



Object-store

REST API reference

NetApp
September 12, 2025

This PDF was generated from https://docs.netapp.com/us-en/ontap-restapi-9141/protocols_s3_buckets_endpoint_overview.html on September 12, 2025. Always check docs.netapp.com for the latest.

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Object-store

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:netappl! -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\":  
      \"AnonymousAccessToGetObjectForUsers\" } ] }, \"svm\": { \"uuid\":  
      \"259b4e46-2d33-11ea-9145-005056bbb1\" } } }
```

```
# 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-  
005056bbb1/?name=bucket-3  
Content-Length: 353  
Content-Type: application/json  
{  
  \"num_records\": 1,  
  \"records\": [  
    {  
      \"name\": \"bucket-3\",  
      \"comment\": \"S3 bucket.\"  
    }  
  ],  
  \"job\": {  
    \"uuid\": \"2e880171-7e16-11e9-bfdc-0050568ea123\",  
    \"_links\": {  
      \"self\": {  
        \"href\": \"/api/cluster/jobs/2e880171-7e16-11e9-bfdc-0050568ea123\"  
      }  
    }  
  }  
}
```

```
}  
}
```

Creating an S3 bucket along with 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": 11111111111, "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": [ "<strong>" ], "conditions": [ { "operator": "ip_address", "source_ips": [ "1.1.1.5/23" ] }, {"effect": "allow", "resources": [ "</strong>" ], "sid": "fullAccessForAllPrincipalsToBucket" } ] } }'</mgmt-ip>

```

The response:

```

HTTP/1.1 202 Accepted Date: Fri, 24 May 2019 11:32:27 GMT Server: libzapid-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" } } } }
```

```
[[IDf98b54fa59d83a1b7e78683a1619d51d]]
= 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_days
|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_initia  
tion_days  
|integer  
|query  
|False  
a|Filter by  
lifecycle_management.rules.abort_incomplete_multipart_upload.after_initiat  
ion_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": [
  {
    "audit_event_selector": {
      "access": "string",
      "permission": "string"
    },
    "comment": "S3 bucket.",
    "lifecycle_management": {
      "rules": [
        {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "abort_incomplete_multipart_upload": {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            }
          },
          "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,
"svm": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    }
}

```

```

    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "type": "s3",
  "use_mirrored_aggregates": true,
  "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>+</pre>
```

```
|</pre>
```

```
[#svm]</pre>
```

```
[.api-collapsible-fifth-title]</pre>
```

```
svm</pre>
```

Specifies the name of the SVM where this bucket exists.

```
[cols=3*,options=header]</pre>
```

```
|</pre>
```

```
|Name</pre>
```

```
|Type</pre>
```

```
|Description</pre>
```

```
|_links</pre>
```

```
|link:#_links[_links]</pre>
```

```
a|</pre>
```

```
|name</pre>
```

```
|string</pre>
```

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

```
|uuid</pre>
```

```
|string</pre>
```

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

```
|</pre>
```

```
[#rules]</pre>
```

```
[.api-collapsible-fifth-title]</pre>
```

```
rules</pre>
```

Information about the lifecycle management rule of a bucket.

```
[cols=3*,options=header]</pre>
```

```
|</pre>
```

```
|Name</pre>
```

```

|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
```

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

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

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

```
|max_throughput_iops
|integer
```

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

```
|max_throughput_mbps
|integer
```

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

```
|min_throughput_iops
|integer
```

a|Specifies the minimum throughput in IOPS, 0 means none. Setting "min_throughput" is supported on AFF platforms only, unless FabricPool tiering policies are set. This is mutually exclusive with name and UUID during POST and PATCH.

```
|min_throughput_mbps
```

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

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

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

|===

[#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 &dash; 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 &dash; An administrator can delete a Governance bucket.
no_lock &dash; 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

|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.

|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.
```

```
|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".
```

```
|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
====

[[IDbc2bb520fc6e0a62144d76f2737d0377]]
= 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|Specifies "qos_policy.max_throughput_iops" and/or "qos_policy.max_throughput_mbps" or "qos_policy.min_throughput_iops" and/or "qos_policy.min_throughput_mbps". Specifying "min_throughput_iops" or "min_throughput_mbps" is only supported on volumes hosted on a node that is flash optimized. A pre-created QoS policy can also be used by specifying "qos_policy.name" or "qos_policy.uuid" properties. Setting or assigning a QoS policy to a bucket is not supported if its containing volume or SVM already has a QoS policy attached.

|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": [
    {
      "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": [
      {
        "bucket_name": "bucket1",
        "expiration": {
          "object_expiry_date": "string"
        },
        "name": "string",
        "object_filter": {
          "prefix": "/logs",
          "size_greater_than": 10240,
          "size_less_than": 10485760,
          "tags": [
            "project1=projA",
            "project2=projB"
          ]
        },
        "svm": {
          "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": {
  "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": {
  "name": "svml",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"type": "s3",
"uuid": "414b29a1-3b26-11e9-bd58-0050568ea055",
"versioning_state": "enabled",
"volume": {
  "name": "volume1",
  "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
}
}
====

```

== Response

Status: 202, Accepted

```

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

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

|===

.Example response
[%collapsible%closed]
====
[source,json,subs=+macros]
{
  "job": {
    "uuid": "string"
  }
}
====

=== Headers

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

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

== 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

== Definitions

```

```

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

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

|href
|string
a|

|===

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

Aggregate

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

|name
|string
a|

|uuid
|string
a|

```

```
|===
```

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

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

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

```
|===
```

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

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

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

```
|===
```

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

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

```
|===
```

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

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

```
|after_initiation_days
```

```
|integer
```

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

|===

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

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

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

|===

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

```
|expired_object_delete_marker
```

```
|boolean
```

a|Cleanup object delete markers.

```
|object_age_days
```

```
|integer
```

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

|`new_non_current_versions`

|integer

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

|`non_current_days`

|integer

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

|===

[#`object_filter`]

[.api-collapsible-fifth-title]

`object_filter`

Specifies a way to filter objects within a bucket.

[cols=3*,options=header]

```

|===
|Name
|Type
|Description

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

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

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

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

|===

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

Specifies the name of the SVM where this bucket exists.

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

|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
```

```
|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
```

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

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

```
|===
```

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

```
|max_throughput_iops
|integer
```

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

```
|max_throughput_mbps
|integer
```

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

|min_throughput_iops

|integer

a|Specifies the minimum throughput in IOPS, 0 means none. Setting "min_throughput" is supported on AFF platforms only, unless FabricPool tiering policies are set. This is mutually exclusive with name and UUID during POST and PATCH.

|min_throughput_mbps

|integer

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

|name

|string

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

|uuid

|string

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

|===

[#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

|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

|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|Specifies "qos_policy.max_throughput_iops" and/or "qos_policy.max_throughput_mbps" or "qos_policy.min_throughput_iops" and/or "qos_policy.min_throughput_mbps". Specifying "min_throughput_iops" or "min_throughput_mbps" is only supported on volumes hosted on a node that is flash optimized. A pre-created QoS policy can also be used by specifying "qos_policy.name" or "qos_policy.uuid" properties. Setting or

assigning a QoS policy to a bucket is not supported if its containing volume or SVM already has a QoS policy attached.

|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

|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
```

```
====
```

```
[[ID3b5dd5085cb55aeae124748e997a44d6]]
```

```
= 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
=====

[[IDa088494695888d44b51c9af244c8381d]]
= Retrieve the S3 bucket configuration for an SVM

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

*Introduced In:* 9.8

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

== Related ONTAP commands

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

== Learn more

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

== Parameters

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

```

```

|Name
|Type
|In
|Required
|Description

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

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

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

|===

== Response

```

Status: 200, Ok

```

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

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

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

|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.

|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".

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

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

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

```
|===
```

.Example response

[%collapsible%closed]

=====

[source,json,subs=+macros]

```
{
  "audit_event_selector": {
    "access": "string",
    "permission": "string"
  },
  "comment": "S3 bucket.",
  "lifecycle_management": {
    "rules": [
      {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "abort_incomplete_multipart_upload": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          }
        }
      }
    ],
  },
}
```

```

    "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,
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "type": "s3",
  "use_mirrored_aggregates": true,
  "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
```

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

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

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

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

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

```
|min_throughput_iops
|integer
a|Specifies the minimum throughput in IOPS, 0 means none. Setting "min_throughput" is supported on AFF platforms only, unless FabricPool tiering policies are set. This is mutually exclusive with name and UUID during POST and PATCH.
```

```
|min_throughput_mbps
|integer
```

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

|name

|string

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

|uuid

|string

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

|===

[#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 &dash; 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 &dash; An administrator can delete a Governance bucket.
no_lock &dash; 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
=====

```

[[ID78e27f8b01b9f3280862888287a1561d]]

= 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
```

```
|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.

```
|encryption
```

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

```
a|
```

```
|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.

```
|nas_path
```

```
|string
```

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

```
|policy
```

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

a|A policy is an object associated with a bucket. It defines resource (bucket, folder, or object) permissions. These policies get evaluated when

an S3 user makes a request by executing a specific command. The user must be part of the principal (user or group) specified in the policy. Permissions in the policies determine whether the request is allowed or denied.

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

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

```
|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.
```

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

```
|uuid
|string
```

a|Specifies the unique identifier of the bucket.

|versioning_state

|string

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

|volume

|link:#volume[volume]

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

|===

.Example request

[%collapsible%closed]

====

[source,json,subs=+macros]

```
{
  "audit_event_selector": {
    "access": "string",
    "permission": "string"
  },
  "comment": "S3 bucket.",
  "logical_used_size": 0,
  "nas_path": "/",
  "policy": {
    "statements": [
      {
        "actions": [
          "GetObject",
          "PutObject",
          "DeleteObject",
          "ListBucket"
        ],
        "conditions": [
          {
            "delimiters": [
              "/"
            ],
            "max_keys": [
              1000
            ]
          }
        ]
      }
    ]
  }
}
```

```

        ],
        "operator": "ip_address",
        "prefixes": [
            "pref"
        ],
        "source_ips": [
            "1.1.1.1",
            "1.2.2.0/24"
        ],
        "usernames": [
            "user1"
        ]
    }
],
"effect": "allow",
"principals": [
    "user1",
    "group/grp1",
    "nasgroup/group1"
],
"resources": [
    "bucket1",
    "bucket1/*"
],
"sid": "FullAccessToUser1"
}
]
},
"qos_policy": {
    "max_throughput_iops": 10000,
    "max_throughput_mbps": 500,
    "min_throughput_iops": 2000,
    "min_throughput_mbps": 500,
    "name": "performance",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"retention": {
    "default_period": "P10Y"
},
"role": "string",
"size": 1677721600,
"type": "s3",
"use_mirrored_aggregates": true,
"uuid": "414b29a1-3b26-11e9-bd58-0050568ea055",
"versioning_state": "enabled",
"volume": {

```

```

    "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": {
    "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
|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

```

== Definitions

```

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

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

```

```
|Type
|Description
```

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

```
|===
```

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

Aggregate

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

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

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

```
|===
```

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

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

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

```
|Name
|Type
|Description

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

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

```
|===
```

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

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

```
|===
```

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

```
|enabled
|boolean
```

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

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

|===

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

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

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

|expired_object_delete_marker
|boolean
a|Cleanup object delete markers.

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

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

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

```
|===
```

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

Specifies a way to filter objects within a bucket.

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

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

```
|size_greater_than
|integer
a|Size of the object greater than specified for which the corresponding
```

lifecycle rule is to be applied.

|size_less_than

|integer

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

|tags

|array[string]

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

|===

[#svm]

[.api-collapsible-fifth-title]

svm

Specifies the name of the SVM where this bucket exists.

[cols=3*,options=header]

|===

|Name

|Type

|Description

|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

|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.

|enabled

|boolean

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

|expiration

|link:#expiration[expiration]

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

|non_current_version_expiration

|link:#non_current_version_expiration[non_current_version_expiration]

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

|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

|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>+++

```
|===
```

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

SVM, applies only to SVM-scoped objects.

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

```
|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
```

```
|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

|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.

|encryption

|link:#encryption[encryption]

a|

|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.

|nas_path

|string

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

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

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

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

|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.

|type
|string

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

|uuid

|string

a|Specifies the unique identifier of the bucket.

|versioning_state

|string

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

|volume

|link:#volume[volume]

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

|===

[#job_link]

[.api-collapsible-fifth-title]

job_link

[cols=3*,options=header]

|===

|Name

|Type

|Description

|uuid

|string

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

|===

[#error_arguments]

[.api-collapsible-fifth-title]

error_arguments

[cols=3*,options=header]

```

|===
|Name
|Type
|Description

|code
|string
a|Argument code

|message
|string
a|Message argument

|===

[#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
```

```
= Manage protocols S3 services
```

```
:leveloffset: +1
```

```
[[ID5f1fab2b712b6df3cc8c95296ae64d39]]  
= Protocols S3 services endpoint overview
```

== Overview

An S3 server is an object store server that is compatible with the Amazon S3 protocol. In the initial version, only a subset of the protocol features necessary to support Fabric Pool capacity tier usecases are implemented. S3 server allows you to store objects in ONTAP using Amazon S3 protocol. This feature can be used as a target object store server for ONTAP FabricPools.

== Performance monitoring

Performance of the SVM can be monitored by the ``metric.+++`` and ``statistics.+++`` properties. These show the performance of the SVM in terms of IOPS, latency and throughput. The ``metric.+++`` properties denote an average whereas ``statistics.+++`` properties denote a real-time monotonically increasing value aggregated across all nodes.

== Examples

```
=== Retrieving all of the S3 configurations
```

```
----
```

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

```
# The call:
curl -X GET "https://<mgmt-
ip>/api/protocols/s3/services?fields=*&return_records=true&return_timeout=
15" -H "accept: application/json"

# The response:
{
  "records": [
    {
      "svm": {
        "uuid": "cf90b8f2-8071-11e9-8190-0050568eae21",
        "name": "vs2"
      },
      "name": "vs1",
      "comment": "S3 server",
      "enabled": false,
    },
    {
      "svm": {
        "uuid": "d7f1219c-7f8e-11e9-9124-0050568eae21",
        "name": "vs1"
      },
      "name": "Server-1",
      "comment": "S3 server",
      "enabled": true,
      "buckets": [
        {
          "uuid": "e08665af-8114-11e9-8190-0050568eae21",
          "name": "bucket-1",
          "volume": {
            "name": "fg_oss_1559026220",
            "uuid": "de146bff-8114-11e9-8190-0050568eae21"
          },
          "size": 209715200,
          "logical_used_size": 157286400,
          "encryption": {
            "enabled": false
          },
          "comment": "s3 bucket"
        },
        {
          "uuid": "fb1912ef-8114-11e9-8190-0050568eae21",
          "name": "bucket-2",
          "volume": {
            "name": "fg_oss_1559026269",

```

```

        "uuid": "f9b1cdd0-8114-11e9-8190-0050568eae21"
    },
    "size": 1048576000,
    "logical_used_size": 78643200,
    "encryption": {
        "enabled": false
    },
    "comment": "s3 bucket"
}
],
"users": [
    {
        "name": "user-1",
        "comment": "S3 user",
        "access_key": "KEOYV21G156K8AB4ZISH"
    },
    {
        "name": "user-2",
        "comment": "",
        "access_key": "ANOYV22L156K8AB4ZISB"
    }
]
}
],
"num_records": 2
}
-----

```

=== Retrieving all S3 configurations for a particular SVM

```

-----

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

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/s3/services/24c2567a-f269-11e8-8852-0050568e5298?fields=*" -H "accept: application/json"

# The response:
{
  "svm": {
    "uuid": "d7f1219c-7f8e-11e9-9124-0050568eae21",
    "name": "vs1"
  },
  "name": "Server-1",

```

```

"comment": "S3 server",
"enabled": true,
"buckets": [
  {
    "uuid": "e08665af-8114-11e9-8190-0050568eae21",
    "name": "bucket-1",
    "volume": {
      "name": "fg_oss_1559026220",
      "uuid": "de146bff-8114-11e9-8190-0050568eae21"
    },
    "size": 209715200,
    "logical_used_size": 157286400,
    "encryption": {
      "enabled": false
    },
    "comment": "s3 bucket",
    "policy": {
      "statements": [
        {
          "effect": "deny",
          "actions": [
            "*Object"
          ],
          "principals": [
            "mike"
          ],
          "resources": [
            "bucket-1/policy-docs/*",
            "bucket-1/confidential-*"
          ],
          "sid": "DenyAccessToGetPutDeleteObjectForMike"
        },
        {
          "effect": "allow",
          "actions": [
            "GetObject"
          ],
          "principals": [
            "*"
          ],
          "resources": [
            "bucket-1/readme"
          ],
          "sid": "AccessToGetObjectForAnonymousUser"
        }
      ]
    }
  ]
}

```

```

    }
  },
  {
    "uuid": "fb1912ef-8114-11e9-8190-0050568eae21",
    "name": "bucket-2",
    "volume": {
      "name": "fg_oss_1559026269",
      "uuid": "f9b1cdd0-8114-11e9-8190-0050568eae21"
    },
    "size": 1677721600,
    "logical_used_size": 1075838976,
    "encryption": {
      "enabled": false
    },
    "comment": "s3 bucket"
  }
],
"users": [
  {
    "name": "user-1",
    "comment": "s3 user",
    "access_key": "KEOYV21G156K8AB4ZISH"
  },
  {
    "name": "user-2",
    "comment": "",
    "access_key": "ANOYV22L156K8AB4ZISB"
  }
]
}

```

==== Creating an S3 server, users, and buckets configurations with required fields specified

```

----

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

# The call:
curl -X POST "https://<mgmt-ip>/api/protocols/s3/services" -H "accept: application/hal+json" -H "Content-Type: application/json" -d "{
  \"buckets\": [ { \"name\": \"bucket-1\" }, { \"name\": \"bucket-2\" } ],
  \"enabled\": true, \"name\": \"Server-1\", \"svm\": { \"uuid\":
  \"d49ef663-7f8e-11e9-9b2c-0050568e4594\" }, \"users\": [ { \"name\":

```



```
\ "user-1\" }, { \"name\": \"user-2\" } ]}]"
```

```
# The response:
```

```
HTTP/1.1 201 Created
```

```
Date: Fri, 31 May 2019 08:44:16 GMT
```

```
Server: libzapid-httpd
```

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

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

```
Location: /api/protocols/s3/services/
```

```
Content-Length: 623
```

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

```
{
  "num_records": 1,
  "records": [
    {
      "users": [
        {
          "name": "user-1",
          "access_key": "KEOYV21G156K8AB4ZISH",
          "secret_key": "fu9PD3gWxrTZWi1Dru_TzNZUIncJ_Qa01st3NNhA"
        },
        {
          "name": "user-2",
          "access_key": "ANOYV22L156K8AB4ZISB",
          "secret_key": "YcmjAnPpnqZzyV4OVRbbswdX88____96X1qb6453Y"
        }
      ],
      "job": {
        "uuid": "f51675dd-820a-11e9-a762-0050568e4594",
        "_links": {
          "self": {
            "href": "/api/cluster/jobs/f51675dd-820a-11e9-a762-0050568e4594"
          }
        }
      },
      "_links": {
        "self": {
          "href": "/api/protocols/s3/services/"
        }
      }
    }
  ]
}
```

```
----
```

```
=== Creating an S3 server, users, and buckets configurations
```

The API:

/api/protocols/s3/services

The call:

```
curl -X POST "https://<mgmt-ip>/api/protocols/s3/services" -H "accept:
application/hal+json" -H "Content-Type: application/json" -d "{
\"buckets\": [ { \"aggregates\": [ { \"name\": \"aggr1\", \"uuid\":
\"1cd8a442-86d1-11e0-ae1c-123478563412\" } ],
\"constituents_per_aggregate\": 4, \"name\": \"bucket-1\", \"size\":
\"209715200\", \"policy\": { \"statements\": [ { \"actions\": [ \"*\" ],
\"conditions\": [ { \"operator\": \"ip_address\", \"source_ips\": [
\"1.1.1.1/23\", \"1.2.2.2/20\" ] } ], \"effect\": \"allow\",
\"resources\": [ \"bucket-1\", \"bucket-1*\" ], \"sid\":
\"fullAccessForAllPrincipalsToBucket\" } ] } }, { \"aggregates\": [ {
\"name\": \"aggr1\", \"uuid\": \"1cd8a442-86d1-11e0-ae1c-123478563412\" },
{ \"name\": \"aggr2\", \"uuid\": \"982fc4d0-d1a2-4da4-9c47-5b433f24757d\" }
], \"constituents_per_aggregate\": 4, \"name\": \"bucket-2\" } ],
\"enabled\": true, \"name\": \"Server-1\", \"svm\": { \"name\": \"vs1\",
\"uuid\": \"d49ef663-7f8e-11e9-9b2c-0050568e4594\" }, \"users\": [ {
\"name\": \"user-1\" }, { \"name\": \"user-2\" } ] } }
```

The response:

HTTP/1.1 201 Created

Date: Fri, 31 May 2019 08:44:16 GMT

Server: libzapid-httpd

X-Content-Type-Options: nosniff

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

Location: /api/protocols/s3/services/

Content-Length: 623

Content-Type: application/hal+json

