



Manage volume Snapshot copies

ONTAP 9.15.1 REST API reference

NetApp
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Manage volume Snapshot copies

Storage volumes volume.uuid snapshots endpoint overview

Overview

A Snapshot copy is the view of the filesystem as it exists at the time when the Snapshot copy is created.

In ONTAP, different types of Snapshot copies are supported, such as scheduled Snapshot copies, user requested Snapshot copies, SnapMirror Snapshot copies, and so on.

ONTAP Snapshot copy APIs allow you to create, modify, delete and retrieve Snapshot copies.

ONTAP Bulk Snapshot copy APIs allow you to create, modify, delete and retrieve Snapshot copies on multiple volumes in one request.

Snapshot copy APIs

The following APIs are used to perform operations related to Snapshot copies.

– POST /api/storage/volumes/{volume.uuid}/snapshots

– GET /api/storage/volumes/{volume.uuid}/snapshots

– GET /api/storage/volumes/{volume.uuid}/snapshots/{uuid}

– PATCH /api/storage/volumes/{volume.uuid}/snapshots/{uuid}

– DELETE /api/storage/volumes/{volume.uuid}/snapshots/{uuid} The following APIs are used to perform bulk operations related to Snapshot copies.

– POST /api/storage/volumes/*/snapshots

– GET /api/storage/volumes/*/snapshots

– PATCH /api/storage/volumes/*/snapshots/{uuid}

– DELETE /api/storage/volumes/*/snapshots/{uuid}

Examples

Creating a Snapshot copy

The POST operation is used to create a Snapshot copy with the specified attributes.

```
# The API:
/api/storage/volumes/{volume.uuid}/snapshots

# The call:
curl -X POST "https://<mgmt-
ip>/api/storage/volumes/{volume.uuid}/snapshots" -H "accept:
```

```
application/hal+json" -d '{"name": "snapshot_copy", "comment": "Store this copy." }'
```

```
# The response:
```

```
HTTP/1.1 202 Accepted
```

```
Date: Wed, 13 Mar 2019 22:43:34 GMT
```

```
Server: libzapid-httpd
```

```
X-Content-Type-Options: nosniff
```

```
Cache-Control: no-cache,no-store,must-revalidate
```

```
Location: /api/storage/volumes/0353dc05-405f-11e9-acb6-005056bbc848/snapshots/?name=snapshot_copy
```

```
Content-Length: 189
```

```
Content-Type: application/json
```

```
{  
  "num_records": 1,  
  "records": [  
    {  
      "volume": {  
        "name": "v2"  
      },  
      "svm": {  
        "uuid": "8139f958-3c6e-11e9-a45f-005056bbc848",  
        "name": "vs0"  
      },  
      "name": "snapshot_copy",  
      "comment": "Store this copy."  
    }  
  ],  
  "job": {  
    "uuid": "6f68c85b-45e1-11e9-8fc7-005056bbc848",  
    "_links": {  
      "self": {  
        "href": "/api/cluster/jobs/6f68c85b-45e1-11e9-8fc7-005056bbc848"  
      }  
    }  
  }  
}
```

```
# The Job:
```

```
HTTP/1.1 200 OK
```

```
Date: Wed, 13 Mar 2019 22:43:57 GMT
```

```
Server: libzapid-httpd
```

```
X-Content-Type-Options: nosniff
```

```
Cache-Control: no-cache,no-store,must-revalidate
```

```
Content-Length: 224
```

```
Content-Type: application/json
```

```
{
  "uuid": "6f68c85b-45e1-11e9-8fc7-005056bbc848",
  "description": "POST /api/storage/volumes/0353dc05-405f-11e9-acb6-005056bbc848/snapshots/?name=snapshot_copy",
  "state": "success",
  "message": "success",
  "code": 0
}
```

Retrieving Snapshot copy attributes

The GET operation is used to retrieve Snapshot copy attributes.

```
# The API:
/api/storage/volumes/{volume.uuid}/snapshots

# The call:
curl -X GET "https://<mgmt-
ip>/api/storage/volumes/{volume.uuid}/snapshots" -H "accept:
application/hal+json"

# The response:
HTTP/1.1 200 OK
Date: Wed, 13 Mar 2019 21:14:06 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Type: application/json
Transfer-Encoding: chunked
{
  "records": [
    {
      "uuid": "402b6c73-73a0-4e89-a58a-75ee0ab3e8c0",
      "name": "hourly.2019-03-13_1305",
      "_links": {
        "self": {
          "href": "/api/storage/volumes/0353dc05-405f-11e9-acb6-005056bbc848/snapshots/402b6c73-73a0-4e89-a58a-75ee0ab3e8c0"
        }
      }
    },
    {
      "uuid": "f0dd497f-efe8-44b7-a4f4-bdd3890bc0c8",
      "name": "hourly.2019-03-13_1405",
      "_links": {
        "self": {
```

```

        "href": "/api/storage/volumes/0353dc05-405f-11e9-acb6-
005056bbc848/snapshots/f0dd497f-efe8-44b7-a4f4-bdd3890bc0c8"
    }
}
},
{
    "uuid": "02701900-51bd-46b8-9c77-47d9a9e2ce1d",
    "name": "hourly.2019-03-13_1522",
    "_links": {
        "self": {
            "href": "/api/storage/volumes/0353dc05-405f-11e9-acb6-
005056bbc848/snapshots/02701900-51bd-46b8-9c77-47d9a9e2ce1d"
        }
    }
}
],
"num_records": 3,
"_links": {
    "self": {
        "href": "/api/storage/volumes/0353dc05-405f-11e9-acb6-
005056bbc848/snapshots"
    }
}
}
}

```

Creating bulk Snapshot copies

The POST operation is used to create a Snapshot copy with the same name on multiple volumes in one request. This operation accepts a volume UUID or volume name and SVM, and a Snapshot copy name. This operation only supports SnapMirror label attributes to be added to Snapshot copies during creation.

```

# The API:
/api/storage/volumes/*/snapshots

# The call:
curl -k -u admin -X POST "https://<mgmt-
ip>/api/storage/volumes/*/snapshots" -H 'accept: application/hal+json' -d
'{"records": [{"volume.uuid":"e8815adb-5209-11ec-b4ad-005056bbc3e8",
"name":"snapshot_copy"}, {"volume.uuid":"efda9101-5209-11ec-b4ad-
005056bbc3e8", "name":"snapshot_copy"}]}'

# The response:
HTTP/1.1 202 Accepted
Date: Tue, 14 Dec 2021 20:18:13 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff

```

```

Cache-Control: no-cache,no-store,must-revalidate
Content-Security-Policy: default-src 'self'; script-src 'self' 'unsafe-
inline'; style-src 'self' 'unsafe-inline'; img-src 'self' data:; frame-
ancestors: 'self'
Location: /api/storage/volumes/*/snapshots/
Content-Length: 209
Content-Type: application/json
{
  "num_records": 2,
  "job": {
    "uuid": "f7130fc0-5d1a-11ec-b78c-005056bbb467",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/f7130fc0-5d1a-11ec-b78c-005056bbb467"
      }
    }
  }
}

# The Job:
HTTP/1.1 200 OK
Date: Tue, 14 Dec 2021 20:20:54 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Security-Policy: default-src 'self'; script-src 'self' 'unsafe-
inline'; style-src 'self' 'unsafe-inline'; img-src 'self' data:; frame-
ancestors: 'self'
Content-Length: 258
Content-Type: application/json
Vary: Accept-Encoding
{
  "uuid": "f7130fc0-5d1a-11ec-b78c-005056bbb467",
  "description": "POST /api/storage/volumes/*/snapshots/",
  "state": "success",
  "message": "success",
  "code": 0,
  "start_time": "2021-12-14T15:18:13-05:00",
  "end_time": "2021-12-14T15:18:13-05:00"
}

