



Manage S3 buckets

REST API reference

NetApp

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Manage S3 buckets

Protocols S3 buckets endpoint overview

Overview

An S3 bucket is a container of objects. Each bucket defines an object namespace. S3 server requests specify objects using a bucket-name and object-name pair. An object consists of data, along with optional metadata and access controls, that is accessible using a name. An object resides within a bucket. There can be more than one bucket in an S3 server. Buckets that are created for the server are associated with an S3 user that is created on the S3 server.

Examples

Retrieving all fields for all S3 buckets of a cluster

```
# The API:  
/api/protocols/s3/buckets  
  
# The call:  
curl -X GET "https://<mgmt-  
ip>/api/protocols/s3/buckets?fields=**&return_records=true" -H "accept:  
application/json"  
  
# The response:  
{  
  "records": [  
    {  
      "svm": {  
        "uuid": "12f3ba4c-7ae0-11e9-8c06-0050568ea123",  
        "name": "vs1"  
      },  
      "uuid": "527812ab-7c6d-11e9-97e8-0050568ea123",  
      "name": "bucket-2",  
      "volume": {  
        "name": "fg_oss_1558514455",  
        "uuid": "51276f5f-7c6d-11e9-97e8-0050568ea123"  
      },  
      "size": 209715200,  
      "logical_used_size": 157286400,  
      "encryption": {  
        "enabled": false  
      },  
      "comment": "S3 bucket.",  
      "qos_policy": {  
        "min_throughput_iops": 0,  
        "max_throughput_iops": 0  
      }  
    }  
  ]  
}
```

```

        "min_throughput_mbps": 0,
        "max_throughput_iops": 1000,
        "max_throughput_mbps": 0,
        "uuid": "39ac471f-ff35-11e9-b0f9-005056a7ab52",
        "name": "vs0_auto_gen_policy_39a9522f_ff35_11e9_b0f9_005056a7ab52"
    }
},
{
    "svm": {
        "uuid": "12f3ba4c-7ae0-11e9-8c06-0050568ea123",
        "name": "vs1"
    },
    "uuid": "a8234aec-7e06-11e9-97e8-0050568ea123",
    "name": "bucket-1",
    "volume": {
        "name": "fg_oss_1558690256",
        "uuid": "a36a1ea7-7e06-11e9-97e8-0050568ea123"
    },
    "size": 1677721600,
    "logical_used_size": 0,
    "encryption": {
        "enabled": false
    },
    "comment": "bucket2",
    "qos_policy": {
        "min_throughput_iops": 0,
        "min_throughput_mbps": 0,
        "max_throughput_iops": 1000,
        "max_throughput_mbps": 0,
        "uuid": "39ac471f-ff35-11e9-b0f9-005056a7ab52",
        "name": "vs0_auto_gen_policy_39a9522f_ff35_11e9_b0f9_005056a7ab52"
    }
},
{
    "svm": {
        "uuid": "ee30eb2d-7ae1-11e9-8abe-0050568ea123",
        "name": "vs2"
    },
    "uuid": "19283b75-7ae2-11e9-8abe-0050568ea123",
    "name": "bucket-3",
    "volume": {
        "name": "fg_oss_1558690257",
        "uuid": "a46a1ea7-7e06-11e9-97e8-0050568ea123"
    },
    "size": 1677721600,
    "logical_used_size": 1075838976,

```

```

"encryption": {
    "enabled": false
},
"comment": "bucket3",
"qos_policy": {
    "min_throughput_iops": 0,
    "min_throughput_mbps": 0,
    "max_throughput_iops": 1000,
    "max_throughput_mbps": 0,
    "uuid": "39ac471f-ff35-11e9-b0f9-005056a7ab52",
    "name": "vs0_auto_gen_policy_39a9522f_ff35_11e9_b0f9_005056a7ab52"
},
"policy": {
    "statements": [
        {
            "effect": "allow",
            "actions": [
                "*"
            ],
            "principals": [
                "Alice"
            ],
            "resources": [
                "bucket-3",
                "bucket-3/*"
            ],
            "sid": "fullAccessForAliceToBucket",
            "conditions": [
                {
                    "operator": "ip_address",
                    "source_ips": [
                        "1.1.1.1/10"
                    ]
                }
            ]
        }
    ],
    "num_records": 3
}

```

Retrieving all S3 buckets of a cluster ordered by size

```

# The API:
/api/protocols/s3/buckets

# The call:
curl -X GET "https://<mgmt-
ip>/api/protocols/s3/buckets?return_records=true&order_by=size" -H
"accept: application/json"

# The response:
{
  "records": [
    {
      "svm": {
        "uuid": "12f3ba4c-7ae0-11e9-8c06-0050568ea123",
        "name": "vs1"
      },
      "uuid": "754389d0-7e13-11e9-bfdc-0050568ea123",
      "name": "bb1",
      "size": 83886080
    },
    {
      "svm": {
        "uuid": "ee30eb2d-7ae1-11e9-8abe-0050568ea123",
        "name": "vs2"
      },
      "uuid": "19283b75-7ae2-11e9-8abe-0050568ea123",
      "name": "bb2",
      "size": 83886080
    },
    {
      "svm": {
        "uuid": "12f3ba4c-7ae0-11e9-8c06-0050568ea123",
        "name": "vs1"
      },
      "uuid": "a8234aec-7e06-11e9-97e8-0050568ea123",
      "name": "bucket-1",
      "size": 1677721600
    }
  ],
  "num_records": 3
}

```

Retrieving all S3 buckets of a cluster with name "bb2"

```

# The API:
/api/protocols/s3/buckets

# The call:
curl -X GET "https://<mgmt-
ip>/api/protocols/s3/buckets?name=bb2&return_records=true" -H "accept:
application/json"

# The response:
{
  "records": [
    {
      "svm": {
        "uuid": "12f3ba4c-7ae0-11e9-8c06-0050568ea123",
        "name": "vs1"
      },
      "uuid": "087d940e-7e15-11e9-bfdc-0050568ea123",
      "name": "bb2"
    },
    {
      "svm": {
        "uuid": "ee30eb2d-7ae1-11e9-8abe-0050568ea123",
        "name": "vs2"
      },
      "uuid": "19283b75-7ae2-11e9-8abe-0050568ea123",
      "name": "bb2"
    }
  ],
  "num_records": 2
}

```

Retrieving the specified bucket associated with an SVM

```

# The API:
/api/protocols/s3/buckets/{svm.uuid}/{uuid}

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/s3/buckets/12f3ba4c-7ae0-
11e9-8c06-0050568ea123/527812ab-7c6d-11e9-97e8-0050568ea123" -H "accept:
application/json"

# The response:
{
  "svm": {
    "uuid": "12f3ba4c-7ae0-11e9-8c06-0050568ea123",
    "name": "vs1"
  },
  "uuid": "527812ab-7c6d-11e9-97e8-0050568ea123",
  "name": "bucket-2",
  "volume": {
    "name": "fg_oss_1558514455",
    "uuid": "51276f5f-7c6d-11e9-97e8-0050568ea123"
  },
  "size": 209715200,
  "logical_used_size": 157286400,
  "encryption": {
    "enabled": false
  },
  "comment": "S3 bucket.",
  "qos_policy": {
    "min_throughput_iops": 0,
    "min_throughput_mbps": 0,
    "max_throughput_iops": 1000,
    "max_throughput_mbps": 0,
    "uuid": "39ac471f-ff35-11e9-b0f9-005056a7ab52",
    "name": "vs0_auto_gen_policy_39a9522f_ff35_11e9_b0f9_005056a7ab52"
  }
}

```

Creating an S3 bucket for an SVM

```

# The API:
/api/protocols/s3/buckets

# The call:
curl -iku admin:netapp1! -X POST "https://<mgmt-
ip>/api/protocols/s3/buckets?return_timeout=0&return_records=true" -H
"accept: application/json" -H "Content-Type: application/json" -d "{
\"aggregates\": [ { \"name\": \"aggr5\", \"uuid\": \"12f3ba4c-7ae0-11e9-
8c06-0050568ea123\" } ], \"comment\": \"S3 bucket.\",
\"constituents_per_aggregate\": 4, \"name\": \"bucket-3\", \"svm\": {
\"name\": \"vs1\" } }"

# The response:
HTTP/1.1 202 Accepted
Date: Fri, 24 May 2019 11:22:14 GMT
Server: libzapid-httdp
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Location: /api/protocols/s3/buckets/259b4e46-2d33-11ea-9145-
005056bbbec1/?name=bucket-3
Content-Length: 353
Content-Type: application/json
{
  "num_records": 1,
  "records": [
    {
      "name": "bucket-3",
      "comment": "S3 bucket."
    }
  ],
  "job": {
    "uuid": "2e880171-7e16-11e9-bfdc-0050568ea123",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/2e880171-7e16-11e9-bfdc-0050568ea123"
      }
    }
  }
}

```

Creating an S3 bucket along with QoS policy for an SVM

```

# The API:
/api/protocols/s3/buckets

# The call:
curl -iku admin:netapp1! -X POST "https://<mgmt-
ip>/api/protocols/s3/buckets?return_timeout=0&return_records=true" -H
"accept: application/json" -H "Content-Type: application/json" -d "{
\"comment\": \"S3 bucket.\", \"name\": \"bucket-3\", \"svm\": { \"name\":
\"vs1\" }, \"qos_policy\": { \"min_throughput_iops\": 0,
\"min_throughput_mbps\": 0, \"max_throughput_iops\": 1000000,
\"max_throughput_mbps\": 900000, \"uuid\": \"02d07a93-6177-11ea-b241-
000c293feac8\", \"name\": \"vs0_auto_gen_policy_02cfa02a_6177_11ea_b241_000c293feac8\" } }"

# The response:
HTTP/1.1 202 Accepted
Date: Fri, 24 May 2019 11:22:14 GMT
Server: libzapid-httpp
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Location: /api/protocols/s3/buckets/259b4e46-2d33-11ea-9145-
005056bbb1/?name=bucket-3
Content-Length: 353
Content-Type: application/json
{
  "num_records": 1,
  "records": [
    {
      "name": "bucket-3",
      "comment": "S3 bucket."
    }
  ],
  "job": {
    "uuid": "2e880171-7e16-11e9-bfdc-0050568ea123",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/2e880171-7e16-11e9-bfdc-0050568ea123"
      }
    }
  }
}

```

Creating an S3 bucket along with policies and conditions for an SVM

```

# The API:
/api/protocols/s3/buckets

# The call:
curl -iku admin:netapp1! -X POST "https://<mgmt-
ip>/api/protocols/s3/buckets?return_timeout=0&return_records=true" -H
"accept: application/json" -H "Content-Type: application/json" -d "{
\"aggregates\": [ { \"name\": \"aggr5\", \"uuid\": \"12f3ba4c-7ae0-11e9-
8c06-0050568ea123\" } ], \"comment\": \"S3 bucket.\",
\"constituents_per_aggregate\": 4, \"name\": \"bucket-3\", \"policy\": {
\"statements\": [ { \"actions\": [ \"GetObject\" ], \"conditions\": [ {
\"operator\": \"ip_address\", \"source_ips\": [ \"1.1.1.1/23\",
\"1.2.2.2/20\" ] } ], \"effect\": \"allow\", \"resources\": [ \"bucket-
3/policies/examples/*\" ], \"sid\": \"AccessToGetObjectForAllUsersofSVM\",
{ \"actions\": [ \"*Object\" ], \"effect\": \"deny\", \"principals\": [
\"mike\" ], \"resources\": [ \"bucket-3/policy-docs/*\" ], \"bucket-
3/confidential-*\" ], \"sid\": \"DenyAccessToObjectForMike\" }, {
\"actions\": [ \"GetObject\" ], \"effect\": \"allow\", \"principals\": [
\"*\" ], \"resources\": [ \"bucket-3/readme\" ], \"sid\": \"AnonymousAccessToObjectForUsers\" } ] }, \"svm\": { \"uuid\": \"259b4e46-2d33-11ea-9145-005056bbb1c1\" } }

# The response:
HTTP/1.1 202 Accepted
Date: Fri, 24 May 2019 11:22:14 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Location: /api/protocols/s3/buckets/259b4e46-2d33-11ea-9145-
005056bbb1c1/?name=bucket-3
Content-Length: 353
Content-Type: application/json
{
  "num_records": 1,
  "records": [
    {
      "name": "bucket-3",
      "comment": "S3 bucket."
    }
  ],
  "job": {
    "uuid": "2e880171-7e16-11e9-bfdc-0050568ea123",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/2e880171-7e16-11e9-bfdc-0050568ea123"
      }
    }
  }
}

```

```
    }
}
}
```

Creating an S3 bucket along with a bucket lifecycle management rule for an SVM

```
# The API:
/api/protocols/s3/buckets

# The call:
curl -iku admin:netapp1! -X POST "https://<mgmt-
ip>/api/protocols/s3/buckets?return_timeout=0&return_records=true" -H
"accept: application/json" -H "Content-Type: application/json" -d "{
\"aggregates\": [ { \"name\": \"aggr5\", \"uuid\": \"12f3ba4c-7ae0-11e9-
8c06-0050568ea123\" } ], \"comment\": \"S3 bucket.\",
\"constituents_per_aggregate\": 4, \"name\": \"bucket-4\",
\"lifecycle_management\": { \"rules\": [ { \"name\": \"rule1\",
\"expiration\": { \"object_age_days\": \"1000\" },
\"abort_incomplete_multipart_upload\": { \"after_initiation_days\": 200
}, \"object_filter\": { \"prefix\": \"obj1*/\", \"size_greater_than\": \"1000\" }
}, { \"name\": \"rule2\", \"object_filter\": {
\"size_greater_than\": \"50\" }, \"expiration\": { \"object_age_days\": \"5000\" }
} ] } }"

# The response:
HTTP/1.1 202 Accepted
Date: Fri, 18 April 2022 11:22:14 GMT
Server: libzapid-httdp
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Location: /api/protocols/s3/buckets/259b4e46-2d33-11ea-9145-
005056bbbcc1/?name=bucket-4
Content-Length: 353
Content-Type: application/json
{
  "num_records": 1,
  "records": [
    {
      "name": "bucket-4",
      "comment": "S3 bucket."
    }
  ],
  "job": {
    "uuid": "2e880171-7e16-11e9-bfdc-0050568ea123",
    "_links": {

