NetApp

Manage S3 buckets

ONTAP 9.14.1 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,
```

```
        "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": 838860800
  },
  {
    "svm": {
       "uuid": "ee30eb2d-7ae1-11e9-8abe-0050568ea123",
       "name": "vs2"
    },
    "uuid": "19283b75-7ae2-11e9-8abe-0050568ea123",
    "name": "bb2",
    "size": 838860800
  },
  {
    "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-httpd
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-httpd
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 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\":
\"AnonnymousAccessToGetObjectForUsers\" } ] }, \"svm\": { \"uuid\":
\"259b4e46-2d33-11ea-9145-005056bbbec1\" } }"

# 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-
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 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-httpd
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-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-httpd 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\": [\"\"], \"conditions\": [{ \"operator\": \"ip_address\", \"source_ips\": [\"1.1.1.5/23\"] }], \"effect\": \"allow\", \"resources\": [\"\"], \"sid\": \"fullAccessForAllPrincipalsToBucket\"}] } }"</mgmt-ip>

The response:

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

nosniff Cache-Control: no-cache,no-store,must-revalidate Content-Length: 189 Content-Type: application/json { "job": { "uuid": "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-9145-005056bbbec1/98528221-2d52-11ea-892e-005056bbbec1?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-httpd 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" } } } }

```
[[IDea8ba1fdbe6a7fcf8c613f4ded90a3b4]]
= 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

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

* Introduced in: 9.10


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


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

* maxLength: 256
* minLength: 0


|retention.default_period
|string
|query
|False
a|Filter by retention.default_period

* Introduced in: 9.14
```

|retention.mode
|string
|query
|False
a|Filter by retention.mode

* Introduced in: 9.14

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

* maxLength: 63
* minLength: 3

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

* Introduced in: 9.11

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

* Introduced in: 9.12

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

* Introduced in: 9.12

|uuid

|string
|query
|False
a|Filter by uuid

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

* Introduced in: 9.8

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

* Introduced in: 9.8
* Max value: 4194303
* Min value: 0

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

* Introduced in: 9.8

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

* Introduced in: 9.8
* Max value: 2147483647
* Min value: 0

|qos_policy.min_throughput_iops

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

* Introduced in: 9.8
* Max value: 2147483647
* Min value: 0

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

* Introduced in: 9.8
* Max value: 4194303
* Min value: 0

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

* Max value: 62672162783232000
* Min value: 199229440

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

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

|encryption.enabled
|boolean

|query
|False
a|Filter by encryption.enabled

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

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

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

* Introduced in: 9.8


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

* Introduced in: 9.8


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

* Introduced in: 9.8


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

* Introduced in: 9.8
```

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

* Introduced in: 9.8
* maxLength: 256
* minLength: 0


|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.svm.uuid
|string
|query
|False
a|Filter by lifecycle_management.rules.svm.uuid

* Introduced in: 9.14
```

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

* Introduced in: 9.14

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

* Introduced in: 9.13

|lifecycle_management.rules.bucket_name
|string
|query
|False
a|Filter by lifecycle_management.rules.bucket_name

* Introduced in: 9.14
* maxLength: 63
* minLength: 3

|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.name
|string
|query
|False
a|Filter by lifecycle_management.rules.name

* Introduced in: 9.13
* maxLength: 256
* minLength: 0

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

* 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.size_less_than
|integer

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

* 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.uuid
|string
|query
|False
a|Filter by lifecycle_management.rules.uuid

* Introduced in: 9.14

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

* Introduced in: 9.10

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

* Introduced in: 9.10

|nas_path

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

* Introduced in: 9.12


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


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


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

* 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_ontap
|boolean
|query
|False
a|Filter by protection_status.destination.is_ontap