```

Retrieving Snapshot copy advanced attributes

A collection GET request is used to calculate the amount of Snapshot copy reclaimable space. When the advanced privilege field 'reclaimable space' is requested, the API returns the amount of reclaimable space for the queried list of Snapshot copies.

```

# The API:
/api/storage/volumes/{volume.uuid}/snapshots?fields=reclaimable_space

# The call:
curl -X GET "https://<mgmt-
ip>/api/storage/volumes/{volume.uuid}/snapshots?fields=reclaimable_space&
ame=hourly.2019-03-13_1305&#124;hourly.2019-03-13_1405&#124;hourly.2019-
03-13_1522" -H "accept: application/hal+json"

# The response:
HTTP/1.1 200 OK
Date: Wed, 13 Mar 2019 21:14:06 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Type: application/json
Transfer-Encoding: chunked
{
"records": [
  {
    "uuid": "402b6c73-73a0-4e89-a58a-75ee0ab3e8c0",
    "name": "hourly.2019-03-13_1305",
    "_links": {
      "self": {
        "href": "/api/storage/volumes/0353dc05-405f-11e9-acb6-
005056bbc848/snapshots/402b6c73-73a0-4e89-a58a-75ee0ab3e8c0"
      }
    }
  },
  {
    "uuid": "f0dd497f-efe8-44b7-a4f4-bdd3890bc0c8",
    "name": "hourly.2019-03-13_1405",
    "_links": {
      "self": {
        "href": "/api/storage/volumes/0353dc05-405f-11e9-acb6-
005056bbc848/snapshots/f0dd497f-efe8-44b7-a4f4-bdd3890bc0c8"
      }
    }
  },
  {
    "uuid": "02701900-51bd-46b8-9c77-47d9a9e2ce1d",
    "name": "hourly.2019-03-13_1522",
    "_links": {
      "self": {
        "href": "/api/storage/volumes/0353dc05-405f-11e9-acb6-
005056bbc848/snapshots/02701900-51bd-46b8-9c77-47d9a9e2ce1d"
      }
    }
  }
]
}

```



```

    }
  }
},
"num_records": 3,
"reclaimable_space": 1567832,
"_links": {
  "self": {
    "href": "/api/storage/volumes/0353dc05-405f-11e9-acb6-005056bbc848/snapshots"
  }
}
}
}

```

Retrieving Snapshot copy advanced attributes

A collection GET request is used to calculate the delta between two Snapshot copies. When the advanced privilege field 'delta' is requested, the API returns the delta between the queried Snapshot copies.

```

# The API:
/api/storage/volumes/{volume.uuid}/snapshots?fields=delta

# The call:
curl -X GET "https://<mgmt-
ip>/api/storage/volumes/{volume.uuid}/snapshots?fields=delta&name=hourly.2
022-06-29_1105,hourly.2022-06-29_1205" -H "accept: application/hal+json"

# The response:
HTTP/1.1 200 OK
Connection: Keep-Alive
Content-Encoding: gzip
Content-Length: 378
Content-Security-Policy: default-src 'self'; script-src 'self' 'unsafe-
inline'; style-src 'self' 'unsafe-inline'; img-src 'self' data:; frame-
ancestors: 'self'
Content-Type: application/hal+json
Date: Wed, 29 Jun 2022 18:37:11 GMT
Keep-Alive: timeout=5, max=99
Server: libzapid-httpd
Vary: Accept-Encoding
X-Content-Type-Options: nosniff
{
"records": [
  {
    "uuid": "52a2247a-7735-4a92-bc3c-e51df1fe502f",
    "name": "hourly.2022-06-29_1105",

```

```

    "delta": {
      "size_consumed": 675840,
      "time_elapsed": "PT3H27M45S"
    }
  },
  {
    "uuid": "b399eb34-44fe-4689-9fb5-c8f72162dd77",
    "name": "hourly.2022-06-29_1205",
    "delta": {
      "size_consumed": 507904,
      "time_elapsed": "PT2H27M45S"
    }
  }
],
"num_records": 2,
"delta": {
  "size_consumed": 167936,
  "time_elapsed": "PT1H"
}
}

```

Retrieving the attributes of a specific Snapshot copy

The GET operation is used to retrieve the attributes of a specific Snapshot copy.

```

# The API:
/api/storage/volumes/{volume.uuid}/snapshots/{uuid}

# The call:
curl -X GET "https://<mgmt-ip>/api/storage/volumes/0353dc05-405f-11e9-
acb6-005056bbc848/snapshots/402b6c73-73a0-4e89-a58a-75ee0ab3e8c0" -H
"accept: application/hal+json"

# The response:
HTTP/1.1 200 OK
Date: Wed, 13 Mar 2019 22:39:26 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Length: 308
Content-Type: application/json
{
  "volume": {
    "uuid": "0353dc05-405f-11e9-acb6-005056bbc848",
    "name": "v2",
    "_links": {

```

```

    "self": {
      "href": "/api/storage/volumes/0353dc05-405f-11e9-acb6-005056bbc848"
    }
  },
  "uuid": "402b6c73-73a0-4e89-a58a-75ee0ab3e8c0",
  "svm": {
    "uuid": "8139f958-3c6e-11e9-a45f-005056bbc848",
    "name": "vs0",
    "_links": {
      "self": {
        "href": "/api/svm/svms/8139f958-3c6e-11e9-a45f-005056bbc848"
      }
    }
  },
  "name": "hourly.2019-03-13_1305",
  "create_time": "2019-03-13T13:05:00-04:00",
  "size": 122880,
  "_links": {
    "self": {
      "href": "/api/storage/volumes/0353dc05-405f-11e9-acb6-005056bbc848/snapshots/402b6c73-73a0-4e89-a58a-75ee0ab3e8c0"
    }
  }
}

```

Retrieving the advanced attributes of a specific Snapshot copy

The GET operation is used to retrieve the attributes of a specific Snapshot copy. Snapshot copy reclaimable space can be requested during a GET request. When the advanced privilege field reclaimable space is requested, the API returns the amount of reclaimable space for the Snapshot copy.

```

# The API:
/api/storage/volumes/{volume.uuid}/snapshots/{uuid}?fields=reclaimable_space

# The call:
curl -X GET "https://<mgmt-ip>/api/storage/volumes/0353dc05-405f-11e9-acb6-005056bbc848/snapshots/402b6c73-73a0-4e89-a58a-75ee0ab3e8c0?fields=*" -H "accept: application/hal+json"

# The response:
HTTP/1.1 200 OK
Date: Wed, 13 Mar 2019 22:39:26 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff

```

```

Cache-Control: no-cache,no-store,must-revalidate
Content-Length: 308
Content-Type: application/json
{
  "volume": {
    "uuid": "0353dc05-405f-11e9-acb6-005056bbc848",
    "name": "v2",
    "_links": {
      "self": {
        "href": "/api/storage/volumes/0353dc05-405f-11e9-acb6-005056bbc848"
      }
    }
  },
  "uuid": "402b6c73-73a0-4e89-a58a-75ee0ab3e8c0",
  "svm": {
    "uuid": "8139f958-3c6e-11e9-a45f-005056bbc848",
    "name": "vs0",
    "_links": {
      "self": {
        "href": "/api/svm/svms/8139f958-3c6e-11e9-a45f-005056bbc848"
      }
    }
  },
  "name": "hourly.2019-03-13_1305",
  "reclaimable_space": 167832,
  "_links": {
    "self": {
      "href": "/api/storage/volumes/0353dc05-405f-11e9-acb6-005056bbc848/snapshots/402b6c73-73a0-4e89-a58a-75ee0ab3e8c0"
    }
  }
}