```

```

    "self": {
      "href": "/api/cluster/jobs/2e880171-7e16-11e9-bfdc-0050568ea123"
    }
  }
}

### Updating an S3 bucket for an SVM

```

The API:

/api/protocols/s3/buckets/{svm.uuid}/{uuid}

The call:

```
curl -X PATCH "https://<mgmt-ip>/api/protocols/s3/buckets/259b4e46-2d33-11ea-9145-005056bbbec1/376a2efd-2d4d-11ea-9c30-005056bb883a?return_records=true" -H "accept: application/json?return_records=true" -H "Content-Type: application/json" -d "{ \"comment\": \"Bucket modified.\", \"size\": 111111111111, \"qos_policy\": { \"min_throughput_iops\": 0, \"min_throughput_mbps\": 0, \"max_throughput_iops\": 1000000, \"max_throughput_mbps\": 900000, \"uuid\": \"02d07a93-6177-11ea-b241-000c293feac8\", \"name\": \"vs0_auto_gen_policy_02cfa02a_6177_11ea_b241_000c293feac8\" }}" </mgmt-ip>
```

The response:

HTTP/1.1 202 Accepted Date: Fri, 24 May 2019 11:32:27 GMT Server: libzapid-httd X-Content-Type-Options: nosniff Cache-Control: no-cache,no-store,must-revalidate Content-Length: 189 Content-Type: application/json { "job": { "uuid": "9beafabb-7e17-11e9-bfdc-0050568ea123", "_links": { "self": { "href": "/api/cluster/jobs/9beafabb-7e17-11e9-bfdc-0050568ea123" } } } }

```

### Updating an S3 bucket policy for an SVM

```

The API:

/api/protocols/s3/buckets/{svm.uuid}/{uuid}

The call:

```
curl -X PATCH "https://<mgmt-ip>/api/protocols/s3/buckets/259b4e46-2d33-11ea-9145-005056bbbec1/376a2efd-2d4d-11ea-9c30-005056bb883a?return_records=true" -H "accept: application/json" -H "Content-Type: application/json" -d "{ \"policy\": { \"statements\": [ { \"actions\": [ \"<strong>\" ], \"conditions\": [ { \"operator\": \"ip_address\", \"source_ips\": [ \"1.1.1.5/23\" ] } ], \"effect\": \"allow\", \"resources\": [ \"</strong>\" ], \"sid\": \"fullAccessForAllPrincipalsToBucket\" } ] } }" </mgmt-ip>
```

The response:

HTTP/1.1 202 Accepted Date: Fri, 24 May 2019 11:32:27 GMT Server: libzapid-httd X-Content-Type-Options:

```
nosniff Cache-Control: no-cache,no-store,must-revalidate Content-Length: 189 Content-Type: application/json { "job": { "uuid": "9beafabb-7e17-11e9-bfdc-0050568ea123", "_links": { "self": { "href": "/api/cluster/jobs/9beafabb-7e17-11e9-bfdc-0050568ea123" } } } }
```

```
### Deleting an S3 bucket for a specified SVM
```

The API:

/api/protocols/s3/buckets/{svm.uuid}/{uuid}

The call:

```
curl -iku admin:netapp1! -X DELETE "https://<mgmt-ip>/api/protocols/s3/buckets/259b4e46-2d33-11ea-9145-005056bbb1c1/98528221-2d52-11ea-892e-005056bbb1c1?return_records=true" -H "accept: application/json"</mgmt-ip>
```

The response:

```
HTTP/1.1 202 Accepted Date: Fri, 24 May 2019 11:40:17 GMT Server: libzapid-htpd X-Content-Type-Options: nosniff Cache-Control: no-cache,no-store,must-revalidate Content-Length: 189 Content-Type: application/json { "job": { "uuid": "b3af4a54-7e18-11e9-bfdc-0050568ea123", "_links": { "self": { "href": "/api/cluster/jobs/b3af4a54-7e18-11e9-bfdc-0050568ea123" } } } }
```

```
[ [IDf603d4aafb9daf5d6fcce9168bb875f9] ]  
= Retrieve all S3 buckets for all SVMs  
  
[.api-doc-operation .api-doc-operation-get]#GET# [.api-doc-code-block]#`/protocols/s3/buckets`#  
  
*Introduced In:* 9.7  
  
Retrieves all S3 buckets for all SVMs. Note that in order to retrieve S3 bucket policy conditions, the 'fields' option should be set to '***'.  
  
== Related ONTAP commands  
  
* `vserver object-store-server bucket show`  
* `vserver object-store-server bucket policy statement show`  
* `vserver object-store-server bucket policy-statement-condition show`  
* `vserver object-store-server bucket lifecycle-management-rule show`  
  
== Learn more  
  
* xref:{relative_path}protocols_s3_buckets_endpoint_overview.html [DOC /protocols/s3/buckets]
```

```
== Parameters

[cols=5*,options=header]
| ===

| Name
| Type
| In
| Required
| Description

| qos_policy.name
| string
| query
| False
a|Filter by qos_policy.name

* Introduced in: 9.8

| qos_policy.min_throughput_mbps
| integer
| query
| False
a|Filter by qos_policy.min_throughput_mbps

* Introduced in: 9.8

| qos_policy.min_throughput_iops
| integer
| query
| False
a|Filter by qos_policy.min_throughput_iops

* Introduced in: 9.8

| qos_policy.max_throughput_mbps
| integer
| query
| False
a|Filter by qos_policy.max_throughput_mbps

* Introduced in: 9.8
```

```
|qos_policy.uuid
|string
|query
|False
a|Filter by qos_policy.uuid
```

* Introduced in: 9.8

```
|qos_policy.max_throughput_iops
|integer
|query
|False
a|Filter by qos_policy.max_throughput_iops
```

* Introduced in: 9.8

```
|nas_path
|string
|query
|False
a|Filter by nas_path
```

* Introduced in: 9.12

```
|uuid
|string
|query
|False
a|Filter by uuid
```

```
|lifecycle_management.rules.expiration.expired_object_delete_marker
|boolean
|query
|False
a|Filter by
lifecycle_management.rules.expiration.expired_object_delete_marker
```

* Introduced in: 9.13

```
|lifecycle_management.rules.expiration.object_age_days
|integer
```

```
|query
|False
a|Filter by lifecycle_management.rules.expiration.object_age_days

* Introduced in: 9.13

|lifecycle_management.rules.expiration.object_expiry_date
|string
|query
|False
a|Filter by lifecycle_management.rules.expiration.object_expiry_date

* Introduced in: 9.13

|lifecycle_management.rules.object_filter.size_less_than
|integer
|query
|False
a|Filter by lifecycle_management.rules.object_filter.size_less_than

* Introduced in: 9.13

|lifecycle_management.rules.object_filter.tags
|string
|query
|False
a|Filter by lifecycle_management.rules.object_filter.tags

* Introduced in: 9.13

|lifecycle_management.rules.object_filter.size_greater_than
|integer
|query
|False
a|Filter by lifecycle_management.rules.object_filter.size_greater_than

* Introduced in: 9.13

|lifecycle_management.rules.object_filter.prefix
|string
|query
|False
```

```
a|Filter by lifecycle_management.rules.object_filter.prefix
```

* Introduced in: 9.13

```
|lifecycle_management.rules.name
```

```
|string
```

```
|query
```

```
|False
```

```
a|Filter by lifecycle_management.rules.name
```

* Introduced in: 9.13

```
|lifecycle_management.rules.non_current_version_expiration.non_current_day
```

```
s
```

```
|integer
```

```
|query
```

```
|False
```

```
a|Filter by
```

```
lifecycle_management.rules.non_current_version_expiration.non_current_days
```

* Introduced in: 9.13

```
|lifecycle_management.rules.non_current_version_expiration.new_non_current_versions
```

```
|integer
```

```
|query
```

```
|False
```

```
a|Filter by
```

```
lifecycle_management.rules.non_current_version_expiration.new_non_current_versions
```

* Introduced in: 9.13

```
|lifecycle_management.rules.abort_incomplete_multipart_upload.after_initiation_days
```

```
|integer
```

```
|query
```

```
|False
```

```
a|Filter by
```

```
lifecycle_management.rules.abort_incomplete_multipart_upload.after_initiation_days
```

* Introduced in: 9.13

```
|lifecycle_management.rules.enabled
|boolean
|query
|False
a|Filter by lifecycle_management.rules.enabled
```

* Introduced in: 9.13

```
|role
|string
|query
|False
a|Filter by role
```

* Introduced in: 9.10

```
|name
|string
|query
|False
a|Filter by name
```

* maxLength: 63
* minLength: 3

```
|policy.statements.sid
|string
|query
|False
a|Filter by policy.statements.sid
```

* Introduced in: 9.8

```
|policy.statements.principals
|string
|query
|False
a|Filter by policy.statements.principals
```

* Introduced in: 9.8

```
|policy.statements.conditions.usernames
|string
|query
|False
a|Filter by policy.statements.conditions.usernames
```

* Introduced in: 9.8

```
|policy.statements.conditions.max_keys
|integer
|query
|False
a|Filter by policy.statements.conditions.max_keys
```

* Introduced in: 9.8

```
|policy.statements.conditions.delimiters
|string
|query
|False
a|Filter by policy.statements.conditions.delimiters
```

* Introduced in: 9.8

```
|policy.statements.conditions.prefixes
|string
|query
|False
a|Filter by policy.statements.conditions.prefixes
```

* Introduced in: 9.8

```
|policy.statements.conditions.source_ips
|string
|query
|False
a|Filter by policy.statements.conditions.source_ips
```

* Introduced in: 9.8

```
|policy.statements.conditions.operator
```

```
|string
|query
|False
a|Filter by policy.statements.conditions.operator
```

* Introduced in: 9.8

```
|policy.statements.effect
|string
|query
|False
a|Filter by policy.statements.effect
```

* Introduced in: 9.8

```
|policy.statements.actions
|string
|query
|False
a|Filter by policy.statements.actions
```

* Introduced in: 9.8

```
|policy.statements.resources
|string
|query
|False
a|Filter by policy.statements.resources
```

* Introduced in: 9.8

```
|type
|string
|query
|False
a|Filter by type
```

* Introduced in: 9.12

```
|volume.uuid
|string
|query
```

```
|False
a|Filter by volume.uuid

|volume.name
|string
|query
|False
a|Filter by volume.name

|comment
|string
|query
|False
a|Filter by comment

* maxLength: 256
* minLength: 0

|versioning_state
|string
|query
|False
a|Filter by versioning_state

* Introduced in: 9.11

|audit_event_selector.permission
|string
|query
|False
a|Filter by audit_event_selector.permission

* Introduced in: 9.10

|audit_event_selector.access
|string
|query
|False
a|Filter by audit_event_selector.access

* Introduced in: 9.10
```

```
|protection_status.destination.is_ontap
|boolean
|query
|False
a|Filter by protection_status.destination.is_ontap
```

* Introduced in: 9.10

```
|protection_status.destination.is_external_cloud
|boolean
|query
|False
a|Filter by protection_status.destination.is_external_cloud
```

* Introduced in: 9.12

```
|protection_status.destination.is_cloud
|boolean
|query
|False
a|Filter by protection_status.destination.is_cloud
```

* Introduced in: 9.10

```
|protection_status.is_protected
|boolean
|query
|False
a|Filter by protection_status.is_protected
```

* Introduced in: 9.10

```
|encryption.enabled
|boolean
|query
|False
a|Filter by encryption.enabled
```

```
|svm.uuid
|string
|query
```

```
|False
a|Filter by svm.uuid

|svm.name
|string
|query
|False
a|Filter by svm.name

|logical_used_size
|integer
|query
|False
a|Filter by logical_used_size

|size
|integer
|query
|False
a|Filter by size

* Max value: 70368744177664
* Min value: 83886080

|allowed
|boolean
|query
|False
a|Filter by allowed

* Introduced in: 9.12

|fields
|array[string]
|query
|False
a|Specify the fields to return.

|max_records
|integer
|query
```

```

|False
a|Limit the number of records returned.

|return_records
|boolean
|query
|False
a|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
a|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.

* Max value: 120
* Min value: 0
* Default value: 1

|order_by
|array[string]
|query
|False
a|Order results by specified fields and optional [asc|desc] direction.
Default direction is 'asc' for ascending.

| ===

== Response

```

Status: 200, Ok

```

[cols=3*,options=header]
| ===
|Name
|Type
|Description

```

```

|_links
|link:#collection_links[collection_links]
a|


|num_records
|integer
a|Number of records


|records
|array[link:#s3_bucket[s3_bucket]]
a|


|====

.Example response
[%collapsible%closed]
=====
[source, json, subs=+macros]
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "audit_event_selector": {
        "access": "string",
        "permission": "string"
      },
      "comment": "S3 bucket.",
      "lifecycle_management": {
        "rules": [
          {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            ...
          }
        ]
      }
    }
  ]
}

```

```

"abort_incomplete_multipart_upload": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    }
},
"expiration": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "object_expiry_date": "string"
},
"name": "string",
"non_current_version_expiration": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    }
},
"object_filter": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "prefix": "/logs",
    "size_greater_than": 10485760,
    "size_less_than": 10240,
    "tags": [
        "project1=projA",
        "project2=projB"
    ]
}
},
"logical_used_size": 0,
"name": "bucket1",
"nas_path": "/",
"policy": {
    "statements": [
        {

