | Options that are applied to the operation. |
| qos | qos | |

| Name | Type | Description |
|-----------------|---|--|
| restore_to | restore_to | Use to restore a consistency group to a previous Snapshot copy |
| snapshot_policy | snapshot_policy_reference | This is a reference to the Snapshot copy policy. |
| volumes | array[volumes] | <p>A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group.</p> <p>The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group.</p> <p>The total number of volumes across all child consistency groups contained in a consistency group is constrained by the same limit.</p> |

svm

The Storage Virtual Machine (SVM) in which the consistency group is located.

| Name | Type | Description |
|--------|------------------------|-----------------------------------|
| _links | _links | |
| name | string | The name of the SVM. |
| uuid | string | The unique identifier of the SVM. |

consistency_group

| Name | Type | Description |
|-------------|-----------------------------|-------------|
| application | application | |

| Name | Type | Description |
|--------------------|---------------------------|---|
| consistency_groups | array[consistency_groups] | A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A consistency group can only be associated with one direct parent consistency group. |
| luns | array[luns] | The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group. |

| Name | Type | Description |
|----------------------|----------------------|--|
| namespaces | array[namespaces] | <p>An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.</p> <p>An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.</p> <p>An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.</p> <ul style="list-style-type: none"> • maxItems: 16 • minItems: 0 • uniqueItems: 1 • Introduced in: 9.10 |
| provisioning_options | provisioning_options | Options that are applied to the operation. |
| qos | qos | |

| Name | Type | Description |
|-----------------|---|--|
| restore_to | restore_to | Use to restore a consistency group to a previous Snapshot copy |
| snapshot_policy | snapshot_policy_reference | This is a reference to the Snapshot copy policy. |
| volumes | array[volumes] | <p>A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group.</p> <p>The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group.</p> <p>The total number of volumes across all child consistency groups contained in a consistency group is constrained by the same limit.</p> |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|-------------------|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |

| Name | Type | Description |
|--------|--------|---|
| target | string | The target parameter that caused the error. |

Manage application consistency group Snapshot copies

Application consistency-groups consistency_group.uuid snapshots endpoint overview

Overview

Consistency groups support Snapshot copy create, inventory, and restore. Snapshot copies can be created on a specified schedule or on-demand. On-demand Snapshot copies can have a type of application consistent or crash consistent. Crash consistent is the default. Scheduled Snapshot copies are always crash consistent. There is no functional difference in ONTAP between crash consistent or application consistent Snapshot copies.

The functionality provided by these APIs is not integrated with the host application. Snapshot copies have limited value without host coordination, so the use of the SnapCenter Backup Management suite is recommended to ensure correct interaction between host applications and ONTAP.

On-Demand Snapshot Copies

A manual Snapshot copy may be created on-demand for a parent consistency group and for any of the children consistency groups within it.

Scheduled and manual Snapshot copy creation operations are subject to a pre-defined seven second internal timeout. If the Snapshot copy creation operation does not complete within this time, it is aborted.

Individual volume Snapshot copies within a consistency group Snapshot copies can be accessed and used with native volume Snapshot copy operations.

When an individual volume Snapshot copy is deleted that is part of a consistency group Snapshot copy, then that consistency group Snapshot copy becomes invalid and which cannot be used for restoring the consistency group.

Restoring to a Previous Snapshot Copy

A Snapshot copy restores to a parent consistency group from an existing parent consistency group's Snapshot copy. A Snapshot copy restores to any of the children's consistency groups within it from an existing children's consistency group. Granular Snapshot copies are supported. This is performed by a PATCH operation on the specific consistency group for the restore. An example is shown in [PATCH /application/consistency-groups/{uuid}](#).

Any existing Snapshot copies that were created chronologically after the time of the Snapshot copy used in a successful restore operation is deleted, in compliance with existing ONTAP "future-snapshot" handling principles.

On failures during consistency group restores, any volumes that have been restored will remain so and will not be rolled back. The user must retry the failed restore operation until it is successful. The user can retry with consistency group restore or individual volume-granular restore.

Consistency group Snapshot APIs

The following APIs are used to perform operations related to consistency group Snapshot copies:

– GET /api/application/consistency-groups/snapshots

– POST /api/application/consistency-groups/snapshots

– GET /api/application/consistency-groups/snapshots/{uuid}

– DELETE /api/application/consistency-groups/snapshots/{uuid}

Examples

Required properties

- `consistency_group.uuid` - Existing consistency group UUID in which to create the Snapshot copy.

Retrieving the list of existing Snapshot copies for a consistency group

Retrieves the list of consistency group granular Snapshot copies for a specific consistency group.

```
curl -X GET 'https://<mgmt-ip>/api/application/consistency-  
groups/92c6c770-17a1-11eb-b141-005056acd498/snapshots'
```

Response:

```
{  
  "records": [  
    {  
      "uuid": "92c6c770-17a1-11eb-b141-005056acd498",  
      "name": "sa3s1",  
      "_links": {  
        "self": {  
          "href": "/api/application/consistency-groups/a8d0626a-17a0-11eb-  
b141-005056acd498/snapshots/92c6c770-17a1-11eb-b141-005056acd498"  
        }  
      }  
    },  
    {  
      "uuid": "c5a250ba-17a1-11eb-b141-005056acd498",  
      "name": "sa3s2",  
      "_links": {  
        "self": {  
          "href": "/api/application/consistency-groups/a8d0626a-17a0-11eb-  
b141-005056acd498/snapshots/c5a250ba-17a1-11eb-b141-005056acd498"  
        }  
      }  
    }  
  ],  
  "num_records": 2,  
  "_links": {  
    "self": {  
      "href": "/api/application/consistency-groups/a8d0626a-17a0-11eb-b141-  
005056acd498/snapshots"  
    }  
  }  
}
```

Retrieves details of a specific Snapshot copy for a consistency group

Retrieves details for a specific Snapshot copy in a consistency group.


```
curl -X GET 'https://<mgmt-ip>/api/application/consistency-  
groups/92c6c770-17a1-11eb-b141-005056acd498/snapshots/a175c021-4199-11ec-  
8674-005056accf3f'
```

Response:

```
{  
  "consistency_group": {  
    "uuid": "ddabc6a5-4196-11ec-8674-005056accf3f",  
    "name": "CG_1",  
    "_links": {  
      "self": {  
        "href": "/api/application/consistency-groups/ddabc6a5-4196-11ec-  
8674-005056accf3f"  
      }  
    }  
  },  
  "uuid": "a175c021-4199-11ec-8674-005056accf3f",  
  "name": "sa3s2",  
  "consistency_type": "crash",  
  "comment": "manually created snapshot",  
  "create_time": "2021-11-09T15:14:23-05:00",  
  "svm": {  
    "uuid": "7379fecb-4195-11ec-8674-005056accf3f",  
    "name": "vs1",  
    "_links": {  
      "self": {  
        "href": "/api/svm/svms/7379fecb-4195-11ec-8674-005056accf3f"  
      }  
    }  
  },  
  "_links": {  
    "self": {  
      "href": "/api/application/consistency-groups/ddabc6a5-4196-11ec-8674-  
005056accf3f/snapshots/a175c021-4199-11ec-8674-005056accf3f"  
    }  
  }  
}
```

Creating a crash-consistent Snapshot copy of a consistency group

Creates an on-demand crash-consistent Snapshot copy of an existing consistency group.

```
curl -X POST 'https://<mgmt-ip>/api/application/consistency-  
groups/a8d0626a-17a0-11eb-b141-005056acd498/snapshots' -d '{ "name":  
"name_of_this_snapshot", "consistency_type": "crash", "comment": "this is  
a manually created on-demand snapshot", "snapmirror_label":  
"my_special_sm_label" }' -H "accept: application/hal+json"
```

```
#### Response:  
{  
}
```

Creating a app-consistent Snapshot copy of a consistency group

Creates an on-demand crash-consistent Snapshot copy of an existing consistency group.

```
curl -X POST 'https://<mgmt-ip>/api/application/consistency-  
groups/a8d0626a-17a0-11eb-b141-005056acd498/snapshots' -d '{ "name":  
"name_of_this_snapshot", "consistency_type": "application", "comment":  
"this is a manually created on-demand snapshot", "snapmirror_label":  
"my_special_sm_label" }' -H "accept: application/hal+json"
```

```
#### Response:  
{  
}
```

Deleting a Snapshot copy from a consistency group

Deletes an existing Snapshot copy from a consistency group.

```
curl -X DELETE 'https://<mgmt-ip>/api/application/consistency-  
groups/a8d0626a-17a0-11eb-b141-005056acd498/snapshots/92c6c770-17a1-11eb-  
b141-005056acd498'
```

```
#### Response:  
{  
}
```

Retrieve consistency group Snapshot copies

GET /application/consistency-groups/{consistency_group.uuid}/snapshots

Introduced In: 9.10

Retrieves Snapshot copies for a consistency group.