```
{
  "num_records": 1,
  "records": [
    {
      "users": [
        {
          "name": "user-1",
          "access_key": "KEOYV21G156K8AB4ZISH",
          "secret_key": "YCmjAnPpnqZzyV4OVRbbswdX88____96X1qb6453Y"
        },
        {
          "name": "user-2",
          "access_key": "M4U4922OT09QGXM3YR2I",

```

```

        "secret_key": "fu9PD3gWxrTZWilDru_TzNZUIncJ_Qa01st3NNhA"
    }
],
"job": {
    "uuid": "f51675dd-820a-11e9-a762-0050568e4594",
    "_links": {
        "self": {
            "href": "/api/cluster/jobs/f51675dd-820a-11e9-a762-0050568e4594"
        }
    }
},
"_links": {
    "self": {
        "href": "/api/protocols/s3/services/"
    }
}
}
]
}
}

```

=== Creating an S3 server configuration

```

----

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

# The call:
curl -X POST "https://<mgmt-ip>/api/protocols/s3/services" -H "accept:
application/json" -H "Content-Type: application/json" -d "{ \"comment\":
\"S3 server\", \"enabled\": true, \"name\": \"Server-1\", \"svm\": {
\"name\": \"vs1\", \"uuid\": \"db2ec036-8375-11e9-99e1-0050568e3ed9\" } }"
----

```

=== Disable s3 server for the specified SVM

```

----

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

# The call:
curl -X PATCH "https://<mgmt-ip>/api/protocols/s3/services/03ce5c36-f269-
11e8-8852-0050568e5298" -H "accept: application/json" -H "Content-Type:
application/json" -d "{ \"enabled\": false }"

```

=== Deleting the S3 server for a specified SVM

The API:

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

The call:

```
curl -X DELETE "https://<mgmt-ip>/api/protocols/s3/services/a425f10b-ad3b-11e9-b559-0050568e8222?delete_all=false" -H "accept: application/json"
```

HTTP/1.1 200 OK

Date: Wed, 14 Aug 2019 07:04:24 GMT

Server: libzapid-httpd

X-Content-Type-Options: nosniff

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

Content-Length: 132

Content-Type: application/json

```
{
  "num_records": 1,
  "records": [
    {
      "job": {
        "uuid": "bf74ba50-be61-11e9-bea8-0050568e8222"
      }
    }
  ]
}
```

=== Deleting all of the S3 server configuration for a specified SVM

The API:

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

The call:

```
curl -X DELETE "https://<mgmt-ip>/api/protocols/s3/services/03ce5c36-f269-11e8-8852-0050568e5298?delete_all=true" -H "accept: application/json"
```

The response:

HTTP/1.1 200 OK

Date: Sat, 01 Jun 2019 15:46:39 GMT

Server: libzapid-httpd

```

X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Length: 132
Content-Type: application/hal+json
{
  "num_records": 1,
  "records": [
    {
      "job": {
        "uuid": "71eaaf02-8484-11e9-91f7-0050568ebc5f"
      }
    }
  ]
}
-----

```

```

[[IDa5053face416b00156db0605e05b2cf2]]
= Retrieve the S3 server configuration for all SVMs

```

```

[.api-doc-operation .api-doc-operation-get]#GET# [.api-doc-code-
block]#`/protocols/s3/services`#

```

***Introduced In:** 9.7

Retrieves the S3 server configuration for all SVMs. Note that in order to retrieve S3 bucket policy conditions, 'fields' option should be set to '***'.

== Expensive properties

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

```

* `statistics.+++`
* `metric.+++`

```

== Related ONTAP commands

```

* `vserver object-store-server show`

```

== Learn more

* xref:{relative_path}protocols_s3_services_endpoint_overview.html[DOC
/protocols/s3/services]

== Parameters

[cols=5*,options=header]

|==

|Name

|Type

|In

|Required

|Description

|certificate.uuid

|string

|query

|False

a|Filter by certificate.uuid

* Introduced in: 9.8

|certificate.name

|string

|query

|False

a|Filter by certificate.name

* Introduced in: 9.8

|statistics.throughput_raw.total

|integer

|query

|False

a|Filter by statistics.throughput_raw.total

* Introduced in: 9.8

|statistics.throughput_raw.write

|integer

|query

```

|False
a|Filter by statistics.throughput_raw.write

* Introduced in: 9.8

|statistics.throughput_raw.read
|integer
|query
|False
a|Filter by statistics.throughput_raw.read

* Introduced in: 9.8

|statistics.iops_raw.total
|integer
|query
|False
a|Filter by statistics.iops_raw.total

* Introduced in: 9.8

|statistics.iops_raw.other
|integer
|query
|False
a|Filter by statistics.iops_raw.other

* Introduced in: 9.8

|statistics.iops_raw.write
|integer
|query
|False
a|Filter by statistics.iops_raw.write

* Introduced in: 9.8

|statistics.iops_raw.read
|integer
|query
|False
a|Filter by statistics.iops_raw.read

```

* Introduced in: 9.8

```
|statistics.timestamp  
|string  
|query  
|False  
a|Filter by statistics.timestamp
```

* Introduced in: 9.8

```
|statistics.latency_raw.total  
|integer  
|query  
|False  
a|Filter by statistics.latency_raw.total
```

* Introduced in: 9.8

```
|statistics.latency_raw.other  
|integer  
|query  
|False  
a|Filter by statistics.latency_raw.other
```

* Introduced in: 9.8

```
|statistics.latency_raw.write  
|integer  
|query  
|False  
a|Filter by statistics.latency_raw.write
```

* Introduced in: 9.8

```
|statistics.latency_raw.read  
|integer  
|query  
|False  
a|Filter by statistics.latency_raw.read
```

* Introduced in: 9.8


```
|statistics.status
|string
|query
|False
a|Filter by statistics.status
```

* Introduced in: 9.8

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

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

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

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

* Introduced in: 9.12

```
|metric.latency.total
|integer
|query
|False
a|Filter by metric.latency.total
```

* Introduced in: 9.8

```
|metric.latency.other  
|integer  
|query  
|False  
a|Filter by metric.latency.other
```

* Introduced in: 9.8

```
|metric.latency.write  
|integer  
|query  
|False  
a|Filter by metric.latency.write
```

* Introduced in: 9.8

```
|metric.latency.read  
|integer  
|query  
|False  
a|Filter by metric.latency.read
```

* Introduced in: 9.8

```
|metric.status  
|string  
|query  
|False  
a|Filter by metric.status
```

* Introduced in: 9.8

```
|metric.throughput.total  
|integer  
|query  
|False  
a|Filter by metric.throughput.total
```

* Introduced in: 9.8

```
|metric.throughput.write  
|integer  
|query  
|False  
a|Filter by metric.throughput.write
```

* Introduced in: 9.8

```
|metric.throughput.read  
|integer  
|query  
|False  
a|Filter by metric.throughput.read
```

* Introduced in: 9.8

```
|metric.iops.total  
|integer  
|query  
|False  
a|Filter by metric.iops.total
```

* Introduced in: 9.8

```
|metric.iops.other  
|integer  
|query  
|False  
a|Filter by metric.iops.other
```

* Introduced in: 9.8

```
|metric.iops.write  
|integer  
|query  
|False  
a|Filter by metric.iops.write
```

* Introduced in: 9.8

```
|metric.iops.read
```

```
|integer
|query
|False
a|Filter by metric.iops.read
```

* Introduced in: 9.8

```
|metric.timestamp
|string
|query
|False
a|Filter by metric.timestamp
```

* Introduced in: 9.8

```
|metric.duration
|string
|query
|False
a|Filter by metric.duration
```

* Introduced in: 9.8

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

* Introduced in: 9.12

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

* Introduced in: 9.10

```
|buckets.logical_used_size
|integer
|query
```

```

|False
a|Filter by buckets.logical_used_size

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

* maxLength: 256
* minLength: 0

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

* Introduced in: 9.14

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

* Introduced in: 9.14

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

* maxLength: 63
* minLength: 3

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

```

* Introduced in: 9.11

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

* Introduced in: 9.12

```
|buckets.allowed
|boolean
|query
|False
a|Filter by buckets.allowed
```

* Introduced in: 9.12

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

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

* Introduced in: 9.8

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

* Introduced in: 9.8

* Max value: 4194303

* Min value: 0

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

* Introduced in: 9.8

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

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

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

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

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

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

```
|buckets.size
|integer
|query
```

```

|False
a|Filter by buckets.size

* Max value: 62672162783232000
* Min value: 199229440


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


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


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


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

* Introduced in: 9.8


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

* Introduced in: 9.8


|buckets.policy.statements.conditions.usernames

```



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

* Introduced in: 9.8

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

* Introduced in: 9.8

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

* Introduced in: 9.8

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

* Introduced in: 9.8

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

* Introduced in: 9.8

```
|buckets.policy.statements.actions
|string
|query
```

```

|False
a|Filter by buckets.policy.statements.actions

* Introduced in: 9.8

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

* Introduced in: 9.8

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

* Introduced in: 9.8

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

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

|buckets.lifecycle_management.rules.expiration.expired_object_delete_marke
r
|boolean
|query
|False
a|Filter by
buckets.lifecycle_management.rules.expiration.expired_object_delete_marker

* Introduced in: 9.13

|buckets.lifecycle_management.rules.expiration.object_age_days

```

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

* Introduced in: 9.13

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

* Introduced in: 9.13

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

* Introduced in: 9.14

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

* Introduced in: 9.14

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

* Introduced in: 9.13

```
|buckets.lifecycle_management.rules.bucket_name
|string
```

```

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

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

|buckets.lifecycle_management.rules.non_current_version_expiration.non_cur
rent_days
|integer
|query
|False
a|Filter by
buckets.lifecycle_management.rules.non_current_version_expiration.non_curr
ent_days

* Introduced in: 9.13

|buckets.lifecycle_management.rules.non_current_version_expiration.new_non
_current_versions
|integer
|query
|False
a|Filter by
buckets.lifecycle_management.rules.non_current_version_expiration.new_non_
current_versions

* Introduced in: 9.13

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

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

|buckets.lifecycle_management.rules.object_filter.tags
|string
|query

```

```

|False
a|Filter by buckets.lifecycle_management.rules.object_filter.tags

* Introduced in: 9.13


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

* Introduced in: 9.13


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

* Introduced in: 9.13


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

* Introduced in: 9.13


|buckets.lifecycle_management.rules.abort_incomplete_multipart_upload.after
_initiation_days
|integer
|query
|False
a|Filter by
buckets.lifecycle_management.rules.abort_incomplete_multipart_upload.after
_initiation_days

* Introduced in: 9.13

```

```
|buckets.lifecycle_management.rules.uuid  
|string  
|query  
|False  
a|Filter by buckets.lifecycle_management.rules.uuid
```

* Introduced in: 9.14

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

* Introduced in: 9.10

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

* Introduced in: 9.10

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

* Introduced in: 9.12

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

```
|buckets.svm.name  
|string  
|query  
|False
```

a|Filter by buckets.svm.name

|buckets.protection_status.is_protected

|boolean

|query

|False

a|Filter by buckets.protection_status.is_protected

* Introduced in: 9.10

|buckets.protection_status.destination.is_external_cloud

|boolean

|query

|False

a|Filter by buckets.protection_status.destination.is_external_cloud

* Introduced in: 9.12

|buckets.protection_status.destination.is_ontap

|boolean

|query

|False

a|Filter by buckets.protection_status.destination.is_ontap

* Introduced in: 9.10

|buckets.protection_status.destination.is_cloud

|boolean

|query

|False

a|Filter by buckets.protection_status.destination.is_cloud

* Introduced in: 9.10

|port

|integer

|query

|False

a|Filter by port

* Introduced in: 9.8

* Max value: 65535

```
* Min value: 1

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

* maxLength: 253
* minLength: 3

|is_http_enabled
|boolean
|query
|False
a|Filter by is_http_enabled

* Introduced in: 9.8

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

* maxLength: 256
* minLength: 0

|secure_port
|integer
|query
|False
a|Filter by secure_port

* Introduced in: 9.8
* Max value: 65535
* Min value: 1

|is_https_enabled
|boolean
|query
|False
```


a|Filter by is_https_enabled

* Introduced in: 9.8

|users.comment

|string

|query

|False

a|Filter by users.comment

* maxLength: 256

* minLength: 0

|users.key_expiry_time

|string

|query

|False

a|Filter by users.key_expiry_time

* Introduced in: 9.14

|users.svm.uuid

|string

|query

|False

a|Filter by users.svm.uuid

|users.svm.name

|string

|query

|False

a|Filter by users.svm.name

|users.key_time_to_live

|string

|query

|False

a|Filter by users.key_time_to_live

* Introduced in: 9.14

```
|users.access_key
|string
|query
|False
a|Filter by users.access_key
```

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

```
* maxLength: 64
* minLength: 1
```

```
|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_service[s3_service]]
a|

|===

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

```
[source,json,subs=+macros]
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "buckets": [
        {
          "audit_event_selector": {
            "access": "string",
            "permission": "string"
          },
          "comment": "S3 bucket.",
          "lifecycle_management": {
            "rules": [
              {
                "_links": {
                  "self": {
                    "href": "/api/resourcelink"
                  }
                },
                "abort_incomplete_multipart_upload": {
                  "_links": {
                    "self": {
                      "href": "/api/resourcelink"
                    }
                  }
                },
                "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,
    "svm": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "type": "s3",
    "use_mirrored_aggregates": true,
    "uuid": "414b29a1-3b26-11e9-bd58-0050568ea055",
    "versioning_state": "enabled",
    "volume": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        "name": "volume1",
        "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
    }
}
],
"certificate": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "string",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"comment": "S3 server",

```

```

"default_unix_user": "string",
"default_win_user": "string",
"metric": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "duration": "PT15S",
  "iops": {
    "read": 200,
    "total": 1000,
    "write": 100
  },
  "latency": {
    "read": 200,
    "total": 1000,
    "write": 100
  },
  "status": "ok",
  "throughput": {
    "read": 200,
    "total": 1000,
    "write": 100
  },
  "timestamp": "2017-01-25 06:20:13 -0500"
},
"name": "Server-1",
"port": 80,
"secure_port": 443,
"statistics": {
  "iops_raw": {
    "read": 200,
    "total": 1000,
    "write": 100
  },
  "latency_raw": {
    "read": 200,
    "total": 1000,
    "write": 100
  },
  "status": "ok",
  "throughput_raw": {
    "read": 200,
    "total": 1000,
    "write": 100
  }
}

```



```

    },
    "timestamp": "2017-01-25 06:20:13 -0500"
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "users": [
    {
      "access_key": "HJAKU28M3SXTE2UXUACV",
      "comment": "S3 user",
      "key_expiry_time": "2023-12-31 19:00:00 -0500",
      "key_time_to_live": "PT6H3M",
      "name": "user-1",
      "svm": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "svm1",
        "uuid": "02c9e252-41be-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|

|===

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

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

|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: 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

|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.

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

|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.

|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".

|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.

|===

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

Specifies the certificate that will be used for creating HTTPS connections
to the S3 server.

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

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

|name
|string
a|Certificate name

|uuid
|string
a|Certificate UUID

|===

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

```

iops

The rate of I/O operations observed at the storage object.

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|other
```

```
|integer
```

```
a|Performance metric for other I/O operations. Other I/O operations can be  
metadata operations, such as directory lookups and so on.
```

```
|read
```

```
|integer
```

```
a|Performance metric for read I/O operations.
```

```
|total
```

```
|integer
```

```
a|Performance metric aggregated over all types of I/O operations.
```

```
|write
```

```
|integer
```

```
a|Performance metric for write I/O operations.
```

```
|===
```

```
[#latency]
```

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

```
latency
```

The round trip latency in microseconds observed at the storage object.

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|other
|integer
a|Performance metric for other I/O operations. Other I/O operations can be
metadata operations, such as directory lookups and so on.
```

```
|read
|integer
a|Performance metric for read I/O operations.
```

```
|total
|integer
a|Performance metric aggregated over all types of I/O operations.
```

```
|write
|integer
a|Performance metric for write I/O operations.
```

```
|===
```

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

The rate of throughput bytes per second observed at the storage object.

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

```
|===
```

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

```
|read
|integer
a|Performance metric for read I/O operations.
```

```
|total
|integer
a|Performance metric aggregated over all types of I/O operations.
```



```
|write
|integer
a|Performance metric for write I/O operations.
```

```
|===
```

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

Performance numbers, such as IOPS latency and throughput, for SVM protocols.

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

```
|===
```

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

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

```
|duration
|string
```

a|The duration over which this sample is calculated. The time durations are represented in the ISO-8601 standard format. Samples can be calculated over the following durations:

```
|iops
|link:#iops[iops]
```

a|The rate of I/O operations observed at the storage object.

```
|latency
|link:#latency[latency]
```

a|The round trip latency in microseconds observed at the storage object.

```
|status
|string
```

a|Any errors associated with the sample. For example, if the aggregation

of data over multiple nodes fails then any of the partial errors might be returned, "ok" on success, or "error" on any internal uncategorized failure. Whenever a sample collection is missed but done at a later time, it is back filled to the previous 15 second timestamp and tagged with "backfilled_data". "Inconsistent_delta_time" is encountered when the time between two collections is not the same for all nodes. Therefore, the aggregated value might be over or under inflated. "Negative_delta" is returned when an expected monotonically increasing value has decreased in value. "Inconsistent_old_data" is returned when one or more nodes do not have the latest data.

|throughput

|link:#throughput[throughput]

a|The rate of throughput bytes per second observed at the storage object.

|timestamp

|string

a|The timestamp of the performance data.

|===

[#iops_raw]

[.api-collapsible-fifth-title]

iops_raw

The number of I/O operations observed at the storage object. This should be used along with delta time to calculate the rate of I/O operations per unit of time.

[cols=3*,options=header]

|===

|Name

|Type

|Description

|other

|integer

a|Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.

|read

```
|integer
a|Performance metric for read I/O operations.
```

```
|total
|integer
a|Performance metric aggregated over all types of I/O operations.
```

```
|write
|integer
a|Performance metric for write I/O operations.
```

```
|===
```

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

The raw latency in microseconds observed at the storage object. This should be divided by the raw IOPS value to calculate the average latency per I/O operation.

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

```
|===
```

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

```
|other
|integer
a|Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
```

```
|read
|integer
a|Performance metric for read I/O operations.
```

```
|total
|integer
a|Performance metric aggregated over all types of I/O operations.
```

```
|write
|integer
a|Performance metric for write I/O operations.
```

```
|===
```

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

Throughput bytes observed at the storage object. This should be used along with delta time to calculate the rate of throughput bytes per unit of time.

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

```
|===
```

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

```
|read
|integer
a|Performance metric for read I/O operations.
```

```
|total
|integer
a|Performance metric aggregated over all types of I/O operations.
```

```
|write
|integer
a|Performance metric for write I/O operations.
```

```
|===
```

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

These are raw performance numbers, such as IOPS latency and throughput for

SVM protocols. These numbers are aggregated across all nodes in the cluster and increase with the uptime of the cluster.

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|iops_raw
```

```
|link:#iops_raw[iops_raw]
```

a|The number of I/O operations observed at the storage object. This should be used along with delta time to calculate the rate of I/O operations per unit of time.

```
|latency_raw
```

```
|link:#latency_raw[latency_raw]
```

a|The raw latency in microseconds observed at the storage object. This should be divided by the raw IOPS value to calculate the average latency per I/O operation.

```
|status
```

```
|string
```

a|Any errors associated with the sample. For example, if the aggregation of data over multiple nodes fails then any of the partial errors might be returned, "ok" on success, or "error" on any internal uncategorized failure. Whenever a sample collection is missed but done at a later time, it is back filled to the previous 15 second timestamp and tagged with "backfilled_data". "Inconsistent_delta_time" is encountered when the time between two collections is not the same for all nodes. Therefore, the aggregated value might be over or under inflated. "Negative_delta" is returned when an expected monotonically increasing value has decreased in value. "Inconsistent_old_data" is returned when one or more nodes do not have the latest data.

```
|throughput_raw
```

```
|link:#throughput_raw[throughput_raw]
```

a|Throughput bytes observed at the storage object. This should be used along with delta time to calculate the rate of throughput bytes per unit of time.