```

```

"actions": [
    "GetObject",
    "PutObject",
    "DeleteObject",
    "ListBucket"
],
"conditions": [
    {
        "delimiters": [
            "/"
        ],
        "max_keys": [
            1000
        ],
        "operator": "ip_address",
        "prefixes": [
            "pref"
        ],
        "source_ips": [
            "1.1.1.1",
            "1.2.2.0/24"
        ],
        "usernames": [
            "user1"
        ]
    }
],
"effect": "allow",
" principals": [
    "user1",
    "group/grp1"
],
"resources": [
    "bucket1",
    "bucket1/*"
],
"sid": "FullAccessToUser1"
}
]
},
"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"
},
"role": "string",
"size": 1677721600,
"svm": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"type": "s3",
"uuid": "414b29a1-3b26-11e9-bd58-0050568ea055",
"versioning_state": "enabled",
"volume": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "volume1",
    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
}
}
]
}
=====

== Error

```

Status: Default, Error

```

[cols=3*,options=header]
|===
|Name
|Type
|Description

```

```

|error
|link:#error[error]
a|
|====

.Example error
[%collapsible%closed]
=====

[source, json, subs=+macros]
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
=====

== Definitions

[.api-def-first-level]
.See Definitions
[%collapsible%closed]
//Start collapsible Definitions block
=====

[#href]
[.api-collapsible-fifth-title]
href

[cols=3*, options=header]
|====
| Name
| Type
| Description

| href
| string
a|

```

```
| ====

[#collection_links]
[.api-collapsible-fifth-title]
collection_links

[cols=3*, options=header]
| ====
| Name
| Type
| Description

| next
| link:#href[href]
a| 

| self
| link:#href[href]
a| 

| ====

[_links]
[.api-collapsible-fifth-title]
_links

[cols=3*, options=header]
| ====
| Name
| Type
| Description

| self
| link:#href[href]
a| 

| ====

[aggregates]
[.api-collapsible-fifth-title]
aggregates

[cols=3*, options=header]
| ====
|
```

```
| Name
| Type
| Description

| _links
| link:#_links[_links]
a|
```

```
| name
| string
a|
```

```
| uuid
| string
a|
```

```
| ===
```

```
[#audit_event_selector]
[.api-collapsible-fifth-title]
audit_event_selector
```

Audit event selector allows you to specify access and permission types to audit.

```
[cols=3*,options=header]
```

```
| ===
```

```
| Name
| Type
| Description
```

```
| access
| string
a| Specifies read and write access types.
```

```
| permission
| string
a| Specifies allow and deny permission types.
```

```
| ===
```

```
[#encryption]
```

```
[ .api-collapsible-fifth-title]
encryption

[cols=3*,options=header]
| ====
| Name
| Type
| Description

| enabled
| boolean
a| Specifies whether encryption is enabled on the bucket. By default, encryption is disabled on a bucket.
```

```
| ====
|
```

```
[#abort_incomplete_multipart_upload]
[ .api-collapsible-fifth-title]
abort_incomplete_multipart_upload
```

Specifies a way to perform abort_incomplete_multipart_upload action on filtered objects within a bucket.

```
[cols=3*,options=header]
| ====
| Name
| Type
| Description

| _links
| link:#_links[_links]
a|
```

| after_initiation_days
| integer
a| Number of days of initiation after which uploads can be aborted.

```
| ====
|
```

```
[#expiration]
[ .api-collapsible-fifth-title]
expiration
```

Specifies a way to perform expiration action on filtered objects within a bucket.

```
[cols=3*,options=header]
| ====
| Name
| Type
| Description

| _links
| link:#_links[_links]
a|  
  
| expired_object_delete_marker
| boolean
a| Cleanup object delete markers.  
  
| object_age_days
| integer
a| Number of days since creation after which objects can be deleted.
```

```
| object_expiry_date
| string
a| Specific date from when objects can expire.
```

| ===

```
[#non_current_version_expiration]
[.api-collapsible-fifth-title]
non_current_version_expiration
```

Specifies a way to perform non_current_version_expiration action on filtered objects within a bucket.

```
[cols=3*,options=header]
| ====
| Name
| Type
| Description
```

```

|_links
|link:#_links[_links]
a|


|new_non_current_versions
|integer
a|Number of latest non-current versions to be retained.


|non_current_days
|integer
a|Number of days after which non-current versions can be deleted.

|---


[#object_filter]
[.api-collapsible-fifth-title]
object_filter

Specifies a way to filter objects within a bucket.

[cols=3*,options=header]
|===
|Name
|Type
|Description

|_links
|link:#_links[_links]
a|


|prefix
|string
a|A prefix that is matched against object-names within a bucket.

|size_greater_than
|integer
a|Size of the object greater than specified for which the corresponding
lifecycle rule is to be applied.

|size_less_than
|integer

```

a|Size of the object smaller than specified for which the corresponding lifecycle rule is to be applied.

|tags
|array[string]
a|An array of key-value paired tags of the form +++<tag>+++or
<tag=value>.+.+</tag>+++

|====

[#rules]
[.api-collapsible-fifth-title]
rules

Information about the lifecycle management rule of a bucket.

[cols=3*, options=header]

|====

|Name

|Type

|Description

|_links

|link:#_links[_links]

a|

|abort_incomplete_multipart_upload

|link:#abort_incomplete_multipart_upload[abort_incomplete_multipart_upload]
]

a|Specifies a way to perform abort_incomplete_multipart_upload action on
filtered objects within a bucket.

|enabled

|boolean

a|Specifies whether or not the associated rule is enabled.

|expiration

|link:#expiration[expiration]

a|Specifies a way to perform expiration action on filtered objects within
a bucket.

```
| name
| string
a|Bucket lifecycle management rule identifier.

| non_current_version_expiration
| link:#non_current_version_expiration[non_current_version_expiration]
a|Specifies a way to perform non_current_version_expiration action on
filtered objects within a bucket.
```

```
| object_filter
| link:#object_filter[object_filter]
a|Specifies a way to filter objects within a bucket.
```

```
| ===
```

```
[#lifecycle_management]
[.api-collapsible-fifth-title]
lifecycle_management
```

Lifecycle management is implemented as an object associated with a bucket. It defines rules to be applied against objects within a bucket. These rules are applied in the background and can delete objects.

```
[cols=3*,options=header]
| ===
| Name
| Type
| Description

| rules
| array[link:#rules[rules]]
a|Specifies an object store lifecycle management policy.
```

```
| ===
```

```
[#s3_bucket_policy_condition]
[.api-collapsible-fifth-title]
s3_bucket_policy_condition
```

Information about policy conditions based on various condition operators and condition keys.

[cols=3*,options=header]

|====

| Name

| Type

| Description

| delimiters

| array[string]

a|An array of delimiters that are compared with the delimiter value specified at the time of execution of an S3-based command, using the condition operator specified.

| max_keys

| array[integer]

a|An array of maximum keys that are allowed or denied to be retrieved using an S3 list operation, based on the condition operator specified.

| operator

| string

a|Condition operator that is applied to the specified condition key.

| prefixes

| array[string]

a|An array of prefixes that are compared with the input prefix value specified at the time of execution of an S3-based command, using the condition operator specified.

| source_ips

| array[string]

a|An array of IP address ranges that are compared with the IP address of a source command at the time of execution of an S3-based command, using the condition operator specified.

| usernames

| array[string]

a|An array of usernames that a current user in the context is evaluated against using the condition operators.

```
| ===
```

```
[#s3_bucket_policy_statement]
[.api-collapsible-fifth-title]
s3_bucket_policy_statement
```

Specifies information about a single access permission.

```
[cols=3*, options=header]
```

```
| ===
```

```
| Name
```

```
| Type
```

```
| Description
```

```
| actions
```

```
| array[string]
```

```
a|
```

```
| conditions
```

```
| array[link:#s3_bucket_policy_condition[s3_bucket_policy_condition]]
```

a| Specifies bucket policy conditions.

```
| effect
```

```
| string
```

a| Specifies whether access is allowed or denied when a user requests the specific action. If access (to allow) is not granted explicitly to a resource, access is implicitly denied. Access can also be denied explicitly to a resource, in order to make sure that a user cannot access it, even if a different policy grants access.

```
| principals
```

```
| array[string]
```

```
a|
```

```
| resources
```

```
| array[string]
```

```
a|
```

```
| sid
```

```
| string
```

a| Specifies the statement identifier used to differentiate between statements.

```
| ===
```

```
[#policy]
[.api-collapsible-fifth-title]
policy
```

A policy is an object associated with a bucket. It defines resource (bucket, folder, or object) permissions. These policies get evaluated when an S3 user makes a request by executing a specific command. The user must be part of the principal (user or group) specified in the policy. Permissions in the policies determine whether the request is allowed or denied.

```
[cols=3*,options=header]
| ===
| Name
| Type
| Description

| statements
| array[link:#s3_bucket_policy_statement[s3_bucket_policy_statement]]
a|Specifies bucket access policy statement.
```

```
| ===
```

```
[#destination]
[.api-collapsible-fifth-title]
destination
```

```
[cols=3*,options=header]
| ===
| Name
| Type
| Description

| is_cloud
| boolean
a|Specifies whether a bucket is protected within the Cloud.
```

```
| is_external_cloud
```

```
|boolean  
a|Specifies whether a bucket is protected on external Cloud providers.
```

```
|is_ontap  
|boolean  
a|Specifies whether a bucket is protected within ONTAP.
```

```
* Default value:  
* readOnly: 1  
* Introduced in: 9.10  
* x-nullable: true
```

```
|====
```

```
[#protection_status]  
[.api-collapsible-fifth-title]  
protection_status
```

Specifies attributes of bucket protection.

```
[cols=3*,options=header]
```

```
|====
```

```
| Name
```

```
| Type
```

```
| Description
```

```
|destination
```

```
|link:#destination[destination]
```

```
a|
```

```
|is_protected
```

```
|boolean
```

```
a|Specifies whether a bucket is a source and if it is protected within  
ONTAP and/or an external cloud.
```

```
* Default value:  
* readOnly: 1  
* Introduced in: 9.10  
* x-nullable: true
```

```
|====
```

```
[#qos_policy]
[.api-collapsible-fifth-title]
qos_policy
```

Specifies "qos_policy.max_throughput_iops" and/or "qos_policy.max_throughput_mbps" or "qos_policy.min_throughput_iops" and/or "qos_policy.min_throughput_mbps". Specifying "min_throughput_iops" or "min_throughput_mbps" is only supported on volumes hosted on a node that is flash optimized. A pre-created QoS policy can also be used by specifying "qos_policy.name" or "qos_policy.uuid" properties. Setting or assigning a QoS policy to a bucket is not supported if its containing volume or SVM already has a QoS policy attached.

```
[cols=3*,options=header]
```

```
|==
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|_links
```

```
|link:#_links[_links]
```

```
a|
```

```
|max_throughput_iops
```

```
|integer
```

a|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
```

a|Specifies the maximum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH.

```
|min_throughput_iops
```

```
|integer
```

a|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
```

```
a|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  
a|The QoS policy group name. This is mutually exclusive with UUID and  
other QoS attributes during POST and PATCH.
```

```
|uuid  
|string  
a|The QoS policy group UUID. This is mutually exclusive with name and  
other QoS attributes during POST and PATCH.
```

```
|====
```

```
[#svm]  
[.api-collapsible-fifth-title]  
svm
```

```
[cols=3*,options=header]
```

```
|====
```

```
|Name  
|Type  
|Description
```

```
|_links
```

```
|link:#_links[_links]
```

```
a|
```

```
|name
```

```
|string
```

```
a|The name of the SVM.
```

```
|uuid
```

```
|string
```

```
a|The unique identifier of the SVM.
```

```
|====
```

```
[#volume]
```

```
[ .api-collapsible-fifth-title]
volume
```

Specifies the FlexGroup volume name and UUID where the bucket is hosted.

```
[cols=3*,options=header]
```

```
|====
```

```
| Name
```

```
| Type
```

```
| Description
```

```
| _links
```

```
| link:#_links[_links]
```

```
a|
```

```
| name
```

```
| string
```

a|The name of the volume.

```
| uuid
```

```
| string
```

a|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.

* example: 028baa66-41bd-11e9-81d5-00a0986138f7

* Introduced in: 9.6

* x-nullable: true

```
|====
```

```
[#s3_bucket]
```

```
[ .api-collapsible-fifth-title]
```

```
s3_bucket
```

A bucket is a container of objects. Each bucket defines an object namespace. S3 requests specify objects using a bucket-name and object-name pair. An object resides within a bucket.

```
[cols=3*,options=header]
```

```
|====
```

```
| Name
```

Type	Description
allowed boolean	a If this is set to true, an SVM administrator can manage the S3 service. If it is false, only the cluster administrator can manage the service.
audit_event_selector link:#audit_event_selector[audit_event_selector]	a Audit event selector allows you to specify access and permission types to audit.
comment string	a Can contain any additional information about the bucket being created or modified.
encryption link:#encryption[encryption]	a
lifecycle_management link:#lifecycle_management[lifecycle_management]	a Lifecycle management is implemented as an object associated with a bucket. It defines rules to be applied against objects within a bucket. These rules are applied in the background and can delete objects.
logical_used_size integer	a Specifies the bucket logical used size up to this point.
name string	a Specifies the name of the bucket. Bucket name is a string that can only contain the following combination of ASCII-range alphanumeric characters 0-9, a-z, ".", and "-".
nas_path string	a Specifies the NAS path to which the nas bucket corresponds to.

```
|policy
|link:#policy[policy]
a|A policy is an object associated with a bucket. It defines resource
(bucket, folder, or object) permissions. These policies get evaluated when
an S3 user makes a request by executing a specific command. The user must
be part of the principal (user or group) specified in the policy.
Permissions in the policies determine whether the request is allowed or
denied.
```

```
|protection_status
|link:#protection_status[protection_status]
a|Specifies attributes of bucket protection.
```

```
|qos_policy
|link:#qos_policy[qos_policy]
a|Specifies "qos_policy.max_throughput_iops" and/or
"qos_policy.max_throughput_mbps" or "qos_policy.min_throughput_iops"
and/or "qos_policy.min_throughput_mbps". Specifying "min_throughput_iops"
or "min_throughput_mbps" is only supported on volumes hosted on a node
that is flash optimized. A pre-created QoS policy can also be used by
specifying "qos_policy.name" or "qos_policy.uuid" properties. Setting or
assigning a QoS policy to a bucket is not supported if its containing
volume or SVM already has a QoS policy attached.
```

```
|role
|string
a|Specifies the role of the bucket.
```

```
|size
|integer
a|Specifies the bucket size in bytes; ranges from 80MB to 64TB.
```

```
|svm
|link:#svm[svm]
a|  
  
|type
|string
a|Specifies the bucket type. Valid values are "s3" and "nas".
```

```
|uuid
|string
a|Specifies the unique identifier of the bucket.

|versioning_state
|string
a|Specifies the versioning state of the bucket. Valid values are
"disabled", "enabled" or "suspended". Note that the versioning state
cannot be modified to 'disabled' from any other state.

|volume
|link:#volume[volume]
a|Specifies the FlexGroup volume name and UUID where the bucket is hosted.

|===
[#:error_arguments]
[.api-collapsible-fifth-title]
error_arguments

[cols=3*, options=header]
|===
| Name
| Type
| Description

|code
|string
a|Argument code

|message
|string
a|Message argument

|===
[#:error]
[.api-collapsible-fifth-title]
error
```


- * Each SVM can have one or more bucket configurations.
- * Aggregate lists should be specified explicitly. If not specified, then the bucket is auto-provisioned as a FlexGroup volume.
- * Constituents per aggregate specifies the number of components (or FlexVol volumes) per aggregate. Is specified only when an aggregate list is explicitly defined.
- * An access policy can be created along with a bucket create. If creating an access policy fails, bucket configurations are saved and the access policy can be created using the PATCH endpoint.
- * "qos_policy" can be specified if a bucket needs to be attached to a QoS group policy during creation time.
- * "audit_event_selector" can be specified if a bucket needs to be specify access and permission type for auditing.