* Introduced in: 9.10
```

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

* Introduced in: 9.10

|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": [
      {
        "aggregates": [
          {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "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": [
            {
              "_links": {
                "self": {
                  "href": "/api/resourcelink"
                }
              },
              "abort_incomplete_multipart_upload": {
                "_links": {
                  "self": {
                    "href": "/api/resourcelink"
                  }
                }
              },
              "bucket_name": "bucket1",
              "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": 10240,
          "size_less_than": 10485760,
          "tags": [
            "project1=projA",
            "project2=projB"
          ]
        },
        "svm": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "svm1",
          "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
        },
        "uuid": "414b29a1-3b26-11e9-bd58-0050568ea055"
      }
    ]
  },
  "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",
              "nasgroup/group1"
            ],
            "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"
      },
      "retention": {
        "default_period": "P10Y",
        "mode": "governance"
      },
      "role": "string",
      "size": 1677721600,
      "storage_service_level": "value",
      "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:#returned_error[returned_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

Aggregate


[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. This field cannot be specified in a
POST method.

|===

[#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. It cannot be specified with tags.

[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. This
cannot be used along with object_expiry_date.


|object_expiry_date
|string
a|Specific date from when objects can expire. This cannot be used with
object_age_days.


|===


[#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>+++



|===


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

Specifies the name of the SVM where this bucket exists.


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

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

|name
|string
a|The name of the SVM. This field cannot be specified in a PATCH method.


|uuid
|string
```

a|The unique identifier of the SVM. This field cannot be specified in a PATCH method.

|===

[#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. It cannot be specified with tags.

|bucket_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 "-".

|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. The length of the name can range from 0 to 256 characters.

|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.

|svm
|link:#svm[svm]
a|Specifies the name of the SVM where this bucket exists.

|uuid
|string
a|Specifies the unique identifier of the 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. The sid length can range from 1 to 256 characters and can only
contain the following combination of characters 0-9, A-Z, and a-z. Special
characters are not valid.


|===


[#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. This field
cannot be specified using a POST method.



|is_external_cloud
|boolean
a|Specifies whether a bucket is protected on external Cloud providers.
This field cannot be specified using a POST method.



|is_ontap
|boolean
a|Specifies whether a bucket is protected within ONTAP. This field cannot
be specified using a POST method.

* 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. This field cannot be specified using a
POST method.

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


|===


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

Specifes "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.


|===


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

Specifies the retention mode and default retention period configured on
the bucket.


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

|Name
|Type
|Description

|default_period
|string
a|Specifies the default retention period that is applied to objects while committing them to the WORM state without an associated retention period. The retention period can be in years, or days. The retention period value represents a duration and must be specified in the ISO-8601 duration format. A period specified for years and days is represented in the ISO-8601 format as "P+++<num>+++Y" and "P+++<num>+++D" respectively, for example "P10Y" represents a duration of 10 years. The period string must contain only a single time element that is, either years, or days. A duration which combines different periods is not supported, for example "P1Y10D" is not supported.+++</num>+++++++</num>+++

|mode
|string
a|The lock mode of the bucket.
compliance ‐ A SnapLock Compliance (SLC) bucket provides the highest level of WORM protection and an administrator cannot destroy a compliance bucket if it contains unexpired WORM objects.
 governance ‐ An administrator can delete a Governance bucket.
 no_lock ‐ Indicates the bucket does not support object locking.

|===

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

SVM, applies only to SVM-scoped objects.

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

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

```
|name
|string
a|The name of the SVM. This field cannot be specified in a PATCH method.


|uuid
|string
a|The unique identifier of the SVM. This field cannot be specified in a
PATCH method.


|===


[#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. This field cannot be specified in a POST or
PATCH method.


|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.
This field cannot be specified in a POST method.


|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. This field cannot be specified using a POST or PATCH method.

|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|Specifes "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.

|retention
|link:#retention[retention]
a|Specifies the retention mode and default retention period configured on
the bucket.

|role
|string
a|Specifies the role of the bucket. This field cannot be specified using a
POST method.

|size
|integer
a|Specifies the bucket size in bytes; ranges from 190MB to 62PB.

|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|SVM, applies only to SVM-scoped objects.

|type
|string

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

|use_mirrored_aggregates
|boolean
a|Specifies whether mirrored aggregates are selected when provisioning a
FlexGroup. Only mirrored aggregates are used if this parameter is set to
"true" and only unmirrored aggregates are used if this parameter is set to
"false". The default value is "true" for a MetroCluster configuration and
is "false" for a non-MetroCluster configuration.

|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



|===


[#returned_error]
[.api-collapsible-fifth-title]
returned_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
====


[[ID583dc7a652a6f8deeb2ab1d0f4efa31b]]
```