```

Retrieving Snapshot copy advanced attributes

A collection GET request is used to calculate the delta between two Snapshot copies. When the advanced privilege field 'delta' is requested, the API returns the delta between the queried Snapshot copies.

```

# The API:
/api/storage/volumes/{volume.uuid}/snapshots?fields=delta

# The call:
curl -X GET "https://<mgmt-
ip>/api/storage/volumes/{volume.uuid}/snapshots?fields=delta&name=hourly.2
022-06-29_1105,hourly.2022-06-29_1205" -H "accept: application/hal+json"

```

```
# The response:
HTTP/1.1 200 OK
Connection: Keep-Alive
Content-Encoding: gzip
Content-Length: 378
Content-Security-Policy: default-src 'self'; script-src 'self' 'unsafe-
inline'; style-src 'self' 'unsafe-inline'; img-src 'self' data;; frame-
ancestors: 'self'
Content-Type: application/hal+json
Date: Wed, 29 Jun 2022 18:37:11 GMT
Keep-Alive: timeout=5, max=99
Server: libzapid-httpd
Vary: Accept-Encoding
X-Content-Type-Options: nosniff
{
"records": [
  {
    "uuid": "52a2247a-7735-4a92-bc3c-e51df1fe502f",
    "name": "hourly.2022-06-29_1105",
    "delta": {
      "size_consumed": 675840,
      "time_elapsed": "PT3H27M45S"
    }
  },
  {
    "uuid": "b399eb34-44fe-4689-9fb5-c8f72162dd77",
    "name": "hourly.2022-06-29_1205",
    "delta": {
      "size_consumed": 507904,
      "time_elapsed": "PT2H27M45S"
    }
  }
],
"num_records": 2,
"delta": {
  "size_consumed": 167936,
  "time_elapsed": "PT1H"
}
}
```

Retrieving bulk Snapshot copies

The bulk GET operation is used to retrieve Snapshot copy attributes across all volumes.

```
# The API:
/api/storage/volumes/*/snapshots
```

```
# The call:
curl -X GET "https://<mgmt-ip>/api/storage/volumes/*/snapshots" -H
"accept: application/hal+json"

# The response:
HTTP/1.1 200 OK
{
"records": [
  {
    "volume": {
      "uuid": "966c285f-47f7-11ec-8407-005056bbc08f",
      "name": "v1"
    },
    "uuid": "3edba912-5507-4535-adce-e12fe5c0e31c",
    "name": "daily.2021-11-18_0010"
  },
  {
    "volume": {
      "uuid": "966c285f-47f7-11ec-8407-005056bbc08f",
      "name": "v1"
    },
    "uuid": "3ad61153-d5ef-495d-8e0e-5c3b8bbaf5e6",
    "name": "hourly.2021-11-18_0705"
  },
  {
    "volume": {
      "uuid": "99c974e3-47f7-11ec-8407-005056bbc08f",
      "name": "v2"
    },
    "uuid": "3dd0fa97-65d9-41ea-a99d-5ceb9d2f55c5",
    "name": "daily.2021-11-18_0010"
  },
  {
    "volume": {
      "uuid": "99c974e3-47f7-11ec-8407-005056bbc08f",
      "name": "v2"
    },
    "uuid": "6ca20a52-c342-4753-8865-3693fa9b7e23",
    "name": "hourly.2021-11-18_0705"
  },
],
"num_records": 4
}
```

Updating a Snapshot copy

The PATCH operation is used to update the specific attributes of a Snapshot copy.

```
# The API:
/api/storage/volumes/{volume.uuid}/snapshots/{uuid}

# The call:
curl -X PATCH "https://<mgmt-ip>/api/storage/volumes/0353dc05-405f-11e9-
acb6-005056bbc848/snapshots/16f7008c-18fd-4a7d-8485-a0e290d9db7f" -d
'{"name": "snapshot_copy_new" }' -H "accept: application/hal+json"

# The response:
HTTP/1.1 202 Accepted
Date: Wed, 13 Mar 2019 22:50:44 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Length: 189
Content-Type: application/json
{
  "job": {
    "uuid": "6f7c3a82-45e2-11e9-8fc7-005056bbc848",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/6f7c3a82-45e2-11e9-8fc7-005056bbc848"
      }
    }
  }
}

# The Job:
HTTP/1.1 200 OK
Date: Wed, 13 Mar 2019 22:54:16 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Length: 242
Content-Type: application/json
{
  "uuid": "6f7c3a82-45e2-11e9-8fc7-005056bbc848",
  "description": "PATCH /api/storage/volumes/0353dc05-405f-11e9-acb6-
005056bbc848/snapshots/16f7008c-18fd-4a7d-8485-a0e290d9db7f",
  "state": "success",
  "message": "success",
  "code": 0
}
```


Updating bulk Snapshot copies

The bulk PATCH operation is used to update the specific attributes of Snapshot copies across volumes in a single request.

```
# The API:
/api/storage/volumes/*/snapshots

# The call:
curl -X PATCH "https://<mgmt-ip>/api/storage/volumes/*/snapshots" -d
'{"records": [{"volume.uuid":"e8815adb-5209-11ec-b4ad-005056bbc3e8",
"svm.uuid":"d0e6def5-5209-11ec-b4ad-005056bbc3e8", "uuid":"f9b7714d-1166-
410a-b143-874f27969db6", "comment":"yay"}, {"volume.uuid":"efda9101-5209-
11ec-b4ad-005056bbc3e8", "svm.uuid":"d0e6def5-5209-11ec-b4ad-
005056bbc3e8", "uuid":"514c82a7-bff7-48e2-a13c-5337b09ed41e",
"comment":"yay"}]}' -H "accept: application/hal+json"

# The response:
HTTP/1.1 202 Accepted
{
  "job": {
    "uuid": "1e9a561f-520f-11ec-b4ad-005056bbc3e8",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/1e9a561f-520f-11ec-b4ad-005056bbc3e8"
      },
      "results": {
        "href": "/api/storage/volumes/*/snapshots?job_results_uuid=1e9a561f-
520f-11ec-b4ad-005056bbc3e8"
      }
    }
  }
}

# The Job:
curl -u admin:<password> -k -X GET --header 'Content-Type:
application/json' --header 'Accept: application/json' 'https://<mgmt-
ip>/api/storage/volumes/*/snapshots?job_results_uuid=1e9a561f-520f-11ec-
b4ad-005056bbc3e8'
HTTP/1.1 200 OK
{
  "records": [
    {
      "volume": {
        "uuid": "e8815adb-5209-11ec-b4ad-005056bbc3e8",
        "name": "v1"
      },

```

```
"uuid": "f9b7714d-1166-410a-b143-874f27969db6",
  "svm": {
    "uuid": "d0e6def5-5209-11ec-b4ad-005056bbc3e8"
  },
  "name": "s1",
  "comment": "yay"
},
{
  "volume": {
    "uuid": "efda9101-5209-11ec-b4ad-005056bbc3e8",
    "name": "v2"
  },
  "uuid": "514c82a7-bff7-48e2-a13c-5337b09ed41e",
  "svm": {
    "uuid": "d0e6def5-5209-11ec-b4ad-005056bbc3e8"
  },
  "name": "s1",
  "comment": "yay"
}
],
"num_records": 2
}
```