Expensive properties

There is an added computational cost to retrieving values for these properties. They are not included by default in GET results and must be explicitly requested using the `fields` query parameter. See [DOC Requesting specific fields](#) to learn more.

- `is_partial`
- `missing_volumes.uuid`
- `missing_volumes.name`

Parameters

| Name | Type | In | Required | Description |
|-------------------------------------|---------|-------|----------|---|
| <code>consistency_group.uuid</code> | string | path | True | The unique identifier of the consistency group to retrieve. |
| <code>missing_volumes.uuid</code> | string | query | False | Filter by <code>missing_volumes.uuid</code> |
| <code>missing_volumes.name</code> | string | query | False | Filter by <code>missing_volumes.name</code> |
| <code>consistency_type</code> | string | query | False | Filter by <code>consistency_type</code> |
| <code>consistency_group.name</code> | string | query | False | Filter by <code>consistency_group.name</code> |
| <code>name</code> | string | query | False | Filter by name |
| <code>is_partial</code> | boolean | query | False | Filter by <code>is_partial</code> |
| <code>svm.uuid</code> | string | query | False | Filter by <code>svm.uuid</code> |
| <code>svm.name</code> | string | query | False | Filter by <code>svm.name</code> |
| <code>comment</code> | string | query | False | Filter by comment |
| <code>uuid</code> | string | query | False | Filter by <code>uuid</code> |
| <code>create_time</code> | string | query | False | Filter by <code>create_time</code> |

| Name | Type | In | Required | Description |
|------------------|---------------|-------|----------|--|
| snapmirror_label | string | query | False | Filter by snapmirror_label |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned. • Default value: 1 |
| return_timeout | integer | query | False | The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached. • Default value: 1 • Max value: 120 • Min value: 0 |
| order_by | array[string] | query | False | Order results by specified fields and optional [asc |

Response

Status: 200, Ok

| Name | Type | Description |
|--------|----------------------------------|-------------|
| _links | collection_links | |

| Name | Type | Description |
|-------------|----------------------------------|--------------------|
| num_records | integer | Number of records. |
| records | array[records] | |

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "comment": "My Snapshot copy comment",
      "consistency_group": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "my_consistency_group",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "consistency_type": "crash",
      "create_time": "2020-10-25T11:20:00Z",
      "is_partial": "",
      "missing_volumes": [
        {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "volume1",
          "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
        }
      ],
      "name": "string",
      "snapmirror_label": "sm_label",
      "svm": {
```

```

    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
]
}

```

Error

Status: Default, Error

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

Example error

```

{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}

```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

collection_links

| Name | Type | Description |
|------|----------------------|-------------|
| next | href | |
| self | href | |

self_link

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

consistency_group

The consistency group of the Snapshot copy.

| Name | Type | Description |
|--------|---------------------------|---|
| _links | self_link | |
| name | string | The name of the consistency group. |
| uuid | string | The unique identifier of the consistency group. |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

volume_reference

| Name | Type | Description |
|--------|------------------------|-------------------------|
| _links | _links | |
| name | string | The name of the volume. |

| Name | Type | Description |
|------|--------|--|
| uuid | string | <p>Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move.</p> <ul style="list-style-type: none"> • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6 |

svm_reference

SVM, applies only to SVM-scoped objects.

| Name | Type | Description |
|--------|------------------------|-----------------------------------|
| _links | _links | |
| name | string | The name of the SVM. |
| uuid | string | The unique identifier of the SVM. |

records

| Name | Type | Description |
|-------------------|-----------------------------------|---|
| _links | self_link | |
| comment | string | Comment for the Snapshot copy. |
| consistency_group | consistency_group | The consistency group of the Snapshot copy. |
| consistency_type | string | Consistency type. This is for categorization purposes only. A Snapshot copy should not be set to 'application consistent' unless the host application is quiesced for the Snapshot copy. Valid in POST. |
| create_time | string | Time the snapshot copy was created |
| is_partial | boolean | Indicates whether the Snapshot copy taken is partial or not. |

| Name | Type | Description |
|------------------|-------------------------|---|
| missing_volumes | array[volume_reference] | List of volumes which are not in the Snapshot copy. |
| name | string | Name of the Snapshot copy. |
| snapmirror_label | string | Snapmirror Label for the Snapshot copy. |
| svm | svm_reference | SVM, applies only to SVM-scoped objects. |
| uuid | string | <p>The unique identifier of the Snapshot copy. The UUID is generated by ONTAP when the Snapshot copy is created.</p> <ul style="list-style-type: none"> • example: 1cd8a442-86d1-11e0-ae1c-123478563412 • Introduced in: 9.6 • readOnly: 1 |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|------------------------|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Create a consistency group Snapshot copy

POST /application/consistency-groups/{consistency_group.uuid}/snapshots

Introduced In: 9.10

Creates a Snapshot copy of an existing consistency group.

Required properties

- `consistency_group.uuid` - Existing consistency group UUID in which to create the Snapshot copy.

Parameters

| Name | Type | In | Required | Description |
|------------------------|--------|-------|----------|---|
| consistency_group.uuid | string | path | True | The unique identifier of the consistency group to retrieve. |
| action | string | query | False | <p>Initiates the Snapshot copy create operation. The start of the Snapshot copy operation can optionally use a timeout value specified by "action_timeout". The Snapshot copy is committed by calling PATCH on the Snapshot copy href link with action specified as "commit".</p> <ul style="list-style-type: none">• Introduced in: 9.11• enum: ["start"] |

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|--|
| action_timeout | integer | query | False | <p>Duration to complete the 2-phase Snapshot copy operation. This also specifies the maximum duration that the write-fence remains in effect on the volumes associated with this consistency group. Default is 7 seconds with a valid range of 1 to 90 seconds.</p> <ul style="list-style-type: none"> Introduced in: 9.11 |
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> Default value: 1 Max value: 120 Min value: 0 |

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|---|
| return_records | boolean | query | False | The default is false. If set to true, the records are returned. • Default value: |

Request Body

| Name | Type | Description |
|------------------|-------------------------------|---|
| comment | string | Comment for the Snapshot copy. |
| consistency_type | string | Consistency type. This is for categorization purposes only. A Snapshot copy should not be set to 'application consistent' unless the host application is quiesced for the Snapshot copy. Valid in POST. |
| name | string | Name of the Snapshot copy. |
| snapmirror_label | string | Snapmirror Label for the Snapshot copy. |
| svm | svm_reference | SVM, applies only to SVM-scoped objects. |

Example request

```
{
  "comment": "My Snapshot copy comment",
  "consistency_type": "crash",
  "is_partial": "",
  "name": "string",
  "snapmirror_label": "sm_label",
  "svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```

Response

Status: 202, Accepted

| Name | Type | Description |
|------|--------------------------|-------------|
| job | job_link | |

Example response

```
{
  "job": {
    "uuid": "string"
  }
}
```

Headers

| Name | Description | Type |
|----------|---|--------|
| Location | Useful for tracking the resource location | string |

Response

Status: 201, Created

Error

Status: Default, Error

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

self_link

consistency_group

The consistency group of the Snapshot copy.

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the consistency group. |
| uuid | string | The unique identifier of the consistency group. |

_links

volume_reference

| Name | Type | Description |
|------|--------|--|
| name | string | The name of the volume. |
| uuid | string | Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. <ul style="list-style-type: none">• example: 028baa66-41bd-11e9-81d5-00a0986138f7• Introduced in: 9.6 |

svm_reference

SVM, applies only to SVM-scoped objects.

| Name | Type | Description |
|------|--------|-----------------------------------|
| name | string | The name of the SVM. |
| uuid | string | The unique identifier of the SVM. |

consistency_group_snapshot

| Name | Type | Description |
|------------------|-------------------------------|---|
| comment | string | Comment for the Snapshot copy. |
| consistency_type | string | Consistency type. This is for categorization purposes only. A Snapshot copy should not be set to 'application consistent' unless the host application is quiesced for the Snapshot copy. Valid in POST. |
| name | string | Name of the Snapshot copy. |
| snapmirror_label | string | Snapmirror Label for the Snapshot copy. |
| svm | svm_reference | SVM, applies only to SVM-scoped objects. |

job_link

| Name | Type | Description |
|------|--------|---|
| uuid | string | The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation. |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|-------------------|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |

| Name | Type | Description |
|--------|--------|---|
| target | string | The target parameter that caused the error. |

Delete a consistency group Snapshot copy

DELETE /application/consistency-groups/{consistency_group.uuid}/snapshots/{uuid}

Introduced In: 9.10

Deletes a Snapshot copy of a consistency group.