Create the S3 bucket configuration for an SVM

[.api-doc-operation .api-doc-operation-post]#POST# [.api-doc-code-block]#`/protocols/s3/buckets`#

Introduced In: 9.8

Creates the S3 bucket configuration of an SVM.

Important notes

* 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.
* `use_mirrored_aggregates` - Specifies whether mirrored aggregates are selected when provisioning a FlexGroup volume.

* `lifecycle_management` - Object store server lifecycle management
policy.
* `retention.mode` - Object lock mode supported on the bucket.
* `retention.default_period` - Specifies the duration of default-retention
applicable for objects on the object store bucket.

== 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 or
the NAS groups.
* `policy.statements.resources` - all objects in the bucket.
* `policy.statements.conditions` - list of bucket policy conditions.
* `versioning_state` - disabled.
* `use_mirrored_aggregates` - _true_ for a MetroCluster configuration and
false for a non-MetroCluster configuration.
* `type` - S3
* `retention.mode` - no_lock

== 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. This field cannot be specified in a POST method.

|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. This field cannot be specified using a POST or PATCH method.

|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|Specifes "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.

|retention
|link:#retention[retention]
a|Specifies the retention mode and default retention period configured on the bucket.

|role
|string
a|Specifies the role of the bucket. This field cannot be specified using a POST method.

|size
|integer
a|Specifies the bucket size in bytes; ranges from 190MB to 62PB.

|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|SVM, applies only to SVM-scoped objects.

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

|use_mirrored_aggregates
|boolean
a|Specifies whether mirrored aggregates are selected when provisioning a FlexGroup. Only mirrored aggregates are used if this parameter is set to "true" and only unmirrored aggregates are used if this parameter is set to "false". The default value is "true" for a MetroCluster configuration and is "false" for a non-MetroCluster configuration.

|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": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "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": [
      {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "abort_incomplete_multipart_upload": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          }
        },
        "bucket_name": "bucket1",
        "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": 10240,
        "size_less_than": 10485760,
        "tags": [
          "project1=projA",
          "project2=projB"
        ]
      },
      "svm": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "uuid": "414b29a1-3b26-11e9-bd58-0050568ea055"
    }
  ]
},
"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",
        "nasgroup/group1"
      ],
      "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"
  },
  "retention": {
    "default_period": "P10Y",
    "mode": "governance"
  },
  "role": "string",
  "size": 1677721600,
  "storage_service_level": "value",
  "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"
  }
}
====
```

== 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"
  }
}
====

=== 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
|===

== Response
```

Status: 201, Created

```
== 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
|92405863 +
//end row
//start row
|"Failed to create lifecycle management rules for bucket "s3bucket1".
Reason: {Reason of failure}. ";
//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
|92406166 +
```

```
//end row
//start row
|"Cannot enable locking on a NAS bucket.";
//end row
//start row
|92406170 +
//end row
//start row
|"Cannot set "-default-retention-period" on object store bucket "\{0}" in
Vserver "\{1}". Setting the default retention period on an object store
bucket requires an effective cluster version of 9.14.1 or later.";
//end row
//start row
|92406171 +
//end row
//start row
|"Cannot set "\{retention_mode}" to "compliance" in a MetroCluster
configuration";
//end row
//start row
|92406174 +
//end row
//start row
|"Internal error. Failed to complete bucket create workflow with "-
retention-mode" set to "compliance" or "governance". Reason: \{0}";
//end row
//start row
|92406175 +
//end row
//start row
|"The SnapLock compliance clock is not running. Use the "snaplock
compliance-clock initialize" command to initialize the compliance clock,
and then try the operation again.";
//end row
//start row
|92406176 +
//end row
//start row
|"The SnapLock compliance clock is not running on the MetroCluster partner
cluster. Use the "snaplock compliance-clock initialize" command to
initialize the compliance clock on the MetroCluster partner cluster, and
then try the operation again.";
//end row
|===
//end table
```