```
|timestamp
```

```
|string
a|The timestamp of the performance data.
```

```
|===
```

```
[#s3_user]
[.api-collapsible-fifth-title]
s3_user
```

This is a container of S3 users.

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

```
|===
```

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

```
|access_key
|string
a|Specifies the access key for the user.
```

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

```
|key_expiry_time
|string
a|Specifies the date and time after which keys expire and are no longer
valid.
```

```
|key_time_to_live
|string
a|Indicates the time period from when this parameter is specified:
```

- * when creating or modifying a user or
- * when the user keys were last regenerated, after which the user keys expire and are no longer valid.
- * Valid format is: 'PnDTnHnMnS\|PnW'. For example, P2DT6H3M10S specifies a time period of 2 days, 6 hours, 3 minutes, and 10 seconds.
- * If the value specified is '0' seconds, then the keys won't expire.

```
|name
|string
a|Specifies the name of the user. A user name length can range from 1 to
64 characters and can only contain the following combination of characters
0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".
```

```
|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.
```

```
|===
```

```
[#s3_service]
[.api-collapsible-fifth-title]
s3_service
```

Specifies the S3 server configuration.

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

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

```
|buckets
|array[link:#s3_bucket[s3_bucket]]
a|This field cannot be specified in a PATCH method.
```

```
|certificate
|link:#certificate[certificate]
a|Specifies the certificate that will be used for creating HTTPS
connections to the S3 server.
```

```
|comment
|string
```

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

|default_unix_user

|string

a|Specifies the default UNIX user for NAS Access.

|default_win_user

|string

a|Specifies the default Windows user for NAS Access.

|enabled

|boolean

a|Specifies whether the S3 server being created or modified should be up or down.

|is_http_enabled

|boolean

a|Specifies whether HTTP is enabled on the S3 server being created or modified. By default, HTTP is disabled on the S3 server.

|is_https_enabled

|boolean

a|Specifies whether HTTPS is enabled on the S3 server being created or modified. By default, HTTPS is enabled on the S3 server.

|metric

|link:#metric[metric]

a|Performance numbers, such as IOPS latency and throughput, for SVM protocols.

|name

|string

a|Specifies the name of the S3 server. A server name can contain 3 to 253 characters using only the following combination of characters':' 0-9, A-Z, a-z, ".", and "-".

|port

|integer

a|Specifies the HTTP listener port for the S3 server. By default, HTTP is enabled on port 80. Valid values range from 1 to 65535.

|secure_port

|integer

a|Specifies the HTTPS listener port for the S3 server. By default, HTTPS is enabled on port 443. Valid values range from 1 to 65535.

|statistics

|link:#statistics[statistics]

a|These are raw performance numbers, such as IOPS latency and throughput for SVM protocols. These numbers are aggregated across all nodes in the cluster and increase with the uptime of the cluster.

|svm

|link:#svm[svm]

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

|users

|array[link:#s3_user[s3_user]]

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

|===

[#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
====

[[ID0f9495e1adadd0bf10a7e3b1898e4c1d]]
= Create S3 server, users, and buckets configurations

```

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

Introduced In: 9.7

Creates an S3 server, users, and buckets configurations.

== Important notes

- * Each SVM can have one S3 server configuration.
- * One or more buckets and users can also be created using this end-point.
- * If creating a user configuration fails, buckets are not created either and already created users are not saved.
- * If creating a bucket configuration fails, all buckets already created are saved with no new buckets created.

== Required properties

- * `svm.uuid` - Existing SVM in which to create an S3 server configuration.

== Recommended optional properties

- * `enabled` - Specifies the state of the server created.
- * `comment` - Any information related to the server created.

== Default property values

- * `comment` - ""
- * `enabled` - `_true_`

== Related ONTAP commands

- * ``vserver object-store-server create``
- * ``vserver object-store-server bucket create``
- * ``vserver object-store-server bucket policy statement create``
- * ``vserver object-store-server bucket policy-statement-condition create``
- * ``vserver object-store-server user create``

== Learn more

- * `xref:{relative_path}protocols_s3_services_endpoint_overview.html[DOC /protocols/s3/services]`

== Parameters

[cols=5*,options=header]

```

|===

|Name
|Type
|In
|Required
|Description

|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

|buckets
|array[link:#s3_bucket[s3_bucket]]
a|This field cannot be specified in a PATCH method.

|certificate
|link:#certificate[certificate]
a|Specifies the certificate that will be used for creating HTTPS
connections to the S3 server.

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

|default_unix_user
|string

```

a|Specifies the default UNIX user for NAS Access.

|default_win_user

|string

a|Specifies the default Windows user for NAS Access.

|enabled

|boolean

a|Specifies whether the S3 server being created or modified should be up or down.

|is_http_enabled

|boolean

a|Specifies whether HTTP is enabled on the S3 server being created or modified. By default, HTTP is disabled on the S3 server.

|is_https_enabled

|boolean

a|Specifies whether HTTPS is enabled on the S3 server being created or modified. By default, HTTPS is enabled on the S3 server.

|name

|string

a|Specifies the name of the S3 server. A server name can contain 3 to 253 characters using only the following combination of characters':' 0-9, A-Z, a-z, ".", and "-".

|port

|integer

a|Specifies the HTTP listener port for the S3 server. By default, HTTP is enabled on port 80. Valid values range from 1 to 65535.

|secure_port

|integer

a|Specifies the HTTPS listener port for the S3 server. By default, HTTPS is enabled on port 443. Valid values range from 1 to 65535.

|svm

|link:#svm[svm]

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

```
|users
|array[link:#s3_user[s3_user]]
a|This field cannot be specified in a PATCH method.
```

|===

```
.Example request
[%collapsible%closed]
====
[source,json,subs=+macros]
{
  "buckets": [
    {
      "aggregates": [
        {
          "name": "aggr1",
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        }
      ],
      "audit_event_selector": {
        "access": "string",
        "permission": "string"
      },
      "comment": "S3 bucket.",
      "constituents_per_aggregate": 4,
      "lifecycle_management": {
        "rules": [
          {
            "bucket_name": "bucket1",
            "expiration": {
              "object_expiry_date": "string"
            },
            "name": "string",
            "object_filter": {
              "prefix": "/logs",
              "size_greater_than": 10240,
              "size_less_than": 10485760,
              "tags": [
                "project1=projA",
                "project2=projB"
              ]
            }
          }
        ]
      }
    }
  ]
}
```

```

    },
    "svm": {
      "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": {
    "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": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"type": "s3",
"uuid": "414b29a1-3b26-11e9-bd58-0050568ea055",
"versioning_state": "enabled",
"volume": {
    "name": "volume1",
    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
}
}
],
"certificate": {
    "name": "string",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"comment": "S3 server",
"default_unix_user": "string",
"default_win_user": "string",
"name": "Server-1",

```



```

"port": 80,
"secure_port": 443,
"svm": {
  "name": "svm1",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"users": [
  {
    "access_key": "HJAKU28M3SXTE2UXUACV",
    "comment": "S3 user",
    "key_expiry_time": "2023-12-31 19:00:00 -0500",
    "key_time_to_live": "PT6H3M",
    "name": "user-1",
    "svm": {
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
  }
]
}
====

== Response

```

Status: 201, Created

```

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

|num_records
|integer
a|Number of Records

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

|===

.Example response
[%collapsible%closed]

```

```

=====
[source,json,subs=+macros]
{
  "num_records": 1,
  "records": [
    {
      "job": {
        "uuid": "string"
      },
      "users": [
        {
          "access_key": "HJAKU28M3SXTE2UXUACV",
          "name": "user-1",
          "secret_key": "BcA_HX6If4581lhnx3n1TCO3mg4roCXG0ddYf_cJ"
        }
      ]
    }
  ]
}
=====

```

=== Headers

```

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

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

== Error

```

Status: Default

ONTAP Error Response Codes

Error Code	Description
2621706	The specified \"{svm.uuid}\" and \"{svm.name}\" refer to different SVMs.
92405789	The specified object server name contains invalid characters or not a fully qualified domain name. Valid characters for an object store server name are 0-9, A-Z, a-z, ".", and "-".
92405790	Object store server names must have between 3 and 253 characters.
92405839	Creating an object store server requires an effective cluster version of data ONTAP 9.7.0 or later. Upgrade all the nodes to 9.7.0 or later and try the operation again.
92405853	Failed to create the object store server because Cloud Volumes ONTAP does not support object store servers.

[cols=2*]
|===

| 92405863
| An error occurs when creating an S3 user or bucket. The reason for failure is detailed in the error message. Follow the error codes specified for the user or bucket endpoints to see details for the failure.

| 92405863
| Failed to create bucket \"{bucket name}\". Reason: "Failed to create bucket \"{bucket name}\" for SVM \"{svm.name}\". Reason: Bucket name \"{bucket name}\" contains invalid characters. Valid characters for a bucket name are 0-9, a-z, ".", and "-". ". Resolve all the issues and retry the operation.

| 92405863
| Failed to create bucket \"{bucket name}\". Reason: "Failed to create bucket \"{bucket name}\" for SVM \"{svm.name}\". Reason: Invalid QoS policy group specified \"{qos policy}\". 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. Resolve all the issues and retry the operation.

| 92405863
| Failed to create bucket \"{bucket name}\". Reason: "User(s) \"{user name(s)}\" specified in the principal list do not exist for SVM \"{svm.name}\". Use the "object-store-server user create" command to create a user.". Resolve all the issues and retry the operation.

```
| 92405863
| Failed to create user \"{user name}\". Reason: "SVM "Cluster" is not a
data SVM. Specify a data SVM.". Resolve all the issues and retry the
operation.

| 92405884
| An object store server can only be created on a data SVM. An object
store server can also be created on a system SVM on a mixed platform
cluster.

| 92405903
| Failed to configure HTTPS on an object store server for SVM
\"{svm.name}\". Reason: {Reason of failure}.

| 92405900
| Certificate not found for SVM \"{svm.name}\".

| 92406044
| Failed to set default UNIX user for SVM \"{svm.name}\". Reason: UNIX
user can only be created on a Data SVM.
|===
```

== 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|

|===
```

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

Aggregate

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

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

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

```
|===
```

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

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

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

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

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

```
|===
```

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

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

```
|===
```

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

```
|enabled
|boolean
```

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

```
|after_initiation_days
|integer
```

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

```
|===
```

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

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

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

```
|===
```

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

```
|expired_object_delete_marker  
|boolean  
a|Cleanup object delete markers.
```

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

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

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

|===

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

Specifies a way to filter objects within a bucket.

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

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

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

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

```



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

```
|===
```

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

Specifies the name of the SVM where this bucket exists.

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

```
|===
```

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

```
|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

|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

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

[cols=3*,options=header]

|===

|Name

|Type

|Description

|max_throughput_iops

|integer

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

|max_throughput_mbps

|integer

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

|min_throughput_iops

|integer

a|Specifies the minimum throughput in IOPS, 0 means none. Setting "min_throughput" is supported on AFF platforms only, unless FabricPool tiering policies are set. This is mutually exclusive with name and UUID during POST and PATCH.

|min_throughput_mbps

|integer

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

|name

|string

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

|uuid

|string

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

|===

[#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

|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

```

|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.

|===

```

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

Specifies the certificate that will be used for creating HTTPS connections to the S3 server.

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

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

```
|uuid
|string
a|Certificate UUID
```

```
|===
```

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

The rate of I/O operations observed at the storage object.

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

```
|other
|integer
a|Performance metric for other I/O operations. Other I/O operations can be
metadata operations, such as directory lookups and so on.
```

```
|read
```

```
|integer
a|Performance metric for read I/O operations.
```

```
|total
|integer
a|Performance metric aggregated over all types of I/O operations.
```

```
|write
|integer
a|Performance metric for write I/O operations.
```

```
|===
```

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

The round trip latency in microseconds observed at the storage object.

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

```
|other
|integer
a|Performance metric for other I/O operations. Other I/O operations can be
metadata operations, such as directory lookups and so on.
```

```
|read
|integer
a|Performance metric for read I/O operations.
```

```
|total
|integer
a|Performance metric aggregated over all types of I/O operations.
```

```
|write
```



```
|integer
a|Performance metric for write I/O operations.
```

```
|===
```

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

The rate of throughput bytes per second observed at the storage object.

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

```
|===
```

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

```
|read
|integer
a|Performance metric for read I/O operations.
```

```
|total
|integer
a|Performance metric aggregated over all types of I/O operations.
```

```
|write
|integer
a|Performance metric for write I/O operations.
```

```
|===
```

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

Performance numbers, such as IOPS latency and throughput, for SVM protocols.

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

```

|===
|Name
|Type
|Description

|duration
|string
a|The duration over which this sample is calculated. The time durations
are represented in the ISO-8601 standard format. Samples can be calculated
over the following durations:

|iops
|link:#iops[iops]
a|The rate of I/O operations observed at the storage object.

|latency
|link:#latency[latency]
a|The round trip latency in microseconds observed at the storage object.

|status
|string
a|Any errors associated with the sample. For example, if the aggregation
of data over multiple nodes fails then any of the partial errors might be
returned, "ok" on success, or "error" on any internal uncategorized
failure. Whenever a sample collection is missed but done at a later time,
it is back filled to the previous 15 second timestamp and tagged with
"backfilled_data". "Inconsistent_delta_time" is encountered when the time
between two collections is not the same for all nodes. Therefore, the
aggregated value might be over or under inflated. "Negative_delta" is
returned when an expected monotonically increasing value has decreased in
value. "Inconsistent_old_data" is returned when one or more nodes do not
have the latest data.

|throughput
|link:#throughput[throughput]
a|The rate of throughput bytes per second observed at the storage object.

|timestamp
|string
a|The timestamp of the performance data.

```

```
|===
```

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

The number of I/O operations observed at the storage object. This should be used along with delta time to calculate the rate of I/O operations per unit of time.

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

```
|===
```

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

```
|other  
|integer
```

a|Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.

```
|read  
|integer
```

a|Performance metric for read I/O operations.

```
|total  
|integer
```

a|Performance metric aggregated over all types of I/O operations.

```
|write  
|integer
```

a|Performance metric for write I/O operations.

```
|===
```

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

The raw latency in microseconds observed at the storage object. This

should be divided by the raw IOPS value to calculate the average latency per I/O operation.

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|other
```

```
|integer
```

a|Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.

```
|read
```

```
|integer
```

a|Performance metric for read I/O operations.

```
|total
```

```
|integer
```

a|Performance metric aggregated over all types of I/O operations.

```
|write
```

```
|integer
```

a|Performance metric for write I/O operations.

```
|===
```

```
[#throughput_raw]
```

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

throughput_raw

Throughput bytes observed at the storage object. This should be used along with delta time to calculate the rate of throughput bytes per unit of time.

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|read
```

```
|integer
```

```
a|Performance metric for read I/O operations.
```

```
|total
```

```
|integer
```

```
a|Performance metric aggregated over all types of I/O operations.
```

```
|write
```

```
|integer
```

```
a|Performance metric for write I/O operations.
```

```
|===
```

```
[#statistics]
```

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

```
statistics
```

These are raw performance numbers, such as IOPS latency and throughput for SVM protocols. These numbers are aggregated across all nodes in the cluster and increase with the uptime of the cluster.

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|iops_raw
```

```
|link:#iops_raw[iops_raw]
```

```
a|The number of I/O operations observed at the storage object. This should be used along with delta time to calculate the rate of I/O operations per unit of time.
```

```
|latency_raw
```

```
|link:#latency_raw[latency_raw]
```

```
a|The raw latency in microseconds observed at the storage object. This should be divided by the raw IOPS value to calculate the average latency per I/O operation.
```

```
|status
|string
a|Any errors associated with the sample. For example, if the aggregation
of data over multiple nodes fails then any of the partial errors might be
returned, "ok" on success, or "error" on any internal uncategorized
failure. Whenever a sample collection is missed but done at a later time,
it is back filled to the previous 15 second timestamp and tagged with
"backfilled_data". "Inconsistent_delta_time" is encountered when the time
between two collections is not the same for all nodes. Therefore, the
aggregated value might be over or under inflated. "Negative_delta" is
returned when an expected monotonically increasing value has decreased in
value. "Inconsistent_old_data" is returned when one or more nodes do not
have the latest data.
```

```
|throughput_raw
|link:#throughput_raw[throughput_raw]
a|Throughput bytes observed at the storage object. This should be used
along with delta time to calculate the rate of throughput bytes per unit
of time.
```

```
|timestamp
|string
a|The timestamp of the performance data.
```

```
|===
```

```
[#s3_user]
[.api-collapsible-fifth-title]
s3_user
```

This is a container of S3 users.

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

```
|access_key
|string
```

a|Specifies the access key for the user.

|comment

|string

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

|key_expiry_time

|string

a|Specifies the date and time after which keys expire and are no longer valid.

|key_time_to_live

|string

a|Indicates the time period from when this parameter is specified:

* when creating or modifying a user or

* when the user keys were last regenerated, after which the user keys expire and are no longer valid.

* Valid format is: 'PnDTnHnMnS\|PnW'. For example, P2DT6H3M10S specifies a time period of 2 days, 6 hours, 3 minutes, and 10 seconds.

* If the value specified is '0' seconds, then the keys won't expire.

|name

|string

a|Specifies the name of the user. A user name length can range from 1 to 64 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

|svm

|link:#svm[svm]

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

|===

[#s3_service]

[.api-collapsible-fifth-title]

s3_service

Specifies the S3 server configuration.

```

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

|buckets
|array[link:#s3_bucket[s3_bucket]]
a|This field cannot be specified in a PATCH method.

|certificate
|link:#certificate[certificate]
a|Specifies the certificate that will be used for creating HTTPS
connections to the S3 server.

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

|default_unix_user
|string
a|Specifies the default UNIX user for NAS Access.

|default_win_user
|string
a|Specifies the default Windows user for NAS Access.

|enabled
|boolean
a|Specifies whether the S3 server being created or modified should be up
or down.

|is_http_enabled
|boolean
a|Specifies whether HTTP is enabled on the S3 server being created or
modified. By default, HTTP is disabled on the S3 server.

```



```

|is_https_enabled
|boolean
a|Specifies whether HTTPS is enabled on the S3 server being created or
modified. By default, HTTPS is enabled on the S3 server.

|name
|string
a|Specifies the name of the S3 server. A server name can contain 3 to 253
characters using only the following combination of characters': ' 0-9, A-Z,
a-z, ".", and "-".

|port
|integer
a|Specifies the HTTP listener port for the S3 server. By default, HTTP is
enabled on port 80. Valid values range from 1 to 65535.

|secure_port
|integer
a|Specifies the HTTPS listener port for the S3 server. By default, HTTPS
is enabled on port 443. Valid values range from 1 to 65535.

|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.

|users
|array[link:#s3_user[s3_user]]
a|This field cannot be specified in a PATCH method.

|===

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

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

```

```

|Name
|Type
|Description

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

|===

[#s3_service_user_post_response]
[.api-collapsible-fifth-title]
s3_service_user_post_response

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

|access_key
|string
a|Specifies the access key for the user.

|name
|string
a|The name of the user.

|secret_key
|string
a|Specifies the secret key for the user.

|===

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

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

```

```

|Name
|Type
|Description

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

|users
|array[link:#s3_service_user_post_response[s3_service_user_post_response]]
a|

|===

[#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
=====
```

```
[[IDa9a0002b4d37d1e291e3abad88943070]]
= Delete the S3 server configuration for an SVM
```

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

```
*Introduced In:* 9.7
```

Deletes the S3 server configuration of an SVM. If the 'delete_all' parameter is set to false, only the S3 server is deleted. Otherwise S3 users and buckets present on the SVM are also deleted. Note that only empty buckets can be deleted. This endpoint returns the S3 server delete job-uuid in response. To monitor the job status follow
/api/cluster/jobs/+++<job-uuid>+++
+++</job-uuid>+++

```
== Related ONTAP commands
```

```
* `vserver object-store-server delete`
```

== Learn more

* xref:{relative_path}protocols_s3_services_endpoint_overview.html[DOC
/protocols/s3/services]

== Parameters

[cols=5*,options=header]

|===

|Name

|Type

|In

|Required

|Description

|delete_all

|boolean

|query

|False

a|Delete S3 server and associated users and empty buckets.

* Default value: 1

|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

|num_records
|integer
a|Number of Records


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

|===


.Example response
[%collapsible%closed]
=====
[source,json,subs=+macros]
{
  "num_records": 1,
  "records": [
    {
      "job": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "uuid": "string"
      }
    }
  ]
}
=====

== Error

```

Status: Default

ONTAP Error Response Codes

```

|===
| Error Code | Description

| 92405864
| An error occurs when deleting an S3 user or bucket. The reason for
failure is detailed in the error message. Follow the error codes specified
for the user or bucket endpoints to see details for the failure.
|===

```

```

[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.

|===

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

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

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

|===

[#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
====

[[ID61980d083970b94b3281189bb063f894]]
= Retrieve the S3 server configuration for an SVM

```

```
[.api-doc-operation .api-doc-operation-get]#GET# [.api-doc-code-block]#`/protocols/s3/services/{svm.uuid}`#
```

Introduced In: 9.7

Retrieves the S3 Server 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 show`

== Learn more

* xref:{relative_path}protocols_s3_services_endpoint_overview.html[DOC /protocols/s3/services]

== Parameters

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

```
|Name
|Type
|In
|Required
|Description
```

```
|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

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

|buckets
|array[link:#s3_bucket[s3_bucket]]
a|This field cannot be specified in a PATCH method.

|certificate
|link:#certificate[certificate]
a|Specifies the certificate that will be used for creating HTTPS
connections to the S3 server.