Deleting a Snapshot copy

The DELETE operation is used to delete a Snapshot copy.

```
# The API:
/api/storage/volumes/{volume.uuid}/snapshots/{uuid}

# The call:
curl -X DELETE "https://<mgmt-ip>/api/storage/volumes/0353dc05-405f-11e9-
acb6-005056bbc848/snapshots/16f7008c-18fd-4a7d-8485-a0e290d9db7f" -H
"accept: application/hal+json"

# The response:
HTTP/1.1 202 Accepted
Date: Wed, 13 Mar 2019 22:57:51 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Length: 189
Content-Type: application/json
{
  "job": {
    "uuid": "6da1dfdd-45e3-11e9-8fc7-005056bbc848",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/6da1dfdd-45e3-11e9-8fc7-005056bbc848"
      }
    }
  }
}

# The Job:
HTTP/1.1 200 OK
Date: Wed, 13 Mar 2019 23:02:46 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Length: 243
Content-Type: application/json
{
  "uuid": "6da1dfdd-45e3-11e9-8fc7-005056bbc848",
  "description": "DELETE /api/storage/volumes/0353dc05-405f-11e9-acb6-
005056bbc848/snapshots/16f7008c-18fd-4a7d-8485-a0e290d9db7f",
  "state": "success",
  "message": "success",
  "code": 0
}
```

Deleting bulk Snapshot copies

The bulk DELETE operation is used to delete a Snapshot copies across volumes in a single request.

```
# The API:
/api/storage/volumes/*/snapshots

# The call:
curl -X DELETE "https://<mgmt-ip>/api/storage/volumes/*/snapshots" -d
'{"records": [{"volume.uuid": "e8815adb-5209-11ec-b4ad-005056bbc3e8",
"uuid": "f9b7714d-1166-410a-b143-874f27969db6"}, {"volume.uuid": "efda9101-
5209-11ec-b4ad-005056bbc3e8", "uuid": "1d55c97a-25f3-4366-bfa8-
9ea75c255469"}]}' -H "accept: application/hal+json"

# The response:
HTTP/1.1 202 Accepted
{
"job": {
  "uuid": "fe114ed7-520f-11ec-b4ad-005056bbc3e8",
  "_links": {
    "self": {
      "href": "/api/cluster/jobs/fe114ed7-520f-11ec-b4ad-005056bbc3e8"
    },
    "results": {
      "href": "/api/storage/volumes/*/snapshots?job_results_uuid=fe114ed7-
520f-11ec-b4ad-005056bbc3e8"
    }
  }
}
}

# The Job:
HTTP/1.1 200 OK
curl -u admin:<password> -k -X GET --header 'Content-Type:
application/json' --header 'Accept: application/json' 'https://<mgmt-
ip>/api/storage/volumes/*/snapshots?job_results_uuid=fe114ed7-520f-11ec-
b4ad-005056bbc3e8'
{
"records": [
],
"num_records": 0
}
```

Retrieve volume Snapshot copies

GET /storage/volumes/{volume.uuid}/snapshots

Introduced In: 9.6

Retrieves a collection of volume Snapshot copies.

Expensive properties

There is an added computational cost to retrieving the amount of reclaimable space for Snapshot copies, as the calculation is done on demand based on the list of Snapshot copies provided.

- `reclaimable_space`
- `delta`

Related ONTAP commands

- `snapshot show`
- `snapshot compute-reclaimable`
- `snapshot show-delta`

Learn more

- [DOC /storage/volumes/{volume.uuid}/snapshots](#)

Parameters

Name	Type	In	Required	Description
volume.uuid	string	path	True	Volume
uuid	string	query	False	Filter by uuid
comment	string	query	False	Filter by comment
expiry_time	string	query	False	Filter by expiry_time
snaplock_expiry_time	string	query	False	Filter by snaplock_expiry_time
owners	string	query	False	Filter by owners <ul style="list-style-type: none">• Introduced in: 9.7

Name	Type	In	Required	Description
snaplock.expiry_time	string	query	False	Filter by snaplock.expiry_time • Introduced in: 9.15
snaplock.time_until_expiry	string	query	False	Filter by snaplock.time_until_expiry • Introduced in: 9.15
snaplock.expired	boolean	query	False	Filter by snaplock.expired • Introduced in: 9.15
create_time	string	query	False	Filter by create_time
reclaimable_space	integer	query	False	Filter by reclaimable_space • Introduced in: 9.10
version_uuid	string	query	False	Filter by version_uuid • Introduced in: 9.11
logical_size	integer	query	False	Filter by logical_size • Introduced in: 9.12
size	integer	query	False	Filter by size • Introduced in: 9.9
volume.name	string	query	False	Filter by volume.name
svm.uuid	string	query	False	Filter by svm.uuid

Name	Type	In	Required	Description
svm.name	string	query	False	Filter by svm.name
name	string	query	False	Filter by name
delta.time_elapsed	string	query	False	Filter by delta.time_elapsed • Introduced in: 9.12
delta.size_consumed	integer	query	False	Filter by delta.size_consumed • Introduced in: 9.12
snapmirror_label	string	query	False	Filter by snapmirror_label • Introduced in: 9.8
provenance_volume.uuid	string	query	False	Filter by provenance_volume.uuid • Introduced in: 9.11
state	string	query	False	Filter by state
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

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
order_by	array[string]	query	False	Order results by specified fields and optional [asc

Response

Status: 200, Ok

Name	Type	Description
_links	_links	
delta	snapshot_delta	Reports the amount of space consumed between two WAFL file systems, in bytes. The two WAFL file systems should be specified in a comma-separated format using the "name" parameter. To determine the space consumed between a Snapshot copy and the Active File System, only the Snapshot copy name needs to be mentioned.
num_records	integer	Number of records
reclaimable_space	integer	Space reclaimed when the Snapshot copy is deleted, in bytes.

Name	Type	Description
records	array[snapshot]	

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "delta": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "size_consumed": 0,
    "time_elapsed": "string"
  },
  "num_records": 1,
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "comment": "string",
      "create_time": "2019-02-04 14:00:00 -0500",
      "delta": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "size_consumed": 0,
        "time_elapsed": "string"
      },
      "expiry_time": "2019-02-04 14:00:00 -0500",
      "logical_size": 1228800,
      "name": "this_snapshot",
      "owners": [
        "string"
      ],
      "provenance_volume": {
```