== Required properties

- * `svm.uuid` or `svm.name` - Existing SVM in which to create the bucket configuration.
- * `name` - Bucket name that is to be created.

== Recommended optional properties

- * `aggregates` - List of aggregates for the FlexGroup volume on which the bucket is hosted on.
- * `constituents_per_aggregate` - Number of constituents per aggregate.
- * `size` - Specifying the bucket size is recommended.
- * `policy` - Specifying a policy enables users to perform operations on buckets; specifying the resource permissions is recommended.
- * `qos_policy` - A QoS policy for buckets.
- * `audit_event_selector` - Audit policy for buckets.
- * `versioning_state` - Versioning state for buckets.
- * `type` - Type of bucket.
- * `nas_path` - NAS path to which the bucket corresponds to.
- * `lifecycle_management` - Object store server lifecycle management policy.

== Default property values

- * `size` - 800MB
- * `comment` - ""
- * `aggregates` - No default value.
- * `constituents_per_aggregate` - 4, if an aggregates list is specified. Otherwise, no default value.
- * `policy.statements.actions` - GetObject, PutObject, DeleteObject, ListBucket, ListBucketMultipartUploads, ListMultipartUploadParts, GetObjectTagging, PutObjectTagging, DeleteObjectTagging,

```

GetBucketVersioning, PutBucketVersioning.

* `policy.statements.principals` - all S3 users and groups in the SVM.
* `policy.statements.resources` - all objects in the bucket.
* `policy.statements.conditions` - list of bucket policy conditions.
* `versioning_state` - disabled.
* `type` - S3

== Related ONTAP commands

* `vserver object-store-server bucket create`
* `vserver object-store-server bucket policy statement create`
* `vserver object-store-server bucket lifecycle-management-rule create`

== Learn more

* xref:{relative\_path}protocols\_s3\_buckets\_endpoint\_overview.html [DOC /protocols/s3/buckets]

== Parameters

[cols=5*,options=header]
| ===

| Name
| Type
| In
| Required
| Description

| return_timeout
| integer
| query
| False
a|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.

* Default value: 1
* Max value: 120
* Min value: 0

```

```

| return_records
| boolean
| query
| False
a|The default is false. If set to true, the records are returned.

* Default value:

| ===

== Request Body

[cols=3*, options=header]
| ===
| Name
| Type
| Description

| aggregates
| array[link:#aggregates[aggregates]]
a|A list of aggregates for FlexGroup volume constituents where the bucket
is hosted. If this option is not specified, the bucket is auto-provisioned
as a FlexGroup volume.

| allowed
| boolean
a|If this is set to true, an SVM administrator can manage the S3 service.
If it is false, only the cluster administrator can manage the service.

| audit_event_selector
| link:#audit_event_selector[audit_event_selector]
a|Audit event selector allows you to specify access and permission types
to audit.

| comment
| string
a|Can contain any additional information about the bucket being created or
modified.

| constituents_per_aggregate
| integer

```

a|Specifies the number of constituents or FlexVol volumes per aggregate. A FlexGroup volume consisting of all such constituents across all specified aggregates is created. This option is used along with the aggregates option and cannot be used independently.

|encryption
|link:#encryption[encryption]
a|

|lifecycle_management
|link:#lifecycle_management[lifecycle_management]
a|Lifecycle management is implemented as an object associated with a bucket. It defines rules to be applied against objects within a bucket. These rules are applied in the background and can delete objects.

|logical_used_size
|integer
a|Specifies the bucket logical used size up to this point.

|name
|string
a|Specifies the name of the bucket. Bucket name is a string that can only contain the following combination of ASCII-range alphanumeric characters 0-9, a-z, ".", and "-".

|nas_path
|string
a|Specifies the NAS path to which the nas bucket corresponds to.

|policy
|link:#policy[policy]
a|A policy is an object associated with a bucket. It defines resource (bucket, folder, or object) permissions. These policies get evaluated when an S3 user makes a request by executing a specific command. The user must be part of the principal (user or group) specified in the policy. Permissions in the policies determine whether the request is allowed or denied.

|protection_status
|link:#protection_status[protection_status]
a|Specifies attributes of bucket protection.

```
|qos_policy
|link:#qos_policy[qos_policy]
a|Specifies "qos_policy.max_throughput_iops" and/or
"qos_policy.max_throughput_mbps" or "qos_policy.min_throughput_iops"
and/or "qos_policy.min_throughput_mbps". Specifying "min_throughput_iops"
or "min_throughput_mbps" is only supported on volumes hosted on a node
that is flash optimized. A pre-created QoS policy can also be used by
specifying "qos_policy.name" or "qos_policy.uuid" properties. Setting or
assigning a QoS policy to a bucket is not supported if its containing
volume or SVM already has a QoS policy attached.
```

```
|role
|string
a|Specifies the role of the bucket.
```

```
|size
|integer
a|Specifies the bucket size in bytes; ranges from 80MB to 64TB.
```

```
|storage_service_level
|string
a|Specifies the storage service level of the FlexGroup volume on which the
bucket should be created. Valid values are "value", "performance" or
"extreme".
```

```
|svm
|link:#svm[svm]
a|
|type
|string
a|Specifies the bucket type. Valid values are "s3" and "nas".
```

```
|uuid
|string
a|Specifies the unique identifier of the bucket.
```

```
|versioning_state
|string
```

```
a|Specifies the versioning state of the bucket. Valid values are  
"disabled", "enabled" or "suspended". Note that the versioning state  
cannot be modified to 'disabled' from any other state.
```

```
|volume  
|link:#volume[volume]  
a|Specifies the FlexGroup volume name and UUID where the bucket is hosted.
```

```
|====
```

```
.Example request  
[%collapsible%closed]  
=====  
[source, json, subs=+macros]  
{  
    "aggregates": [  
        {  
            "name": "aggr1",  
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"  
        }  
    ],  
    "audit_event_selector": {  
        "access": "string",  
        "permission": "string"  
    },  
    "comment": "S3 bucket.",  
    "constituents_per_aggregate": 4,  
    "lifecycle_management": {  
        "rules": [  
            {  
                "expiration": {  
                    "object_expiry_date": "string"  
                },  
                "name": "string",  
                "object_filter": {  
                    "prefix": "/logs",  
                    "size_greater_than": 10485760,  
                    "size_less_than": 10240,  
                    "tags": [  
                        "project1=projA",  
                        "project2=projB"  
                    ]  
                }  
            }  
        }  
    }  
}
```

```
        }
    ],
},
"logical_used_size": 0,
"name": "bucket1",
"nas_path": "/",
"policy": {
    "statements": [
        {
            "actions": [
                "GetObject",
                "PutObject",
                "DeleteObject",
                "ListBucket"
            ],
            "conditions": [
                {
                    "delimiters": [
                        "/"
                    ],
                    "max_keys": [
                        1000
                    ],
                    "operator": "ip_address",
                    "prefixes": [
                        "pref"
                    ],
                    "source_ips": [
                        "1.1.1.1",
                        "1.2.2.0/24"
                    ],
                    "usernames": [
                        "user1"
                    ]
                }
            ],
            "effect": "allow",
            " principals": [
                "user1",
                "group/grp1"
            ],
            "resources": [
                "bucket1",
                "bucket1/*"
            ],
            "sid": "FullAccessToUser1"
        }
    ]
}
```

```

        }
    ],
},
"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"
},
"role": "string",
"size": 1677721600,
"storage_service_level": "value",
"svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"type": "s3",
"uuid": "414b29a1-3b26-11e9-bd58-0050568ea055",
"versioning_state": "enabled",
"volume": {
    "name": "volume1",
    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
}
}
=====

== Response

```

Status: 202, Accepted

```

[cols=3*,options=header]
| ====
| Name
| Type
| Description

| job
| link:#job_link[job_link]
a| a

| ====

.Example response
[%collapsible%closed]
=====

[source, json, subs=+macros]
{
  "job": {
    "uuid": "string"
  }
}
=====

==== Headers

[cols=3*,options=header]
| ====
//header
| Name
| Description
| Type
//end header

//start row
| Location
| Useful for tracking the resource location
| string
//end row
//end table
| ====

== Error

```

Status: Default

```

ONTAP Error Response Codes
//start table
[cols=2*,options=header]
|===
//header
| Error code | Message
//end header
//end row
//start row
|92405777 +
//end row
//start row
|"Failed to create bucket "{bucket name}" for SVM "{svm.name}". Reason:
{Reason of failure}. ";
//end row
//start row
|92405785 +
//end row
//start row
|"Bucket name "{bucket name}" contains invalid characters. Valid
characters for a bucket name are 0-9, a-z, ".", and "-". ";
//end row
//start row
|92405786 +
//end row
//start row
|"Bucket name "{bucket name}" is not valid. Bucket names must have between
3 and 63 characters. ";
//end row
//start row
|92405811 +
//end row
//start row
|"Failed to create bucket "{bucket name}" for SVM "{svm.name}". Wait a few
minutes and try the operation again.";
//end row
//start row
|92405812 +
//end row
//start row
|"Failed to create the object store volume. Reason: {Reason for
failure}. ";
//end row
//start row
|92405819 +

```

```
//end row
//start row
|"Cannot provision an object store server volume for bucket "{bucket
name}" in SVM "{svm.name}" on the following aggregates because they are
SnapLock aggregates: {List of aggregates.name}.";
//end row
//start row
|92405820 +
//end row
//start row
|"Failed to check whether the aggregate "{aggregates.name}" is a
FabricPool. Reason: {Reason for failure}.";
//end row
//start row
|92405821 +
//end row
//start row
|"Cannot provision an object store server volume for bucket "{bucket
name}" in SVM "{svm.name}" on the following aggregates because they are
FabricPool: {List of aggregates.name}.";
//end row
//start row
|92405827 +
//end row
//start row
|"Internal Error. Unable to generate object store volume name.";
//end row
//start row
|92405857 +
//end row
//start row
|"One or more aggregates must be specified if "constituents_per_aggregate"
is specified.";
//end row
//start row
|92405858 +
//end row
//start row
|"Failed to "create" the "bucket" because the operation is only supported
on data SVMs.";
//end row
//start row
|92405859 +
//end row
//start row
|"The specified "aggregates.uuid" "{aggregates.uuid}" does not exist.";
```

```

//end row
//start row
|92405860 +
//end row
//start row
|"The specified "aggregates.name" "{aggregates.name}" and
"aggregates.uuid" "{aggregates.uuid}" refer to different aggregates.";
//end row
//start row
|92405861 +
//end row
//start row
|"The specified SVM UUID or bucket UUID does not exist.";
//end row
//start row
|92405863 +
//end row
//start row
|"An error occurs when creating an access policy. The reason for failure
is detailed in the error message.";
//end row
//start row
|92405891 +
//end row
//start row
|The resources specified in the access policy are not valid. Valid ways to
specify a resource are *, <bucket-name>, <bucket-name>/.../. Valid
characters for a resource are 0-9, A-Z, a-z, _, +, comma, ;, :, =, ., &,
@, ?, (, ), single quote, *, !, - and $.

//end row
//start row
|92405894 +
//end row
//start row
|"Statements, principals and resources list can have a maximum of 10
entries.";
//end row
//start row
|92405897 +
//end row
//start row
|The principals specified in the access policy are not in the correct
format. User name must be in between 1 and 64 characters. Valid characters
for a user name are 0-9, A-Z, a-z, _, +, =, comma, ., @, and - .

```

```

//end row
//start row
|92405898 +
//end row
//start row
|"The SID specified in the access policy is not valid. Valid characters
for a SID are 0-9, A-Z and a-z.";
//end row
|===
//end table

== Definitions

[.api-def-first-level]
.See Definitions
[%collapsible%closed]
//Start collapsible Definitions block
=====

[#href]
[.api-collapsible-fifth-title]
href

[cols=3*,options=header]
|===
|Name
|Type
|Description

|href
|string
a|
|===

[#_links]
[.api-collapsible-fifth-title]
_links
[#aggregates]
[.api-collapsible-fifth-title]
aggregates

[cols=3*,options=header]
|===
|Name

```

```
| Type
| Description

| name
| string
a| 

| uuid
| string
a| 

| ===

[#audit_event_selector]
[.api-collapsible-fifth-title]
audit_event_selector
```

Audit event selector allows you to specify access and permission types to audit.

```
[cols=3*,options=header]
| ===
| Name
| Type
| Description

| access
| string
a| Specifies read and write access types.

| permission
| string
a| Specifies allow and deny permission types.

| ===
```

```
[#encryption]
[.api-collapsible-fifth-title]
encryption
```

```
[cols=3*,options=header]
| ===
```

	Name	
	Type	
	Description	
	enabled	
	boolean	
a	Specifies whether encryption is enabled on the bucket. By default, encryption is disabled on a bucket.	

| ===

[#abort_incomplete_multipart_upload]
[.api-collapsible-fifth-title]
abort_incomplete_multipart_upload

Specifies a way to perform abort_incomplete_multipart_upload action on filtered objects within a bucket.