Examples

Parameters

| Name | Type | In | Required | Description |
|------------------------|--------|------|----------|--|
| consistency_group.uuid | string | path | True | The unique identifier of the Snapshot copy of the consistency group to delete. |
| uuid | string | path | True | Snapshot copy UUID |

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|--|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |

Response

Status: 200, Ok

Response

Status: 202, Accepted

Error

Status: Default, Error

| Name | Type | Description |
|-------|-----------------------|-------------|
| error | error | |

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Retrieve a consistency group Snapshot copy

GET /application/consistency-groups/{consistency_group.uuid}/snapshots/{uuid}

Introduced In: 9.10

Retrieves details of a specific snapshot for a consistency group.

Expensive properties

There is an added computational cost to retrieving values for these properties. They are not included by default in GET results and must be explicitly requested using the `fields` query parameter. See [DOC Requesting specific fields](#) to learn more.

- `is_partial`
- `missing_volumes.uuid`
- `missing_volumes.name`

Parameters

| Name | Type | In | Required | Description |
|------------------------|--------|-------|----------|--|
| consistency_group.uuid | string | path | True | The unique identifier of the consistency group to retrieve. |
| uuid | string | path | True | The unique identifier of the Snapshot copy of the consistency group to retrieve. |
| missing_volumes.uuid | string | query | False | Filter by missing_volumes.uuid |
| missing_volumes.name | string | query | False | Filter by missing_volumes.name |
| consistency_type | string | query | False | Filter by consistency_type |
| consistency_group.name | string | query | False | Filter by consistency_group.name |
| name | string | query | False | Filter by name |

| Name | Type | In | Required | Description |
|------------------|---------------|-------|----------|--|
| is_partial | boolean | query | False | Filter by is_partial |
| svm.uuid | string | query | False | Filter by svm.uuid |
| svm.name | string | query | False | Filter by svm.name |
| comment | string | query | False | Filter by comment |
| create_time | string | query | False | Filter by create_time |
| snapmirror_label | string | query | False | Filter by snapmirror_label |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | <p>The default is true for GET calls. When set to false, only the number of records is returned.</p> <ul style="list-style-type: none"> • Default value: 1 |
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |

| Name | Type | In | Required | Description |
|----------|---------------|-------|----------|---|
| order_by | array[string] | query | False | Order results by specified fields and optional [asc |

Response

Status: 200, Ok

| Name | Type | Description |
|-------------------|---|---|
| _links | self_link | |
| comment | string | Comment for the Snapshot copy. |
| consistency_group | consistency_group | The consistency group of the Snapshot copy. |
| consistency_type | string | Consistency type. This is for categorization purposes only. A Snapshot copy should not be set to 'application consistent' unless the host application is quiesced for the Snapshot copy. Valid in POST. |
| create_time | string | Time the snapshot copy was created |
| is_partial | boolean | Indicates whether the Snapshot copy taken is partial or not. |
| missing_volumes | array[volume_reference] | List of volumes which are not in the Snapshot copy. |
| name | string | Name of the Snapshot copy. |
| snapmirror_label | string | Snapmirror Label for the Snapshot copy. |
| svm | svm_reference | SVM, applies only to SVM-scoped objects. |

| Name | Type | Description |
|------|--------|--|
| uuid | string | <p>The unique identifier of the Snapshot copy. The UUID is generated by ONTAP when the Snapshot copy is created.</p> <ul style="list-style-type: none"> • example: 1cd8a442-86d1-11e0-ae1c-123478563412 • Introduced in: 9.10 • readOnly: 1 |

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "comment": "My Snapshot copy comment",
  "consistency_group": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "my_consistency_group",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "consistency_type": "crash",
  "create_time": "2020-10-25T11:20:00Z",
  "is_partial": "",
  "missing_volumes": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "volume1",
      "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
    }
  ],
  "name": "string",
  "snapmirror_label": "sm_label",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
```


Error

Status: Default, Error

| Name | Type | Description |
|-------|-----------------------|-------------|
| error | error | |

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

self_link

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

consistency_group

The consistency group of the Snapshot copy.

| Name | Type | Description |
|--------|---------------------------|---|
| _links | self_link | |
| name | string | The name of the consistency group. |
| uuid | string | The unique identifier of the consistency group. |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

volume_reference

| Name | Type | Description |
|--------|------------------------|--|
| _links | _links | |
| name | string | The name of the volume. |
| uuid | string | Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. <ul style="list-style-type: none">• example: 028baa66-41bd-11e9-81d5-00a0986138f7• Introduced in: 9.6 |

svm_reference

SVM, applies only to SVM-scoped objects.

| Name | Type | Description |
|--------|------------------------|-----------------------------------|
| _links | _links | |
| name | string | The name of the SVM. |
| uuid | string | The unique identifier of the SVM. |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Complete a consistency group Snapshot copy operation

PATCH /application/consistency-groups/{consistency_group.uuid}/snapshots/{uuid}

Introduced In: 9.13

Completes a Snapshot copy operation of a consistency group.

Example

Completing a Snapshot copy operation

The following example shows how to complete the Snapshot copy operation by committing an existing Snapshot copy to disk:

```
curl -X PATCH https://<mgmt-ip>/api/application/consistency-  
groups/a8d0626a-17a0-11eb-b141-005056acd498/snapshots/92c6c770-17a1-11eb-  
b141-005056acd498?action=commit
```

Response:

```
{  
}
```

Parameters

| Name | Type | In | Required | Description |
|------------------------|--------|-------|----------|--|
| consistency_group.uuid | string | path | True | Unique identifier of the consistency group's Snapshot copy for deletion. |
| uuid | string | path | True | Snapshot copy UUID. |
| action | string | query | False | Commits the Snapshot copy. The commit must be called within the timeout value specified during POST. If the commit is not called within the specified time, then the Snapshot copy create operation is aborted. • enum: ["commit"] |

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|--|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |

Response

Status: 200, Ok

Response

Status: 202, Accepted

Error

Status: Default, Error

Definitions

See Definitions

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Retrieve application templates

GET /application/templates

Introduced In: 9.6

Retrieves application templates.

Query examples

The most useful queries on this API allows searches by name or protocol access. The following query returns all templates that are used to provision an Oracle application.

```
GET /application/templates?name=ora*
```

Similarly, the following query returns all templates that support SAN access.

```
GET /application/templates?protocol=san
```

Learn more

- [DOC /application](#)

Parameters

| Name | Type | In | Required | Description |
|-----------------------|---------------|-------|----------|--|
| name | string | query | False | Filter by name |
| protocol | string | query | False | Filter by protocol |
| description | string | query | False | Filter by description |
| missing_prerequisites | string | query | False | Filter by missing_prerequisites |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached.</p> <ul style="list-style-type: none">• Default value: 1• Max value: 120• Min value: 0 |
| return_records | boolean | query | False | <p>The default is true for GET calls. When set to false, only the number of records is returned.</p> <ul style="list-style-type: none">• Default value: 1 |

| Name | Type | In | Required | Description |
|----------|---------------|-------|----------|---|
| order_by | array[string] | query | False | Order results by specified fields and optional [asc |

Response

Status: 200, Ok

| Name | Type | Description |
|-------------|---|-------------------|
| _links | _links | |
| num_records | integer | Number of records |
| records | array[application_template] | |

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "description": "string",
      "missing_prerequisites": "string",
      "name": "string",
      "nas": {
        "application_components": [
          {}
        ],
        "cifs_access": [
          {
            "access": "string",
            "user_or_group": "string"
          }
        ],
        "cifs_share_name": "string",
        "exclude_aggregates": [
          {
            "name": "string",
            "uuid": "string"
          }
        ],
        "nfs_access": [
          {
            "access": "string",
            "host": "string"
          }
        ],
        "protection_type": {
```

```

        "local_policy": "string",
        "local_rpo": "string",
        "remote_rpo": "string"
    }
},
"nvme": {
    "components": [
        {
            "name": "string",
            "os_type": "string",
            "performance": {
                "storage_service": {
                    "name": "string"
                }
            },
            "qos": {
                "policy": {
                    "name": "string",
                    "uuid": "string"
                }
            },
            "subsystem": {
                "hosts": [
                    {
                        "nqn": "string"
                    }
                ],
                "name": "string",
                "os_type": "string",
                "uuid": "string"
            },
            "tiering": {
                "policy": "string"
            }
        }
    ],
    "os_type": "string",
    "rpo": {
        "local": {
            "name": "string",
            "policy": "string"
        }
    }
},
"protocol": "string",
"s3_bucket": {