```

    "uuid": "4cd8a442-86d1-11e0-ae1c-125648563413"
  },
  "size": "122880",
  "snaplock": {
    "expired": 1,
    "expiry_time": "2019-02-04 14:00:00 -0500",
    "time_until_expiry": "PT3H27M45S"
  },
  "snaplock_expiry_time": "2019-02-04 14:00:00 -0500",
  "snapmirror_label": "string",
  "state": "string",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
  "version_uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
  "volume": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "volumel",
    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
  }
}
]
}

```

Error

Status: Default

ONTAP Error Response Code

Error Code	Description
918235	The specified volume is invalid.

Error Code	Description
9437613	The operation is not supported on FlexCache Volumes.

Name	Type	Description
error	returned_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	

snapshot_delta

Reports the amount of space consumed between two WAFL file systems, in bytes. The two WAFL file systems should be specified in a comma-separated format using the "name" parameter. To determine the space consumed between a Snapshot copy and the Active File System, only the Snapshot copy name needs to be mentioned.

Name	Type	Description
_links	_links	
size_consumed	integer	Indicates the space that has changed between two specified WAFL file systems, in bytes.
time_elapsed	string	Time elapsed between two specified WAFL file systems.

provenance_volume

Name	Type	Description
uuid	string	UUID for the volume that is used to identify the source volume in a mirroring relationship. When the mirroring relationship is broken, a volume's Instance UUID and Provenance UUID are made identical. An unmirrored volume's Provenance UUID is the same as its Instance UUID. This field is valid for flexible volumes only.

snaplock

Name	Type	Description
expired	boolean	Indicates whether a SnapLock Snapshot copy has expired.
expiry_time	string	SnapLock expiry time for the Snapshot copy, if the Snapshot copy is taken on a SnapLock volume. A Snapshot copy is not allowed to be deleted or renamed until the SnapLock ComplianceClock time goes beyond this retention time. This option can be set during Snapshot copy POST and Snapshot copy PATCH on Snapshot copy locking enabled volumes.
time_until_expiry	string	Indicates the remaining SnapLock expiry time of a locked Snapshot copy, in seconds. This field is set only when the remaining time interval is less than 136 years.

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
_links	_links	

Name	Type	Description
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

volume

Name	Type	Description
_links	_links	
name	string	The name of the volume. This field cannot be specified in a POST or PATCH method.
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 • x-nullable: true

snapshot

The Snapshot copy object represents a point in time Snapshot copy of a volume.

Name	Type	Description
_links	_links	
comment	string	A comment associated with the Snapshot copy. This is an optional attribute for POST or PATCH.
create_time	string	Creation time of the Snapshot copy. It is the volume access time when the Snapshot copy was created.

Name	Type	Description
delta	snapshot_delta	Reports the amount of space consumed between two WAFL file systems, in bytes. The two WAFL file systems should be specified in a comma-separated format using the "name" parameter. To determine the space consumed between a Snapshot copy and the Active File System, only the Snapshot copy name needs to be mentioned.
expiry_time	string	The expiry time for the Snapshot copy. This is an optional attribute for POST or PATCH. Snapshot copies with an expiry time set are not allowed to be deleted until the retention time is reached.
logical_size	integer	Size of the logical used file system at the time the Snapshot copy is captured.
name	string	Snapshot copy. Valid in POST or PATCH.
owners	array[string]	
provenance_volume	provenance_volume	
reclaimable_space	integer	Space reclaimed when the Snapshot copy is deleted, in bytes.
size	integer	Size of the active file system at the time the Snapshot copy is captured. The actual size of the Snapshot copy also includes those blocks trapped by other Snapshot copies. On a Snapshot copy deletion, the "size" amount of blocks is the maximum number of blocks available. On a Snapshot copy restore, the "afs-used size" value will match the Snapshot copy "size" value.
snaplock	snaplock	

Name	Type	Description
snaplock_expiry_time	string	SnapLock expiry time for the Snapshot copy, if the Snapshot copy is taken on a SnapLock volume. A Snapshot copy is not allowed to be deleted or renamed until the SnapLock ComplianceClock time goes beyond this retention time. This option can be set during Snapshot copy POST and Snapshot copy PATCH on Snapshot copy locking enabled volumes. This field will no longer be supported in a future release. Use snaplock.expiry_time instead.
snapmirror_label	string	Label for SnapMirror operations
state	string	State of the FlexGroup volume Snapshot copy. In the "pre_conversion" state, the Snapshot copy was created before converting the FlexVol to a FlexGroup volume. A recently created Snapshot copy can be in the "unknown" state while the system is calculating the state. In the "partial" state, the Snapshot copy is consistent but exists only on the subset of the constituents that existed prior to the FlexGroup's expansion. Partial Snapshot copies cannot be used for a Snapshot copy restore operation. A Snapshot copy is in an "invalid" state when it is present in some FlexGroup constituents but not in others. At all other times, a Snapshot copy is valid.
svm	svm	SVM, applies only to SVM-scoped objects.
uuid	string	The UUID of the Snapshot copy in the volume that uniquely identifies the Snapshot copy in that volume.

Name	Type	Description
version_uuid	string	The 128 bit identifier that uniquely identifies a snapshot and its logical data layout.
volume	volume	

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned_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 volume Snapshot copy

POST /storage/volumes/{volume.uuid}/snapshots

Introduced In: 9.6

Creates a volume Snapshot copy.

Required properties

- `name` - Name of the Snapshot copy to be created.

Recommended optional properties

- `comment` - Comment associated with the Snapshot copy.
- `expiry_time` - Snapshot copies with an expiry time set are not allowed to be deleted until the retention time is reached.
- `snapmirror_label` - Label for SnapMirror operations.

- `snaplock_expiry_time` - Expiry time for Snapshot copy locking enabled volumes.

Related ONTAP commands

- `snapshot create`

Learn more

- [DOC /storage/volumes/{volume.uuid}/snapshots](#)

Parameters

Name	Type	In	Required	Description
<code>volume.uuid</code>	string	path	True	Volume UUID
<code>return_timeout</code>	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	<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	
comment	string	A comment associated with the Snapshot copy. This is an optional attribute for POST or PATCH.
create_time	string	Creation time of the Snapshot copy. It is the volume access time when the Snapshot copy was created.
delta	snapshot_delta	Reports the amount of space consumed between two WAFL file systems, in bytes. The two WAFL file systems should be specified in a comma-separated format using the "name" parameter. To determine the space consumed between a Snapshot copy and the Active File System, only the Snapshot copy name needs to be mentioned.
expiry_time	string	The expiry time for the Snapshot copy. This is an optional attribute for POST or PATCH. Snapshot copies with an expiry time set are not allowed to be deleted until the retention time is reached.
logical_size	integer	Size of the logical used file system at the time the Snapshot copy is captured.
name	string	Snapshot copy. Valid in POST or PATCH.
owners	array[string]	

Name	Type	Description
provenance_volume	provenance_volume	
reclaimable_space	integer	Space reclaimed when the Snapshot copy is deleted, in bytes.
size	integer	Size of the active file system at the time the Snapshot copy is captured. The actual size of the Snapshot copy also includes those blocks trapped by other Snapshot copies. On a Snapshot copy deletion, the "size" amount of blocks is the maximum number of blocks available. On a Snapshot copy restore, the "afs-used size" value will match the Snapshot copy "size" value.
snaplock	snaplock	
snaplock_expiry_time	string	SnapLock expiry time for the Snapshot copy, if the Snapshot copy is taken on a SnapLock volume. A Snapshot copy is not allowed to be deleted or renamed until the SnapLock ComplianceClock time goes beyond this retention time. This option can be set during Snapshot copy POST and Snapshot copy PATCH on Snapshot copy locking enabled volumes. This field will no longer be supported in a future release. Use <code>snaplock.expiry_time</code> instead.
snapmirror_label	string	Label for SnapMirror operations

Name	Type	Description
state	string	State of the FlexGroup volume Snapshot copy. In the "pre_conversion" state, the Snapshot copy was created before converting the FlexVol to a FlexGroup volume. A recently created Snapshot copy can be in the "unknown" state while the system is calculating the state. In the "partial" state, the Snapshot copy is consistent but exists only on the subset of the constituents that existed prior to the FlexGroup's expansion. Partial Snapshot copies cannot be used for a Snapshot copy restore operation. A Snapshot copy is in an "invalid" state when it is present in some FlexGroup constituents but not in others. At all other times, a Snapshot copy is valid.
svm	svm	SVM, applies only to SVM-scoped objects.
uuid	string	The UUID of the Snapshot copy in the volume that uniquely identifies the Snapshot copy in that volume.
version_uuid	string	The 128 bit identifier that uniquely identifies a snapshot and its logical data layout.
volume	volume	

Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "comment": "string",
  "create_time": "2019-02-04 14:00:00 -0500",
  "delta": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "size_consumed": 0,
  "time_elapsed": "string"
},
"expiry_time": "2019-02-04 14:00:00 -0500",
"logical_size": 1228800,
"name": "this_snapshot",
"owners": [
  "string"
],
"provenance_volume": {
  "uuid": "4cd8a442-86d1-11e0-ae1c-125648563413"
},
"size": "122880",
"snaplock": {
  "expired": 1,
  "expiry_time": "2019-02-04 14:00:00 -0500",
  "time_until_expiry": "PT3H27M45S"
},
"snaplock_expiry_time": "2019-02-04 14:00:00 -0500",
"snapmirror_label": "string",
"state": "string",
"svm": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  }
},
"name": "svm1",
"uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
```

```

"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"version_uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"volume": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "volumel",
  "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
}
}