[cols=3*, options=header]

| ===

Name	
Type	
Description	

| after_initiation_days

| integer

a|Number of days of initiation after which uploads can be aborted.

| ===

[#expiration]
[.api-collapsible-fifth-title]
expiration

Specifies a way to perform expiration action on filtered objects within a bucket.

[cols=3*, options=header]

| ===

Name	
Type	

Description
expired_object_delete_marker boolean a Cleanup object delete markers.
object_age_days integer a Number of days since creation after which objects can be deleted.
object_expiry_date string a Specific date from when objects can expire.
====
[#non_current_version_expiration] [.api-collapsible-fifth-title] non_current_version_expiration
Specifies a way to perform non_current_version_expiration action on filtered objects within a bucket.
[cols=3*,options=header] ==== Name Type Description
new_non_current_versions integer a Number of latest non-current versions to be retained.
non_current_days integer a Number of days after which non-current versions can be deleted.
====

```
[#object_filter]
[.api-collapsible-fifth-title]
object_filter
```

Specifies a way to filter objects within a bucket.

```
[cols=3*,options=header]
```

```
|====
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|prefix
```

```
|string
```

a|A prefix that is matched against object-names within a bucket.

```
|size_greater_than
```

```
|integer
```

a|Size of the object greater than specified for which the corresponding lifecycle rule is to be applied.

```
|size_less_than
```

```
|integer
```

a|Size of the object smaller than specified for which the corresponding lifecycle rule is to be applied.

```
|tags
```

```
|array[string]
```

a|An array of key-value paired tags of the form +++<tag>+++ or
<tag=value>.+++</tag>+++

```
|====
```

```
[#rules]
```

```
[.api-collapsible-fifth-title]
```

```
rules
```

Information about the lifecycle management rule of a bucket.

```
[cols=3*,options=header]
```

```

| ===
| Name
| Type
| Description

| abort_incomplete_multipart_upload
| link:#abort_incomplete_multipart_upload[abort_incomplete_multipart_upload]
|
a| Specifies a way to perform abort_incomplete_multipart_upload action on
  filtered objects within a bucket.

| enabled
| boolean
a| Specifies whether or not the associated rule is enabled.

| expiration
| link:#expiration[expiration]
a| Specifies a way to perform expiration action on filtered objects within
  a bucket.

| name
| string
a| Bucket lifecycle management rule identifier.

| non_current_version_expiration
| link:#non_current_version_expiration[non_current_version_expiration]
a| Specifies a way to perform non_current_version_expiration action on
  filtered objects within a bucket.

| object_filter
| link:#object_filter[object_filter]
a| Specifies a way to filter objects within a bucket.

| ===

[#lifecycle_management]
[.api-collapsible-fifth-title]
lifecycle_management

Lifecycle management is implemented as an object associated with a bucket.

```

It defines rules to be applied against objects within a bucket. These rules are applied in the background and can delete objects.

```
[cols=3*,options=header]
|===
| Name
| Type
| Description

|rules
|array[link:#rules[rules]]
a|Specifies an object store lifecycle management policy.

|===
| #s3_bucket_policy_condition
[.api-collapsible-fifth-title]
s3_bucket_policy_condition

Information about policy conditions based on various condition operators and condition keys.

[cols=3*,options=header]
|===
| Name
| Type
| Description

|delimiters
|array[string]
a|An array of delimiters that are compared with the delimiter value specified at the time of execution of an S3-based command, using the condition operator specified.

|max_keys
|array[integer]
a|An array of maximum keys that are allowed or denied to be retrieved using an S3 list operation, based on the condition operator specified.

|operator
|string
```

a|Condition operator that is applied to the specified condition key.

|prefixes

|array[string]

a|An array of prefixes that are compared with the input prefix value specified at the time of execution of an S3-based command, using the condition operator specified.

|source_ips

|array[string]

a|An array of IP address ranges that are compared with the IP address of a source command at the time of execution of an S3-based command, using the condition operator specified.

|usernames

|array[string]

a|An array of usernames that a current user in the context is evaluated against using the condition operators.

|====

[#s3_bucket_policy_statement]

[.api-collapsible-fifth-title]

s3_bucket_policy_statement

Specifies information about a single access permission.

[cols=3*,options=header]

|====

|Name

|Type

|Description

|actions

|array[string]

a|

|conditions

|array[link:#s3_bucket_policy_condition[s3_bucket_policy_condition]]

a|Specifies bucket policy conditions.

```
|effect
|string
a|Specifies whether access is allowed or denied when a user requests the
specific action. If access (to allow) is not granted explicitly to a
resource, access is implicitly denied. Access can also be denied
explicitly to a resource, in order to make sure that a user cannot access
it, even if a different policy grants access.
```

```
|principals
|array[string]
a|
```

```
|resources
|array[string]
a|
```

```
|sid
|string
a|Specifies the statement identifier used to differentiate between
statements.
```

```
|====
```

```
[#policy]
[.api-collapsible-fifth-title]
policy
```

A policy is an object associated with a bucket. It defines resource (bucket, folder, or object) permissions. These policies get evaluated when an S3 user makes a request by executing a specific command. The user must be part of the principal (user or group) specified in the policy. Permissions in the policies determine whether the request is allowed or denied.

```
[cols=3*,options=header]
|===
|Name
|Type
|Description

|statements
|array[link:#s3_bucket_policy_statement[s3_bucket_policy_statement]]
```

```
a|Specifies bucket access policy statement.
```

```
|====
```

```
[#destination]
[.api-collapsible-fifth-title]
destination
```

```
[cols=3*,options=header]
```

```
|====
```

```
|Name
|Type
|Description
```

```
|is_cloud
```

```
|boolean
```

```
a|Specifies whether a bucket is protected within the Cloud.
```

```
|is_external_cloud
```

```
|boolean
```

```
a|Specifies whether a bucket is protected on external Cloud providers.
```

```
|is_ontap
```

```
|boolean
```

```
a|Specifies whether a bucket is protected within ONTAP.
```

```
* Default value: 1
```

```
* readOnly: 1
```

```
* Introduced in: 9.10
```

```
* x-nullable: true
```

```
|====
```

```
[#protection_status]
[.api-collapsible-fifth-title]
protection_status
```

```
Specifies attributes of bucket protection.
```

```
[cols=3*,options=header]
```

```

| ===
| Name
| Type
| Description

| destination
| link:#destination[destination]
a|


| is_protected
| boolean
a| Specifies whether a bucket is a source and if it is protected within
ONTAP and/or an external cloud.

```

- * Default value: 1
- * readOnly: 1
- * Introduced in: 9.10
- * x-nullable: true

```

| ===

```

```

[#qos_policy]
[.api-collapsible-fifth-title]
qos_policy

```

Specifies "qos_policy.max_throughput_iops" and/or
 "qos_policy.max_throughput_mbps" or "qos_policy.min_throughput_iops"
 and/or "qos_policy.min_throughput_mbps". Specifying "min_throughput_iops"
 or "min_throughput_mbps" is only supported on volumes hosted on a node
 that is flash optimized. A pre-created QoS policy can also be used by
 specifying "qos_policy.name" or "qos_policy.uuid" properties. Setting or
 assigning a QoS policy to a bucket is not supported if its containing
 volume or SVM already has a QoS policy attached.

```

[cols=3*,options=header]
| ===
| Name
| Type
| Description

| max_throughput_iops
| integer
a| 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
a|Specifies the maximum throughput in Megabytes per sec, 0 means none.
This is mutually exclusive with name and UUID during POST and PATCH.
```

```
|min_throughput_iops
|integer
a|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
a|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
a|The QoS policy group name. This is mutually exclusive with UUID and
other QoS attributes during POST and PATCH.
```

```
|uuid
|string
a|The QoS policy group UUID. This is mutually exclusive with name and
other QoS attributes during POST and PATCH.
```

```
|====
```

```
[#svm]
```

```
[.api-collapsible-fifth-title]
```

```
svm
```

```
[cols=3*,options=header]
```

```
|====
```

```
|Name
```

```
|Type
```

```
|Description
```

```
| name
| string
a|The name of the SVM.
```

```
| uuid
| string
a|The unique identifier of the SVM.
```

```
| ===
```

```
[#volume]
[.api-collapsible-fifth-title]
volume
```

Specifies the FlexGroup volume name and UUID where the bucket is hosted.

```
[cols=3*, options=header]
```

```
| ===
```

```
| Name
| Type
| Description
```

```
| name
| string
a|The name of the volume.
```

```
| uuid
| string
a|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.
```

* example: 028baa66-41bd-11e9-81d5-00a0986138f7

* Introduced in: 9.6

* x-nullable: true

```
| ===
```

```
[#s3_bucket]
[.api-collapsible-fifth-title]
```

s3_bucket

A bucket is a container of objects. Each bucket defines an object namespace. S3 requests specify objects using a bucket-name and object-name pair. An object resides within a bucket.

[cols=3*,options=header]

|====

|Name

|Type

|Description

|aggregates

|array[link:#aggregates[aggregates]]

a|A list of aggregates for FlexGroup volume constituents where the bucket is hosted. If this option is not specified, the bucket is auto-provisioned as a FlexGroup volume.

|allowed

|boolean

a|If this is set to true, an SVM administrator can manage the S3 service. If it is false, only the cluster administrator can manage the service.

|audit_event_selector

|link:#audit_event_selector[audit_event_selector]

a|Audit event selector allows you to specify access and permission types to audit.

|comment

|string

a|Can contain any additional information about the bucket being created or modified.

|constituents_per_aggregate

|integer

a|Specifies the number of constituents or FlexVol volumes per aggregate. A FlexGroup volume consisting of all such constituents across all specified aggregates is created. This option is used along with the aggregates option and cannot be used independently.

|encryption

```
|link:#encryption[encryption]
```

```
a|
```

```
|lifecycle_management
```

```
|link:#lifecycle_management[lifecycle_management]
```

a|Lifecycle management is implemented as an object associated with a bucket. It defines rules to be applied against objects within a bucket. These rules are applied in the background and can delete objects.

```
|logical_used_size
```

```
|integer
```

a|Specifies the bucket logical used size up to this point.

```
|name
```

```
|string
```

a|Specifies the name of the bucket. Bucket name is a string that can only contain the following combination of ASCII-range alphanumeric characters 0-9, a-z, ".", and "-".

```
|nas_path
```

```
|string
```

a|Specifies the NAS path to which the nas bucket corresponds to.

```
|policy
```

```
|link:#policy[policy]
```

a|A policy is an object associated with a bucket. It defines resource (bucket, folder, or object) permissions. These policies get evaluated when an S3 user makes a request by executing a specific command. The user must be part of the principal (user or group) specified in the policy.

Permissions in the policies determine whether the request is allowed or denied.

```
|protection_status
```

```
|link:#protection_status[protection_status]
```

a|Specifies attributes of bucket protection.

```
|qos_policy
```

```
|link:#qos_policy[qos_policy]
```

a|Specifies "qos_policy.max_throughput_iops" and/or

"qos_policy.max_throughput_mbps" or "qos_policy.min_throughput_iops"

and/or "qos_policy.min_throughput_mbps". Specifying "min_throughput_iops"

or "min_throughput_mbps" is only supported on volumes hosted on a node that is flash optimized. A pre-created QoS policy can also be used by specifying "qos_policy.name" or "qos_policy.uuid" properties. Setting or assigning a QoS policy to a bucket is not supported if its containing volume or SVM already has a QoS policy attached.

|role
|string
a|Specifies the role of the bucket.

|size
|integer
a|Specifies the bucket size in bytes; ranges from 80MB to 64TB.

|storage_service_level
|string
a|Specifies the storage service level of the FlexGroup volume on which the bucket should be created. Valid values are "value", "performance" or "extreme".

|svm
|link:#svm[svm]
a|

|type
|string
a|Specifies the bucket type. Valid values are "s3" and "nas".

|uuid
|string
a|Specifies the unique identifier of the bucket.

|versioning_state
|string
a|Specifies the versioning state of the bucket. Valid values are "disabled", "enabled" or "suspended". Note that the versioning state cannot be modified to 'disabled' from any other state.

|volume
|link:#volume[volume]

a|Specifies the FlexGroup volume name and UUID where the bucket is hosted.

|====

```
[#job_link]
[.api-collapsible-fifth-title]
job_link
```

[cols=3*,options=header]

|====

| Name

| Type

| Description

| uuid

| string

a|The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation.

|====

```
[#error_arguments]
[.api-collapsible-fifth-title]
error_arguments
```

[cols=3*,options=header]

|====

| Name

| Type

| Description

| code

| string

a|Argument code

| message

| string

a|Message argument

|====

```

[#error]
[.api-collapsible-fifth-title]
error

[cols=3*,options=header]
| ====
| Name
| Type
| Description

| arguments
| array[link:#error_arguments[error_arguments]]
a|Message arguments

| code
| string
a|Error code

| message
| string
a|Error message

| target
| string
a|The target parameter that caused the error.

| ====

//end collapsible .Definitions block
=====

[[IDeec1b089255c01ab79034d35c2972a38]]
= Delete the S3 bucket configuration for an SVM

[.api-doc-operation .api-doc-operation-delete]#DELETE# [.api-doc-code-
block]#`/protocols/s3/buckets/{svm.uuid}/{uuid}`#


*Introduced In:* 9.8

```

Deletes the S3 bucket configuration of an SVM. An access policy is also deleted on an S3 bucket "delete" command.