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

|error
|link:#returned_error[returned_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

Aggregate


[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. This field cannot be specified in a
POST method.


|===



[#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. It cannot be specified with tags.


[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. This
cannot be used along with object_expiry_date.


|object_expiry_date
|string
a|Specific date from when objects can expire. This cannot be used with
object_age_days.


|===


[#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>+++

|===

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

Specifies the name of the SVM where this bucket exists.

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

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

|name
|string
a|The name of the SVM. This field cannot be specified in a PATCH method.

|uuid
|string
a|The unique identifier of the SVM. This field cannot be specified in a
PATCH method.

|===

[#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. It cannot be specified with tags.

|bucket_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 "-".

|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. The length of the name can range from 0 to 256 characters.

|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.

|svm
|link:#svm[svm]
a|Specifies the name of the SVM where this bucket exists.

|uuid
|string
a|Specifies the unique identifier of the 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. The sid length can range from 1 to 256 characters and can only
contain the following combination of characters 0-9, A-Z, and a-z. Special
characters are not valid.
```

```
|===


[#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. This field
cannot be specified using a POST method.


|is_external_cloud
|boolean
```

a|Specifies whether a bucket is protected on external Cloud providers. This field cannot be specified using a POST method.

|is_ontap
|boolean
a|Specifies whether a bucket is protected within ONTAP. This field cannot be specified using a POST method.

* 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. This field cannot be specified using a POST method.

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

```
|===
```

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

Specifes "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.


|===



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

Specifies the retention mode and default retention period configured on
the bucket.


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

|default_period
|string
a|Specifies the default retention period that is applied to objects while
committing them to the WORM state without an associated retention period.
The retention period can be in years, or days. The retention period value
represents a duration and must be specified in the ISO-8601 duration
format.  A period specified for years and days is represented in the ISO-
8601 format as "P+++<num>+++Y" and "P+++<num>+++D" respectively, for
example "P10Y" represents a duration of 10 years. The period string must
contain only a single time element that is, either years, or days. A
duration which combines different periods is not supported, for example
"P1Y10D" is not supported.+++</num>++++++</num>+++
```

|mode
|string
a|The lock mode of the bucket.
compliance ‐ A SnapLock Compliance (SLC) bucket provides the highest
level of WORM protection and an administrator cannot destroy a compliance
bucket if it contains unexpired WORM objects.
 governance ‐ An administrator can delete a Governance bucket.
 no_lock ‐ Indicates the bucket does not support object locking.

|===

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

SVM, applies only to SVM-scoped objects.

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

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

|name
|string
a|The name of the SVM. This field cannot be specified in a PATCH method.

|uuid
|string
a|The unique identifier of the SVM. This field cannot be specified in a
PATCH method.

|===

[#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. This field cannot be specified in a POST or
PATCH method.


|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 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	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. This field cannot be specified in a POST method.
audit_event_selector	link:#audit_event_selector[audit_event_selector]	Audit event selector allows you to specify access and permission types to audit.
comment	string	Can contain any additional information about the bucket being created or modified.
constituents_per_aggregate	integer	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]	
lifecycle_management	link:#lifecycle_management[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.

|logical_used_size
|integer
a|Specifies the bucket logical used size up to this point. This field
cannot be specified using a POST or PATCH method.

|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|Specifes "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.

|retention
|link:#retention[retention]
a|Specifies the retention mode and default retention period configured on the bucket.

|role
|string
a|Specifies the role of the bucket. This field cannot be specified using a POST method.

|size
|integer
a|Specifies the bucket size in bytes; ranges from 190MB to 62PB.

|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|SVM, applies only to SVM-scoped objects.