```

Response

Status: 202, Accepted

Name	Type	Description
job	job_link	

Example response

```

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

```

Headers

Name	Description	Type
Location	Useful for tracking the resource location	string

Response

Status: 201, Created

Error

Status: Default

ONTAP Error Response Code

Error Code	Description
524479	The specified volume is not online or does not have enough space to create a Snapshot copy.
525062	Cannot exceed maximum number of Snapshot copies.
2621462	The specified SVM name does not exist.
525059	A Snapshot copy with the specified name already exists.
1638461	Snapshot copies can only be created on read/write (RW) volumes.
1638477	User-created Snapshot copy names cannot begin with the specified prefix.
1638518	The specified Snapshot copy name is invalid.
1638532	Failed to create the Snapshot copy on the specified volume because a revert operation is in progress.
1638537	Cannot determine the status of the Snapshot copy create operation for the specified volume.
1638574	The "expiry-time" parameter is not supported for FlexGroup volumes.
1638616	Bulk Snapshot copy create is not supported with multiple Snapshot copy names.
1638617	Bulk Snapshot copy create is not supported with volume names in a mixed-version cluster.
1638618	The property cannot be specified for Snapshot copy create.
1638630	Snapshot copy create operation is not supported on destination of SnapMirror active sync relationship with policy-type "automated-failover-duplex".

Name	Type	Description
error	returned_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	

snapshot_delta

Reports the amount of space consumed between two WAFL file systems, in bytes. The two WAFL file systems should be specified in a comma-separated format using the "name" parameter. To determine the space consumed between a Snapshot copy and the Active File System, only the Snapshot copy name needs to be mentioned.

Name	Type	Description
_links	_links	
size_consumed	integer	Indicates the space that has changed between two specified WAFL file systems, in bytes.
time_elapsed	string	Time elapsed between two specified WAFL file systems.

provenance_volume

Name	Type	Description
uuid	string	UUID for the volume that is used to identify the source volume in a mirroring relationship. When the mirroring relationship is broken, a volume's Instance UUID and Provenance UUID are made identical. An unmirrored volume's Provenance UUID is the same as its Instance UUID. This field is valid for flexible volumes only.

snaplock

Name	Type	Description
expired	boolean	Indicates whether a SnapLock Snapshot copy has expired.
expiry_time	string	SnapLock expiry time for the Snapshot copy, if the Snapshot copy is taken on a SnapLock volume. A Snapshot copy is not allowed to be deleted or renamed until the SnapLock ComplianceClock time goes beyond this retention time. This option can be set during Snapshot copy POST and Snapshot copy PATCH on Snapshot copy locking enabled volumes.
time_until_expiry	string	Indicates the remaining SnapLock expiry time of a locked Snapshot copy, in seconds. This field is set only when the remaining time interval is less than 136 years.

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
_links	_links	
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

volume

Name	Type	Description
_links	_links	
name	string	The name of the volume. This field cannot be specified in a POST or PATCH method.

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 • x-nullable: true

snapshot

The Snapshot copy object represents a point in time Snapshot copy of a volume.

Name	Type	Description
_links	_links	
comment	string	A comment associated with the Snapshot copy. This is an optional attribute for POST or PATCH.
create_time	string	Creation time of the Snapshot copy. It is the volume access time when the Snapshot copy was created.
delta	snapshot_delta	Reports the amount of space consumed between two WAFL file systems, in bytes. The two WAFL file systems should be specified in a comma-separated format using the "name" parameter. To determine the space consumed between a Snapshot copy and the Active File System, only the Snapshot copy name needs to be mentioned.
expiry_time	string	The expiry time for the Snapshot copy. This is an optional attribute for POST or PATCH. Snapshot copies with an expiry time set are not allowed to be deleted until the retention time is reached.

Name	Type	Description
logical_size	integer	Size of the logical used file system at the time the Snapshot copy is captured.
name	string	Snapshot copy. Valid in POST or PATCH.
owners	array[string]	
provenance_volume	provenance_volume	
reclaimable_space	integer	Space reclaimed when the Snapshot copy is deleted, in bytes.
size	integer	Size of the active file system at the time the Snapshot copy is captured. The actual size of the Snapshot copy also includes those blocks trapped by other Snapshot copies. On a Snapshot copy deletion, the "size" amount of blocks is the maximum number of blocks available. On a Snapshot copy restore, the "afs-used size" value will match the Snapshot copy "size" value.
snaplock	snaplock	
snaplock_expiry_time	string	SnapLock expiry time for the Snapshot copy, if the Snapshot copy is taken on a SnapLock volume. A Snapshot copy is not allowed to be deleted or renamed until the SnapLock ComplianceClock time goes beyond this retention time. This option can be set during Snapshot copy POST and Snapshot copy PATCH on Snapshot copy locking enabled volumes. This field will no longer be supported in a future release. Use <code>snaplock.expiry_time</code> instead.
snapmirror_label	string	Label for SnapMirror operations

Name	Type	Description
state	string	State of the FlexGroup volume Snapshot copy. In the "pre_conversion" state, the Snapshot copy was created before converting the FlexVol to a FlexGroup volume. A recently created Snapshot copy can be in the "unknown" state while the system is calculating the state. In the "partial" state, the Snapshot copy is consistent but exists only on the subset of the constituents that existed prior to the FlexGroup's expansion. Partial Snapshot copies cannot be used for a Snapshot copy restore operation. A Snapshot copy is in an "invalid" state when it is present in some FlexGroup constituents but not in others. At all other times, a Snapshot copy is valid.
svm	svm	SVM, applies only to SVM-scoped objects.
uuid	string	The UUID of the Snapshot copy in the volume that uniquely identifies the Snapshot copy in that volume.
version_uuid	string	The 128 bit identifier that uniquely identifies a snapshot and its logical data layout.
volume	volume	

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

returned_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 volume Snapshot copy

DELETE /storage/volumes/{volume.uuid}/snapshots/{uuid}

Introduced In: 9.6

Deletes a Volume Snapshot copy.

Related ONTAP commands

- `snapshot delete`

Learn more

- [DOC /storage/volumes/{volume.uuid}/snapshots](#)

Parameters

Name	Type	In	Required	Description
volume.uuid	string	path	True	Volume 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: 200, Ok

Name	Type	Description
job	job_link	

Example response

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

Response

Status: 202, Accepted

Error

Status: Default

ONTAP Error Response Code

Error Code	Description
2	An invalid value was entered for one of the fields.
524481	Snapshot copy was not deleted because the associated volume is locked or fenced.
1638521	Snapshot copies can only be deleted on read/write (RW) volumes.
1638538	Cannot determine the status of the Snapshot copy delete operation for the specified volume.
1638543	Failed to delete Snapshot copy because it has an owner.
1638555	The specified Snapshot copy has not expired or is locked.
1638600	The Snapshot copy does not exist.

Name	Type	Description
error	returned_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

returned_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 volume Snapshot copy details

GET /storage/volumes/{volume.uuid}/snapshots/{uuid}

Introduced In: 9.6

Retrieves details of a specific volume Snapshot copy.