```

```

"application_components": [
  {
    "access_policies": [
      {
        "actions": [
          "string"
        ],
        "conditions": [
          {
            "delimiters": [
              "string"
            ],
            "max_keys": [
              "integer"
            ],
            "operator": "string",
            "prefixes": [
              "string"
            ],
            "source_ips": [
              "string"
            ],
            "usernames": [
              "string"
            ]
          }
        ],
        "effect": "string",
        "principals": [
          "string"
        ],
        "resources": [
          "string"
        ],
        "sid": "string"
      }
    ],
    "bucket_endpoint_type": "string",
    "comment": "string",
    "exclude_aggregates": [
      {
        "name": "string",
        "uuid": "string"
      }
    ],
    "name": "string",

```

```

        "nas_path": "string",
        "qos": {
            "policy": {
                "name": "string",
                "uuid": "string"
            }
        },
        "storage_service": {
            "name": "string"
        },
        "uuid": "string",
        "versioning_state": "string"
    }
]
},
"san": {
    "application_components": [
        {
            "igroup_name": "string",
            "name": "string",
            "os_type": "string",
            "qos": {
                "policy": {
                    "name": "string",
                    "uuid": "string"
                }
            },
            "storage_service": {
                "name": "string"
            },
            "tiering": {
                "policy": "string"
            }
        }
    ],
    "exclude_aggregates": [
        {
            "name": "string",
            "uuid": "string"
        }
    ],
    "os_type": "string",
    "protection_type": {
        "local_policy": "string",
        "local_rpo": "string",
        "remote_rpo": "string"
    }
}

```

```
}
  }
}
]
}
```

Error

Status: Default, Error

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| next | href | |
| self | href | |

self_link

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

storage_service

| Name | Type | Description |
|------|--------|--------------------------------------|
| name | string | The storage service of the database. |

dataset

| Name | Type | Description |
|--------------------|---------------------------------|--|
| element_count | integer | The number of storage elements (LUNs for SAN) of the database to maintain. Must be an even number between 2 and 16. Odd numbers will be rounded up to the next even number within range. |
| replication_factor | integer | The number of data bearing members of the replicaset, including 1 primary and at least 1 secondary. |
| size | integer | The size of the database. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

igroups

initiator_objects

mongo_db_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

protection_type

| Name | Type | Description |
|------------|--------|------------------------------------|
| local_rpo | string | The local RPO of the application. |
| remote_rpo | string | The remote RPO of the application. |

secondary_igroups

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the initiator group for each secondary. |

mongo_db_on_san

MongoDB using SAN.

| Name | Type | Description |
|---------------------|--|--|
| dataset | dataset | |
| os_type | string | The name of the host OS running the application. |
| primary_igroup_name | string | The initiator group for the primary. |
| protection_type | protection_type | |
| secondary_igroups | array[secondary_igroups] | |

export_policy

| Name | Type | Description |
|------|---------|--|
| id | integer | The ID of an existing NFS export policy. |

| Name | Type | Description |
|------|--------|--|
| name | string | The name of an existing NFS export policy. |

component

| Name | Type | Description |
|------|--------|-------------------------------|
| name | string | Name of the source component. |

svm

| Name | Type | Description |
|------|--------|-------------------------|
| name | string | Name of the source SVM. |

origin

| Name | Type | Description |
|-----------|---------------------------|-------------|
| component | component | |
| svm | svm | |

flexcache

| Name | Type | Description |
|----------|------------------------|--|
| dr_cache | boolean | Dr-cache is a FlexCache volume create time option that has the same flexgroup-msid as that of the origin of a FlexCache volume. By default, dr-cache is disabled. The flexgroup-msid of the FlexCache volume does not need to be same as that of the origin of a FlexCache volume. |
| origin | origin | |

policy

| Name | Type | Description |
|------|--------|---|
| name | string | The name of an existing QoS policy. |
| uuid | string | The UUID of an existing QoS policy. Usage: <UUID> |

qos

| Name | Type | Description |
|--------|------------------------|-------------|
| policy | policy | |

retention

| Name | Type | Description |
|---------|--------|---|
| default | string | Specifies the default retention period that is applied to files while committing them to the WORM state without an associated retention period. The retention value represents a duration and must be specified in the ISO-8601 duration format. The retention period can be in years, months, days, hours, and minutes. A duration specified for years, months, and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The retention string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the duration field also accepts the string "infinite" to set an infinite retention period and the string "unspecified" to set an unspecified retention period. |

| Name | Type | Description |
|---------|--------|---|
| maximum | string | Specifies the maximum allowed retention period for files committed to the WORM state on the volume. The retention value represents a duration and must be specified in the ISO-8601 duration format. The retention period can be in years, months, days, hours, and minutes. A duration specified for years, months, and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The retention string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the duration field also accepts the string "infinite" to set an infinite retention period. |

| Name | Type | Description |
|---------|--------|---|
| minimum | string | Specifies the minimum allowed retention period for files committed to the WORM state on the volume. The retention value represents a duration and must be specified in the ISO-8601 duration format. The retention period can be in years, months, days, hours, and minutes. A duration specified for years, month,s and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The retention string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the duration field also accepts the string "infinite" to set an infinite retention period. |

snaplock

| Name | Type | Description |
|---------------------|---------|---|
| append_mode_enabled | boolean | Specifies if the volume append mode is enabled or disabled. When it is enabled, all the files created with write permissions on the volume are, by default, WORM appendable files. The user can append the data to a WORM appendable file but cannot modify the existing contents of the file nor delete the file until it expires. |

| Name | Type | Description |
|-------------------|---------------------------|--|
| autocommit_period | string | Specifies the autocommit period for SnapLock volume. All files which are not modified for a period greater than the autocommit period of the volume are committed to the WORM state. The autocommit period value represents a duration and must be specified in the ISO-8601 duration format. The autocommit period can be in years, months, days, hours, and minutes. A period specified for years, months, and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The period string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the autocommit field also accepts the string "none". |
| retention | retention | |
| snaplock_type | string | The SnapLock type of the smart container. |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the application component. |

object_stores

nas_application_components_tiering

application-components.tiering

| Name | Type | Description |
|--------|--------|--|
| policy | string | The storage tiering type of the application component. |

application_components

| Name | Type | Description |
|-----------------|--|---|
| export_policy | export_policy | |
| flexcache | flexcache | |
| name | string | The name of the application component. |
| qos | qos | |
| scale_out | boolean | Denotes a Flexgroup. |
| share_count | integer | The number of shares in the application component. |
| snaplock | snaplock | |
| storage_service | storage_service | |
| tiering | nas_application_components_tiering | application-components.tiering |
| total_size | integer | The total size of the application component, split across the member shares. Usage: {<integer>[KB MB GB TB PB]} |

app_cifs_access

The list of CIFS access controls. You must provide either 'user_or_group' or 'access' to enable CIFS access.

| Name | Type | Description |
|---------------|--------|---|
| access | string | The CIFS access granted to the user or group. |
| user_or_group | string | The name of the CIFS user or group that will be granted access. |

exclude_aggregates

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the aggregate to exclude. Usage: <aggregate name> |
| uuid | string | The ID of the aggregate to exclude. Usage: <UUID> |

app_nfs_access

The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access.

| Name | Type | Description |
|--------|--------|--|
| access | string | The NFS access granted. |
| host | string | The name of the NFS entity granted access. |

protection_type

| Name | Type | Description |
|--------------|--------|---|
| local_policy | string | The Snapshot copy policy to apply to each volume in the smart container. This property is only supported for smart containers. Usage: <snapshot policy> |
| local_rpo | string | The local RPO of the application. |
| remote_rpo | string | The remote RPO of the application. |

nas

A generic NAS application.