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

|default_unix_user
|string
a|Specifies the default UNIX user for NAS Access.

|default_win_user
|string
a|Specifies the default Windows user for NAS Access.

|enabled
|boolean
a|Specifies whether the S3 server being created or modified should be up
or down.

|is_http_enabled
```

```

|boolean
a|Specifies whether HTTP is enabled on the S3 server being created or
modified. By default, HTTP is disabled on the S3 server.

|is_https_enabled
|boolean
a|Specifies whether HTTPS is enabled on the S3 server being created or
modified. By default, HTTPS is enabled on the S3 server.

|metric
|link:#metric[metric]
a|Performance numbers, such as IOPS latency and throughput, for SVM
protocols.

|name
|string
a|Specifies the name of the S3 server. A server name can contain 3 to 253
characters using only the following combination of characters': ' 0-9, A-Z,
a-z, ".", and "-".

|port
|integer
a|Specifies the HTTP listener port for the S3 server. By default, HTTP is
enabled on port 80. Valid values range from 1 to 65535.

|secure_port
|integer
a|Specifies the HTTPS listener port for the S3 server. By default, HTTPS
is enabled on port 443. Valid values range from 1 to 65535.

|statistics
|link:#statistics[statistics]
a|These are raw performance numbers, such as IOPS latency and throughput
for SVM protocols. These numbers are aggregated across all nodes in the
cluster and increase with the uptime of the cluster.

|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.

```

```
|users
|array[link:#s3_user[s3_user]]
a|This field cannot be specified in a PATCH method.
```

```
|===
```

```
.Example response
[%collapsible%closed]
=====
[source,json,subs=+macros]
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "buckets": [
    {
      "audit_event_selector": {
        "access": "string",
        "permission": "string"
      },
      "comment": "S3 bucket.",
      "lifecycle_management": {
        "rules": [
          {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "abort_incomplete_multipart_upload": {
              "_links": {
                "self": {
                  "href": "/api/resourcelink"
                }
              }
            }
          },
          {
            "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,
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "type": "s3",
  "use_mirrored_aggregates": true,
  "uuid": "414b29a1-3b26-11e9-bd58-0050568ea055",
  "versioning_state": "enabled",
  "volume": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "volume1",
    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
  }
}
],
"certificate": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "string",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},

```

```

"comment": "S3 server",
"default_unix_user": "string",
"default_win_user": "string",
"metric": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "duration": "PT15S",
  "iops": {
    "read": 200,
    "total": 1000,
    "write": 100
  },
  "latency": {
    "read": 200,
    "total": 1000,
    "write": 100
  },
  "status": "ok",
  "throughput": {
    "read": 200,
    "total": 1000,
    "write": 100
  },
  "timestamp": "2017-01-25 06:20:13 -0500"
},
"name": "Server-1",
"port": 80,
"secure_port": 443,
"statistics": {
  "iops_raw": {
    "read": 200,
    "total": 1000,
    "write": 100
  },
  "latency_raw": {
    "read": 200,
    "total": 1000,
    "write": 100
  },
  "status": "ok",
  "throughput_raw": {
    "read": 200,
    "total": 1000,

```

```

    "write": 100
  },
  "timestamp": "2017-01-25 06:20:13 -0500"
},
"svm": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "svm1",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"users": [
  {
    "access_key": "HJAKU28M3SXTE2UXUACV",
    "comment": "S3 user",
    "key_expiry_time": "2023-12-31 19:00:00 -0500",
    "key_time_to_live": "PT6H3M",
    "name": "user-1",
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-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|

```

```

|===

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

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

|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: 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

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

[cols=3*,options=header]

|===

|Name

|Type

|Description

|_links

|link:#_links[_links]

a|

|max_throughput_iops

|integer

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

|max_throughput_mbps

|integer

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

```
|min_throughput_iops
|integer
a|Specifies the minimum throughput in IOPS, 0 means none. Setting
"min_throughput" is supported on AFF platforms only, unless FabricPool
tiering policies are set. This is mutually exclusive with name and UUID
during POST and PATCH.
```

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

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

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

```
|===
```

```
[#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
```

```
|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.

```
|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.

|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".

|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.

|===

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

Specifies the certificate that will be used for creating HTTPS connections
to the S3 server.

```

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

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

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

```
|uuid
|string
a|Certificate UUID
```

```
|===
```

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

The rate of I/O operations observed at the storage object.

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

```
|other
|integer
a|Performance metric for other I/O operations. Other I/O operations can be
metadata operations, such as directory lookups and so on.
```

```
|read
|integer
a|Performance metric for read I/O operations.
```



```
|total
|integer
a|Performance metric aggregated over all types of I/O operations.
```

```
|write
|integer
a|Performance metric for write I/O operations.
```

```
|===
```

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

The round trip latency in microseconds observed at the storage object.

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

```
|===
```

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

```
|other
|integer
a|Performance metric for other I/O operations. Other I/O operations can be
metadata operations, such as directory lookups and so on.
```

```
|read
|integer
a|Performance metric for read I/O operations.
```

```
|total
|integer
a|Performance metric aggregated over all types of I/O operations.
```

```
|write
|integer
a|Performance metric for write I/O operations.
```

|===

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

The rate of throughput bytes per second observed at the storage object.

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

|===

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

```
|read
|integer
a|Performance metric for read I/O operations.
```

```
|total
|integer
a|Performance metric aggregated over all types of I/O operations.
```

```
|write
|integer
a|Performance metric for write I/O operations.
```

|===

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

Performance numbers, such as IOPS latency and throughput, for SVM protocols.

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

|===

```
|Name
|Type
```

```

|Description

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

|duration
|string
a|The duration over which this sample is calculated. The time durations
are represented in the ISO-8601 standard format. Samples can be calculated
over the following durations:

|iops
|link:#iops[iops]
a|The rate of I/O operations observed at the storage object.

|latency
|link:#latency[latency]
a|The round trip latency in microseconds observed at the storage object.

|status
|string
a|Any errors associated with the sample. For example, if the aggregation
of data over multiple nodes fails then any of the partial errors might be
returned, "ok" on success, or "error" on any internal uncategorized
failure. Whenever a sample collection is missed but done at a later time,
it is back filled to the previous 15 second timestamp and tagged with
"backfilled_data". "Inconsistent_delta_time" is encountered when the time
between two collections is not the same for all nodes. Therefore, the
aggregated value might be over or under inflated. "Negative_delta" is
returned when an expected monotonically increasing value has decreased in
value. "Inconsistent_old_data" is returned when one or more nodes do not
have the latest data.

|throughput
|link:#throughput[throughput]
a|The rate of throughput bytes per second observed at the storage object.

|timestamp
|string
a|The timestamp of the performance data.

```

```
|===
```

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

The number of I/O operations observed at the storage object. This should be used along with delta time to calculate the rate of I/O operations per unit of time.

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

```
|===
```

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

```
|other
```

```
|integer
```

a|Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.

```
|read
```

```
|integer
```

a|Performance metric for read I/O operations.

```
|total
```

```
|integer
```

a|Performance metric aggregated over all types of I/O operations.

```
|write
```

```
|integer
```

a|Performance metric for write I/O operations.

```
|===
```

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

The raw latency in microseconds observed at the storage object. This should be divided by the raw IOPS value to calculate the average latency per I/O operation.

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|other
```

```
|integer
```

a|Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.

```
|read
```

```
|integer
```

a|Performance metric for read I/O operations.

```
|total
```

```
|integer
```

a|Performance metric aggregated over all types of I/O operations.

```
|write
```

```
|integer
```

a|Performance metric for write I/O operations.

```
|===
```

```
[#throughput_raw]
```

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

```
throughput_raw
```

Throughput bytes observed at the storage object. This should be used along with delta time to calculate the rate of throughput bytes per unit of time.

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

```
|===
```

```
|Name
```

```
|Type
|Description

|read
|integer
a|Performance metric for read I/O operations.
```

```
|total
|integer
a|Performance metric aggregated over all types of I/O operations.
```

```
|write
|integer
a|Performance metric for write I/O operations.
```

```
|===
```

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

These are raw performance numbers, such as IOPS latency and throughput for SVM protocols. These numbers are aggregated across all nodes in the cluster and increase with the uptime of the cluster.

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

```
|===
```

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

```
|iops_raw
|link:#iops_raw[iops_raw]
a|The number of I/O operations observed at the storage object. This should
be used along with delta time to calculate the rate of I/O operations per
unit of time.
```

```
|latency_raw
|link:#latency_raw[latency_raw]
a|The raw latency in microseconds observed at the storage object. This
should be divided by the raw IOPS value to calculate the average latency
```

per I/O operation.

|status

|string

a|Any errors associated with the sample. For example, if the aggregation of data over multiple nodes fails then any of the partial errors might be returned, "ok" on success, or "error" on any internal uncategorized failure. Whenever a sample collection is missed but done at a later time, it is back filled to the previous 15 second timestamp and tagged with "backfilled_data". "Inconsistent_delta_time" is encountered when the time between two collections is not the same for all nodes. Therefore, the aggregated value might be over or under inflated. "Negative_delta" is returned when an expected monotonically increasing value has decreased in value. "Inconsistent_old_data" is returned when one or more nodes do not have the latest data.

|throughput_raw

|link:#throughput_raw[throughput_raw]

a|Throughput bytes observed at the storage object. This should be used along with delta time to calculate the rate of throughput bytes per unit of time.

|timestamp

|string

a|The timestamp of the performance data.

|===

[#s3_user]

[.api-collapsible-fifth-title]

s3_user

This is a container of S3 users.

[cols=3*,options=header]

|===

|Name

|Type

|Description

|access_key

```

|string
a|Specifies the access key for the user.

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

|key_expiry_time
|string
a|Specifies the date and time after which keys expire and are no longer
valid.

|key_time_to_live
|string
a|Indicates the time period from when this parameter is specified:

* when creating or modifying a user or
* when the user keys were last regenerated, after which the user keys
expire and are no longer valid.
* Valid format is: 'PnDTnHnMnS\|PnW'. For example, P2DT6H3M10S specifies a
time period of 2 days, 6 hours, 3 minutes, and 10 seconds.
* If the value specified is '0' seconds, then the keys won't expire.

|name
|string
a|Specifies the name of the user. A user name length can range from 1 to
64 characters and can only contain the following combination of characters
0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.

|===

[#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

====

[[IDa87c79253bd4f10e922619e5d1c01d52]]

= Update the S3 server configuration for an SVM

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

Introduced In: 9.7

Updates the S3 Server configuration of an SVM.

== Related ONTAP commands

* `vserver object-store-server modify`

== Learn more

* xref:{relative_path}protocols_s3_services_endpoint_overview.html[DOC /protocols/s3/services]

== Parameters

[cols=5*,options=header]

|===

|Name

|Type

|In

|Required

|Description

|svm.uuid

|string

|path

|True

a|UUID of the SVM to which this object belongs.

```
|===
```

```
== Request Body
```

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|certificate
```

```
|link:#certificate[certificate]
```

```
a|Specifies the certificate that will be used for creating HTTPS  
connections to the S3 server.
```

```
|comment
```

```
|string
```

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

```
|default_unix_user
```

```
|string
```

```
a|Specifies the default UNIX user for NAS Access.
```

```
|default_win_user
```

```
|string
```

```
a|Specifies the default Windows user for NAS Access.
```

```
|enabled
```

```
|boolean
```

```
a|Specifies whether the S3 server being created or modified should be up  
or down.
```

```
|is_http_enabled
```

```
|boolean
```

```
a|Specifies whether HTTP is enabled on the S3 server being created or  
modified. By default, HTTP is disabled on the S3 server.
```

```
|is_https_enabled
```

```

|boolean
a|Specifies whether HTTPS is enabled on the S3 server being created or
modified. By default, HTTPS is enabled on the S3 server.

|name
|string
a|Specifies the name of the S3 server. A server name can contain 3 to 253
characters using only the following combination of characters': ' 0-9, A-Z,
a-z, ".", and "-".

|port
|integer
a|Specifies the HTTP listener port for the S3 server. By default, HTTP is
enabled on port 80. Valid values range from 1 to 65535.

|secure_port
|integer
a|Specifies the HTTPS listener port for the S3 server. By default, HTTPS
is enabled on port 443. Valid values range from 1 to 65535.

|===

.Example request
[%collapsible%closed]
====
[source,json,subs=+macros]
{
  "certificate": {
    "name": "string",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "comment": "S3 server",
  "default_unix_user": "string",
  "default_win_user": "string",
  "name": "Server-1",
  "port": 80,
  "secure_port": 443
}
=====

```

== Response

Status: 200, Ok

```
== Error
```

Status: Default

ONTAP Error Response Codes

```
|===
```

```
| Error Code | Description
```

```
| 92405789
```

```
| The name \"{object server name}\" is not valid. A valid object server  
name must be a fully qualified domain name.
```

```
| 92405790
```

```
| Object store server name is not valid. Object store server names must  
have between 3 and 253 characters.
```

```
| 92406151
```

```
| Set the enabled field of the server to "down" before modifying following  
fields: {field name}
```

```
|===
```

== 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|
```

```
|===
```

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

Aggregate

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

```
|===
```

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

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

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

```
|===
```

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

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

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

```
|===
```

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

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

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

```
|===
```

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

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

```
|===
```

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

```
|enabled
|boolean
```

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

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

```
|===
```

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

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

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

```
|===
```

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

```
|expired_object_delete_marker
|boolean
a|Cleanup object delete markers.
```

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

```
|new_non_current_versions
```

```
|integer
```

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

```
|non_current_days
```

```
|integer
```

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

```
|===
```

```
[#object_filter]
```

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

```
object_filter
```

Specifies a way to filter objects within a bucket.

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|prefix
```

```
|string
```

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

```
|size_greater_than
```

```
|integer
```

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

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

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

```
|===
```

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

Specifies the name of the SVM where this bucket exists.

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

```
|===
```

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

```
|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

|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.


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


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


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


|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

|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>+++

```
|===
```

```
[#svm]
```

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

```
svm
```

SVM, applies only to SVM-scoped objects.

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|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
```

```
|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
```

```
|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.

```
|encryption
```

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

```
a|
```

```
|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.

```
|nas_path
```

```
|string
```

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

```
|policy
```

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

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

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

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

```
|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.
```

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

```

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

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

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

|===

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

Specifies the certificate that will be used for creating HTTPS connections
to the S3 server.

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

|name
|string
a|Certificate name

|uuid
|string
a|Certificate UUID

|===

```

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

The rate of I/O operations observed at the storage object.

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

```
|other
|integer
a|Performance metric for other I/O operations. Other I/O operations can be
metadata operations, such as directory lookups and so on.
```

```
|read
|integer
a|Performance metric for read I/O operations.
```

```
|total
|integer
a|Performance metric aggregated over all types of I/O operations.
```

```
|write
|integer
a|Performance metric for write I/O operations.
```

```
|===
```

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

The round trip latency in microseconds observed at the storage object.

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

```

|Type
|Description

|other
|integer
a|Performance metric for other I/O operations. Other I/O operations can be
metadata operations, such as directory lookups and so on.

|read
|integer
a|Performance metric for read I/O operations.

|total
|integer
a|Performance metric aggregated over all types of I/O operations.

|write
|integer
a|Performance metric for write I/O operations.

|===

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

The rate of throughput bytes per second observed at the storage object.

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

|read
|integer
a|Performance metric for read I/O operations.

|total
|integer

```


a|Performance metric aggregated over all types of I/O operations.

|write

|integer

a|Performance metric for write I/O operations.

|===

[#metric]

[.api-collapsible-fifth-title]

metric

Performance numbers, such as IOPS latency and throughput, for SVM protocols.

[cols=3*,options=header]

|===

|Name

|Type

|Description

|duration

|string

a|The duration over which this sample is calculated. The time durations are represented in the ISO-8601 standard format. Samples can be calculated over the following durations:

|iops

|link:#iops[iops]

a|The rate of I/O operations observed at the storage object.

|latency

|link:#latency[latency]

a|The round trip latency in microseconds observed at the storage object.

|status

|string

a|Any errors associated with the sample. For example, if the aggregation of data over multiple nodes fails then any of the partial errors might be returned, "ok" on success, or "error" on any internal uncategorized

failure. Whenever a sample collection is missed but done at a later time, it is back filled to the previous 15 second timestamp and tagged with "backfilled_data". "Inconsistent_delta_time" is encountered when the time between two collections is not the same for all nodes. Therefore, the aggregated value might be over or under inflated. "Negative_delta" is returned when an expected monotonically increasing value has decreased in value. "Inconsistent_old_data" is returned when one or more nodes do not have the latest data.

|throughput

|link:#throughput[throughput]

a|The rate of throughput bytes per second observed at the storage object.

|timestamp

|string

a|The timestamp of the performance data.

|===

[#iops_raw]

[.api-collapsible-fifth-title]

iops_raw

The number of I/O operations observed at the storage object. This should be used along with delta time to calculate the rate of I/O operations per unit of time.

[cols=3*,options=header]

|===

|Name

|Type

|Description

|other

|integer

a|Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.

|read

|integer

a|Performance metric for read I/O operations.

```
|total
|integer
a|Performance metric aggregated over all types of I/O operations.
```

```
|write
|integer
a|Performance metric for write I/O operations.
```

```
|===
```

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

The raw latency in microseconds observed at the storage object. This should be divided by the raw IOPS value to calculate the average latency per I/O operation.

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

```
|===
```

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

```
|other
|integer
a|Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
```

```
|read
|integer
a|Performance metric for read I/O operations.
```

```
|total
|integer
a|Performance metric aggregated over all types of I/O operations.
```

```
|write
```

```
|integer
a|Performance metric for write I/O operations.
```

```
|===
```

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

Throughput bytes observed at the storage object. This should be used along with delta time to calculate the rate of throughput bytes per unit of time.

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

```
|===
```

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

```
|read
```

```
|integer
```

```
a|Performance metric for read I/O operations.
```

```
|total
```

```
|integer
```

```
a|Performance metric aggregated over all types of I/O operations.
```

```
|write
```

```
|integer
```

```
a|Performance metric for write I/O operations.
```

```
|===
```

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

These are raw performance numbers, such as IOPS latency and throughput for SVM protocols. These numbers are aggregated across all nodes in the cluster and increase with the uptime of the cluster.

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

|iops_raw
|link:#iops_raw[iops_raw]
a|The number of I/O operations observed at the storage object. This should
be used along with delta time to calculate the rate of I/O operations per
unit of time.

|latency_raw
|link:#latency_raw[latency_raw]
a|The raw latency in microseconds observed at the storage object. This
should be divided by the raw IOPS value to calculate the average latency
per I/O operation.

|status
|string
a|Any errors associated with the sample. For example, if the aggregation
of data over multiple nodes fails then any of the partial errors might be
returned, "ok" on success, or "error" on any internal uncategorized
failure. Whenever a sample collection is missed but done at a later time,
it is back filled to the previous 15 second timestamp and tagged with
"backfilled_data". "Inconsistent_delta_time" is encountered when the time
between two collections is not the same for all nodes. Therefore, the
aggregated value might be over or under inflated. "Negative_delta" is
returned when an expected monotonically increasing value has decreased in
value. "Inconsistent_old_data" is returned when one or more nodes do not
have the latest data.

|throughput_raw
|link:#throughput_raw[throughput_raw]
a|Throughput bytes observed at the storage object. This should be used
along with delta time to calculate the rate of throughput bytes per unit
of time.

|timestamp
|string
a|The timestamp of the performance data.
```

```
|===
```

```
[#s3_user]  
[.api-collapsible-fifth-title]  
s3_user
```

This is a container of S3 users.

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

```
|===
```

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

```
|access_key  
|string
```

a|Specifies the access key for the user.

```
|comment  
|string
```

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

```
|key_expiry_time  
|string
```

a|Specifies the date and time after which keys expire and are no longer valid.

```
|key_time_to_live  
|string
```

a|Indicates the time period from when this parameter is specified:

- * when creating or modifying a user or
- * when the user keys were last regenerated, after which the user keys expire and are no longer valid.
- * Valid format is: 'PnDTnHnMnS\|PnW'. For example, P2DT6H3M10S specifies a time period of 2 days, 6 hours, 3 minutes, and 10 seconds.
- * If the value specified is '0' seconds, then the keys won't expire.

```
|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.
```

```
|===
```

```
[#s3_service]
[.api-collapsible-fifth-title]
s3_service
```

Specifies the S3 server configuration.

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

```
|===
```

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

```
|certificate
```

```
|link:#certificate[certificate]
```

a|Specifies the certificate that will be used for creating HTTPS connections to the S3 server.