Related ONTAP commands

- `snapshot show`

Learn more

- [DOC /storage/volumes/{volume.uuid}/snapshots](#)

Parameters

Name	Type	In	Required	Description
volume.uuid	string	path	True	Volume 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	
comment	string	A comment associated with the Snapshot copy. This is an optional attribute for POST or PATCH.
create_time	string	Creation time of the Snapshot copy. It is the volume access time when the Snapshot copy was created.

Name	Type	Description
delta	snapshot_delta	Reports the amount of space consumed between two WAFL file systems, in bytes. The two WAFL file systems should be specified in a comma-separated format using the "name" parameter. To determine the space consumed between a Snapshot copy and the Active File System, only the Snapshot copy name needs to be mentioned.
expiry_time	string	The expiry time for the Snapshot copy. This is an optional attribute for POST or PATCH. Snapshot copies with an expiry time set are not allowed to be deleted until the retention time is reached.
logical_size	integer	Size of the logical used file system at the time the Snapshot copy is captured.
name	string	Snapshot copy. Valid in POST or PATCH.
owners	array[string]	
provenance_volume	provenance_volume	
reclaimable_space	integer	Space reclaimed when the Snapshot copy is deleted, in bytes.
size	integer	Size of the active file system at the time the Snapshot copy is captured. The actual size of the Snapshot copy also includes those blocks trapped by other Snapshot copies. On a Snapshot copy deletion, the "size" amount of blocks is the maximum number of blocks available. On a Snapshot copy restore, the "afs-used size" value will match the Snapshot copy "size" value.
snaplock	snaplock	

Name	Type	Description
snaplock_expiry_time	string	SnapLock expiry time for the Snapshot copy, if the Snapshot copy is taken on a SnapLock volume. A Snapshot copy is not allowed to be deleted or renamed until the SnapLock ComplianceClock time goes beyond this retention time. This option can be set during Snapshot copy POST and Snapshot copy PATCH on Snapshot copy locking enabled volumes. This field will no longer be supported in a future release. Use snaplock.expiry_time instead.
snapmirror_label	string	Label for SnapMirror operations
state	string	State of the FlexGroup volume Snapshot copy. In the "pre_conversion" state, the Snapshot copy was created before converting the FlexVol to a FlexGroup volume. A recently created Snapshot copy can be in the "unknown" state while the system is calculating the state. In the "partial" state, the Snapshot copy is consistent but exists only on the subset of the constituents that existed prior to the FlexGroup's expansion. Partial Snapshot copies cannot be used for a Snapshot copy restore operation. A Snapshot copy is in an "invalid" state when it is present in some FlexGroup constituents but not in others. At all other times, a Snapshot copy is valid.
svm	svm	SVM, applies only to SVM-scoped objects.
uuid	string	The UUID of the Snapshot copy in the volume that uniquely identifies the Snapshot copy in that volume.

Name	Type	Description
version_uuid	string	The 128 bit identifier that uniquely identifies a snapshot and its logical data layout.
volume	volume	

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "comment": "string",
  "create_time": "2019-02-04 14:00:00 -0500",
  "delta": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "size_consumed": 0,
    "time_elapsed": "string"
  },
  "expiry_time": "2019-02-04 14:00:00 -0500",
  "logical_size": 1228800,
  "name": "this_snapshot",
  "owners": [
    "string"
  ],
  "provenance_volume": {
    "uuid": "4cd8a442-86d1-11e0-ae1c-125648563413"
  },
  "size": "122880",
  "snaplock": {
    "expired": 1,
    "expiry_time": "2019-02-04 14:00:00 -0500",
    "time_until_expiry": "PT3H27M45S"
  },
  "snaplock_expiry_time": "2019-02-04 14:00:00 -0500",
  "snapmirror_label": "string",
  "state": "string",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
}
```

```

"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"version_uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"volume": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "volumel",
  "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
}
}

```

Error

Status: Default

ONTAP Error Response Code

Error Code	Description
2	An invalid value was entered for one of the fields.
262197	An invalid field was specified in the request.
1638473	Snapshot copy tag not found.
1638503	The Snapshot copy does not exist on the specified volume.
1638600	The Snapshot copy does not exist.
1638615	Bulk operations for Snapshot copies are not supported on multiple SVMs.

Name	Type	Description
error	returned_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	

snapshot_delta

Reports the amount of space consumed between two WAFL file systems, in bytes. The two WAFL file systems should be specified in a comma-separated format using the "name" parameter. To determine the space consumed between a Snapshot copy and the Active File System, only the Snapshot copy name needs to be mentioned.

Name	Type	Description
_links	_links	
size_consumed	integer	Indicates the space that has changed between two specified WAFL file systems, in bytes.
time_elapsed	string	Time elapsed between two specified WAFL file systems.

provenance_volume

Name	Type	Description
uuid	string	UUID for the volume that is used to identify the source volume in a mirroring relationship. When the mirroring relationship is broken, a volume's Instance UUID and Provenance UUID are made identical. An unmirrored volume's Provenance UUID is the same as its Instance UUID. This field is valid for flexible volumes only.

snaplock

Name	Type	Description
expired	boolean	Indicates whether a SnapLock Snapshot copy has expired.
expiry_time	string	SnapLock expiry time for the Snapshot copy, if the Snapshot copy is taken on a SnapLock volume. A Snapshot copy is not allowed to be deleted or renamed until the SnapLock ComplianceClock time goes beyond this retention time. This option can be set during Snapshot copy POST and Snapshot copy PATCH on Snapshot copy locking enabled volumes.
time_until_expiry	string	Indicates the remaining SnapLock expiry time of a locked Snapshot copy, in seconds. This field is set only when the remaining time interval is less than 136 years.

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
_links	_links	
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

volume

Name	Type	Description
_links	_links	
name	string	The name of the volume. This field cannot be specified in a POST or PATCH method.

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 • x-nullable: true

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned_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 volume Snapshot copy

PATCH /storage/volumes/{volume.uuid}/snapshots/{uuid}

Introduced In: 9.6

Updates a Volume Snapshot copy.

Related ONTAP commands

- `snapshot modify`
- `snapshot rename`

Learn more

- [DOC /storage/volumes/{volume.uuid}/snapshots](#)

Parameters

Name	Type	In	Required	Description
volume.uuid	string	path	True	Volume UUID
uuid	string	path	True	Snapshot copy 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	

Name	Type	Description
comment	string	A comment associated with the Snapshot copy. This is an optional attribute for POST or PATCH.
create_time	string	Creation time of the Snapshot copy. It is the volume access time when the Snapshot copy was created.
delta	snapshot_delta	Reports the amount of space consumed between two WAFL file systems, in bytes. The two WAFL file systems should be specified in a comma-separated format using the "name" parameter. To determine the space consumed between a Snapshot copy and the Active File System, only the Snapshot copy name needs to be mentioned.
expiry_time	string	The expiry time for the Snapshot copy. This is an optional attribute for POST or PATCH. Snapshot copies with an expiry time set are not allowed to be deleted until the retention time is reached.
logical_size	integer	Size of the logical used file system at the time the Snapshot copy is captured.
name	string	Snapshot copy. Valid in POST or PATCH.
owners	array[string]	
provenance_volume	provenance_volume	
reclaimable_space	integer	Space reclaimed when the Snapshot copy is deleted, in bytes.

Name	Type	Description
size	integer	Size of the active file system at the time the Snapshot copy is captured. The actual size of the Snapshot copy also includes those blocks trapped by other Snapshot copies. On a Snapshot copy deletion, the "size" amount of blocks is the maximum number of blocks available. On a Snapshot copy restore, the "afs-used size" value will match the Snapshot copy "size" value.
snaplock	snaplock	
snaplock_expiry_time	string	SnapLock expiry time for the Snapshot copy, if the Snapshot copy is taken on a SnapLock volume. A Snapshot copy is not allowed to be deleted or renamed until the SnapLock ComplianceClock time goes beyond this retention time. This option can be set during Snapshot copy POST and Snapshot copy PATCH on Snapshot copy locking enabled volumes. This field will no longer be supported in a future release. Use <code>snaplock.expiry_time</code> instead.
snapmirror_label	string	Label for SnapMirror operations

Name	Type	Description
state	string	State of the FlexGroup volume Snapshot copy. In the "pre_conversion" state, the Snapshot copy was created before converting the FlexVol to a FlexGroup volume. A recently created Snapshot copy can be in the "unknown" state while the system is calculating the state. In the "partial" state, the Snapshot copy is consistent but exists only on the subset of the constituents that existed prior to the FlexGroup's expansion. Partial Snapshot copies cannot be used for a Snapshot copy restore operation. A Snapshot copy is in an "invalid" state when it is present in some FlexGroup constituents but not in others. At all other times, a Snapshot copy is valid.
svm	svm	SVM, applies only to SVM-scoped objects.
uuid	string	The UUID of the Snapshot copy in the volume that uniquely identifies the Snapshot copy in that volume.
version_uuid	string	The 128 bit identifier that uniquely identifies a snapshot and its logical data layout.
volume	volume	

Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "comment": "string",
  "create_time": "2019-02-04 14:00:00 -0500",
  "delta": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "size_consumed": 0,
    "time_elapsed": "string"
  },
  "expiry_time": "2019-02-04 14:00:00 -0500",
  "logical_size": 1228800,
  "name": "this_snapshot",
  "owners": [
    "string"
  ],
  "provenance_volume": {
    "uuid": "4cd8a442-86d1-11e0-ae1c-125648563413"
  },
  "size": "122880",
  "snaplock": {
    "expired": 1,
    "expiry_time": "2019-02-04 14:00:00 -0500",
    "time_until_expiry": "PT3H27M45S"
  },
  "snaplock_expiry_time": "2019-02-04 14:00:00 -0500",
  "snapmirror_label": "string",
  "state": "string",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
}
```

```
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"version_uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"volume": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "volumel",
  "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
}
}
```