| Name | Type | Description |
|------------------------|---|--|
| application_components | array[application_components] | |
| cifs_access | array[app_cifs_access] | The list of CIFS access controls. You must provide either 'user_or_group' or 'access' to enable CIFS access. |

| Name | Type | Description |
|--------------------|---|--|
| cifs_share_name | string | The name of the CIFS share. Usage: <Share> |
| exclude_aggregates | array[exclude_aggregates] | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| protection_type | protection_type | |

performance

| Name | Type | Description |
|-----------------|---------------------------------|-------------|
| storage_service | storage_service | |

hosts

| Name | Type | Description |
|------|--------|---------------|
| nqn | string | The host NQN. |

zapp_nvme_components_subsystem

components.subsystem

| Name | Type | Description |
|---------|--------------------------------|--|
| hosts | array[hosts] | |
| name | string | The name of the subsystem accessing the component. If neither the name nor the UUID is provided, the name defaults to <application-name>_<component-name>, whether that subsystem already exists or not. |
| os_type | string | The name of the host OS accessing the component. The default value is the host OS that is running the application. |
| uuid | string | The UUID of an existing subsystem to be granted access to the component. |

zapp_nvme_components_tiering

application-components.tiering

| Name | Type | Description |
|--------|--------|--|
| policy | string | The storage tiering type of the application component. |

components

| Name | Type | Description |
|-----------------|--|--|
| name | string | The name of the application component. |
| namespace_count | integer | The number of namespaces in the component. |
| os_type | string | The name of the host OS running the application. |
| performance | performance | |
| qos | qos | |
| subsystem | zapp_nvme_components_subsystem | components.subsystem |
| tiering | zapp_nvme_components_tiering | application-components.tiering |
| total_size | integer | The total size of the component, spread across member namespaces. Usage: {<integer>[KB MB GB TB PB]} |

local

| Name | Type | Description |
|--------|--------|---|
| name | string | The local RPO of the application. |
| policy | string | The Snapshot copy policy to apply to each volume in the smart container. This property is only supported for smart containers. Usage: <snapshot policy> |

rpo

| Name | Type | Description |
|-------|-----------------------|-------------|
| local | local | |

zapp_nvme

An NVME application.

| Name | Type | Description |
|------------|-------------------------------------|--|
| components | array[components] | |
| os_type | string | The name of the host OS running the application. |
| rpo | rpo | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the archive log. |

archive_log

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the archive log. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

db

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the database. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|--|
| name | string | The storage service of the ORACLE_HOME storage volume. |

ora_home

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the ORACLE_HOME storage volume. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|--|
| name | string | The storage service of the redo log group. |

redo_log

| Name | Type | Description |
|-----------------|---------------------------------|--|
| mirrored | boolean | Specifies whether the redo log group should be mirrored. |
| size | integer | The size of the redo log group. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

oracle_on_nfs

Oracle using NFS.

| Name | Type | Description |
|-----------------|---|---|
| archive_log | archive_log | |
| db | db | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| ora_home | ora_home | |
| protection_type | protection_type | |
| redo_log | redo_log | |

oracle_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

oracle_on_san

Oracle using SAN.

| Name | Type | Description |
|-----------------|---------------------------------|--|
| archive_log | archive_log | |
| db | db | |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| ora_home | ora_home | |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |
| redo_log | redo_log | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the Oracle grid binary storage volume. |

grid_binary

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the Oracle grid binary storage volume. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the Oracle CRS volume. |

oracle_crs

| Name | Type | Description |
|-----------------|---------------------------------|--|
| copies | integer | The number of CRS volumes. |
| size | integer | The size of the Oracle CRS/voting storage volume. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

oracle_rac_on_nfs

Oracle RAC using NFS.

| Name | Type | Description |
|-----------------|---|---|
| archive_log | archive_log | |
| db | db | |
| grid_binary | grid_binary | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| ora_home | ora_home | |
| oracle_crs | oracle_crs | |
| protection_type | protection_type | |
| redo_log | redo_log | |

db_sids

| Name | Type | Description |
|-------------|--------|--|
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |

oracle_rac_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

oracle_rac_on_san

Oracle RAC using SAN.

| Name | Type | Description |
|-----------------|----------------------------------|--|
| archive_log | archive_log | |
| db | db | |
| db_sids | array[db_sids] | |
| grid_binary | grid_binary | |
| ora_home | ora_home | |
| oracle_crs | oracle_crs | |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |
| redo_log | redo_log | |

zapp_s3_bucket_application_components_access_policies_conditions

conditions

| Name | Type | Description |
|------------|----------------|----------------------------|
| delimiters | array[string] | |
| max_keys | array[integer] | |
| operator | string | Policy Condition Operator. |

| Name | Type | Description |
|------------|---------------|-------------|
| prefixes | array[string] | |
| source_ips | array[string] | |
| usernames | array[string] | |

zapp_s3_bucket_application_components_access_policies

The list of S3 objectstore policies to be created.

| Name | Type | Description |
|------------|---|---|
| actions | array[string] | |
| conditions | array[zapp_s3_bucket_application_components_access_policies_conditions] | conditions. |
| effect | string | Allow or Deny Access. |
| principals | array[string] | |
| resources | array[string] | |
| sid | string | Statement Identifier Usage: <(size 1..256)> |

zapp_s3_bucket_application_components

The list of application components to be created.

| Name | Type | Description |
|----------------------|--|---|
| access_policies | array[zapp_s3_bucket_application_components_access_policies] | The list of S3 objectstore policies to be created. |
| bucket_endpoint_type | string | The type of bucket. |
| capacity_tier | boolean | Prefer lower latency storage under similar media costs. |
| comment | string | Object Store Server Bucket Description Usage: <(size 1..256)> |
| exclude_aggregates | array[exclude_aggregates] | |
| name | string | The name of the application component. |

| Name | Type | Description |
|------------------|---------------------------------|---|
| nas_path | string | The path to which the bucket corresponds to. |
| qos | qos | |
| size | integer | The total size of the S3 Bucket, split across the member components. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |
| uuid | string | Object Store Server Bucket UUID Usage: <UUID> |
| versioning_state | string | Bucket Versioning State. For nas type buckets, this field is not set. For s3 type buckets, the default value is disabled. |

zapp_s3_bucket

A generic S3 bucket application.

| Name | Type | Description |
|------------------------|--|---|
| application_components | array[zapp_s3_bucket_application_components] | The list of application components to be created. |

san_application_components_tiering

application-components.tiering

| Name | Type | Description |
|--------|--------|--|
| policy | string | The storage tiering type of the application component. |

application_components

| Name | Type | Description |
|-----------------|------------------------------------|--|
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| lun_count | integer | The number of LUNs in the application component. |
| name | string | The name of the application component. |
| os_type | string | The name of the host OS running the application. |
| qos | qos | |
| storage_service | storage_service | |
| tiering | san_application_components_tiering | application-components.tiering |
| total_size | integer | The total size of the application component, split across the member LUNs. Usage: {<integer>[KB MB GB TB PB]} |

san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

san

A generic SAN application.

| Name | Type | Description |
|------------------------|-------------------------------|--|
| application_components | array[application_components] | |
| exclude_aggregates | array[exclude_aggregates] | |
| os_type | string | The name of the host OS running the application. |

| Name | Type | Description |
|-----------------|---------------------------------|-------------|
| protection_type | protection_type | |

storage_service

| Name | Type | Description |
|------|--------|--------------------------------|
| name | string | The storage service of the DB. |

db

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the DB. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|------------------------------------|
| name | string | The storage service of the log DB. |

log

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the log DB. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

sql_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

storage_service

| Name | Type | Description |
|------|--------|-------------------------------------|
| name | string | The storage service of the temp DB. |

temp_db

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the temp DB. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

sql_on_san

Microsoft SQL using SAN.

| Name | Type | Description |
|--------------------|---------------------------------|--|
| db | db | |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| log | log | |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |
| server_cores_count | integer | The number of server cores for the DB. |
| temp_db | temp_db | |

access

| Name | Type | Description |
|-----------------|--------|--------------------------------|
| installer | string | SQL installer admin user name. |
| service_account | string | SQL service account user name. |

sql_on_smb

Microsoft SQL using SMB.

| Name | Type | Description |
|--------|------------------------|-------------|
| access | access | |

| Name | Type | Description |
|--------------------|---------------------------------|--|
| db | db | |
| log | log | |
| protection_type | protection_type | |
| server_cores_count | integer | The number of server cores for the DB. |
| temp_db | temp_db | |

storage_service

| Name | Type | Description |
|------|--------|--------------------------------------|
| name | string | The storage service of the desktops. |

desktops

| Name | Type | Description |
|-----------------|---------------------------------|--|
| count | integer | The number of desktops to support. |
| size | integer | The size of the desktops. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

hyper_v_access

| Name | Type | Description |
|-----------------|--------|--------------------------|
| service_account | string | Hyper-V service account. |

vdi_on_nas

A VDI application using NAS.