```
|comment
```

```
|string
```

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

```
|default_unix_user
```

```
|string
```

a|Specifies the default UNIX user for NAS Access.

```
|default_win_user
```

```
|string
```

a|Specifies the default Windows user for NAS Access.

```
|enabled
```

```
|boolean
```

a|Specifies whether the S3 server being created or modified should be up or down.

|is_http_enabled

|boolean

a|Specifies whether HTTP is enabled on the S3 server being created or modified. By default, HTTP is disabled on the S3 server.

|is_https_enabled

|boolean

a|Specifies whether HTTPS is enabled on the S3 server being created or modified. By default, HTTPS is enabled on the S3 server.

|name

|string

a|Specifies the name of the S3 server. A server name can contain 3 to 253 characters using only the following combination of characters: 0-9, A-Z, a-z, ".", and "-".

|port

|integer

a|Specifies the HTTP listener port for the S3 server. By default, HTTP is enabled on port 80. Valid values range from 1 to 65535.

|secure_port

|integer

a|Specifies the HTTPS listener port for the S3 server. By default, HTTPS is enabled on port 443. Valid values range from 1 to 65535.

|===

[#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
```

```
= Manage S3 service bucket configuration
```

```
:leveloffset: +1
```

```
[[ID502794d1ca514f270e91357470ba053c]]
```

```
= Protocols S3 services svm.uuid 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, accessible via a name. An object resides within a bucket. There can be more than one bucket in an S3 server. Buckets which are created for the server are associated with an S3 user that is created on the S3 server.

An access policy is an object that when associated with a resource, defines their permissions. Buckets and objects are defined as resources. By default, only the "root" user can access these resources. Access policies are used to manage access to these resources by enabling ONTAP admin to provide "grants" to allow other users to perform operations on the buckets.

```
== Examples
```

```
=== Retrieving all fields for all S3 buckets of an SVM
```

```
----
```

```
# The API:
```

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

```
# The call:
```

```
curl -X GET "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-0050568ea123/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": 50,
        "uuid": "39ac471f-ff35-11e9-b0f9-005056a7ab52",
        "name": "vs0_auto_gen_policy_39a9522f_ff35_11e9_b0f9_005056a7ab52"
      },
      "audit_event_selector": {
        "access": "all",
        "permission": "all"
      },
      "versioning-state": "disabled"
    },
    {
      "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": "bucket1",
"qos_policy": {
  "min_throughput_iops": 0,
  "min_throughput_mbps": 0,
  "max_throughput_iops": 1000,
  "max_throughput_mbps": 50,
  "uuid": "39ac471f-ff35-11e9-b0f9-005056a7ab52",
  "name": "vs0_auto_gen_policy_39a9522f_ff35_11e9_b0f9_005056a7ab52"
},
"policy": {
  "statements": [
    {
      "effect": "allow",
      "actions": [
        "*"
      ],
      "principals": [
        "Alice"
      ],
      "resources": [
        "*"
      ],
      "sid": "fullAccessForAliceToBucket"
    },
    {
      "effect": "allow",
      "actions": [
        "ListBucket",
        "GetObject"
      ],
      "principals": [
        "ann",
        "jack"
      ],
      "resources": [
        "bucket-1",
        "bucket-1/*"
      ],
      "sid": "AccessToListAndGetObjectForAnnAndJack",
      "conditions": [
        {
          "operator": "ip_address",
          "source_ips": [

```

```

        "1.1.1.1/10"
    ]
},
{
    "operator": "string_equals",
    "prefixes": [
        "pref1",
        "pref2"
    ],
    "usernames": [
        "user1",
        "user2"
    ],
    "delimiters": [
        "del1",
        "del2"
    ]
},
{
    "operator": "numeric_equals",
    "max_keys": [
        100
    ]
}
]
},
{
    "effect": "deny",
    "actions": [
        "*Object"
    ],
    "principals": [
        "mike",
        "group/group1",
        "nasgroup/group2",
    ],
    "resources": [
        "bucket-1/policy-docs/*",
        "bucket-1/confidential-*"
    ],
    "sid": "DenyAccessToGetPutDeleteObjectForMike"
},
{
    "effect": "allow",
    "actions": [
        "GetObject"
    ]
}

```

```

    ],
    "principals": [
        "*"
    ],
    "resources": [
        "bucket-1/readme"
    ],
    "sid": "AccessToGetObjectForAnonymousUsers"
},
{
    "effect": "allow",
    "actions": [
        "GetObject"
    ],
    "principals": [
    ],
    "resources": [
        "bucket-1/policies/examples/*"
    ],
    "sid": "AccessToGetObjectForAllUsersOfSVM"
}
]
}
}
],
"num_records": 2
}
-----

```

=== Retrieving the specified bucket associated with an SVM

```

-----

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

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-0050568ea123/buckets/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/services/{svm.uuid}/buckets

The call:

```

curl -iku admin:netapp1! -X POST "https://<mgmt-
ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-
0050568ea123/buckets?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\"}"

```

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/services/12f3ba4c-7ae0-11e9-8c06-
0050568ea123/buckets/?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 policies and event selector for an SVM

```

-----

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

# The call:
curl -iku admin:netapp1! -X POST "https://<mgmt-
ip>/api/protocols/s3/services/3e538980-f0af-11e9-ba68-
0050568e9798/buckets?return_records=true" -H "accept: application/json" -H
"Content-Type: application/json" -d "{ \"comment\": \"S3 bucket.\",
\"name\": \"bucket-3\", \"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\" },
\"audit_event_selector\": { \"access\": \"all\", \"permission\":
\"all\"}}}"

# 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/services/12f3ba4c-7ae0-11e9-8c06-
0050568ea123/buckets/?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 for an SVM

The API:

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

The call:

```

curl -iku admin:netappl! -X POST "https://<mgmt-
ip>/api/protocols/s3/services/3e538980-f0af-11e9-ba68-
0050568e9798/buckets?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\" ] }, { \"max_keys\": [
1000 ], \"operator\": \"numeric_equals\" }, { \"delimiters\": [ \"/\" ],
\"operator\": \"string_equals\", \"prefixes\": [ \"pref\" ],

```

```
\\"usernames\\": [ \\"user1\\" ] } ], \\"effect\\": \\"allow\\", \\"resources\\": [
\\"bucket-3/policies/examples/*\\" ], \\"sid\\":
\\"AccessToGetObjectForAllUsersofSVM\\" }, { \\"actions\\": [ \\"*Object\\" ],
\\"effect\\": \\"deny\\", \\"principals\\": [ \\"mike\\", \\"group/grp1\\" ],
\\"resources\\": [ \\"bucket-3/policy-docs/*\\", \\"bucket-3/confidential-*\\"
], \\"sid\\": \\"DenyAccessToGetObjectForMike\\" }, { \\"actions\\": [
\\"GetObject\\" ], \\"effect\\": \\"allow\\", \\"principals\\": [ \\"*\\" ],
\\"resources\\": [ \\"bucket-3/readme\\" ], \\"sid\\":
\\"AnononymousAccessToGetObjectForUsers\\" } ] } }"
```

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/services/12f3ba4c-7ae0-11e9-8c06-0050568ea123/buckets/?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 lifecycle management rules

The API:

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

```
# The call:
curl -iku admin:netapp1! -X POST "https://<mgmt-
ip>/api/protocols/s3/services/3e538980-f0af-11e9-ba68-
0050568e9798/buckets?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_initiaion_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/services/12f3ba4c-7ae0-11e9-8c06-
0050568ea123/buckets/?name=bucket-4
Content-Length: 363
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"
      }
    }
  }
}
}
-----
```

=== Creating an S3 bucket with object locking enabled for an SVM

```

-----

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

# The call:
curl -iku admin:netapp1! -X POST "https://<mgmt-
ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-
0050568ea143/buckets?return_records=true" -H "accept: application/json" -H
"Content-Type: application/json" -d "{ \"aggregates\": [ { \"name\":
\"aggr5\", \"uuid\": \"12f3ba4c-7ae0-11e9-8c06-0050568ea143\" } ],
\"comment\": \"S3 Compliance mode bucket.\",
\"constituents_per_aggregate\": 4, \"name\": \"bucket-5\", \"retention\":
{ \"mode\": \"compliance\", \"default_period\" : \"P1Y\" } }"

# The response:
HTTP/1.1 202 Accepted
Date: Fri, 24 May 2023 11:25:14 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Location: /api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-
0050568ea143/buckets/?name=bucket-5
Content-Length: 353
Content-Type: application/json
{
  "num_records": 1,
  "records": [
    {
      "name": "bucket-5",
      "comment": "S3 Compliance mode bucket."
    }
  ],
  "job": {
    "uuid": "2e880171-7e16-11e9-bfdc-0050568ea143",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/2e880171-7e16-11e9-bfdc-0050568ea143"
      }
    }
  }
}

-----

=== Updating an S3 bucket for an SVM

```

```

-----

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

# The call:
curl -X PATCH "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-0050568ea123/buckets/754389d0-7e13-11e9-bfdc-0050568ea122" -H
"accept: application/json?return_records=true" -H "Content-Type:
application/json" -d "{ \"comment\": \"Bucket modified.\", \"size\":
11111111111, \"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 11:32:27 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 and event selector for an SVM

-----

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

# The call:
curl -X PATCH "https://<mgmt-ip>/api/protocols/s3/services/3e538980-f0af-11e9-ba68-0050568e9798/buckets/754389d0-7e13-11e9-bfdc-

```

```
0050568ea122?return_records=true" -H "accept: application/json" -H
"Content-Type: application/json" -d "{ \"policy\": { \"statements\": [ {
\"actions\": [ \"*\"] , \"conditions\": [ { \"operator\": \"ip_address\",
\"source_ips\": [ \"1.1.1.1/23\", \"1.2.2.2/20\" ] }, { \"max_keys\": [
1000 ], \"operator\": \"numeric_equals\" }, { \"delimiters\": [ \"/\" ] ,
\"operator\": \"string_equals\", \"prefixes\": [ \"pref\" ] ,
\"usernames\": [ \"user1\" ] } ] , \"effect\": \"allow\", \"resources\": [
\"*\"] , \"sid\": \"fullAccessForAllPrincipalsToBucket\"} ] } ,
\"audit_event_selector\": { \"access\": \"read\", \"permission\":
\"deny\"} } }
```

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 the default-retention period on an S3 bucket for an SVM

The API:

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

The call:

```
curl -X PATCH "https://<mgmt-ip>/api/protocols/s3/services/3e538980-f0af-
11e9-ba68-0050568e9798/buckets/754389d0-7e13-11e9-bfdc-
0050568ea122?return_records=true" -H "accept: application/json" -H
"Content-Type: application/json" -d "{ \"retention\": { \"default_period\"
: \"P10Y\" } } }
```

The response:

```

HTTP/1.1 202 Accepted
Date: Fri, 24 May 2023 11:35:27 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-0050568ea143",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/9beafabb-7e17-11e9-bfdc-0050568ea143"
      }
    }
  }
}
}
----

=== Deleting an S3 bucket policy for an SVM

----

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

# The call:
curl -X PATCH "https://<mgmt-ip>/api/protocols/s3/services/3e538980-f0af-11e9-ba68-0050568e9798/buckets/754389d0-7e13-11e9-bfdc-0050568ea122?return_records=true" -H "accept: application/json" -H "Content-Type: application/json" -d "{ \"policy\": { \"statements\": [ ] } }"

# 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/services/{svm.uuid}/buckets/{uuid}

The call:

```

curl -iku admin:netapp1! -X DELETE "https://<mgmt-
ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-
0050568ea123/buckets/754389d0-7e13-11e9-bfdc-
0050568ea123?return_records=true" -H "accept: application/json"

```

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"
      }
    }
  }
}
}
}
-----

```

[[IDbcc2c07097f8f2e4252097c9858cf400]]

= Retrieve the S3 bucket configurations for an SVM


```
[.api-doc-operation .api-doc-operation-get]#GET# [.api-doc-code-block]#`/protocols/s3/services/{svm.uuid}/buckets`#
```

Introduced In: 9.7

Retrieves the S3 bucket's 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_services_svm.uuid_buckets_endpoint_overview.html[DOC /protocols/s3/services/{svm.uuid}/buckets]
```

== Parameters

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

```
|===
```

```
|Name
```

```
|Type
```

```
|In
```

```
|Required
```

```
|Description
```

```
|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_days
|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_initia
tion_days
|integer
|query

```
|False
a|Filter by
lifecycle_management.rules.abort_incomplete_multipart_upload.after_initiat
ion_days
```

* Introduced in: 9.13

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

* Introduced in: 9.14

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

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

|uuid


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

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

```
* Max value: 62672162783232000
* Min value: 199229440
```

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

```
* Introduced in: 9.12
```

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

```
* Introduced in: 9.10
```

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

```
* Introduced in: 9.10
```

```
|protection_status.is_protected
|boolean
|query
|False
```

a|Filter by protection_status.is_protected

* Introduced in: 9.10

|nas_path

|string

|query

|False

a|Filter by nas_path

* Introduced in: 9.12

|svm.name

|string

|query

|False

a|Filter by svm.name

|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

|versioning_state

|string

|query

|False

a|Filter by versioning_state

* Introduced in: 9.11

```

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

* maxLength: 63
* minLength: 3


|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


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


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

* maxLength: 256
* minLength: 0


|role

```

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

* Introduced in: 9.10

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

* Introduced in: 9.12

```
|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.
```

```
|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_svm[s3_bucket_svm]]
a|

```

|===

.Example response

[%collapsible%closed]

====

[source,json,subs=+macros]

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "audit_event_selector": {
        "access": "string",
        "permission": "string"
      },
      "comment": "S3 bucket.",
      "lifecycle_management": {
        "rules": [
          {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "abort_incomplete_multipart_upload": {
              "_links": {
                "self": {
                  "href": "/api/resourcelink"
                }
              }
            },
            "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": 819200000,
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "type": "s3",
  "uuid": "string",
  "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
```

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 set in a POST or PATCH 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. This field cannot be set using the PATCH method.

```
|===
```

```
[#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.

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

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

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

|===

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

Specifies attributes of bucket protection.

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

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

```

```
|is_protected
|boolean
a|Specifies whether a bucket is a source and if it is protected within
ONTAP and/or an external cloud. This field cannot be set in a POST method.
```

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

```
|===
```

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

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

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

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

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

```
|max_throughput_mbps
|integer
```

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

|min_throughput_iops

|integer

a|Specifies the minimum throughput in IOPS, 0 means none. Setting
"min_throughput" is supported on AFF platforms only, unless FabricPool
tiering policies are set. This is mutually exclusive with name and UUID
during POST and PATCH.

|min_throughput_mbps

|integer

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

|name

|string

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

|uuid

|string

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

|===

[#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 &dash; 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 &dash; An administrator can delete a Governance bucket.
no_lock &dash; 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.
This field cannot be set in a POST method.

```
[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_svm]
[.api-collapsible-fifth-title]
s3_bucket_svm
```

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
```

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

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

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

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

```
|logical_used_size
|integer
a|Specifies the bucket logical used size up to this point. This field
cannot be set using the 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 set in a POST

```

method.

|size

|integer

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

|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". This field cannot be set using the PATCH method.

|uuid

|string

a|Specifies the unique identifier of the bucket. This field cannot be specified in a POST or PATCH method.

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

|===

[#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

=====

[[ID5d1b7b6aa8fa7189c0dbcd1cd8970c61]]

= Create an S3 bucket configuration for an SVM

[.api-doc-operation .api-doc-operation-post]#POST# [.api-doc-code-block]#`/protocols/s3/services/{svm.uuid}/buckets`#

Introduced In: 9.7

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.
- * Constituents per aggregate specifies the number of components (or FlexVols) per aggregate. Is specified only when an aggregate list is explicitly defined.
- * An access policy can be created when a bucket is created.
- * "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` - 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 on which the bucket is hosted on.
- * `constituents_per_aggregate` - Number of constituents per aggregate.
- * `size` - Specifying the bucket size is recommended.
- * `policy` - Specifying policy enables users to perform operations on buckets. Hence 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`` - The NAS path to which the NAS 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.
- * ``qos-policy`` - No default value.
- * ``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 policy-statement-condition create``
- * ``vserver object-store-server bucket lifecycle-management-rule create``

== Learn more

*

xref:{relative_path}protocols_s3_services_svm.uuid_buckets_endpoint_overview.html[DOC /protocols/s3/services/{svm.uuid}/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:

```
|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. The "uuid" field cannot be used with the field
"storage_service_level".

|audit_event_selector
|link:#audit_event_selector[audit_event_selector]
a|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. This field cannot be set using
the PATCH method.

|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 set using the 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 set in 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". This field cannot be used with the field "aggregates.uuid" or with the "constituents_per_aggregate" in a POST method. This field cannot be set using the PATCH method.

|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". This field cannot be set using the PATCH method.

|uuid

|string

a|Specifies the unique identifier of the bucket. This field cannot be specified in a POST or PATCH method.

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

|===

.Example request
[%collapsible%closed]
====
[source,json,subs=+macros]
{
 "aggregates": [
 {
 "name": "aggr1",
 "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
 }
],
 "audit_event_selector": {
 "access": "string",
 "permission": "string"
 },
 "comment": "S3 bucket.",
 "constituents_per_aggregate": 4,
 "lifecycle_management": {
 "rules": [
 {
 "bucket_name": "bucket1",
 "expiration": {
 "object_expiry_date": "string"
 },
 "name": "string",
 "object_filter": {
 "prefix": "/logs",
 "size_greater_than": 10240,
 "size_less_than": 10485760,
 "tags": [
 "project1=projA",
 "project2=projB"
]
 },
 "svm": {

```

        "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": {
    "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": 819200000,
"storage_service_level": "value",
"svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"type": "s3",
"uuid": "string",
"versioning_state": "enabled",
"volume": {
    "name": "volume1",
    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
}
}
====

== Response

```

Status: 202, Accepted

```

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

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

|===

.Example response
[%collapsible%closed]
=====
[source,json,subs=+macros]
{
  "job": {
    "uuid": "string"
  }
}
=====

=== Headers

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

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

== 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}" do not refer to same aggregate.";
//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
|"Failed to create access policies for bucket "{bucket name}". Reason:
{Reason of Failure}. Resolve all the issues and retry the operation.";
//end row
//start row
|92405863 +
//end row
//start row
|"Failed to create event selector for bucket "{bucket name}". Reason:
{Reason of failure}. Reason: object-store-server audit configuration not
created for SVM "{svm.name}". Resolve all the issues and retry the
operation.";
//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

```

== Definitions

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

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

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

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

```
|===
```

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

Aggregate

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

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

```
|uuid
|string
```

a|

|===

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

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 set in a POST or
PATCH 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
```

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

|===

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

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

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

```
|expired_object_delete_marker
|boolean
a|Cleanup object delete markers.
```

```
|object_age_days
|integer
```

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

|new_non_current_versions

|integer

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

|non_current_days

|integer

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

|===

[#object_filter]

[.api-collapsible-fifth-title]

object_filter

Specifies a way to filter objects within a bucket.


```

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

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

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

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

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

|===

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

Specifies the name of the SVM where this bucket exists.

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

|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

|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. This field cannot be set using the PATCH method.

|===

[#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.

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

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

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

|===

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

Specifies attributes of bucket protection.