Response

Status: 200, Ok

Name	Type	Description
job	job_link	

Example response

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

Response

Status: 202, Accepted

Error

Status: Default

ONTAP Error Response Code

Error Code	Description
524508	The Snapshot copy was not renamed because the name entered is not valid.
542797	The specified file or Snapshot copy does not exist.
1638455	Failed to set comment for Snapshot copy.
1638476	You cannot rename a Snapshot copy created for use as a reference Snapshot copy by other jobs.
1638477	User-created Snapshot copy names cannot begin with the specified prefix.
1638518	The specified Snapshot copy name is invalid.
1638522	Snapshot copies can only be renamed on read/write (RW) volumes.
1638523	Failed to set the specified SnapMirror label for the Snapshot copy.
1638524	Adding SnapMirror labels is not allowed in a mixed version cluster.
1638539	Cannot determine the status of the Snapshot copy rename operation for the specified volume.
1638554	Failed to set expiry time for the Snapshot copy.
1638600	The Snapshot copy does not exist.

Name	Type	Description
error	returned_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	

snapshot_delta

Reports the amount of space consumed between two WAFL file systems, in bytes. The two WAFL file systems should be specified in a comma-separated format using the "name" parameter. To determine the space consumed between a Snapshot copy and the Active File System, only the Snapshot copy name needs to be mentioned.

Name	Type	Description
_links	_links	
size_consumed	integer	Indicates the space that has changed between two specified WAFL file systems, in bytes.
time_elapsed	string	Time elapsed between two specified WAFL file systems.

provenance_volume

Name	Type	Description
uuid	string	UUID for the volume that is used to identify the source volume in a mirroring relationship. When the mirroring relationship is broken, a volume's Instance UUID and Provenance UUID are made identical. An unmirrored volume's Provenance UUID is the same as its Instance UUID. This field is valid for flexible volumes only.

snaplock

Name	Type	Description
expired	boolean	Indicates whether a SnapLock Snapshot copy has expired.
expiry_time	string	SnapLock expiry time for the Snapshot copy, if the Snapshot copy is taken on a SnapLock volume. A Snapshot copy is not allowed to be deleted or renamed until the SnapLock ComplianceClock time goes beyond this retention time. This option can be set during Snapshot copy POST and Snapshot copy PATCH on Snapshot copy locking enabled volumes.
time_until_expiry	string	Indicates the remaining SnapLock expiry time of a locked Snapshot copy, in seconds. This field is set only when the remaining time interval is less than 136 years.

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
_links	_links	
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

volume

Name	Type	Description
_links	_links	
name	string	The name of the volume. This field cannot be specified in a POST or PATCH method.

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 • x-nullable: true

snapshot

The Snapshot copy object represents a point in time Snapshot copy of a volume.

Name	Type	Description
_links	_links	
comment	string	A comment associated with the Snapshot copy. This is an optional attribute for POST or PATCH.
create_time	string	Creation time of the Snapshot copy. It is the volume access time when the Snapshot copy was created.
delta	snapshot_delta	Reports the amount of space consumed between two WAFL file systems, in bytes. The two WAFL file systems should be specified in a comma-separated format using the "name" parameter. To determine the space consumed between a Snapshot copy and the Active File System, only the Snapshot copy name needs to be mentioned.
expiry_time	string	The expiry time for the Snapshot copy. This is an optional attribute for POST or PATCH. Snapshot copies with an expiry time set are not allowed to be deleted until the retention time is reached.

Name	Type	Description
logical_size	integer	Size of the logical used file system at the time the Snapshot copy is captured.
name	string	Snapshot copy. Valid in POST or PATCH.
owners	array[string]	
provenance_volume	provenance_volume	
reclaimable_space	integer	Space reclaimed when the Snapshot copy is deleted, in bytes.
size	integer	Size of the active file system at the time the Snapshot copy is captured. The actual size of the Snapshot copy also includes those blocks trapped by other Snapshot copies. On a Snapshot copy deletion, the "size" amount of blocks is the maximum number of blocks available. On a Snapshot copy restore, the "afs-used size" value will match the Snapshot copy "size" value.
snaplock	snaplock	
snaplock_expiry_time	string	SnapLock expiry time for the Snapshot copy, if the Snapshot copy is taken on a SnapLock volume. A Snapshot copy is not allowed to be deleted or renamed until the SnapLock ComplianceClock time goes beyond this retention time. This option can be set during Snapshot copy POST and Snapshot copy PATCH on Snapshot copy locking enabled volumes. This field will no longer be supported in a future release. Use <code>snaplock.expiry_time</code> instead.
snapmirror_label	string	Label for SnapMirror operations

Name	Type	Description
state	string	State of the FlexGroup volume Snapshot copy. In the "pre_conversion" state, the Snapshot copy was created before converting the FlexVol to a FlexGroup volume. A recently created Snapshot copy can be in the "unknown" state while the system is calculating the state. In the "partial" state, the Snapshot copy is consistent but exists only on the subset of the constituents that existed prior to the FlexGroup's expansion. Partial Snapshot copies cannot be used for a Snapshot copy restore operation. A Snapshot copy is in an "invalid" state when it is present in some FlexGroup constituents but not in others. At all other times, a Snapshot copy is valid.
svm	svm	SVM, applies only to SVM-scoped objects.
uuid	string	The UUID of the Snapshot copy in the volume that uniquely identifies the Snapshot copy in that volume.
version_uuid	string	The 128 bit identifier that uniquely identifies a snapshot and its logical data layout.
volume	volume	

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

returned_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.

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