| Name | Type | Description |
|-----------------|---|---|
| desktops | desktops | |
| hyper_v_access | hyper_v_access | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| protection_type | protection_type | |

vdi_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

vdi_on_san

A VDI application using SAN.

| Name | Type | Description |
|-----------------|---------------------------------|--|
| desktops | desktops | |
| hypervisor | string | The name of the hypervisor hosting the application. |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| protection_type | protection_type | |

storage_service

| Name | Type | Description |
|------|--------|---------------------------------------|
| name | string | The storage service of the datastore. |

datastore

| Name | Type | Description |
|-----------------|---------------------------------|---|
| count | integer | The number of datastores to support. |
| size | integer | The size of the datastore. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

vsi_on_nas

A VSI application using NAS.

| Name | Type | Description |
|-----------------|---|---|
| datastore | datastore | |
| hyper_v_access | hyper_v_access | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| protection_type | protection_type | |

vsi_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

vsi_on_san

A VSI application using SAN.

| Name | Type | Description |
|-----------------|---------------------------------|--|
| datastore | datastore | |
| hypervisor | string | The name of the hypervisor hosting the application. |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| protection_type | protection_type | |

application_template

Application templates

| Name | Type | Description |
|-------------|---------------------------|--------------|
| _links | self_link | |
| description | string | Description. |

| Name | Type | Description |
|-----------------------|-----------------------------------|----------------------------------|
| missing_prerequisites | string | Missing prerequisites. |
| mongo_db_on_san | mongo_db_on_san | MongoDB using SAN. |
| name | string | Template name. |
| nas | nas | A generic NAS application. |
| nvme | zapp_nvme | An NVME application. |
| oracle_on_nfs | oracle_on_nfs | Oracle using NFS. |
| oracle_on_san | oracle_on_san | Oracle using SAN. |
| oracle_rac_on_nfs | oracle_rac_on_nfs | Oracle RAC using NFS. |
| oracle_rac_on_san | oracle_rac_on_san | Oracle RAC using SAN. |
| protocol | string | Access protocol. |
| s3_bucket | zapp_s3_bucket | A generic S3 bucket application. |
| san | san | A generic SAN application. |
| sql_on_san | sql_on_san | Microsoft SQL using SAN. |
| sql_on_smb | sql_on_smb | Microsoft SQL using SMB. |
| vdi_on_nas | vdi_on_nas | A VDI application using NAS. |
| vdi_on_san | vdi_on_san | A VDI application using SAN. |
| vsi_on_nas | vsi_on_nas | A VSI application using NAS. |
| vsi_on_san | vsi_on_san | A VSI application using SAN. |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Retrieve an application template

GET /application/templates/{name}

Introduced In: 9.6

Retrieves an application template.

Template properties

Each application template has a set of properties. These properties are always nested under a property with the same name as the template. For example, when using the `mongo_db_on_san` template, the properties are found nested inside the `mongo_db_on_san` property. The properties nested under the template property are all specific to the template. The model for the application template object includes all the available templates, but only the object that corresponds to the template's name is returned, and only one is provided in any application API.

The model of each template includes a description of each property and its allowed values or usage. Default values are also indicated when available. The template properties returned by this API include an example value for each property.

Template prerequisites

Each template has a set of prerequisites required for its use. If any of these prerequisites are not met, the `missing_prerequisites` property indicates which prerequisite is missing.

Learn more

- [DOC /application](#)

Parameters

| Name | Type | In | Required | Description |
|------|--------|------|----------|---------------|
| name | string | path | True | Template Name |

| Name | Type | In | Required | Description |
|--------|---------------|-------|----------|-------------------------------|
| fields | array[string] | query | False | Specify the fields to return. |

Response

Status: 200, Ok

| Name | Type | Description |
|-----------------------|-----------------------------------|----------------------------------|
| _links | self_link | |
| description | string | Description. |
| missing_prerequisites | string | Missing prerequisites. |
| mongo_db_on_san | mongo_db_on_san | MongoDB using SAN. |
| name | string | Template name. |
| nas | nas | A generic NAS application. |
| nvme | zapp_nvme | An NVME application. |
| oracle_on_nfs | oracle_on_nfs | Oracle using NFS. |
| oracle_on_san | oracle_on_san | Oracle using SAN. |
| oracle_rac_on_nfs | oracle_rac_on_nfs | Oracle RAC using NFS. |
| oracle_rac_on_san | oracle_rac_on_san | Oracle RAC using SAN. |
| protocol | string | Access protocol. |
| s3_bucket | zapp_s3_bucket | A generic S3 bucket application. |
| san | san | A generic SAN application. |
| sql_on_san | sql_on_san | Microsoft SQL using SAN. |
| sql_on_smb | sql_on_smb | Microsoft SQL using SMB. |
| vdi_on_nas | vdi_on_nas | A VDI application using NAS. |

| Name | Type | Description |
|------------|----------------------------|------------------------------|
| vdi_on_san | vdi_on_san | A VDI application using SAN. |
| vsi_on_nas | vsi_on_nas | A VSI application using NAS. |
| vsi_on_san | vsi_on_san | A VSI application using SAN. |

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "description": "string",
  "missing_prerequisites": "string",
  "name": "string",
  "nas": {
    "application_components": [
      {}
    ],
    "cifs_access": [
      {
        "access": "string",
        "user_or_group": "string"
      }
    ],
    "cifs_share_name": "string",
    "exclude_aggregates": [
      {
        "name": "string",
        "uuid": "string"
      }
    ],
    "nfs_access": [
      {
        "access": "string",
        "host": "string"
      }
    ],
    "protection_type": {
      "local_policy": "string",
      "local_rpo": "string",
      "remote_rpo": "string"
    }
  },
  "nvme": {
    "components": [
      {
        "name": "string",
        "os_type": "string",
        "performance": {
```

```

        "storage_service": {
            "name": "string"
        }
    },
    "qos": {
        "policy": {
            "name": "string",
            "uuid": "string"
        }
    },
    "subsystem": {
        "hosts": [
            {
                "nqn": "string"
            }
        ],
        "name": "string",
        "os_type": "string",
        "uuid": "string"
    },
    "tiering": {
        "policy": "string"
    }
}
],
"os_type": "string",
"rpo": {
    "local": {
        "name": "string",
        "policy": "string"
    }
}
},
"protocol": "string",
"s3_bucket": {
    "application_components": [
        {
            "access_policies": [
                {
                    "actions": [
                        "string"
                    ],
                    "conditions": [
                        {
                            "delimiters": [
                                "string"
                            ]
                        }
                    ]
                }
            ]
        }
    ]
}
}

```

```

    ],
    "max_keys": [
        "integer"
    ],
    "operator": "string",
    "prefixes": [
        "string"
    ],
    "source_ips": [
        "string"
    ],
    "usernames": [
        "string"
    ]
}
],
"effect": "string",
"principals": [
    "string"
],
"resources": [
    "string"
],
"sip": "string"
}
],
"bucket_endpoint_type": "string",
"comment": "string",
"exclude_aggregates": [
    {
        "name": "string",
        "uuid": "string"
    }
],
"name": "string",
"nas_path": "string",
"qos": {
    "policy": {
        "name": "string",
        "uuid": "string"
    }
},
"storage_service": {
    "name": "string"
},
"uuid": "string",

```