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

|use_mirrored_aggregates
|boolean
a|Specifies whether mirrored aggregates are selected when provisioning a FlexGroup. Only mirrored aggregates are used if this parameter is set to "true" and only unmirrored aggregates are used if this parameter is set to "false". The default value is "true" for a MetroCluster configuration and is "false" for a non-MetroCluster configuration.

|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

|_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



|===


[#returned_error]
[.api-collapsible-fifth-title]
returned_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
====
```

[[ID9da20155ef3b9102c5a4ee2d151ee65c]]
= 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: 200, Ok

```
[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"
  }
}
====


== Response
```

Status: 202, Accepted

```
== 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:#returned_error[returned_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


|===


[#returned_error]
[.api-collapsible-fifth-title]
returned_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
====



[[ID966608340f24cd132f7908aa4fe8faf5]]
= 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

|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. This field cannot be specified in a POST method.

|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. This field cannot be specified using a POST or PATCH method.

|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|Specifes "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.

|retention
|link:#retention[retention]
a|Specifies the retention mode and default retention period configured on the bucket.

|role
|string
a|Specifies the role of the bucket. This field cannot be specified using a POST method.

|size
|integer
a|Specifies the bucket size in bytes; ranges from 190MB to 62PB.

|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|SVM, applies only to SVM-scoped objects.

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

|use_mirrored_aggregates
|boolean
a|Specifies whether mirrored aggregates are selected when provisioning a FlexGroup. Only mirrored aggregates are used if this parameter is set to "true" and only unmirrored aggregates are used if this parameter is set to "false". The default value is "true" for a MetroCluster configuration and is "false" for a non-MetroCluster configuration.

|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]
{
  "aggregates": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "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": [
      {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "abort_incomplete_multipart_upload": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          }
        },
        "bucket_name": "bucket1",
        "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": 10240,
          "size_less_than": 10485760,
          "tags": [
            "project1=projA",
            "project2=projB"
          ]
        },
        "svm": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "svm1",
          "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
        },
        "uuid": "414b29a1-3b26-11e9-bd58-0050568ea055"
      }
    ]
  },
  "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",
        "nasgroup/group1"
      ],
      "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"
  },
  "retention": {
    "default_period": "P10Y",
    "mode": "governance"
  },
  "role": "string",
  "size": 1677721600,
  "storage_service_level": "value",
  "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:#returned_error[returned_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

Aggregate


[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. This field cannot be specified in a
POST method.
```

```
|===


[#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. It cannot be specified with tags.


[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. This
cannot be used along with object_expiry_date.


|object_expiry_date
|string
a|Specific date from when objects can expire. This cannot be used with
object_age_days.


|===


[#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>+++

|===

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

Specifies the name of the SVM where this bucket exists.


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

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

|name
|string
a|The name of the SVM. This field cannot be specified in a PATCH method.


|uuid
|string
a|The unique identifier of the SVM. This field cannot be specified in a
PATCH method.


|===


[#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. It cannot be specified with tags.


|bucket_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 "-".


|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. The length of the name can
range from 0 to 256 characters.


|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.


|svm
|link:#svm[svm]
```

a|Specifies the name of the SVM where this bucket exists.

|uuid
|string
a|Specifies the unique identifier of the 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. The sid length can range from 1 to 256 characters and can only
contain the following combination of characters 0-9, A-Z, and a-z. Special
characters are not valid.


|===


[#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. This field
cannot be specified using a POST method.


|is_external_cloud
|boolean
a|Specifies whether a bucket is protected on external Cloud providers.
This field cannot be specified using a POST method.


|is_ontap
```

```
|boolean
a|Specifies whether a bucket is protected within ONTAP. This field cannot
be specified using a POST method.

* 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. This field cannot be specified using a
POST method.

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


|===


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

```
qos_policy

Specifes "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.


|===


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

Specifies the retention mode and default retention period configured on
the bucket.