== Related ONTAP commands

- * `vserver object-store-server bucket delete`
- * `vserver object-store-server bucket policy statement delete`
- * `vserver object-store-server bucket policy-statement-condition delete`
- * `vserver object-store-server bucket lifecycle-management-rule delete`

== Learn more

* [xref:{relative_path}protocols_s3_buckets_endpoint_overview.html](#) [DOC /protocols/s3/buckets]

== Parameters

[cols=5*, options=header]

|====

Name	
Type	
In	
Required	
Description	

uuid	
string	
path	
True	
a The unique identifier of the bucket.	

return_timeout	
integer	
query	
False	
a 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.	

* Default value: 1

```
* Max value: 120
* Min value: 0

| svm.uuid
| string
| path
| True
a|UUID of the SVM to which this object belongs.

| ===

== Response
```

Status: 202, Accepted

```
[cols=3*,options=header]
|===
| Name
| Type
| Description

| job
| link:#job_link[job_link]
a|


|===
.Example response
[%collapsible%closed]
=====

[source,json,subs=+macros]
{
  "job": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "uuid": "string"
  }
}
=====

== Error
```

Status: Default

```
ONTAP Error Response Codes
//start table
[cols=2*,options=header]
|===
//header
| Error code | Message
//end header
//end row
//start row
|92405811 +
//end row
//start row
```

```

|"Failed to delete bucket "{bucket name}" for SVM "{svm.name}". Wait a few
minutes and try the operation again.";
//end row
//start row
|92405858 +
//end row
//start row
|"Failed to "delete" the "bucket" because the operation is only supported
on data SVMs.";
//end row
//start row
|92405861 +
//end row
//start row
|"The specified SVM UUID or bucket UUID does not exist.";
//end row
//start row
|92405779 +
//end row
//start row
|"Failed to remove bucket "{bucket name}" for SVM "{svm.name}". Reason:
{Reason for failure}. ";
//end row
//start row
|92405813 +
//end row
//start row
|"Failed to delete the object store volume. Reason: {Reason for
failure}.";
//end row
//start row
|92405864 +
//end row
//start row
|"An error occurred when deleting an access policy. The reason for failure
is detailed in the error message.";
//end row
|===
//end table

```

```

[cols=3*,options=header]
|===
|Name
|Type

```

```

| Description

| error
| link:#error[error]
a|


| ===

.Example error
[%collapsible%closed]
=====

[source, json, subs=+macros]
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
=====

== Definitions

[.api-def-first-level]
.See Definitions
[%collapsible%closed]
//Start collapsible Definitions block
=====

[#href]
[.api-collapsible-fifth-title]
href

[cols=3*, options=header]
| ===
| Name
| Type
| Description

| href

```

```

|string
a|
|====

[#_links]
[.api-collapsible-fifth-title]
_links

[cols=3*,options=header]
|====
| Name
| Type
| Description

|self
|link:#href[href]
a|
|====

[#job_link]
[.api-collapsible-fifth-title]
job_link

[cols=3*,options=header]
|====
| Name
| Type
| Description

|_links
|link:#_links[_links]
a|
|uuid
|string
a|The UUID of the asynchronous job that is triggered by a POST, PATCH, or
DELETE operation.

|====

[#error_arguments]

```

```
[.api-collapsible-fifth-title]
error_arguments

[cols=3*, options=header]
| ====
| Name
| Type
| Description

| code
| string
a|Argument code

| message
| string
a|Message argument

| ====

[#error]
[.api-collapsible-fifth-title]
error

[cols=3*, options=header]
| ====
| Name
| Type
| Description

| arguments
| array[link:#error_arguments[error_arguments]]
a|Message arguments

| code
| string
a|Error code

| message
| string
a|Error message
```

```

|target
|string
a|The target parameter that caused the error.

|====

//end collapsible .Definitions block
=====

[[ID8552d1f2cc072e17d3d67413bba74ae9]]
= Retrieve the S3 bucket configuration for an SVM

[.api-doc-operation .api-doc-operation-get]#GET# [.api-doc-code-
block]#/protocols/s3/buckets/{svm.uuid}/{uuid}`#
*Introduced In:* 9.8

Retrieves the S3 bucket configuration of an SVM. Note that in order to
retrieve S3 bucket policy conditions, the 'fields' option should be set to
'*'.

== Related ONTAP commands

* `vserver object-store-server bucket show`
* `vserver object-store-server bucket policy statement show`
* `vserver object-store-server bucket policy-statement-condition show`
* `vserver object-store-server bucket lifecycle-management-rule show`

== Learn more

* xref:{relative\_path}protocols\_s3\_buckets\_endpoint\_overview.html\[DOC
/protocols/s3/buckets\]

== Parameters

[cols=5*,options=header]
|====

|Name
|Type
|In
|Required

```

Description	
uuid	
string	
path	
True	
a The unique identifier of the bucket.	
svm.uuid	
string	
path	
True	
a UUID of the SVM to which this object belongs.	
fields	
array[string]	
query	
False	
a Specify the fields to return.	
====	
 == Response	

Status: 200, Ok

[cols=3*,options=header]	
====	
Name	
Type	
Description	
allowed	
boolean	
a If this is set to true, an SVM administrator can manage the S3 service.	
If it is false, only the cluster administrator can manage the service.	
audit_event_selector	
link:#audit_event_selector[audit_event_selector]	
a Audit event selector allows you to specify access and permission types to audit.	

```
|comment
|string
a|Can contain any additional information about the bucket being created or
modified.

|encryption
|link:#encryption[encryption]
a|


|lifecycle_management
|link:#lifecycle_management[lifecycle_management]
a|Lifecycle management is implemented as an object associated with a
bucket. It defines rules to be applied against objects within a bucket.
These rules are applied in the background and can delete objects.

|logical_used_size
|integer
a|Specifies the bucket logical used size up to this point.

|name
|string
a|Specifies the name of the bucket. Bucket name is a string that can only
contain the following combination of ASCII-range alphanumeric characters
0-9, a-z, ".", and "-".

|nas_path
|string
a|Specifies the NAS path to which the nas bucket corresponds to.

|policy
|link:#policy[policy]
a|A policy is an object associated with a bucket. It defines resource
(bucket, folder, or object) permissions. These policies get evaluated when
an S3 user makes a request by executing a specific command. The user must
be part of the principal (user or group) specified in the policy.
Permissions in the policies determine whether the request is allowed or
denied.

|protection_status
|link:#protection_status[protection_status]
a|Specifies attributes of bucket protection.
```

```
|qos_policy
|link:#qos_policy[qos_policy]
a|Specifies "qos_policy.max_throughput_iops" and/or
"qos_policy.max_throughput_mbps" or "qos_policy.min_throughput_iops"
and/or "qos_policy.min_throughput_mbps". Specifying "min_throughput_iops"
or "min_throughput_mbps" is only supported on volumes hosted on a node
that is flash optimized. A pre-created QoS policy can also be used by
specifying "qos_policy.name" or "qos_policy.uuid" properties. Setting or
assigning a QoS policy to a bucket is not supported if its containing
volume or SVM already has a QoS policy attached.
```

```
|role
|string
a|Specifies the role of the bucket.
```

```
|size
|integer
a|Specifies the bucket size in bytes; ranges from 80MB to 64TB.
```

```
|svm
|link:#svm[svm]
a|
|type
|string
a|Specifies the bucket type. Valid values are "s3" and "nas".
```

```
|uuid
|string
a|Specifies the unique identifier of the bucket.
```

```
|versioning_state
|string
a|Specifies the versioning state of the bucket. Valid values are
"disabled", "enabled" or "suspended". Note that the versioning state
cannot be modified to 'disabled' from any other state.
```

```
|volume
|link:#volume[volume]
```

a | Specifies the FlexGroup volume name and UUID where the bucket is hosted.

| ===

.Example response
[%collapsible%closed]
=====

```
[source, json, subs=+macros]
{
  "audit_event_selector": {
    "access": "string",
    "permission": "string"
  },
  "comment": "S3 bucket.",
  "lifecycle_management": {
    "rules": [
      {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "abort_incomplete_multipart_upload": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          }
        },
        "expiration": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          }
        },
        "object_expiry_date": "string"
      },
      "name": "string",
      "non_current_version_expiration": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        }
      }
    ]
  }
}
```

```
        },
        "object_filter": {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "prefix": "/logs",
            "size_greater_than": 10485760,
            "size_less_than": 10240,
            "tags": [
                "project1=projA",
                "project2=projB"
            ]
        }
    }
],
},
"logical_used_size": 0,
"name": "bucket1",
"nas_path": "/",
"policy": {
    "statements": [
        {
            "actions": [
                "GetObject",
                "PutObject",
                "DeleteObject",
                "ListBucket"
            ],
            "conditions": [
                {
                    "delimiters": [
                        "/"
                    ],
                    "max_keys": [
                        1000
                    ],
                    "operator": "ip_address",
                    "prefixes": [
                        "pref"
                    ],
                    "source_ips": [
                        "1.1.1.1",
                        "1.2.2.0/24"
                    ],
                    "variables": [
                        "var1"
                    ]
                }
            ]
        }
    ]
}
```

```

        "usernames": [
            "user1"
        ],
    },
    "effect": "allow",
    "principals": [
        "user1",
        "group/grp1"
    ],
    "resources": [
        "bucket1",
        "bucket1/*"
    ],
    "sid": "FullAccessToUser1"
}
]
},
"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"
},
"role": "string",
"size": 1677721600,
"svm": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "svml1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"type": "s3",
"uuid": "414b29a1-3b26-11e9-bd58-0050568ea055",
"versioning_state": "enabled",
"volume": {

```

```

  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "volume1",
  "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
}
=====

== Error

```

Status: Default, Error

```

[cols=3*,options=header]
|=====
| Name
| Type
| Description

| error
| link:#error[error]
a|
|=====

.Example error
[%collapsible%closed]
=====

[source,json,subs=+macros]
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}

```

```
=====
== Definitions

[.api-def-first-level]
.See Definitions
[%collapsible%closed]
//Start collapsible Definitions block
=====
[#href]
[.api-collapsible-fifth-title]
href

[cols=3*,options=header]
| ===
| Name
| Type
| Description

| href
| string
a|
| ===

[#_links]
[.api-collapsible-fifth-title]
_links

[cols=3*,options=header]
| ===
| Name
| Type
| Description

| self
| link:#href[href]
a|
| ===

[#aggregates]
[.api-collapsible-fifth-title]
aggregates
```

```
[cols=3*,options=header]
```

```
|====
```

```
| Name
```

```
| Type
```

```
| Description
```

```
|_links
```

```
|link:#_links[_links]
```

```
a|
```

```
| name
```

```
| string
```

```
a|
```

```
|uuid
```

```
| string
```

```
a|
```

```
|====
```

```
[#audit_event_selector]
```

```
[.api-collapsible-fifth-title]
```

```
audit_event_selector
```

Audit event selector allows you to specify access and permission types to audit.

```
[cols=3*,options=header]
```

```
|====
```

```
| Name
```

```
| Type
```

```
| Description
```

```
|access
```

```
| string
```

a| Specifies read and write access types.

```
|permission
```

```
| string
```

a| Specifies allow and deny permission types.

```
|====
```

```
[#encryption]
[.api-collapsible-fifth-title]
encryption

[cols=3*,options=header]
| ====
| Name
| Type
| Description

| enabled
| boolean
a| Specifies whether encryption is enabled on the bucket. By default, encryption is disabled on a bucket.
```

```
| ====
|
```

```
[#abort_incomplete_multipart_upload]
[.api-collapsible-fifth-title]
abort_incomplete_multipart_upload
```

Specifies a way to perform abort_incomplete_multipart_upload action on filtered objects within a bucket.

```
[cols=3*,options=header]
| ====
| Name
| Type
| Description

| _links
| link:#_links[_links]
a|
```

| after_initiation_days
| integer
a| Number of days of initiation after which uploads can be aborted.

```
| ====
|
```

```
[#expiration]
```

```
[.api-collapsible-fifth-title]
expiration
```

Specifies a way to perform expiration action on filtered objects within a bucket.

```
[cols=3*,options=header]
```

```
|====
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|_links
```

```
|link:#_links[_links]
```

```
a|
```

```
|expired_object_delete_marker
```

```
|boolean
```

a|Cleanup object delete markers.

```
|object_age_days
```

```
|integer
```

a|Number of days since creation after which objects can be deleted.

```
|object_expiry_date
```

```
|string
```

a|Specific date from when objects can expire.

```
|====
```

```
[#non_current_version_expiration]
```

```
[.api-collapsible-fifth-title]
```

```
non_current_version_expiration
```

Specifies a way to perform non_current_version_expiration action on filtered objects within a bucket.

```
[cols=3*,options=header]
```

```
|====
```

```
|Name
```

```
|Type
```

Description	
_links	
link:#_links[_links]	
a	
new_non_current_versions	
integer	
a Number of latest non-current versions to be retained.	
non_current_days	
integer	
a Number of days after which non-current versions can be deleted.	
====	
[#object_filter]	
[.api-collapsible-fifth-title]	
object_filter	
Specifies a way to filter objects within a bucket.	
[cols=3*,options=header]	
====	
Name	
Type	
Description	
_links	
link:#_links[_links]	
a	
prefix	
string	
a A prefix that is matched against object-names within a bucket.	
size_greater_than	
integer	
a Size of the object greater than specified for which the corresponding lifecycle rule is to be applied.	

```
|size_less_than
|integer
a|Size of the object smaller than specified for which the corresponding
lifecycle rule is to be applied.
```

```
|tags
|array[string]
a|An array of key-value paired tags of the form +++<tag>+++or
<tag=value>.+++</tag>+++
```

```
|====
```

```
[#rules]
[.api-collapsible-fifth-title]
rules
```

Information about the lifecycle management rule of a bucket.

```
[cols=3*,options=header]
```

```
|====
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|_links
```

```
|link:#_links[_links]
```

```
a|
```

```
|abort_incomplete_multipart_upload
```

```
|link:#abort_incomplete_multipart_upload[abort_incomplete_multipart_upload
]
```

```
a|Specifies a way to perform abort_incomplete_multipart_upload action on
filtered objects within a bucket.
```

```
|enabled
```

```
|boolean
```

```
a|Specifies whether or not the associated rule is enabled.
```

```
|expiration
```

```
|link:#expiration[expiration]
```

```
a|Specifies a way to perform expiration action on filtered objects within
```

a bucket.

| name
| string
a|Bucket lifecycle management rule identifier.

| non_current_version_expiration
| link:#non_current_version_expiration[non_current_version_expiration]
a|Specifies a way to perform non_current_version_expiration action on filtered objects within a bucket.

| object_filter
| link:#object_filter[object_filter]
a|Specifies a way to filter objects within a bucket.

| ===

[#lifecycle_management]
[.api-collapsible-fifth-title]
lifecycle_management

Lifecycle management is implemented as an object associated with a bucket. It defines rules to be applied against objects within a bucket. These rules are applied in the background and can delete objects.