```

        "versioning_state": "string"
    }
]
},
"san": {
    "application_components": [
        {
            "igroup_name": "string",
            "name": "string",
            "os_type": "string",
            "qos": {
                "policy": {
                    "name": "string",
                    "uuid": "string"
                }
            },
            "storage_service": {
                "name": "string"
            },
            "tiering": {
                "policy": "string"
            }
        }
    ],
    "exclude_aggregates": [
        {
            "name": "string",
            "uuid": "string"
        }
    ],
    "os_type": "string",
    "protection_type": {
        "local_policy": "string",
        "local_rpo": "string",
        "remote_rpo": "string"
    }
}
}

```

Error

Status: Default, Error

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

self_link

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

storage_service

| Name | Type | Description |
|------|--------|--------------------------------------|
| name | string | The storage service of the database. |

dataset

| Name | Type | Description |
|--------------------|---------------------------------|--|
| element_count | integer | The number of storage elements (LUNs for SAN) of the database to maintain. Must be an even number between 2 and 16. Odd numbers will be rounded up to the next even number within range. |
| replication_factor | integer | The number of data bearing members of the replicaset, including 1 primary and at least 1 secondary. |
| size | integer | The size of the database. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

igroups

initiator_objects

mongo_db_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

protection_type

| Name | Type | Description |
|------------|--------|------------------------------------|
| local_rpo | string | The local RPO of the application. |
| remote_rpo | string | The remote RPO of the application. |

secondary_igroups

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the initiator group for each secondary. |

mongo_db_on_san

MongoDB using SAN.

| Name | Type | Description |
|---------------------|--|--|
| dataset | dataset | |
| os_type | string | The name of the host OS running the application. |
| primary_igroup_name | string | The initiator group for the primary. |
| protection_type | protection_type | |
| secondary_igroups | array[secondary_igroups] | |

export_policy

| Name | Type | Description |
|------|---------|--|
| id | integer | The ID of an existing NFS export policy. |
| name | string | The name of an existing NFS export policy. |

component

| Name | Type | Description |
|------|--------|-------------------------------|
| name | string | Name of the source component. |

svm

| Name | Type | Description |
|------|--------|-------------------------|
| name | string | Name of the source SVM. |

origin

| Name | Type | Description |
|-----------|---------------------------|-------------|
| component | component | |
| svm | svm | |

flexcache

| Name | Type | Description |
|----------|------------------------|--|
| dr_cache | boolean | Dr-cache is a FlexCache volume create time option that has the same flexgroup-msid as that of the origin of a FlexCache volume. By default, dr-cache is disabled. The flexgroup-msid of the FlexCache volume does not need to be same as that of the origin of a FlexCache volume. |
| origin | origin | |

policy

| Name | Type | Description |
|------|--------|---|
| name | string | The name of an existing QoS policy. |
| uuid | string | The UUID of an existing QoS policy. Usage: <UUID> |

qos

| Name | Type | Description |
|--------|------------------------|-------------|
| policy | policy | |

retention

| Name | Type | Description |
|---------|--------|---|
| default | string | Specifies the default retention period that is applied to files while committing them to the WORM state without an associated retention period. The retention value represents a duration and must be specified in the ISO-8601 duration format. The retention period can be in years, months, days, hours, and minutes. A duration specified for years, months, and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The retention string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the duration field also accepts the string "infinite" to set an infinite retention period and the string "unspecified" to set an unspecified retention period. |

| Name | Type | Description |
|---------|--------|---|
| maximum | string | Specifies the maximum allowed retention period for files committed to the WORM state on the volume. The retention value represents a duration and must be specified in the ISO-8601 duration format. The retention period can be in years, months, days, hours, and minutes. A duration specified for years, months, and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The retention string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the duration field also accepts the string "infinite" to set an infinite retention period. |

| Name | Type | Description |
|---------|--------|---|
| minimum | string | Specifies the minimum allowed retention period for files committed to the WORM state on the volume. The retention value represents a duration and must be specified in the ISO-8601 duration format. The retention period can be in years, months, days, hours, and minutes. A duration specified for years, month,s and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The retention string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the duration field also accepts the string "infinite" to set an infinite retention period. |

snaplock

| Name | Type | Description |
|---------------------|---------|---|
| append_mode_enabled | boolean | Specifies if the volume append mode is enabled or disabled. When it is enabled, all the files created with write permissions on the volume are, by default, WORM appendable files. The user can append the data to a WORM appendable file but cannot modify the existing contents of the file nor delete the file until it expires. |

| Name | Type | Description |
|-------------------|---------------------------|--|
| autocommit_period | string | Specifies the autocommit period for SnapLock volume. All files which are not modified for a period greater than the autocommit period of the volume are committed to the WORM state. The autocommit period value represents a duration and must be specified in the ISO-8601 duration format. The autocommit period can be in years, months, days, hours, and minutes. A period specified for years, months, and days is represented in the ISO-8601 format as "P<num>Y", "P<num>M", "P<num>D" respectively, for example "P10Y" represents a duration of 10 years. A duration in hours and minutes is represented by "PT<num>H" and "PT<num>M" respectively. The period string must contain only a single time element that is, either years, months, days, hours, or minutes. A duration which combines different periods is not supported, for example "P1Y10M" is not supported. Apart from the duration specified in the ISO-8601 format, the autocommit field also accepts the string "none". |
| retention | retention | |
| snaplock_type | string | The SnapLock type of the smart container. |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the application component. |

object_stores

nas_application_components_tiering

application-components.tiering

| Name | Type | Description |
|--------|--------|--|
| policy | string | The storage tiering type of the application component. |

application_components

| Name | Type | Description |
|-----------------|--|---|
| export_policy | export_policy | |
| flexcache | flexcache | |
| name | string | The name of the application component. |
| qos | qos | |
| scale_out | boolean | Denotes a Flexgroup. |
| share_count | integer | The number of shares in the application component. |
| snaplock | snaplock | |
| storage_service | storage_service | |
| tiering | nas_application_components_tiering | application-components.tiering |
| total_size | integer | The total size of the application component, split across the member shares. Usage: {<integer>[KB MB GB TB PB]} |

app_cifs_access

The list of CIFS access controls. You must provide either 'user_or_group' or 'access' to enable CIFS access.

| Name | Type | Description |
|---------------|--------|---|
| access | string | The CIFS access granted to the user or group. |
| user_or_group | string | The name of the CIFS user or group that will be granted access. |

exclude_aggregates

| Name | Type | Description |
|------|--------|---|
| name | string | The name of the aggregate to exclude. Usage: <aggregate name> |
| uuid | string | The ID of the aggregate to exclude. Usage: <UUID> |

app_nfs_access

The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access.

| Name | Type | Description |
|--------|--------|--|
| access | string | The NFS access granted. |
| host | string | The name of the NFS entity granted access. |

protection_type

| Name | Type | Description |
|--------------|--------|---|
| local_policy | string | The Snapshot copy policy to apply to each volume in the smart container. This property is only supported for smart containers. Usage: <snapshot policy> |
| local_rpo | string | The local RPO of the application. |
| remote_rpo | string | The remote RPO of the application. |

nas

A generic NAS application.

| Name | Type | Description |
|------------------------|---|--|
| application_components | array[application_components] | |
| cifs_access | array[app_cifs_access] | The list of CIFS access controls. You must provide either 'user_or_group' or 'access' to enable CIFS access. |

| Name | Type | Description |
|--------------------|---|--|
| cifs_share_name | string | The name of the CIFS share. Usage: <Share> |
| exclude_aggregates | array[exclude_aggregates] | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| protection_type | protection_type | |

performance

| Name | Type | Description |
|-----------------|---------------------------------|-------------|
| storage_service | storage_service | |

hosts

| Name | Type | Description |
|------|--------|---------------|
| nqn | string | The host NQN. |

zapp_nvme_components_subsystem

components.subsystem

| Name | Type | Description |
|---------|--------------------------------|--|
| hosts | array[hosts] | |
| name | string | The name of the subsystem accessing the component. If neither the name nor the UUID is provided, the name defaults to <application-name>_<component-name>, whether that subsystem already exists or not. |
| os_type | string | The name of the host OS accessing the component. The default value is the host OS that is running the application. |
| uuid | string | The UUID of an existing subsystem to be granted access to the component. |

zapp_nvme_components_tiering

application-components.tiering

| Name | Type | Description |
|--------|--------|--|
| policy | string | The storage tiering type of the application component. |

components

| Name | Type | Description |
|-----------------|--|--|
| name | string | The name of the application component. |
| namespace_count | integer | The number of namespaces in the component. |
| os_type | string | The name of the host OS running the application. |
| performance | performance | |
| qos | qos | |
| subsystem | zapp_nvme_components_subsystem | components.subsystem |
| tiering | zapp_nvme_components_tiering | application-components.tiering |
| total_size | integer | The total size of the component, spread across member namespaces. Usage: {<integer>[KB MB GB TB PB]} |

local

| Name | Type | Description |
|--------|--------|---|
| name | string | The local RPO of the application. |
| policy | string | The Snapshot copy policy to apply to each volume in the smart container. This property is only supported for smart containers. Usage: <snapshot policy> |

rpo

| Name | Type | Description |