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

|default_period
|string
a|Specifies the default retention period that is applied to objects while
committing them to the WORM state without an associated retention period.
The retention period can be in years, or days. The retention period value
represents a duration and must be specified in the ISO-8601 duration
format.  A period specified for years and days is represented in the ISO-
8601 format as "P+++<num>+++Y" and "P+++<num>+++D" respectively, for
example "P10Y" represents a duration of 10 years. The period string must
contain only a single time element that is, either years, or days. A
duration which combines different periods is not supported, for example
"P1Y10D" is not supported.+++</num>++++++</num>+++


|mode
|string
a|The lock mode of the bucket.
```

compliance ‐ A SnapLock Compliance (SLC) bucket provides the highest
level of WORM protection and an administrator cannot destroy a compliance
bucket if it contains unexpired WORM objects.
 governance ‐ An administrator can delete a Governance bucket.
 no_lock ‐ Indicates the bucket does not support object locking.

|===

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

SVM, applies only to SVM-scoped objects.

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

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

|name
|string
a|The name of the SVM. This field cannot be specified in a PATCH method.

|uuid
|string
a|The unique identifier of the SVM. This field cannot be specified in a
PATCH method.

|===

[#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. This field cannot be specified in a POST or
PATCH method.


|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



|===



[#returned_error]
[.api-collapsible-fifth-title]
returned_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
====



[[IDae0a9674fbe3944b64d5b14fbde19ef0]]
= 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.

*** `retention.default_period` - Specifies the duration of default-retention applicable for objects on the object store bucket.

== 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

|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.
This field cannot be specified in a POST method.


|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. This field cannot be specified using a POST or PATCH method.

|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|Specifes "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.

|retention
|link:#retention[retention]
a|Specifies the retention mode and default retention period configured on the bucket.

|role
|string
a|Specifies the role of the bucket. This field cannot be specified using a POST method.

|size
|integer
a|Specifies the bucket size in bytes; ranges from 190MB to 62PB.

|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|SVM, applies only to SVM-scoped objects.

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

|use_mirrored_aggregates
|boolean
a|Specifies whether mirrored aggregates are selected when provisioning a FlexGroup. Only mirrored aggregates are used if this parameter is set to "true" and only unmirrored aggregates are used if this parameter is set to "false". The default value is "true" for a MetroCluster configuration and is "false" for a non-MetroCluster configuration.

|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": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "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": [
      {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
```

```
        }
      },
      "abort_incomplete_multipart_upload": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        }
      },
      "bucket_name": "bucket1",
      "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": 10240,
        "size_less_than": 10485760,
        "tags": [
          "project1=projA",
          "project2=projB"
        ]
      },
      "svm": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
```

```
            "name": "svm1",
            "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
          },
          "uuid": "414b29a1-3b26-11e9-bd58-0050568ea055"
        }
      ]
    },
    "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",
            "nasgroup/group1"
          ],
```

```
      "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"
},
"retention": {
  "default_period": "P10Y",
  "mode": "governance"
},
"role": "string",
"size": 1677721600,
"storage_service_level": "value",
"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"
    }
  }
  ====

  == Response
```

Status: 200, Ok

```
[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"
  }
}
====

== Response
```

Status: 202, Accepted

```
== Error
```

```
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
//start row
```

```
|92406014 +
//end row
//start row
|"Failed to modify event selector for bucket "{bucket name}". If the value
of either access or permission is set to none, they both must be set to
none.";
//end row
//start row
|92733458 +
//end row
//start row
|"[Job job number] Job failed: Failed to modify bucket "s3bucket1" for SVM
"vs1". Reason: {Reason for failure}. ";
//end row
//start row
|8454236  +
//end row
//start row
|"Could not assign qtree "qtree1" to QoS policy group "group1". Invalid
QoS policy group specified "group1". The specified QoS policy group has a
min-throughput value set, and the workload being assigned resides on a
platform that does not support min-throughput or the cluster is in a mixed
version state and the effective cluster version of ONTAP does not support
min-throughput on this platform.";
//end row
//start row
|8454323  +
//end row
//start row
|"Policy group with UUID "23bwegew-8eqg-121r-bjad-0050e628wq732" does not
exist."
//end row
|===
//end table


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

|error
|link:#returned_error[returned_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

Aggregate


[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. This field cannot be specified in a
POST method.



|===



[#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. It cannot be specified with tags.


[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. This
cannot be used along with object_expiry_date.


|object_expiry_date
|string
a|Specific date from when objects can expire. This cannot be used with
object_age_days.


|===



[#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>+++



|===


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

Specifies the name of the SVM where this bucket exists.
```