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

|destination

```

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

```
a|
```

```
|is_protected
```

```
|boolean
```

a|Specifies whether a bucket is a source and if it is protected within ONTAP and/or an external cloud. This field cannot be set in a POST method.

* Default value: 1

* readOnly: 1

* Introduced in: 9.10

* x-nullable: true

```
|===
```

```
[#qos_policy]
```

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

```
qos_policy
```

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

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|max_throughput_iops
```

```
|integer
```

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

```
|max_throughput_mbps
```

```
|integer
```

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


```
|min_throughput_iops
|integer
a|Specifies the minimum throughput in IOPS, 0 means none. Setting
"min_throughput" is supported on AFF platforms only, unless FabricPool
tiering policies are set. This is mutually exclusive with name and UUID
during POST and PATCH.
```

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

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

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

```
|===
```

```
[#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

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

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

|===

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

```
|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_svm]
[.api-collapsible-fifth-title]
s3_bucket_svm
```

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. The "uuid" field cannot be used with the field
"storage_service_level".

|audit_event_selector
|link:#audit_event_selector[audit_event_selector]
a|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. This field cannot be set using
the PATCH method.

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

|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 set in 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". This field cannot be used with the field "aggregates.uuid" or with the "constituents_per_aggregate" in a POST method. This field cannot be set using the PATCH method.

|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". This field cannot be set using the PATCH method.

|uuid

|string

a|Specifies the unique identifier of the bucket. This field cannot be specified in a POST or PATCH method.

|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.
This field cannot be set in a POST method.
```

```
|===
```

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

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

```
|===
```

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

```
|uuid
|string
```

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

```
|===
```

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

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

```
|===
```

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

```
|code
|string
```

```
a|Argument code
```

```
|message
|string
```

```
a|Message argument
```

```

|===

[#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
====

[[ID2dbc5b72b49af2529041ed3e5a0c5513]]
= Delete an S3 bucket configuration for an SVM

[.api-doc-operation .api-doc-operation-delete]#DELETE# [.api-doc-code-
```



```
block]#`/protocols/s3/services/{svm.uuid}/buckets/{uuid}`#
```

Introduced In: 9.7

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_services_svm.uuid_buckets_endpoint_overview.html[DOC /protocols/s3/services/{svm.uuid}/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
====
```

```
[[ID88f251a57fec83119e8c240b1d8110f8]]
= Retrieve an S3 bucket for an SVM
```

```
[.api-doc-operation .api-doc-operation-get]#GET# [.api-doc-code-
block]#`/protocols/s3/services/{svm.uuid}/buckets/{uuid}`#
```

Introduced In: 9.7

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_services_svm.uuid_buckets_endpoint_overvi
ew.html[DOC /protocols/s3/services/{svm.uuid}/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

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

```

```

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

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

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

|logical_used_size
|integer
a|Specifies the bucket logical used size up to this point. This field
cannot be set using the 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|Specifies "qos_policy.max_throughput_iops" and/or "qos_policy.max_throughput_mbps" or "qos_policy.min_throughput_iops" and/or "qos_policy.min_throughput_mbps". Specifying "min_throughput_iops" or "min_throughput_mbps" is only supported on volumes hosted on a node that is flash optimized. A pre-created QoS policy can also be used by specifying "qos_policy.name" or "qos_policy.uuid" properties. Setting or assigning a QoS policy to a bucket is not supported if its containing volume or SVM already has a QoS policy attached.

|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 set in a POST method.

|size

|integer

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

|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". This field cannot be set using the PATCH method.

|uuid

|string

a|Specifies the unique identifier of the bucket. This field cannot be specified in a POST or PATCH method.

```
|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.
This field cannot be set in a POST method.
```

```
|===
```

```
.Example response
[%collapsible%closed]
====
[source,json,subs=+macros]
{
  "audit_event_selector": {
    "access": "string",
    "permission": "string"
  },
  "comment": "S3 bucket.",
  "lifecycle_management": {
    "rules": [
      {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "abort_incomplete_multipart_upload": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          }
        }
      },
      "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": 819200000,
"svm": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "svm1",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"type": "s3",
"uuid": "string",
"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
```

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 set in a POST or PATCH 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. This field cannot
be set using the PATCH method.
```

```
|===
```

```
[#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.

```
|is_external_cloud
```

```
|boolean
```

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

```
|is_ontap
```

```
|boolean
```

a|Specifies whether a bucket is protected within ONTAP.

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

|===

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

Specifies attributes of bucket protection.

[cols=3*,options=header]

|===

|Name

|Type

|Description

|destination

|link:#destination[destination]

a|

|is_protected

|boolean

a|Specifies whether a bucket is a source and if it is protected within ONTAP and/or an external cloud. This field cannot be set in 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 &dash; 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 &dash; 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. This field cannot be set in a POST method.

[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
====

[[ID616dc1b2e3b518ad4edecbc7dca06653]]
= Update an S3 bucket configuration for an SVM

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

```

Introduced In: 9.7

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. Policy conditions can also be modified using this API.

*** `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 audit event selector.

*** `versioning_state` - Versioning state for buckets.

*** `nas_path` - NAS path to which the NAS 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_services_svm.uuid_buckets_endpoint_overview.html[DOC /protocols/s3/services/{svm.uuid}/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

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

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

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

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

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

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

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

```

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

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

|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 set in a POST method.

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

|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". This field cannot be set using the PATCH method.

|uuid
|string

a|Specifies the unique identifier of the bucket. This field cannot be specified in a POST or PATCH method.

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

|===

.Example request

[%collapsible%closed]

====

[source,json,subs=+macros]

```
{
  "audit_event_selector": {
    "access": "string",
    "permission": "string"
  },
  "comment": "S3 bucket.",
  "lifecycle_management": {
    "rules": [
      {
        "expiration": {
          "object_expiry_date": "string"
        },
        "svm": {
          "name": "svm1",
          "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
        },
        "uuid": "414b29a1-3b26-11e9-bd58-0050568ea055"
      }
    ]
  },
  "logical_used_size": 0,
  "nas_path": "/",
}
```

```

"policy": {
  "statements": [
    {
      "actions": [
        "GetObject",
        "PutObject",
        "DeleteObject",
        "ListBucket"
      ],
      "conditions": [
        {
          "delimiters": [
            "/"
          ],
          "max_keys": [
            1000
          ],
          "operator": "ip_address",
          "prefixes": [
            "pref"
          ],
          "source_ips": [
            "1.1.1.1",
            "1.2.2.0/24"
          ],
          "usernames": [
            "user1"
          ]
        }
      ],
      "effect": "allow",
      "principals": [
        "user1",
        "group/grp1",
        "nasgroup/group1"
      ],
      "resources": [
        "bucket1",
        "bucket1/*"
      ],
      "sid": "FullAccessToUser1"
    }
  ]
},
"qos_policy": {
  "max_throughput_iops": 10000,

```

```
    "max_throughput_mbps": 500,
    "min_throughput_iops": 2000,
    "min_throughput_mbps": 500,
    "name": "performance",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "retention": {
    "default_period": "P10Y"
  },
  "role": "string",
  "size": 819200000,
  "svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "type": "s3",
  "uuid": "string",
  "versioning_state": "enabled",
  "volume": {
    "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": {
    "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
|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 "{parameter field}", "{parameter value}", does not
exist.";
//end row
//start row
|92405863 +
//end row
//start row
|"Failed to create access policies for bucket "{bucket name}". Reason:
"Principal list can have a maximum of 10 entries.". Resolve all the issues
and retry the operation.";
//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
|92405940 +
//end row
//start row
|"The specified condition key is not valid for operator "ip-address".
Valid choices of keys for this operator: source-ips.";
//end row
//start row
|92406014 +
//end row
//start row
|"Failed to modify event selector for bucket "{bucket name}". If value of
either access or permission is set to none, then the other must be set to

```

```

none as well.";
//end row
//start row
|92406032 +
//end row
//start row
|"Modifying the NAS path for a NAS bucket is not supported.";
//end row
|===
//end table

```

== Definitions

```

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

```

```

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

```

```

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

```

```

|href
|string
a|

```

```

|===

```

```

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

```

Aggregate

```

[cols=3*,options=header]

```

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

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

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

```
|===
```

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

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 set in a POST or
PATCH 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

```

```

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

```

```

|===

```

```

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

```

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

```

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

```

```

|Name
|Type
|Description

|expired_object_delete_marker
|boolean
a|Cleanup object delete markers.

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

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

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

```

|===

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

Specifies a way to filter objects within a bucket.

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

|===

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

```
|prefix
```

```
|string
```

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

```
|size_greater_than
```

```
|integer
```

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

```
|size_less_than
```

```
|integer
```

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

```
|tags
```

```
|array[string]
```

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

|===

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


Specifies the name of the SVM where this bucket exists.

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|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
```

```
|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.

```
|enabled
```

```
|boolean
```

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

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

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

```
|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. This field cannot
be set using the PATCH method.
```

```
|===
```

```
[#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.

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

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

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

|===

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

Specifies attributes of bucket protection.

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

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

|is_protected
|boolean
a|Specifies whether a bucket is a source and if it is protected within
ONTAP and/or an external cloud. This field cannot be set in a POST method.

```

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

|===

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

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

[cols=3*,options=header]

|===

|Name

|Type

|Description

|max_throughput_iops

|integer

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

|max_throughput_mbps

|integer

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

|min_throughput_iops

|integer

a|Specifies the minimum throughput in IOPS, 0 means none. Setting "min_throughput" is supported on AFF platforms only, unless FabricPool tiering policies are set. This is mutually exclusive with name and UUID

during POST and PATCH.

|min_throughput_mbps

|integer

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

|name

|string

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

|uuid

|string

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

|===

[#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>+++

|===

[#svm]

[.api-collapsible-fifth-title]

svm

SVM, applies only to SVM-scoped objects.

[cols=3*,options=header]

|===

|Name

|Type

|Description

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

[cols=3*,options=header]

|===

|Name

|Type

|Description

|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_svm]

[.api-collapsible-fifth-title]

s3_bucket_svm

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

|audit_event_selector

|link:#audit_event_selector[audit_event_selector]

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

|comment

|string

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

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

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

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

```
|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 set in a POST method.

|size

|integer

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

|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". This field cannot be set using the PATCH method.

|uuid

|string

a|Specifies the unique identifier of the bucket. This field cannot be specified in a POST or PATCH method.

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

|===

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

[cols=3*,options=header]

|===

|Name
|Type
|Description

|uuid

|string

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

|===

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

[cols=3*,options=header]

|===

|Name
|Type
|Description

|code

|string

a|Argument code

|message

|string

a|Message argument

|===

```

[#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

= Manage S3 bucket lifecycle management rules

:leveloffset: +1

```

```
[[ID3bb0fd42caf94996f443298b02aaba15]]
= Protocols S3 services svm.uuid buckets s3_bucket.uuid rules endpoint
overview
```

```
== Overview
```

An S3 bucket lifecycle management rule is a list of objects. Each rule defines a set of actions to be performed on the object within the bucket.

```
=== Adding a lifecycle management rule on a S3 bucket under an SVM
```

```
----
```

```
# The API:
```

```
/api/protocols/s3/services/{svm.uuid}/buckets/{uuid}/rules
```

```
# The call:
```

```
curl -iku admin:netapp1! -X POST "https://<mgmt-
ip>/api/protocols/s3/services/259b4e78-2893-67ea-9785-
890456bbbec4/buckets/259b4e46-2893-67ea-9145-
909456bbbec4/rules?return_timeout=0&return_records=true" -H "accept:
application/json" -H "Content-Type: application/json" -d "{ \"name\":
\"rule1\", \"expiration\" : { \"object_age_days\" : \"1000\" },
\"abort_incomplete_multipart_upload\" : { \"after_initiation_days\" : 200
} , \"object_filter\": { \"prefix\" : \"obj1*/\" , \"size_greater_than\"
: \"1000\" } }"
```

```
# The response:
```

```
HTTP/1.1 202 Accepted
Date: Fri, 30 Novemeber 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/services/259b4e78-2893-67ea-9785-
890456bbbec4/buckets/259b4e46-2893-67ea-9145-
909456bbbec4/rules?name=bucket-4
Content-Length: 353
Content-Type: application/json
{
  "job": {
    "uuid": "2e880171-7e16-11e9-bfdc-0050568ea123",
    "_links": {
      "self": {
```

```

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

=== Updating a lifecycle management rule on a S3 bucket under an SVM

----

# The call:
curl -iku admin:netappl! -X PATCH "https://<mgmt-
ip>/api/protocols/s3/services/259b4e78-2893-67ea-9785-
890456bbbec4/buckets/259b4e46-2893-67ea-9145-
909456bbbec4/rules/rule1?return_timeout=0&return_records=true" -H "accept:
application/json" -H "Content-Type: application/json" -d "{ \"expiration\"
: { \"object_age_days\" : \"3000\" },
\"abort_incomplete_multipart_upload\" : { \"after_initiation_days\" :
\"5000\" } }"

# The response:
HTTP/1.1 202 Accepted
Date: Fri, 30 Novemeber 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/services/259b4e78-2893-67ea-9785-
890456bbbec4/buckets/259b4e46-2893-67ea-9145-
909456bbbec4/rules?name=bucket-4
Content-Length: 353
Content-Type: application/json
{
  "job": {
    "uuid": "2e880171-7e16-11e9-bfdc-0050568ea124",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/2e880171-7e16-11e9-bfdc-0050568ea124"
      }
    }
  }
}
}
}
----

=== Deleting a lifecycle management rule on a S3 bucket under an SVM

```



```
-----  
  
# The call:  
curl -X DELETE "https://<mgmt-ip>/api/protocols/s3/services/259b4e78-2893-  
67ea-9785-890456bbbec4/buckets/259b4e46-2893-67ea-9145-  
909456bbbec4/rules/rule1" -H "accept: application/json"  
-----
```

=== To delete an action within a rule, pass null inside the action-object.

```
-----  
  
# The call:  
curl -iku admin:netappl! -X PATCH "https://<mgmt-  
ip>/api/protocols/s3/services/259b4e78-2893-67ea-9785-  
890456bbbec4/buckets/259b4e46-2893-67ea-9145-  
909456bbbec4/rules/rule1?return_timeout=0&return_records=true" -H "accept:  
application/json" -H "Content-Type: application/json" -d "{ \"expiration\"  
: null }"  
  
# The response:
```

```
HTTP/1.1 202 Accepted  
Date: Fri, 30 Novemeber 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/services/259b4e78-2893-67ea-9785-  
890456bbbec4/buckets/259b4e46-2893-67ea-9145-  
909456bbbec4/rules?name=bucket-4  
Content-Length: 353  
Content-Type: application/json  
{  
  "job": {  
    "uuid": "2e880171-7e16-11e9-bfdc-0050568ea124",  
    "_links": {  
      "self": {  
        "href": "/api/cluster/jobs/2e880171-7e16-11e9-bfdc-0050568ea124"  
      }  
    }  
  }  
}  
}
```

```
-----
```

```
[[IDe92a8126fa5d9b202dde49e082a54549]]
```

= Retrieve S3 lifecycle rules for a bucket

```
[.api-doc-operation .api-doc-operation-get]#GET# [.api-doc-code-block]#`/protocols/s3/services/{svm.uuid}/buckets/{s3_bucket.uuid}/rules`#
```

Introduced In: 9.13

Retrieves all S3 Lifecycle rules associated with a bucket. Note that in order to retrieve S3 bucket rule parameters, the 'fields' option should be set to '**'.

== Related ONTAP commands

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

== Learn more

*

xref:{relative_path}protocols_s3_services_svm.uuid_buckets_s3_bucket.uuid_rules_endpoint_overview.html[DOC
/protocols/s3/services/{svm.uuid}/buckets/{s3_bucket.uuid}/rules]

== Parameters

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

```
|===
```

```
|Name
```

```
|Type
```

```
|In
```

```
|Required
```

```
|Description
```

```
|expiration.expired_object_delete_marker
```

```
|boolean
```

```
|query
```

```
|False
```

```
a|Filter by expiration.expired_object_delete_marker
```

```
|expiration.object_age_days
```

```
|integer
```

```
|query
```

```
|False
```

```
a|Filter by expiration.object_age_days
```

```
|expiration.object_expiry_date
|string
|query
|False
a|Filter by expiration.object_expiry_date
```

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

* Introduced in: 9.14

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

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

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

```
|non_current_version_expiration.non_current_days
|integer
|query
|False
a|Filter by non_current_version_expiration.non_current_days
```

```
|non_current_version_expiration.new_non_current_versions
|integer
|query
|False
```

```
a|Filter by non_current_version_expiration.new_non_current_versions
```

```
|name
```

```
|string
```

```
|query
```

```
|False
```

```
a|Filter by name
```

```
* maxLength: 256
```

```
* minLength: 0
```

```
|object_filter.tags
```

```
|string
```

```
|query
```

```
|False
```

```
a|Filter by object_filter.tags
```

```
|object_filter.prefix
```

```
|string
```

```
|query
```

```
|False
```

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

```
|object_filter.size_greater_than
```

```
|integer
```

```
|query
```

```
|False
```

```
a|Filter by object_filter.size_greater_than
```

```
|object_filter.size_less_than
```

```
|integer
```

```
|query
```

```
|False
```

```
a|Filter by object_filter.size_less_than
```

```
|abort_incomplete_multipart_upload.after_initiation_days
```

```
|integer
```

```
|query
```

```
|False
```

```
a|Filter by abort_incomplete_multipart_upload.after_initiation_days
```

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

* Introduced in: 9.14

```
|s3_bucket.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.
```

* Introduced in: 9.14

```
|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.

* Default value: 1

* Max value: 120

* Min value: 0

|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_lifecycle_rule[s3_bucket_lifecycle_rule]]
```

```
a|
```

```
|===
```

.Example response

[%collapsible%closed]

====

[source,json,subs=+macros]

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "_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"
}
]
}
====

== 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|

|===

[#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.
```

```
|===
```

```
[#s3_bucket_lifecycle_rule]
[.api-collapsible-fifth-title]
s3_bucket_lifecycle_rule
```

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.

|===

```

```
[#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
=====
```

```
[[ID4d5bb84e048873ddb26d7b25ff3d1e5f]]
= Create the S3 bucket lifecycle rule configuration
```

```
[.api-doc-operation .api-doc-operation-post]#POST# [.api-doc-code-
block]#`/protocols/s3/services/{svm.uuid}/buckets/{s3_bucket.uuid}/rules`#
```

```
*Introduced In:* 9.13
```

Creates the S3 bucket lifecycle rule configuration.

== Required properties

- * `name` - Lifecycle Management rule to be created.
- * `actions` - Lifecycle Management actions associated with the rule.

== Recommended optional properties

- * `enabled` - Lifecycle Management rule is enabled or not.
- * `object_filter.prefix` - Lifecycle Management rule filter prefix.
- * `object_filter.tags` - Lifecycle Management rule filter tags.
- * `object_filter.size_greater_than` - Lifecycle Management rule filter minimum object size.
- * `object_filter.size_less_than` - Lifecycle Management rule filter maximum object size.
- * `object_age_days` - Number of days since creation after which objects can be deleted.
- * `object_expiry_date` - Specific date from when objects can expire.
- * `expired_object_delete_marker` - Cleanup object delete markers.
- * `new_non_current_versions` - Number of latest non-current versions to be retained.
- * `non_current_days` - Number of days after which non-current versions can be deleted.
- * `after_initiation_days` - Number of days of initiation after which

uploads can be aborted.

== Related ONTAP commands

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

== Learn more

*

xref:{relative_path}protocols_s3_services_svm.uuid_buckets_s3_bucket.uuid_rules_endpoint_overview.html[DOC
/protocols/s3/services/{svm.uuid}/buckets/{s3_bucket.uuid}/rules]

== Parameters

[cols=5*,options=header]

|===

|Name

|Type

|In

|Required

|Description

|s3_bucket.uuid

|string

|path

|True

a|Unique identifier of a 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

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

* Default value:

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

* Introduced in: 9.14

```
|===
```

== Request Body

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

```
|===
```

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

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

|===

.Example request

[%collapsible%closed]

====

[source,json,subs=+macros]

{

 "bucket_name": "bucket1",

 "expiration": {

 "object_expiry_date": "string"

```
},
"name": "string",
"object_filter": {
  "prefix": "/logs",
  "size_greater_than": 10240,
  "size_less_than": 10485760,
  "tags": [
    "project1=projA",
    "project2=projB"
  ]
},
"svm": {
  "name": "svm1",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"uuid": "414b29a1-3b26-11e9-bd58-0050568ea055"
}
====
```

== 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": {
    "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
| 92405861 +
//end row
//start row
| "The specified SVM UUID or bucket UUID does not exist.";
//end row
//start row
| 92406111 +
//end row
//start row
| "Lifecycle Management rule for bucket in Vserver is invalid because of
the number of tags specified. The maximum number of tags supported is
four.";
//end row
//start row
| 92406113 +
//end row
//start row
| "Lifecycle Management rule for bucket in Vserver is invalid because there
is a mismatch in one of the filter-field. Filters must be the same for a
particular rule identifier.";
//end row
//start row
| 92406114 +
//end row
//start row
| "The Expiration action requires specifying either object_expiry_date,
object_age_days or expired_object_delete_marker.";
//end row
//start row
| 92406115 +
//end row
//start row
```

```

|"The NonCurrentVersionExpiration action requires either
new_non_current_versions or non_current_days.";
//end row
//start row
|92406116 +
//end row
//start row
|"The AbortIncompleteMultipartUpload action requires
after_initiation_days.";
//end row
//start row
|92406117 +
//end row
//start row
|"The Expiration action cannot have both an expiry date and an age.";
//end row
//start row
|92406118 +
//end row
//start row
|"Using Lifecycle Management rules requires an effective cluster version
of 9.13.1 .";
//end row
//start row
|92406119 +
//end row
//start row
|"One or more object store buckets exist with Lifecycle Management rules.
To list the buckets, run the vservers object-store-server bucket lifecycle-
management-rule show command. To delete the buckets, use the vservers
object-store-server bucket delete command.";
//end row
//start row
|92406120 +
//end row
//start row
|"The AbortIncompleteMultipartUpload action cannot be specified with
tags.";
//end row
//start row
|92406121 +
//end row
//start row
|"Expired object delete marker cannot be specified with tags.";
//end row
//start row