[cols=3*, options=header]
| ===
| Name
| Type
| Description

| rules
| array[link:#rules[rules]]
a|Specifies an object store lifecycle management policy.

| ===

[#s3_bucket_policy_condition]
[.api-collapsible-fifth-title]

s3_bucket_policy_condition

Information about policy conditions based on various condition operators and condition keys.

[cols=3*, options=header]

|====

| Name

| Type

| Description

| delimiters

| array[string]

a|An array of delimiters that are compared with the delimiter value specified at the time of execution of an S3-based command, using the condition operator specified.

| max_keys

| array[integer]

a|An array of maximum keys that are allowed or denied to be retrieved using an S3 list operation, based on the condition operator specified.

| operator

| string

a|Condition operator that is applied to the specified condition key.

| prefixes

| array[string]

a|An array of prefixes that are compared with the input prefix value specified at the time of execution of an S3-based command, using the condition operator specified.

| source_ips

| array[string]

a|An array of IP address ranges that are compared with the IP address of a source command at the time of execution of an S3-based command, using the condition operator specified.

| usernames

| array[string]

a|An array of usernames that a current user in the context is evaluated

against using the condition operators.

|====

```
[#s3_bucket_policy_statement]
[.api-collapsible-fifth-title]
s3_bucket_policy_statement
```

Specifies information about a single access permission.

```
[cols=3*,options=header]
```

|====

|Name

|Type

|Description

|actions

|array[string]

a|

|conditions

|array[link:#s3_bucket_policy_condition[s3_bucket_policy_condition]]

a|Specifies bucket policy conditions.

|effect

|string

a|Specifies whether access is allowed or denied when a user requests the specific action. If access (to allow) is not granted explicitly to a resource, access is implicitly denied. Access can also be denied explicitly to a resource, in order to make sure that a user cannot access it, even if a different policy grants access.

|principals

|array[string]

a|

|resources

|array[string]

a|

|sid

|string

```
a|Specifies the statement identifier used to differentiate between statements.
```

```
|====
```

```
[#policy]
[.api-collapsible-fifth-title]
policy
```

A policy is an object associated with a bucket. It defines resource (bucket, folder, or object) permissions. These policies get evaluated when an S3 user makes a request by executing a specific command. The user must be part of the principal (user or group) specified in the policy. Permissions in the policies determine whether the request is allowed or denied.

```
[cols=3*,options=header]
|====
|Name
|Type
|Description

|statements
|array[link:#s3_bucket_policy_statement[s3_bucket_policy_statement]]
a|Specifies bucket access policy statement.
```

```
|====
```

```
[#destination]
[.api-collapsible-fifth-title]
destination
```

```
[cols=3*,options=header]
|====
|Name
|Type
|Description

|is_cloud
|boolean
a|Specifies whether a bucket is protected within the Cloud.
```

```
|is_external_cloud
|boolean
a|Specifies whether a bucket is protected on external Cloud providers.
```

```
|is_ontap
|boolean
a|Specifies whether a bucket is protected within ONTAP.
```

- * Default value: 1
- * readOnly: 1
- * Introduced in: 9.10
- * x-nullable: true

```
|====
```

```
[#protection_status]
[.api-collapsible-fifth-title]
protection_status
```

Specifies attributes of bucket protection.

```
[cols=3*,options=header]
```

```
|====
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|destination
```

```
|link:#destination[destination]
```

```
a|
```

```
|is_protected
```

```
|boolean
```

a|Specifies whether a bucket is a source and if it is protected within ONTAP and/or an external cloud.

- * Default value: 1
- * readOnly: 1
- * Introduced in: 9.10
- * x-nullable: true

```
|====
```

```
[#qos_policy]
[.api-collapsible-fifth-title]
qos_policy
```

Specifies "qos_policy.max_throughput_iops" and/or "qos_policy.max_throughput_mbps" or "qos_policy.min_throughput_iops" and/or "qos_policy.min_throughput_mbps". Specifying "min_throughput_iops" or "min_throughput_mbps" is only supported on volumes hosted on a node that is flash optimized. A pre-created QoS policy can also be used by specifying "qos_policy.name" or "qos_policy.uuid" properties. Setting or assigning a QoS policy to a bucket is not supported if its containing volume or SVM already has a QoS policy attached.

```
[cols=3*,options=header]
```

```
|====
```

```
| Name
```

```
| Type
```

```
| Description
```

```
|_links
```

```
|link:#_links[_links]
```

```
a|
```

```
|max_throughput_iops
```

```
|integer
```

a|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
```

a|Specifies the maximum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH.

```
|min_throughput_iops
```

```
|integer
```

a|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
a|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
a|The QoS policy group name. This is mutually exclusive with UUID and
other QoS attributes during POST and PATCH.
```

```
|uuid
|string
a|The QoS policy group UUID. This is mutually exclusive with name and
other QoS attributes during POST and PATCH.
```

```
|====
```

```
[#svm]
[.api-collapsible-fifth-title]
svm
```

```
[cols=3*,options=header]
```

```
|====
```

```
| Name
| Type
| Description
```

```
|_links
|link:#_links[_links]
```

```
a|
```

```
|name
|string
a|The name of the SVM.
```

```
|uuid
|string
a|The unique identifier of the SVM.
```

```
|====
```

```
[#volume]
[.api-collapsible-fifth-title]
volume
```

Specifies the FlexGroup volume name and UUID where the bucket is hosted.

```
[cols=3*,options=header]
```

```
|====
```

```
| Name
```

```
| Type
```

```
| Description
```

```
|_links
```

```
|link:#_links[_links]
```

```
a|
```

```
|name
```

```
|string
```

```
a|The name of the volume.
```

```
|uuid
```

```
|string
```

```
a|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.
```

```
* example: 028baa66-41bd-11e9-81d5-00a0986138f7
```

```
* Introduced in: 9.6
```

```
* x-nullable: true
```

```
|====
```

```
[#error_arguments]
```

```
[.api-collapsible-fifth-title]
```

```
error_arguments
```

```
[cols=3*,options=header]
```

```
|====
```

```
| Name
```

```
| Type
```

```
| Description
```

```

| code
| string
a|Argument code

| message
| string
a|Message argument

| ===

[#error]
[.api-collapsible-fifth-title]
error

[cols=3*,options=header]
| ===
| Name
| Type
| Description

| arguments
| array[link:#error_arguments[error_arguments]]
a|Message arguments

| code
| string
a|Error code

| message
| string
a|Error message

| target
| string
a|The target parameter that caused the error.

| ===

//end collapsible .Definitions block

```

====

[[IDb6c9938138042ef5f02d32a2349a9efd]]

= Update the S3 bucket configuration for an SVM

[.api-doc-operation .api-doc-operation-patch]#PATCH# [.api-doc-code-block]#/protocols/s3/buckets/{svm.uuid}/{uuid}`#

Introduced In: 9.8

Updates the S3 bucket configuration of an SVM.

== Important notes

* The following fields can be modified for a bucket:

*** `comment` - Any information related to the bucket.

*** `size` - Bucket size.

*** `policy` - An access policy for resources (buckets and objects) that defines their permissions. New policies are created after existing policies are deleted. To retain any of the existing policy statements, you need to specify those statements again. Also, policy conditions can be specified as part of a bucket policy.

*** `qos_policy` - A QoS policy for buckets.

*** `audit_event_selector` - Audit policy for buckets. None can be specified for both access and permission to remove an audit event selector.

*** `versioning-state` - Versioning state of the buckets.

*** `nas_path` - NAS path to which the bucket corresponds to.

== Related ONTAP commands

* `vserver object-store-server bucket modify`

* `vserver object-store-server bucket policy statement modify`

* `vserver object-store-server bucket policy-statement-condition modify`

== Learn more

* [xref:{relative_path}protocols_s3_buckets_endpoint_overview.html](#) [DOC

```

/protocols/s3/buckets]

== Parameters

[cols=5*,options=header]
| ===

| Name
| Type
| In
| Required
| Description

| uuid
| string
| path
| True
a|The unique identifier of the bucket.

| return_timeout
| integer
| query
| False
a|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.

* Default value: 1
* Max value: 120
* Min value: 0

| svm.uuid
| string
| path
| True
a|UUID of the SVM to which this object belongs.

| ===

== Request Body

```

```
[cols=3*,options=header]
|===
| Name
| Type
| Description

|allowed
|boolean
a|If this is set to true, an SVM administrator can manage the S3 service.
If it is false, only the cluster administrator can manage the service.

|audit_event_selector
|link:#audit_event_selector[audit_event_selector]
a|Audit event selector allows you to specify access and permission types
to audit.

|comment
|string
a|Can contain any additional information about the bucket being created or
modified.

|encryption
|link:#encryption[encryption]
a|logical_used_size
|integer
a|Specifies the bucket logical used size up to this point.

|nas_path
|string
a|Specifies the NAS path to which the nas bucket corresponds to.

|policy
|link:#policy[policy]
a|A policy is an object associated with a bucket. It defines resource
(bucket, folder, or object) permissions. These policies get evaluated when
an S3 user makes a request by executing a specific command. The user must
be part of the principal (user or group) specified in the policy.
```

Permissions in the policies determine whether the request is allowed or denied.

|protection_status
|link:#protection_status[protection_status]
a|Specifies attributes of bucket protection.

|qos_policy
|link:#qos_policy[qos_policy]
a|Specifies "qos_policy.max_throughput_iops" and/or "qos_policy.max_throughput_mbps" or "qos_policy.min_throughput_iops" and/or "qos_policy.min_throughput_mbps". Specifying "min_throughput_iops" or "min_throughput_mbps" is only supported on volumes hosted on a node that is flash optimized. A pre-created QoS policy can also be used by specifying "qos_policy.name" or "qos_policy.uuid" properties. Setting or assigning a QoS policy to a bucket is not supported if its containing volume or SVM already has a QoS policy attached.

|role
|string
a|Specifies the role of the bucket.

|size
|integer
a|Specifies the bucket size in bytes; ranges from 80MB to 64TB.

|type
|string
a|Specifies the bucket type. Valid values are "s3" and "nas".

|uuid
|string
a|Specifies the unique identifier of the bucket.

|versioning_state
|string
a|Specifies the versioning state of the bucket. Valid values are "disabled", "enabled" or "suspended". Note that the versioning state cannot be modified to 'disabled' from any other state.

```
|volume
|link:#volume[volume]
a|Specifies the FlexGroup volume name and UUID where the bucket is hosted.
```

```
|====
```

```
.Example request
[%collapsible%closed]
```

```
=====
```

```
[source,json,subs=+macros]
{
  "audit_event_selector": {
    "access": "string",
    "permission": "string"
  },
  "comment": "S3 bucket.",
  "logical_used_size": 0,
  "nas_path": "/",
  "policy": {
    "statements": [
      {
        "actions": [
          "GetObject",
          "PutObject",
          "DeleteObject",
          "ListBucket"
        ],
        "conditions": [
          {
            "delimiters": [
              "/"
            ],
            "max_keys": [
              1000
            ],
            "operator": "ip_address",
            "prefixes": [
              "pref"
            ],
            "source_ips": [
              "1.1.1.1",
              "1.2.2.0/24"
            ],
            "wildcard": false
          }
        ],
        "effect": "Allow"
      }
    ],
    "version": 1
  }
}
```

```

        "usernames": [
            "user1"
        ]
    },
    "effect": "allow",
    "principals": [
        "user1",
        "group/grp1"
    ],
    "resources": [
        "bucket1",
        "bucket1/*"
    ],
    "sid": "FullAccessToUser1"
}
]
},
"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"
},
"role": "string",
"size": 1677721600,
"type": "s3",
"uuid": "414b29a1-3b26-11e9-bd58-0050568ea055",
"versioning_state": "enabled",
"volume": {
    "name": "volume1",
    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
}
}
=====

== Response

```

Status: 202, Accepted

```
[cols=3*,options=header]
| ====
| Name
| Type
| Description

| job
| link:#job_link[job_link]
a| a

| ====

.Example response
[%collapsible%closed]
=====

[source,json,subs=+macros]
{
  "job": {
    "uuid": "string"
  }
}
=====

== Error
```