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

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

|name
|string
a|The name of the SVM. This field cannot be specified in a PATCH method.

|uuid
|string
a|The unique identifier of the SVM. This field cannot be specified in a
PATCH method.

|===


[#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. It cannot be specified with tags.

|bucket_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 "-".

|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. The length of the name can range from 0 to 256 characters.

|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.

|svm
|link:#svm[svm]
a|Specifies the name of the SVM where this bucket exists.

|uuid
|string
a|Specifies the unique identifier of the 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. The sid length can range from 1 to 256 characters and can only
contain the following combination of characters 0-9, A-Z, and a-z. Special
characters are not valid.


|===


[#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. This field
cannot be specified using a POST method.


|is_external_cloud
|boolean
a|Specifies whether a bucket is protected on external Cloud providers.
This field cannot be specified using a POST method.


|is_ontap
|boolean
a|Specifies whether a bucket is protected within ONTAP. This field cannot
be specified using a POST method.

* 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. This field cannot be specified using a
POST method.
```

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

```
|===
```

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

```
Specifes "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.

|===

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

Specifies the retention mode and default retention period configured on the bucket.

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

|default_period
|string
a|Specifies the default retention period that is applied to objects while committing them to the WORM state without an associated retention period. The retention period can be in years, or days. The retention period value represents a duration and must be specified in the ISO-8601 duration format. A period specified for years and days is represented in the ISO-8601 format as "P+++<num>+++Y" and "P+++<num>+++D" respectively, for example "P10Y" represents a duration of 10 years. The period string must contain only a single time element that is, either years, or days. A duration which combines different periods is not supported, for example "P1Y10D" is not supported.+++</num>++++++</num>+++

|mode
|string
a|The lock mode of the bucket.
compliance ‐ A SnapLock Compliance (SLC) bucket provides the highest level of WORM protection and an administrator cannot destroy a compliance bucket if it contains unexpired WORM objects.
 governance ‐ An administrator can delete a Governance bucket.
 no_lock ‐ Indicates the bucket does not support object locking.

```
|===


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

SVM, applies only to SVM-scoped objects.


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

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

|name
|string
a|The name of the SVM. This field cannot be specified in a PATCH method.


|uuid
|string
a|The unique identifier of the SVM. This field cannot be specified in a
PATCH method.


|===


[#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. This field cannot be specified in a POST or
PATCH method.


|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. This field cannot be specified in a POST method.

|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. This field cannot be specified using a POST or PATCH method.

|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|Specifes "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.

|retention
|link:#retention[retention]
a|Specifies the retention mode and default retention period configured on
the bucket.

|role
|string
a|Specifies the role of the bucket. This field cannot be specified using a
POST method.

```
|size
|integer
a|Specifies the bucket size in bytes; ranges from 190MB to 62PB.


|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|SVM, applies only to SVM-scoped objects.


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


|use_mirrored_aggregates
|boolean
a|Specifies whether mirrored aggregates are selected when provisioning a
FlexGroup. Only mirrored aggregates are used if this parameter is set to
"true" and only unmirrored aggregates are used if this parameter is set to
"false". The default value is "true" for a MetroCluster configuration and
is "false" for a non-MetroCluster configuration.


|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

|_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

```

```
|===


[#returned_error]
[.api-collapsible-fifth-title]
returned_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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