```



```

|92406122 +
//end row
//start row
|"Expired object delete marker cannot be specified with object age days or
expiry date.";
//end row
//start row
|92406123 +
//end row
//start row
|"Expiration is supported on object store volumes only, bucket on Vserver
is not an object store volume.";
//end row
//start row
|92406126 +
//end row
//start row
|"Lifecycle Management rule for bucket in Vserver is invalid because
specified tags contain one or more invalid characters. Valid characters
for a tag are 0-9, A-Z, a-z, +, -, =, ., _, :, /, @.";
//end row
//start row
|92406127 +
//end row
//start row
|"Lifecycle Management rule for bucket in Vserver is invalid because
specified tag length is greater than maximum allowed length: \{1}.";
//end row
//start row
|92406128 +
//end row
//start row
|"Lifecycle Management rule for bucket in Vserver has tags with duplicate
keys. Ensure each tag has a unique key and try the operation again.";
//end row
//start row
|92406129 +
//end row
//start row
|"Lifecycle Management rule for bucket in Vserver has a prefix that is too
long. The maximum length of the prefix is 1024 characters.";
//end row
//start row
|92406130 +
//end row
//start row

```

```

|"Lifecycle Management rule for bucket in Vserver is invalid because the
minimum object size is larger than the maximum object size.";
//end row
//start row
|92406131 +
//end row
//start row
|"Lifecycle Management rule for bucket in Vserver cannot be created
because non_current_days must be specified when new_non_current_versions
is specified.";
//end row
//start row
|92406132 +
//end row
//start row
|"Lifecycle Management rule "+++<rule>+++" for bucket "+++<bucket>+++" in
SVM "+++<SVM>+++" requires "object_age_days" to be greater than zero.";
//end row //start row |92406132 //end row //start row |"Lifecycle
Management rule "+++<rule>+++" for bucket "+++<bucket>+++" in SVM
"+++<SVM>+++" requires "new_non_current_versions" to be greater than
zero."; //end row //start row |92406132 //end row //start row |"Lifecycle
Management rule "+++<rule>+++" for bucket "+++<bucket>+++" in SVM
"+++<SVM>+++" requires "after_initiation_days" to be greater than zero.";
//end row //start row |92406133 //end row //start row |"Lifecycle
Management rule for bucket in Vserver is invalid. The object_expiry_date
must be later than January 1, 1970."; //end row //start row |92406134
//end row //start row |"Cannot exceed the max limit of 1000 Lifecycle
Management rules per bucket."; //end row //start row |92406135 //end row
//start row |"MetroCluster is configured on cluster. Object Expiration is
not supported in a MetroCluster configuration."; //end row //start row
|92406136 //end row //start row |"Lifecycle Management rule for bucket in
Vserver is invalid. The object_expiry_date must be at midnight GMT.";
//end row //start row |92406139 //end row //start row |"Lifecycle
Management rule for bucket in Vserver with action is a stale entry.
Contact technical support for assistance."; //end row //start row
|92406140 //end row //start row |"Expired object delete marker must be
enabled to create a Lifecycle Management rule."; //end row //start row
|92406141 //end row //start row |"Lifecycle Management rule for bucket in
Vserver with action cannot have expired_object_delete_marker disabled. To
disable expired_object_delete_marker, run vserver object-store-server
bucket lifecycle-management-rule delete"; //end row //start row |92406143
//end row //start row |"As part of Bucket Lifecycle, cannot create
fabriclink relationship on bucket "+++<bucket name="">+++" in SVM "+++<SVM
name="">+++". Reason : +++<error>+++"."; //end row //start row |92406144
//end row //start row |"The "AbortIncompleteMultipartUpload" action cannot
be specified with object size."; //end row //start row |92406150 //end row

```

```
//start row |""expired_object_delete_marker" cannot be specified with
"size_less_than."; //end row |=== //end
table+++</error>+++++</SVM>+++++</bucket>+++++</SVM>+++++</bucket>++++
++</rule>+++++</SVM>+++++</bucket>+++++</rule>+++++</SVM>+++++</bucke
t>+++++</rule>+++
```

== 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
```

```
[#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
```

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

```
|===
```

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

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

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

```
|===
```

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

```
|expired_object_delete_marker
|boolean
a|Cleanup object delete markers.
```

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

```
|new_non_current_versions
```

```
|integer
```

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

```
|non_current_days
```

```
|integer
```

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

```
|===
```

```
[#object_filter]
```

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

```
object_filter
```

Specifies a way to filter objects within a bucket.

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|prefix
```

```
|string
```

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

```
|size_greater_than
```

```
|integer
```

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

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

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

```
|===
```

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

Specifies the name of the SVM where this bucket exists.

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

```
|===
```

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

```
|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.
```

```
|===
```

```
[#s3_bucket_lifecycle_rule]
[.api-collapsible-fifth-title]
s3_bucket_lifecycle_rule
```

Information about the lifecycle management rule of a bucket.

```

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

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

|===

[#job_link]

[.api-collapsible-fifth-title]

job_link

[cols=3*,options=header]

|===

|Name

|Type

|Description

|uuid

|string

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

|===

[#error_arguments]

[.api-collapsible-fifth-title]

error_arguments

[cols=3*,options=header]

|===

|Name

|Type

|Description

|code

|string


```

a|Argument code

|message
|string
a|Message argument

|===

[#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
=====

```

```
[[ID328fb1ca1cb3d51364d7d5f6d167d946]]
```

= Delete an S3 bucket lifecycle rule

```
[.api-doc-operation .api-doc-operation-delete]#DELETE# [.api-doc-code-  
block]#`/protocols/s3/services/{svm.uuid}/buckets/{s3_bucket.uuid}/rules/{  
name}`#
```

Introduced In: 9.13

Deletes the S3 bucket lifecycle rule configuration.

== Related ONTAP commands

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

== Learn more

*

```
xref:{relative_path}protocols_s3_services_svm.uuid_buckets_s3_bucket.uuid_  
rules_endpoint_overview.html[DOC  
/protocols/s3/services/{svm.uuid}/buckets/{s3_bucket.uuid}/rules]
```

== Parameters

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

```
|===
```

```
|Name
```

```
|Type
```

```
|In
```

```
|Required
```

```
|Description
```

```
|s3_bucket.uuid
```

```
|string
```

```
|path
```

```
|True
```

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

```
|name
```

```
|string
```

```
|path
```

```
|True
```

```
a|The unique identifier of the bucket lifecycle_management rule.
```

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

```
* Introduced in: 9.14
```

```
|===
```

```
== Response
```

Status: 200, Ok

```
== Error
```

Status: Default

```
ONTAP Error Response Codes  
//start table  
[cols=2*,options=header]  
|===  
//header  
| Error code | Message  
//end header  
//end row  
//start row  
|92405861 +  
//end row  
//start row  
|"The specified SVM UUID or bucket UUID does not exist.";  
//end row  
//start row  
|92406123 +  
//end row  
//start row  
|"Expiration is supported on object store volumes only, bucket on Vserver  
is not an object store volume.";  
//end row  
//start row  
|92406139 +  
//end row
```

```
//start row
|"Lifecycle Management rule for bucket in Vserver with action is a stale
entry. Contact technical support for assistance.";
//end row
//start row
|92406141 +
//end row
//start row
|"Lifecycle Management rule for bucket in Vserver with action cannot have
expired_object_delete_marker disabled. To disable
expired_object_delete_marker, run vserver object-store-server bucket
lifecycle-management-rule delete";
//end row
//start row
|92406144 +
//end row
//start row
|"Cannot delete fabriclink relationship between bucket A and bucket B.
Reason : \{2}.";
//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
=====

```

```

[#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
====


[[ID1c5d2c194d1e0a2317b695c288857225]]
= Retrieve all S3 lifecycle rules for a bucket


[.api-doc-operation .api-doc-operation-get]#GET# [.api-doc-code-
block]#`/protocols/s3/services/{svm.uuid}/buckets/{s3_bucket.uuid}/rules/{
name}`#


*Introduced In:* 9.13


Retrieves all S3 Lifecycle rules associated with a bucket. Note that in
order to retrieve S3 bucket rule parametes, the 'fields' option should be
set to '**'.


== Related ONTAP commands

```

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

== Learn more

*

```
xref:{relative_path}protocols_s3_services_svm.uuid_buckets_s3_bucket.uuid_
rules_endpoint_overview.html[DOC
/protocols/s3/services/{svm.uuid}/buckets/{s3_bucket.uuid}/rules]
```

== Parameters

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

```
|===
```

```
|Name
```

```
|Type
```

```
|In
```

```
|Required
```

```
|Description
```

```
|s3_bucket.uuid
```

```
|string
```

```
|path
```

```
|True
```

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

```
|name
```

```
|string
```

```
|path
```

```
|True
```

```
a|The name of the lifecycle management rule to be applied on the bucket.
```

```
|svm.uuid
```

```
|string
```

```
|path
```

```
|True
```

```
a|UUID of the SVM to which this object belongs.
```

* Introduced in: 9.14

```
|fields
```

```
|array[string]
```

```
|query
```

```
|False
a|Specify the fields to return.

|===

== Response
```

Status: 200, Ok

```
[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.

|===

.Example response
[%collapsible%closed]
====
[source,json,subs=+macros]
{
 "_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"
}
====

== 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|
```

```
|===
```

```
[#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.

|===

[#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
====

[[ID35f3911615a0893f5cf1ada28d6c5f7b]]
= Update the S3 bucket lifecycle rule configuration

[.api-doc-operation .api-doc-operation-patch]#PATCH# [.api-doc-code-
block]#`/protocols/s3/services/{svm.uuid}/buckets/{s3_bucket.uuid}/rules/{
name}`#

*Introduced In:* 9.13

Updates the S3 bucket lifecycle rule configuration.

== Important notes

* The following fields can be modified for a bucket:
* `actions` - Lifecycle Management actions associated with the rule.
* `enabled` - Lifecycle Management rule is enabled or not..
* `object_age_days` - Number of days since creation after which objects
can be deleted.
* `object_expiry_date` - Specific date from when objects can expire.
* `expired_object_delete_marker` - Cleanup object delete markers.
* `new_non_current_versions` - Number of latest non-current versions to be
retained.
* `non_current_days` - Number of days after which non-current versions can
be deleted.
* `after_initiation_days` - Number of days of initiation after which

```

uploads can be aborted.

== Related ONTAP commands

* `vserver object-store-server bucket lifecycle-management-rule modify`

== Learn more

*

xref:{relative_path}protocols_s3_services_svm.uuid_buckets_s3_bucket.uuid_rules_endpoint_overview.html[DOC
/protocols/s3/services/{svm.uuid}/buckets/{s3_bucket.uuid}/rules]

== Parameters

[cols=5*,options=header]

|===

|Name

|Type

|In

|Required

|Description

|s3_bucket.uuid

|string

|path

|True

a|The unique identifier of the bucket.

|name

|string

|path

|True

a|The name of the lifecycle management rule to be applied on 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.

* Introduced in: 9.14

|===

== Request Body

[cols=3*,options=header]

|===

|Name

|Type

|Description

|abort_incomplete_multipart_upload

|link:#abort_incomplete_multipart_upload[abort_incomplete_multipart_upload
]

a|Specifies a way to perform abort_incomplete_multipart_upload action on filtered objects within a bucket. It cannot be specified with tags.

|enabled

|boolean

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

|expiration

|link:#expiration[expiration]

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

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

```
|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.
```

```
|===
```

```
.Example request
[%collapsible%closed]
====
[source,json,subs=+macros]
{
  "expiration": {
    "object_expiry_date": "string"
  },
  "svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "uuid": "414b29a1-3b26-11e9-bd58-0050568ea055"
}
====
```

```
== Response
```

Status: 200, Ok

```

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

|num_records
|integer
a|Number of records


|records
|array[link:#s3_bucket_lifecycle_rule[s3_bucket_lifecycle_rule]]
a|

|===

.Example response
[%collapsible%closed]
=====
[source,json,subs=+macros]
{
  "num_records": 1,
  "records": [
    {
      "expiration": {
        "object_expiry_date": "string"
      },
      "svm": {
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "uuid": "414b29a1-3b26-11e9-bd58-0050568ea055"
    }
  ]
}
=====

== 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
| 92405861 +
//end row
//start row
| "The specified SVM UUID or bucket UUID does not exist.";
//end row
//start row
| 92406114 +
//end row
//start row
| "The Expiration action requires specifying either object_expiry_date,
object_age_days or expired_object_delete_marker.";
//end row
//start row
| 92406115 +
//end row
//start row
| "The NonCurrentVersionExpiration action requires either
new_non_current_versions or non_current_days.";
//end row
//start row
| 92406116 +
//end row
//start row
| "The AbortIncompleteMultipartUpload action requires
after_initiation_days.";
//end row
//start row
| 92406117 +
//end row
//start row
| "The Expiration action cannot have both an expiry date and an age.";
//end row
//start row
| 92406118 +
//end row
```

```

//start row
|"Using Lifecycle Management rules requires an effective cluster version
of 9.13.1 .";
//end row
//start row
|92406119 +
//end row
//start row
|"One or more object store buckets exist with Lifecycle Management rules.
To list the buckets, run the vserver object-store-server bucket lifecycle-
management-rule show command. To delete the buckets, use the vserver
object-store-server bucket delete command.";
//end row
//start row
|92406120 +
//end row
//start row
|"The AbortIncompleteMultipartUpload action cannot be specified with
tags.";
//end row
//start row
|92406121 +
//end row
//start row
|"Expired object delete marker cannot be specified with tags.";
//end row
//start row
|92406122 +
//end row
//start row
|"Expired object delete marker cannot be specified with object age days or
expiry date.";
//end row
//start row
|92406123 +
//end row
//start row
|"Expiration is supported on object store volumes only, bucket on Vserver
is not an object store volume.";
//end row
//start row
|92406126 +
//end row
//start row
|"Lifecycle Management rule for bucket in Vserver is invalid because
specified tags contain one or more invalid characters. Valid characters

```

```

for a tag are 0-9, A-Z, a-z, +, -, =, ., _, :, /, @.";
//end row
//start row
|92406131 +
//end row
//start row
|"Lifecycle Management rule for bucket in Vserver cannot be created
because non_current_days must be specified when new_non_current_versions
is specified.";
//end row
//start row
|92406132 +
//end row
//start row
|"Lifecycle Management rule "+++<rule>+++" for bucket "+++<bucket>+++" in
SVM "+++<SVM>+++" requires "object_age_days" to be greater than zero.";
//end row //start row |92406132 //end row //start row |"Lifecycle
Management rule "+++<rule>+++" for bucket "+++<bucket>+++" in SVM
"+++<SVM>+++" requires "new_non_current_versions" to be greater than
zero."; //end row //start row |92406132 //end row //start row |"Lifecycle
Management rule "+++<rule>+++" for bucket "+++<bucket>+++" in SVM
"+++<SVM>+++" requires "after_initiation_days" to be greater than zero.";
//end row //start row |92406133 //end row //start row |"Lifecycle
Management rule for bucket in Vserver is invalid. The object_expiry_date
must be later than January 1, 1970."; //end row //start row |92406135
//end row //start row |"MetroCluster is configured on cluster. Object
Expiration is not supported in a MetroCluster configuration."; //end row
//start row |92406136 //end row //start row |"Lifecycle Management rule
for bucket in Vserver is invalid. The object_expiry_date must be at
midnight GMT."; //end row //start row |92406139 //end row //start row
|"Lifecycle Management rule for bucket in Vserver with action is a stale
entry. Contact technical support for assistance."; //end row //start row
|92406140 //end row //start row |"Expired object delete marker must be
enabled to create a Lifecycle Management rule."; //end row //start row
|92406141 //end row //start row |"Lifecycle Management rule for bucket in
Vserver with action cannot have expired_object_delete_marker disabled. To
disable expired_object_delete_marker, run vserver object-store-server
bucket lifecycle-management-rule delete"; //end row //start row |92406144
//end row //start row |"The "AbortIncompleteMultipartUpload" action cannot
be specified with object size."; //end row //start row |92406150 //end row
//start row |""expired_object_delete_marker" cannot be specified with
"size_less_than."; //end row |=== //end
table+++</SVM>++++++</bucket>++++++</rule>++++++</SVM>++++++</bucket>+++++
+</rule>++++++</SVM>++++++</bucket>++++++</rule>+++

```



```
== 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
```

```
[#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
```

```
|after_initiation_days
```

```
|integer
```

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

```
|===
```

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

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

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

|expired_object_delete_marker
|boolean
a|Cleanup object delete markers.
```

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

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

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

|===

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

Specifies a way to filter objects within a bucket.

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

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

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

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

|tags

```

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

```
|===
```

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

Specifies the name of the SVM where this bucket exists.

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

```
|===
```

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

```
|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.
```

```
|===
```

```
[#s3_bucket_lifecycle_rule]
[.api-collapsible-fifth-title]
s3_bucket_lifecycle_rule
```

Information about the lifecycle management rule of a bucket.

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

```
|===
```

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

```

|abort_incomplete_multipart_upload
|link:#abort_incomplete_multipart_upload[abort_incomplete_multipart_upload
]
a|Specifies a way to perform abort_incomplete_multipart_upload action on
filtered objects within a bucket. It cannot be specified with tags.


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


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


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


|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.


|===

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

```
= Manage S3 service group configuration
```

```
:leveloffset: +1
```

```
[[ID75fa9d8f4018a4f8e665962d064665bc]]
```

```
= Protocols S3 services svm.uuid groups endpoint overview
```

```
== Overview
```

An S3 group consists of one or many users. Policies are attached to the S3 group to have access control over S3 resources at group level.

```
== Examples
```

```
=== Retrieving all fields for all S3 groups of an SVM
```

```
----
```

```
# The API:
```

```
/api/protocols/s3/services/{svm.uuid}/groups:
```

```
# The call:
```

```
curl -X GET "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-0050568ea123/groups?fields=*&return_records=true&return_timeout=15" -H "accept: application/json"
```

```
# The response:
```

```
{
  "records": [
    {
      "comment": "Admin group",
      "id": 5,
```

```

    "name": "Admin-Group",
    "policies": [
      { "name": "Policy1" },
      { "name": "Policy2" },
      { "name": "Policy3" }
    ],
    "svm": {
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "users": [
      { "name": "User1" },
      { "name": "User2" },
      { "name": "User3" }
    ]
  },
  {
    "comment": "Admin group",
    "id": 6,
    "name": "Admin-Group1",
    "policies": [
      { "name": "Policy1" },
      { "name": "Policy2" },
      { "name": "Policy3" }
    ],
    "svm": {
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "users": [
      { "name": "User1" },
      { "name": "User2" },
      { "name": "User6" }
    ]
  }
],
"num_records": 2
}
-----

```

=== Retrieving the specified group in the SVM

The API:

/api/protocols/s3/services/{svm.uuid}/groups/{group_id}:


```

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-0050568ea123/groups/5?fields=*" -H "accept: application/json"

# The response:
{
  "comment": "Admin group",
  "id": 5,
  "name": "Admin-Group",
  "policies": [
    { "name": "Policy1" },
    { "name": "Policy2" },
    { "name": "Policy3" }
  ],
  "svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "users": [
    { "name": "User1" },
    { "name": "User2" },
    { "name": "User3" }
  ]
}
----

=== Creating an S3 group for an SVM

----

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

# The call:
curl -X POST "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-0050568ea123/groups?return_records=true" -H "accept: application/json" -H "authorization: Basic YWRtaW46bmV0YXBwMSE=" -H "Content-Type: application/json" -d "{ \"comment\": \"Admin group\", \"name\": \"Admin-Group\", \"policies\": [ { \"name\": \"Policy1\" }, { \"name\": \"Policy2\" }, { \"name\": \"Policy3\" } ], \"users\": [ { \"name\": \"User1\" }, { \"name\": \"User2\" }, { \"name\": \"User3\" } ]}"

# The response:
HTTP/1.1 202 Accepted

```

```

Date: Mon, 16 Mar 2020 11:32:27 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Length: 289
Content-Type: application/json
{
  "num_records": 1,
  "records": [
    {
      "comment": "Admin group",
      "id": 5,
      "name": "Admin-Group",
      "policies": [
        { "name": "Policy1" },
        { "name": "Policy2" },
        { "name": "Policy3" }
      ],
      "svm": {
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "users": [
        { "name": "User1" },
        { "name": "User2" },
        { "name": "User3" }
      ]
    }
  ]
}

```

```

----

=== Updating an S3 group for an SVM

```

```

----

# The API:
/api/protocols/s3/services/{svm.uuid}/groups/{group_id}:

# The call:
curl -X PATCH "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-0050568ea123/groups/5" -H "accept: application/json" -H
"authorization: Basic YWRtaW46bmV0YXBwMSE=" -H "Content-Type:
application/json" -d "{ \"comment\": \"Admin group\", \"name\": \"Admin-
Group\", \"policies\": [ { \"name\": \"Policy1\" } ], \"users\": [ {
  \"name\": \"user-1\" } ]}"