Status: Default

```
ONTAP Error Response Codes
//start table
[cols=2*,options=header]
| ====
//header
| Error code | Message
//end header
//end row
//start row
| 92405778 +
//end row
//start row
| "Failed to modify bucket '{bucket name}' for SVM '{svm.name}'. Reason:
{Reason for failure}. ";
//end row
//start row
| 92405846 +
```

```
//end row
//start row
|"Failed to modify the object store volume. Reason: {Reason for
failure}.";
//end row
//start row
|92405811 +
//end row
//start row
|"Failed to modify bucket "{bucket name}" for SVM "{svm.name}". Wait a few
minutes and try the operation again.";
//end row
//start row
|92405858 +
//end row
//start row
|"Failed to "modify" the "bucket" because the operation is only supported
on data SVMs.";
//end row
//start row
|92405861 +
//end row
//start row
|"The specified SVM UUID or bucket UUID does not exist.";
//end row
//start row
|92405863 +
//end row
//start row
|"An error occurs when creating an access policy. The reason for failure
is detailed in the error message.";
//end row
//start row
|92405864 +
//end row
//start row
|"An error occurs when deleting an access policy. The reason for failure
is detailed in the error message.";
//end row
//start row
|92405891 +
//end row
//start row
|The resources specified in the access policy are not valid. Valid ways to
specify a resource are *, <bucket-name>, <bucket-name>/.../.... Valid
characters for a resource are 0-9, A-Z, a-z, _, +, comma, ;, :, =, ., &,
```

```

@, ?, (, ), single quote, *, !, - and $.

//end row
//start row
|92405894 +
//end row
//start row
|"Statements, principals and resources list can have a maximum of 10
entries.";
//end row
//start row
|92405897 +
//end row
//start row
|The principals specified in the access policy are not in the correct
format. User name must be in between 1 and 64 characters. Valid characters
for a user name are 0-9, A-Z, a-z, _, +, =, comma, ., @, and - .

//end row
//start row
|92405898 +
//end row
//start row
|"The SID specified in the access policy is not valid. Valid characters
for a SID are 0-9, A-Z and a-z.";
//end row
|===
//end table

== Definitions

[.api-def-first-level]
.See Definitions
[%collapsible%closed]
//Start collapsible Definitions block
=====
[#href]
[.api-collapsible-fifth-title]
href

[cols=3*,options=header]
|===
|Name
|Type
|Description

```

```
| href
| string
a|
| ===

[#_links]
[.api-collapsible-fifth-title]
_links
[#aggregates]
[.api-collapsible-fifth-title]
aggregates

[cols=3*, options=header]
| ===
| Name
| Type
| Description

| name
| string
a|
| uuid
| string
a|
```

```
| ===

[#audit_event_selector]
[.api-collapsible-fifth-title]
audit_event_selector
```

Audit event selector allows you to specify access and permission types to audit.

```
[cols=3*, options=header]
| ===
| Name
| Type
| Description

| access
| string
```

```
a|Specifies read and write access types.
```

```
|permission  
|string  
a|Specifies allow and deny permission types.
```

```
|====
```

```
[#encryption]  
[.api-collapsible-fifth-title]  
encryption
```

```
[cols=3*,options=header]
```

```
|====
```

```
|Name  
|Type  
|Description
```

```
|enabled
```

```
|boolean
```

```
a|Specifies whether encryption is enabled on the bucket. By default, encryption is disabled on a bucket.
```

```
|====
```

```
[#abort_incomplete_multipart_upload]  
[.api-collapsible-fifth-title]  
abort_incomplete_multipart_upload
```

```
Specifies a way to perform abort_incomplete_multipart_upload action on filtered objects within a bucket.
```

```
[cols=3*,options=header]
```

```
|====
```

```
|Name  
|Type  
|Description
```

```
|after_initiation_days
```

```
|integer
```

```
a|Number of days of initiation after which uploads can be aborted.
```

```
|====
```

```
[#expiration]
[.api-collapsible-fifth-title]
expiration
```

Specifies a way to perform expiration action on filtered objects within a bucket.

```
[cols=3*,options=header]
```

```
|====
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|expired_object_delete_marker
```

```
|boolean
```

a|Cleanup object delete markers.

```
|object_age_days
```

```
|integer
```

a|Number of days since creation after which objects can be deleted.

```
|object_expiry_date
```

```
|string
```

a|Specific date from when objects can expire.

```
|====
```

```
[#non_current_version_expiration]
```

```
[.api-collapsible-fifth-title]
```

```
non_current_version_expiration
```

Specifies a way to perform non_current_version_expiration action on filtered objects within a bucket.

```
[cols=3*,options=header]
```

```
|====
```

Name
Type
Description
new_non_current_versions
integer
a Number of latest non-current versions to be retained.
non_current_days
integer
a Number of days after which non-current versions can be deleted.
===
[#object_filter]
[.api-collapsible-fifth-title]
object_filter
Specifies a way to filter objects within a bucket.
[cols=3*,options=header]
===
Name
Type
Description
prefix
string
a A prefix that is matched against object-names within a bucket.
size_greater_than
integer
a Size of the object greater than specified for which the corresponding lifecycle rule is to be applied.
size_less_than
integer
a Size of the object smaller than specified for which the corresponding lifecycle rule is to be applied.

```

|tags
|array[string]
a|An array of key-value paired tags of the form +++<tag>+++or
<tag=value>.+++</tag>+++
| ===

[#rules]
[.api-collapsible-fifth-title]
rules

Information about the lifecycle management rule of a bucket.

[cols=3*,options=header]
| ===
|Name
|Type
|Description

|abort_incomplete_multipart_upload
|link:#abort_incomplete_multipart_upload[abort_incomplete_multipart_upload]
]
a|Specifies a way to perform abort_incomplete_multipart_upload action on
filtered objects within a bucket.

|enabled
|boolean
a|Specifies whether or not the associated rule is enabled.

|expiration
|link:#expiration[expiration]
a|Specifies a way to perform expiration action on filtered objects within
a bucket.

|non_current_version_expiration
|link:#non_current_version_expiration[non_current_version_expiration]
a|Specifies a way to perform non_current_version_expiration action on
filtered objects within a bucket.

| ===

```

```
[#lifecycle_management]
[.api-collapsible-fifth-title]
lifecycle_management
```

Lifecycle management is implemented as an object associated with a bucket. It defines rules to be applied against objects within a bucket. These rules are applied in the background and can delete objects.

```
[cols=3*,options=header]
|===
| Name
| Type
| Description

|rules
|array[link:#rules[rules]]
a|Specifies an object store lifecycle management policy.
```

```
|===
```

```
[#s3_bucket_policy_condition]
[.api-collapsible-fifth-title]
s3_bucket_policy_condition
```

Information about policy conditions based on various condition operators and condition keys.

```
[cols=3*,options=header]
|===
| Name
| Type
| Description

|delimiters
|array[string]
a|An array of delimiters that are compared with the delimiter value specified at the time of execution of an S3-based command, using the condition operator specified.

|max_keys
```

```
|array[integer]
a|An array of maximum keys that are allowed or denied to be retrieved using an S3 list operation, based on the condition operator specified.
```

```
|operator
|string
a|Condition operator that is applied to the specified condition key.
```

```
|prefixes
|array[string]
a|An array of prefixes that are compared with the input prefix value specified at the time of execution of an S3-based command, using the condition operator specified.
```

```
|source_ips
|array[string]
a|An array of IP address ranges that are compared with the IP address of a source command at the time of execution of an S3-based command, using the condition operator specified.
```

```
|usernames
|array[string]
a|An array of usernames that a current user in the context is evaluated against using the condition operators.
```

```
|====
```

```
[#s3_bucket_policy_statement]
[.api-collapsible-fifth-title]
s3_bucket_policy_statement
```

Specifies information about a single access permission.

```
[cols=3*,options=header]
```

```
|====
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|actions
```

```
|array[string]
a|
|conditions
|array[link:#s3_bucket_policy_condition[s3_bucket_policy_condition]]
a|Specifies bucket policy conditions.
```

|effect
|string
a|Specifies whether access is allowed or denied when a user requests the specific action. If access (to allow) is not granted explicitly to a resource, access is implicitly denied. Access can also be denied explicitly to a resource, in order to make sure that a user cannot access it, even if a different policy grants access.

```
|principals
|array[string]
a|
```

```
|resources
|array[string]
a|
```

|sid
|string
a|Specifies the statement identifier used to differentiate between statements.

```
|====
```

```
[#policy]
[.api-collapsible-fifth-title]
policy
```

A policy is an object associated with a bucket. It defines resource (bucket, folder, or object) permissions. These policies get evaluated when an S3 user makes a request by executing a specific command. The user must be part of the principal (user or group) specified in the policy. Permissions in the policies determine whether the request is allowed or denied.

```
[cols=3*,options=header]
```

```

| ====
| Name
| Type
| Description

| statements
| array[link:#s3_bucket_policy_statement[s3_bucket_policy_statement]]
a|Specifies bucket access policy statement.

| ====

[#destination]
[.api-collapsible-fifth-title]
destination

[cols=3*,options=header]
| ====
| Name
| Type
| Description

| is_cloud
| boolean
a|Specifies whether a bucket is protected within the Cloud.

| is_external_cloud
| boolean
a|Specifies whether a bucket is protected on external Cloud providers.

| is_ontap
| boolean
a|Specifies whether a bucket is protected within ONTAP.

* Default value: 1
* readOnly: 1
* Introduced in: 9.10
* x-nullable: true

| ====

[#protection_status]

```

```
[ .api-collapsible-fifth-title]
protection_status
```

Specifies attributes of bucket protection.

```
[cols=3*,options=header]
```

```
|====
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|destination
```

```
|link:#destination[destination]
```

```
a|
```

```
|is_protected
```

```
|boolean
```

a|Specifies whether a bucket is a source and if it is protected within ONTAP and/or an external cloud.

* Default value: 1

* readOnly: 1

* Introduced in: 9.10

* x-nullable: true

```
|====
```

```
[#qos_policy]
```

```
[ .api-collapsible-fifth-title]
```

```
qos_policy
```

Specifies "qos_policy.max_throughput_iops" and/or "qos_policy.max_throughput_mbps" or "qos_policy.min_throughput_iops" and/or "qos_policy.min_throughput_mbps". Specifying "min_throughput_iops" or "min_throughput_mbps" is only supported on volumes hosted on a node that is flash optimized. A pre-created QoS policy can also be used by specifying "qos_policy.name" or "qos_policy.uuid" properties. Setting or assigning a QoS policy to a bucket is not supported if its containing volume or SVM already has a QoS policy attached.

```
[cols=3*,options=header]
```

```
|====
```

```
|Name
```

Type
Description
max_throughput_iops
integer
a 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
a Specifies the maximum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH.
min_throughput_iops
integer
a 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
a 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
a The QoS policy group name. This is mutually exclusive with UUID and other QoS attributes during POST and PATCH.
uuid
string
a The QoS policy group UUID. This is mutually exclusive with name and other QoS attributes during POST and PATCH.
===
[#svm]
[.api-collapsible-fifth-title]
svm

```
[cols=3*,options=header]
|===
|Name
|Type
|Description

|name
|string
a|The name of the SVM.
```

```
|uuid
|string
a|The unique identifier of the SVM.
```

```
|===
```

```
[#volume]
[.api-collapsible-fifth-title]
volume
```

Specifies the FlexGroup volume name and UUID where the bucket is hosted.

```
[cols=3*,options=header]
```

```
|===
|Name
|Type
|Description
```

```
|name
|string
a|The name of the volume.
```

```
|uuid
|string
a|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.
```

```
* example: 028baa66-41bd-11e9-81d5-00a0986138f7
* Introduced in: 9.6
* x-nullable: true
```

| ===

```
[#s3_bucket]
[.api-collapsible-fifth-title]
s3_bucket
```

A bucket is a container of objects. Each bucket defines an object namespace. S3 requests specify objects using a bucket-name and object-name pair. An object resides within a bucket.

[cols=3*, options=header]

| ===

| Name

| Type

| Description

| allowed

| boolean

a|If this is set to true, an SVM administrator can manage the S3 service. If it is false, only the cluster administrator can manage the service.

| audit_event_selector

| link:#audit_event_selector[audit_event_selector]

a|Audit event selector allows you to specify access and permission types to audit.

| comment

| string

a|Can contain any additional information about the bucket being created or modified.

| encryption

| link:#encryption[encryption]

a|

| logical_used_size

| integer

a|Specifies the bucket logical used size up to this point.

```
|nas_path
|string
a|Specifies the NAS path to which the nas bucket corresponds to.
```

```
|policy
|link:#policy[policy]
a|A policy is an object associated with a bucket. It defines resource (bucket, folder, or object) permissions. These policies get evaluated when an S3 user makes a request by executing a specific command. The user must be part of the principal (user or group) specified in the policy. Permissions in the policies determine whether the request is allowed or denied.
```

```
|protection_status
|link:#protection_status[protection_status]
a|Specifies attributes of bucket protection.
```

```
|qos_policy
|link:#qos_policy[qos_policy]
a|Specifies "qos_policy.max_throughput_iops" and/or "qos_policy.max_throughput_mbps" or "qos_policy.min_throughput_iops" and/or "qos_policy.min_throughput_mbps". Specifying "min_throughput_iops" or "min_throughput_mbps" is only supported on volumes hosted on a node that is flash optimized. A pre-created QoS policy can also be used by specifying "qos_policy.name" or "qos_policy.uuid" properties. Setting or assigning a QoS policy to a bucket is not supported if its containing volume or SVM already has a QoS policy attached.
```

```
|role
|string
a|Specifies the role of the bucket.
```

```
|size
|integer
a|Specifies the bucket size in bytes; ranges from 80MB to 64TB.
```

```
|type
|string
a|Specifies the bucket type. Valid values are "s3" and "nas".
```

```
|uuid
|string
a|Specifies the unique identifier of the bucket.

|versioning_state
|string
a|Specifies the versioning state of the bucket. Valid values are
"disabled", "enabled" or "suspended". Note that the versioning state
cannot be modified to 'disabled' from any other state.

|volume
|link:#volume[volume]
a|Specifies the FlexGroup volume name and UUID where the bucket is hosted.

|===
[#job_link]
[.api-collapsible-fifth-title]
job_link

[cols=3*,options=header]
|===
|Name
|Type
|Description

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

|===
[#error_arguments]
[.api-collapsible-fifth-title]
error_arguments

[cols=3*,options=header]
|===
|Name
|Type
```

```
| Description

| code
| string
a|Argument code

| message
| string
a|Message argument

| ===

[#error]
[.api-collapsible-fifth-title]
error

[cols=3*,options=header]
| ===
| Name
| Type
| Description

| arguments
| array[link:#error_arguments[error_arguments]]
a|Message arguments

| code
| string
a|Error code

| message
| string
a|Error message

| target
| string
a|The target parameter that caused the error.

| ===
```

```
//end collapsible .Definitions block
=====
```

:leveloffset: -1

:leveloffset: -1

<<<

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