|-------|-----------------------|-------------|
| local | local | |

zapp_nvme

An NVME application.

| Name | Type | Description |
|------------|-------------------------------------|--|
| components | array[components] | |
| os_type | string | The name of the host OS running the application. |
| rpo | rpo | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the archive log. |

archive_log

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the archive log. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

db

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the database. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|--|
| name | string | The storage service of the ORACLE_HOME storage volume. |

ora_home

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the ORACLE_HOME storage volume. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|--|
| name | string | The storage service of the redo log group. |

redo_log

| Name | Type | Description |
|-----------------|---------------------------------|--|
| mirrored | boolean | Specifies whether the redo log group should be mirrored. |
| size | integer | The size of the redo log group. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

oracle_on_nfs

Oracle using NFS.

| Name | Type | Description |
|-----------------|---|---|
| archive_log | archive_log | |
| db | db | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| ora_home | ora_home | |
| protection_type | protection_type | |
| redo_log | redo_log | |

oracle_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

oracle_on_san

Oracle using SAN.

| Name | Type | Description |
|-----------------|---------------------------------|--|
| archive_log | archive_log | |
| db | db | |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| ora_home | ora_home | |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |
| redo_log | redo_log | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the Oracle grid binary storage volume. |

grid_binary

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the Oracle grid binary storage volume. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|---|
| name | string | The storage service of the Oracle CRS volume. |

oracle_crs

| Name | Type | Description |
|-----------------|---------------------------------|--|
| copies | integer | The number of CRS volumes. |
| size | integer | The size of the Oracle CRS/voting storage volume. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

oracle_rac_on_nfs

Oracle RAC using NFS.

| Name | Type | Description |
|-----------------|---|---|
| archive_log | archive_log | |
| db | db | |
| grid_binary | grid_binary | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| ora_home | ora_home | |
| oracle_crs | oracle_crs | |
| protection_type | protection_type | |
| redo_log | redo_log | |

db_sids

| Name | Type | Description |
|-------------|--------|--|
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |

oracle_rac_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

oracle_rac_on_san

Oracle RAC using SAN.

| Name | Type | Description |
|-----------------|----------------------------------|--|
| archive_log | archive_log | |
| db | db | |
| db_sids | array[db_sids] | |
| grid_binary | grid_binary | |
| ora_home | ora_home | |
| oracle_crs | oracle_crs | |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |
| redo_log | redo_log | |

zapp_s3_bucket_application_components_access_policies_conditions

conditions

| Name | Type | Description |
|------------|----------------|----------------------------|
| delimiters | array[string] | |
| max_keys | array[integer] | |
| operator | string | Policy Condition Operator. |

| Name | Type | Description |
|------------|---------------|-------------|
| prefixes | array[string] | |
| source_ips | array[string] | |
| usernames | array[string] | |

zapp_s3_bucket_application_components_access_policies

The list of S3 objectstore policies to be created.

| Name | Type | Description |
|------------|---|---|
| actions | array[string] | |
| conditions | array[zapp_s3_bucket_application_components_access_policies_conditions] | conditions. |
| effect | string | Allow or Deny Access. |
| principals | array[string] | |
| resources | array[string] | |
| sid | string | Statement Identifier Usage: <(size 1..256)> |

zapp_s3_bucket_application_components

The list of application components to be created.

| Name | Type | Description |
|----------------------|--|---|
| access_policies | array[zapp_s3_bucket_application_components_access_policies] | The list of S3 objectstore policies to be created. |
| bucket_endpoint_type | string | The type of bucket. |
| capacity_tier | boolean | Prefer lower latency storage under similar media costs. |
| comment | string | Object Store Server Bucket Description Usage: <(size 1..256)> |
| exclude_aggregates | array[exclude_aggregates] | |
| name | string | The name of the application component. |

| Name | Type | Description |
|------------------|---------------------------------|---|
| nas_path | string | The path to which the bucket corresponds to. |
| qos | qos | |
| size | integer | The total size of the S3 Bucket, split across the member components. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |
| uuid | string | Object Store Server Bucket UUID Usage: <UUID> |
| versioning_state | string | Bucket Versioning State. For nas type buckets, this field is not set. For s3 type buckets, the default value is disabled. |

zapp_s3_bucket

A generic S3 bucket application.

| Name | Type | Description |
|------------------------|--|---|
| application_components | array[zapp_s3_bucket_application_components] | The list of application components to be created. |

san_application_components_tiering

application-components.tiering

| Name | Type | Description |
|--------|--------|--|
| policy | string | The storage tiering type of the application component. |

application_components

| Name | Type | Description |
|-----------------|------------------------------------|--|
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| lun_count | integer | The number of LUNs in the application component. |
| name | string | The name of the application component. |
| os_type | string | The name of the host OS running the application. |
| qos | qos | |
| storage_service | storage_service | |
| tiering | san_application_components_tiering | application-components.tiering |
| total_size | integer | The total size of the application component, split across the member LUNs. Usage: {<integer>[KB MB GB TB PB]} |

san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

san

A generic SAN application.

| Name | Type | Description |
|------------------------|-------------------------------|--|
| application_components | array[application_components] | |
| exclude_aggregates | array[exclude_aggregates] | |
| os_type | string | The name of the host OS running the application. |

| Name | Type | Description |
|-----------------|---------------------------------|-------------|
| protection_type | protection_type | |

storage_service

| Name | Type | Description |
|------|--------|--------------------------------|
| name | string | The storage service of the DB. |

db

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the DB. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

storage_service

| Name | Type | Description |
|------|--------|------------------------------------|
| name | string | The storage service of the log DB. |

log

| Name | Type | Description |
|-----------------|---------------------------------|--|
| size | integer | The size of the log DB. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

sql_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

storage_service

| Name | Type | Description |
|------|--------|-------------------------------------|
| name | string | The storage service of the temp DB. |

temp_db

| Name | Type | Description |
|-----------------|---------------------------------|---|
| size | integer | The size of the temp DB. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

sql_on_san

Microsoft SQL using SAN.

| Name | Type | Description |
|--------------------|---------------------------------|--|
| db | db | |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| log | log | |
| os_type | string | The name of the host OS running the application. |
| protection_type | protection_type | |
| server_cores_count | integer | The number of server cores for the DB. |
| temp_db | temp_db | |

access

| Name | Type | Description |
|-----------------|--------|--------------------------------|
| installer | string | SQL installer admin user name. |
| service_account | string | SQL service account user name. |

sql_on_smb

Microsoft SQL using SMB.

| Name | Type | Description |
|--------|------------------------|-------------|
| access | access | |

| Name | Type | Description |
|--------------------|---------------------------------|--|
| db | db | |
| log | log | |
| protection_type | protection_type | |
| server_cores_count | integer | The number of server cores for the DB. |
| temp_db | temp_db | |

storage_service

| Name | Type | Description |
|------|--------|--------------------------------------|
| name | string | The storage service of the desktops. |

desktops

| Name | Type | Description |
|-----------------|---------------------------------|--|
| count | integer | The number of desktops to support. |
| size | integer | The size of the desktops. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

hyper_v_access

| Name | Type | Description |
|-----------------|--------|--------------------------|
| service_account | string | Hyper-V service account. |

vdi_on_nas

A VDI application using NAS.

| Name | Type | Description |
|-----------------|---|---|
| desktops | desktops | |
| hyper_v_access | hyper_v_access | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| protection_type | protection_type | |

vdi_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

vdi_on_san

A VDI application using SAN.

| Name | Type | Description |
|-----------------|---------------------------------|--|
| desktops | desktops | |
| hypervisor | string | The name of the hypervisor hosting the application. |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| protection_type | protection_type | |

storage_service

| Name | Type | Description |
|------|--------|---------------------------------------|
| name | string | The storage service of the datastore. |

datastore

| Name | Type | Description |
|-----------------|---------------------------------|---|
| count | integer | The number of datastores to support. |
| size | integer | The size of the datastore. Usage: {<integer>[KB MB GB TB PB]} |
| storage_service | storage_service | |

vsi_on_nas

A VSI application using NAS.

| Name | Type | Description |
|-----------------|---|---|
| datastore | datastore | |
| hyper_v_access | hyper_v_access | |
| nfs_access | array[app_nfs_access] | The list of NFS access controls. You must provide either 'host' or 'access' to enable NFS access. |
| protection_type | protection_type | |

vsi_on_san_new_igroups

The list of initiator groups to create.

| Name | Type | Description |
|------------|---------------|-------------|
| initiators | array[string] | |

vsi_on_san

A VSI application using SAN.

| Name | Type | Description |
|-----------------|---------------------------------|--|
| datastore | datastore | |
| hypervisor | string | The name of the hypervisor hosting the application. |
| igroup_name | string | The name of the initiator group through which the contents of this application will be accessed. Modification of this parameter is a disruptive operation. All LUNs in the application component will be unmapped from the current igroup and re-mapped to the new igroup. |
| protection_type | protection_type | |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

Copyright information

Copyright © 2025 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.