```

```

# The response:
HTTP/1.1 202 Accepted
Date: Mon, 16 Mar 2020 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
----

=== Deleting an S3 group for a specified SVM

----

# The API:
/api/protocols/s3/services/{svm.uuid}/groups/{group_id}:

# The call:
curl -X DELETE "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-0050568ea123/groups/5" -H "accept: application/json"

# The response:
HTTP/1.1 202 Accepted
Date: Mon, 16 Mar 2020 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
----

[[ID9c81a77746f9a222083d2c545f39ddb]]
= Retrieve an S3 group configuration

[.api-doc-operation .api-doc-operation-get]#GET# [.api-doc-code-
block]#`/protocols/s3/services/{svm.uuid}/groups`#

*Introduced In:* 9.8

Retrieves the S3 group's SVM configuration.

== Related ONTAP commands

```

```
* `vserver object-store-server group show`
```

```
== Learn more
```

```
*
```

```
xref:{relative_path}protocols_s3_services_svm.uuid_groups_endpoint_overvie  
w.html[DOC /protocols/s3/services/{svm.uuid}/groups]
```

```
== Parameters
```

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

```
|===
```

```
|Name
```

```
|Type
```

```
|In
```

```
|Required
```

```
|Description
```

```
|users.name
```

```
|string
```

```
|query
```

```
|False
```

```
a|Filter by users.name
```

```
* maxLength: 64
```

```
* minLength: 1
```

```
|svm.name
```

```
|string
```

```
|query
```

```
|False
```

```
a|Filter by svm.name
```

```
|name
```

```
|string
```

```
|query
```

```
|False
```

```
a|Filter by name
```

```
* maxLength: 128
```

```
* minLength: 1
```

```

|id
|integer
|query
|False
a|Filter by id

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

* maxLength: 128
* minLength: 1

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

* maxLength: 256
* minLength: 0

|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.

|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.

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


|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_group[s3_group]]
```

```
a|
```

```
|===
```

```
.Example response
```

```
[%collapsible%closed]
```

```
====
```

```
[source,json,subs=+macros]
```

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "comment": "Admin group",
      "id": 5,
      "name": "Admin-Group",
      "policies": [
        {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "Policy1"
        }
      ],
      "svm": {
        "_links": {
```

```

        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"users": [
    {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        "name": "user-1"
    }
]
}
]
}
====

== 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|

|===

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

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

|_links
|link:_links[_links]
a|

|name
|string
a|Specifies the name of the policy. A policy name length can range from 1
to 128 characters and can only contain the following combination of
characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

```

|===

[#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.

|===

[#users]

[.api-collapsible-fifth-title]

users

[cols=3*,options=header]

|===

|Name

|Type

|Description

|_links

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

```
a|
```

```
|name
```

```
|string
```

a|Specifies the name of the user. A user name length can range from 1 to 64 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

```
|===
```

```
[#s3_group]
```

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

```
s3_group
```

This is a container for S3 user groups.

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|comment
```

```
|string
```

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

```
|id
```

```
|integer
```

a|Specifies a unique Group ID used to identify a particular group. This parameter should not be specified in the POST or PATCH method. A Group ID is automatically generated and it is retrieved using the GET method. Group ID is SVM-scoped.

```
|name
```

```
|string
```

a|Specifies the name of the group. A group name length can range from 1 to 128 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

```
|policies
|array[link:#policies[policies]]
a|Specifies a list of policies that are attached to the group. The
wildcard character "*" is a valid value for specifying all policies.
```

```
|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.
```

```
|users
|array[link:#users[users]]
a|Specifies the list of users who belong to the group.
```

```
|===
```

```
[#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
====


[[ID89ddb864a1548fe6a3eef9d283c93a99]]
= Create an S3 group configuration


[.api-doc-operation .api-doc-operation-post]#POST# [.api-doc-code-
block]#`/protocols/s3/services/{svm.uuid}/groups`#


*Introduced In:* 9.8


Creates the S3 group configuration.


== Important notes


* Each SVM can have one or more s3 group configurations.

```

== Required properties

- * `svm.uuid` - Existing SVM in which to create the user configuration.
- * `name` - Group name that is to be created.
- * `users` - List of users to be added into the group.
- * `policies` - List of policies are to be attached to this group.

== Recommended optional properties

- * `comment` - Short description about the S3 Group.

== Related ONTAP commands

- * `vserver object-store-server group create`

== Learn more

*

xref:{relative_path}protocols_s3_services_svm.uuid_groups_endpoint_overview.html[DOC /protocols/s3/services/{svm.uuid}/groups]

== Parameters

[cols=5*,options=header]

|===

|Name

|Type

|In

|Required

|Description

|return_records

|boolean

|query

|False

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

* Default value:

|svm.uuid

|string

|path

|True

a|UUID of the SVM to which this object belongs.

```
|===
```

```
== Request Body
```

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|comment
```

```
|string
```

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

```
|id
```

```
|integer
```

a|Specifies a unique Group ID used to identify a particular group. This parameter should not be specified in the POST or PATCH method. A Group ID is automatically generated and it is retrieved using the GET method. Group ID is SVM-scoped.

```
|name
```

```
|string
```

a|Specifies the name of the group. A group name length can range from 1 to 128 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

```
|policies
```

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

a|Specifies a list of policies that are attached to the group. The wildcard character "*" is a valid value for specifying all policies.

```
|svm
```

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

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

```
|users
```

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


a|Specifies the list of users who belong to the group.

|===

.Example request

[%collapsible%closed]

====

[source,json,subs=+macros]

```
{
  "comment": "Admin group",
  "id": 5,
  "name": "Admin-Group",
  "policies": [
    {
      "name": "Policy1"
    }
  ],
  "svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "users": [
    {
      "name": "user-1"
    }
  ]
}
```

====

== Response

Status: 201, Created

[cols=3*,options=header]

|===

|Name

|Type

|Description

|num_records

|integer

a|Number of records

```

|records
|array[link:#s3_group[s3_group]]
a|

|===

.Example response
[%collapsible%closed]
====
[source,json,subs=+macros]
{
  "num_records": 1,
  "records": [
    {
      "comment": "Admin group",
      "id": 5,
      "name": "Admin-Group",
      "policies": [
        {
          "name": "Policy1"
        }
      ],
      "svm": {
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "users": [
        {
          "name": "user-1"
        }
      ]
    }
  ]
}
}
====

=== Headers

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

```

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

== Error
```

Status: Default

```
ONTAP Error Response Codes
//start table
[cols=2*,options=header]
|===
//header
| Error Code | Description
//end header
//end row
//start row
|92405896 +
//end row
//start row
|Users list cannot be empty.
//end row
//start row
|92405930 +
//end row
//start row
|Group name "{group name}" is not valid. Group names must have between 1
and 128 characters.
//end row
//start row
|92405931 +
//end row
//start row
|Group name "{group name}" contains invalid characters. Valid characters
for a group name are 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".
//end row
//start row
|92405932 +
//end row
//start row
|Creating an object store group requires an effective cluster version of
```

```

9.8 or later.
//end row
//start row
|92405933 +
//end row
//start row
|Failed to create group for SVM. Reason: "{reason of failure}".
//end row
//start row
|92405934 +
//end row
//start row
|Users {user name} specified in the user list do not exist for SVM
"{vserver name}". Use the "object-store-server user create" command to
create a user.
//end row
//start row
|92405935 +
//end row
//start row
|Internal Error. Unable to generate unique ID for the group.
//end row
//start row
|92405936 +
//end row
//start row
|Query characters such as * are not supported in the user list.
//end row
//start row
|92405937 +
//end row
//start row
|Policies {policy name} specified in the policy list do not exist for SVM
"{vserver name}".
//end row
//start row
|92405942 +
//end row
//start row
|Group name "{group name}" already exists for SVM "{vserver name}".
//end row
//start row
|92405858 +
//end row
//start row
|Failed to "create" the "group" because the operation is only supported on

```

```

data SVMs.
//end row
//start row
|262222  +
//end row
//start row
|User name is present more than once in the users field.
//end row
//start row
|92406154 +
//end row
//start row
|Users \{user} specified in the user list do not exist for SVM "vs1". Use
the "/protocols/s3/services/{svm.uuid}/users" endpoint to create a user.
//end row
|===
//end table

```

== Definitions

```

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

```

```

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

```

```

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

```

```

|href
|string
a|

```

```

|===

```

```

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

```

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

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

|name
|string
a|Specifies the name of the policy. A policy name length can range from 1
to 128 characters and can only contain the following combination of
characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

|===

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

SVM, applies only to SVM-scoped objects.

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

|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.

|===
```

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

Name	Type	Description
name	string	a Specifies the name of the user. A user name length can range from 1 to 64 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

```
|===
```

```
[#s3_group]
[.api-collapsible-fifth-title]
s3_group
```

This is a container for S3 user groups.

Name	Type	Description
comment	string	a Can contain any additional information about the group being created or modified.
id	integer	a Specifies a unique Group ID used to identify a particular group. This parameter should not be specified in the POST or PATCH method. A Group ID is automatically generated and it is retrieved using the GET method. Group ID is SVM-scoped.

```

|name
|string
a|Specifies the name of the group. A group name length can range from 1 to
128 characters and can only contain the following combination of
characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

|policies
|array[link:#policies[policies]]
a|Specifies a list of policies that are attached to the group. The
wildcard character "*" is a valid value for specifying all policies.

|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.

|users
|array[link:#users[users]]
a|Specifies the list of users who belong to the group.

|===

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

[[IDadfe1536729d7d755b74acd0ce30627e]]
= Delete an S3 group configuration for an SVM

[.api-doc-operation .api-doc-operation-delete]#DELETE# [.api-doc-code-
```

```
block]#`/protocols/s3/services/{svm.uuid}/groups/{id}`#
```

Introduced In: 9.8

Deletes the S3 group configuration of an SVM.

== Related ONTAP commands

* `vserver object-store-server group delete`

== Learn more

*

xref:{relative_path}protocols_s3_services_svm.uuid_groups_endpoint_overview.html[DOC /protocols/s3/services/{svm.uuid}/groups]

== Parameters

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

```
|Name
|Type
|In
|Required
|Description
```

```
|id
|string
|path
|True
a|Group identifier that identifies the unique group.
```

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

```
|===
```

== Response

Status: 200, Ok

```
== 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
====
[#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
=====

[[ID4c40f0334e70bb00a18bc73853c7b678]]
= Retrieve an S3 group configuration for an SVM

[.api-doc-operation .api-doc-operation-get]#GET# [.api-doc-code-
block]#`/protocols/s3/services/{svm.uuid}/groups/{id}`#

*Introduced In:* 9.8

Retrieves the S3 group configuration of an SVM.

== Related ONTAP commands

* `vserver object-store-server group show`

== Learn more

*
xref:{relative_path}protocols_s3_services_svm.uuid_groups_endpoint_overvie
w.html[DOC /protocols/s3/services/{svm.uuid}/groups]

== Parameters

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

|Name
|Type
|In
|Required
|Description

|id
|string
|path

```

```

|True
a|Group identifier that identifies the unique group.

|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

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

|id
|integer
a|Specifies a unique Group ID used to identify a particular group. This
parameter should not be specified in the POST or PATCH method. A Group ID
is automatically generated and it is retrieved using the GET method. Group
ID is SVM-scoped.

|name
|string
a|Specifies the name of the group. A group name length can range from 1 to

```

128 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

|policies
|array[link:#policies[policies]]
a|Specifies a list of policies that are attached to the group. The wildcard character "*" is a valid value for specifying all policies.

|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.

|users
|array[link:#users[users]]
a|Specifies the list of users who belong to the group.

|===

.Example response
[%collapsible%closed]
====
[source,json,subs=+macros]
{
 "comment": "Admin group",
 "id": 5,
 "name": "Admin-Group",
 "policies": [
 {
 "_links": {
 "self": {
 "href": "/api/resourcelink"
 }
 },
 "name": "Policy1"
 }
],
 "svm": {
 "_links": {
 "self": {
 "href": "/api/resourcelink"
 }
 }
 },
}

```

    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "users": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "user-1"
    }
  ]
}
====

== 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|

|===

```

```

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

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

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

|name
|string
a|Specifies the name of the policy. A policy name length can range from 1
to 128 characters and can only contain the following combination of
characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

|===

[#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.

|===

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

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

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

|name
|string
a|Specifies the name of the user. A user name length can range from 1 to
64 characters and can only contain the following combination of characters
0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

|===

[#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
=====

```

```
[[IDe9e0537890cd4b3b44683489443caac5]]
```

= Update an S3 group configuration for an SVM

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

Introduced In: 9.8

Updates the S3 group configuration of an SVM.

== Important notes

* The following fields can be modified for a group:

* `name` - Group name that needs to be modified.

* `users` - List of users present in the group.

* `policies` - List of policies to be attached to this group.

== Recommended optional properties

* `comment` - Short description about the S3 Group.

== Related ONTAP commands

* `vserver object-store-server group modify`

== Learn more

*

xref:{relative_path}protocols_s3_services_svm.uuid_groups_endpoint_overvie
w.html[DOC /protocols/s3/services/{svm.uuid}/groups]

== Parameters

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

```
|===
```

```
|Name
```

```
|Type
```

```
|In
```

```
|Required
```

```
|Description
```

```
|id
```

```
|integer
```

```
|path
```

```
|True
```

a|Group identifier that identifies the unique group.

|svm.uuid

|string

|path

|True

a|UUID of the SVM to which this object belongs.

|===

== Request Body

[cols=3*,options=header]

|===

|Name

|Type

|Description

|comment

|string

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

|id

|integer

a|Specifies a unique Group ID used to identify a particular group. This parameter should not be specified in the POST or PATCH method. A Group ID is automatically generated and it is retrieved using the GET method. Group ID is SVM-scoped.

|name

|string

a|Specifies the name of the group. A group name length can range from 1 to 128 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

|policies

|array[link:#policies[policies]]

a|Specifies a list of policies that are attached to the group. The wildcard character "*" is a valid value for specifying all policies.

```
|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.
```

```
|users
|array[link:#users[users]]
a|Specifies the list of users who belong to the group.
```

```
|===
```

.Example request

[%collapsible%closed]

====

```
[source,json,subs=+macros]
{
  "comment": "Admin group",
  "id": 5,
  "name": "Admin-Group",
  "policies": [
    {
      "name": "Policy1"
    }
  ],
  "svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "users": [
    {
      "name": "user-1"
    }
  ]
}
```

====

== Response

Status: 200, Ok

== Error

ONTAP Error Response Codes

```
//start table
[cols=2*,options=header]
|===
//header
| Error Code | Description
//end header
//end row
//start row
|92405896 +
//end row
//start row
|Users list cannot be empty.
//end row
//start row
|92405930 +
//end row
//start row
|Group name "{group name}" is not valid. Group names must have between 1
and 128 characters.
//end row
//start row
|92405931 +
//end row
//start row
|Group name "{group name}" contains invalid characters. Valid characters
for a group name are 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".
//end row
//start row
|92405934 +
//end row
//start row
|Users {user name} specified in the user list do not exist for SVM
"{vserver name}". Use the "object-store-server user create" command to
create a user.
//end row
//start row
|92405936 +
//end row
//start row
|Query characters such as * are not supported in the user list.
//end row
//start row
|92405937 +
```



```
//end row
//start row
|Policies {policy name} specified in the policy list do not exist for SVM
"{vserver name}".
//end row
//start row
|262222 +
//end row
//start row
|User name is present more than once in the users field.
//end row
//start row
|2621706 +
//end row
//start row
|The specified "{svm.uuid}" and "{svm.name}" refer to different SVMs.
//end row
//start row
|92406154 +
//end row
//start row
|Users \{user} specified in the user list do not exist for SVM "vs1". Use
the "/protocols/s3/services/{svm.uuid}/users" endpoint to create a user.
//end row
|===
//end table
```

== Definitions

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

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

|href
```

```

|string
a|

|===

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

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

|name
|string
a|Specifies the name of the policy. A policy name length can range from 1
to 128 characters and can only contain the following combination of
characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

|===

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

SVM, applies only to SVM-scoped objects.

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

|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.

|===

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

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

|name
|string
a|Specifies the name of the user. A user name length can range from 1 to
64 characters and can only contain the following combination of characters
0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

|===

[#s3_group]
[.api-collapsible-fifth-title]
s3_group

This is a container for S3 user groups.

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

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

```

```

|id
|integer
a|Specifies a unique Group ID used to identify a particular group. This
parameter should not be specified in the POST or PATCH method. A Group ID
is automatically generated and it is retrieved using the GET method. Group
ID is SVM-scoped.

|name
|string
a|Specifies the name of the group. A group name length can range from 1 to
128 characters and can only contain the following combination of
characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

|policies
|array[link:#policies[policies]]
a|Specifies a list of policies that are attached to the group. The
wildcard character "*" is a valid value for specifying all policies.

|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.

|users
|array[link:#users[users]]
a|Specifies the list of users who belong to the group.

|===

[#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
=====

```

```

[[ID5817e612e71fa5f7a7d42670183f1b61]]
= Retrieve S3 protocol historical performance metrics

[.api-doc-operation .api-doc-operation-get]#GET# [.api-doc-code-
block]#`/protocols/s3/services/{svm.uuid}/metrics`#

*Introduced In:* 9.8

Retrieves historical performance metrics for the S3 protocol of an SVM.

== Parameters

[cols=5*,options=header]
|===
|Name
|Type
|In
|Required
|Description

|timestamp
|string
|query
|False
a|Filter by timestamp

|iops.total
|integer
|query
|False
a|Filter by iops.total

|iops.other
|integer
|query
|False
a|Filter by iops.other

|iops.write
|integer

```

```
|query  
|False  
a|Filter by iops.write
```

```
|iops.read  
|integer  
|query  
|False  
a|Filter by iops.read
```

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

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

```
|latency.total  
|integer  
|query  
|False  
a|Filter by latency.total
```

```
|latency.other  
|integer  
|query  
|False  
a|Filter by latency.other
```

```
|latency.write  
|integer  
|query  
|False  
a|Filter by latency.write
```

```
|latency.read
|integer
|query
|False
a|Filter by latency.read
```

```
|throughput.total
|integer
|query
|False
a|Filter by throughput.total
```

```
|throughput.write
|integer
|query
|False
a|Filter by throughput.write
```

```
|throughput.read
|integer
|query
|False
a|Filter by throughput.read
```

```
|svm.uuid
|string
|path
|True
a|Unique identifier of the SVM.
```

```
|interval
|string
|query
|False
a|The time range for the data. Examples can be 1h, 1d, 1m, 1w, 1y.
The period for each time range is as follows:
```

- * 1h: Metrics over the most recent hour sampled over 15 seconds.
- * 1d: Metrics over the most recent day sampled over 5 minutes.
- * 1w: Metrics over the most recent week sampled over 30 minutes.
- * 1m: Metrics over the most recent month sampled over 2 hours.
- * 1y: Metrics over the most recent year sampled over a day.


```

* Default value: 1
* enum: ["1h", "1d", "1w", "1m", "1y"]

|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.

```

```

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

```

```

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

```

```

|max_records
|integer
|query
|False
a|Limit the number of records returned.

```

```

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

```

```

|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

|===

== Response

Status: 200, Ok

[cols=3*,options=header]

|===

|Name

|Type

|Description

|_links

|link:#_links[_links]

a|

|num_records

|integer

a|Number of records

|records

|array[link:#records[records]]

a|

|===

.Example response

[%collapsible%closed]

====

[source,json,subs=+macros]

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
```

```

    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "duration": "PT15S",
    "iops": {
      "read": 200,
      "total": 1000,
      "write": 100
    },
    "latency": {
      "read": 200,
      "total": 1000,
      "write": 100
    },
    "status": "ok",
    "throughput": {
      "read": 200,
      "total": 1000,
      "write": 100
    },
    "timestamp": "2017-01-25 06:20:13 -0500"
  }
]
}
====

== Error

```

Status: Default

ONTAP Error Response Codes

```

|===
| Error Code | Description

| 8586226
| UUID not found.

| 8585947
| There are no entries matching your query.
|===

```

```

[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

|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|

|===

```

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

The rate of I/O operations observed at the storage object.

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|other
```

```
|integer
```

a|Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.

```
|read
```

```
|integer
```

a|Performance metric for read I/O operations.

```
|total
```

```
|integer
```

a|Performance metric aggregated over all types of I/O operations.

```
|write
```

```
|integer
```

a|Performance metric for write I/O operations.

```
|===
```

```
[#latency]
```

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

```
latency
```

The round trip latency in microseconds observed at the storage object.

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

```
|===
```

Name
Type
Description
other
integer
a Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read
integer
a Performance metric for read I/O operations.
total
integer
a Performance metric aggregated over all types of I/O operations.
write
integer
a Performance metric for write I/O operations.
===
[#throughput]
[.api-collapsible-fifth-title]
throughput
The rate of throughput bytes per second observed at the storage object.
[cols=3*,options=header]
===
Name
Type
Description
other
integer
a Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.

```

|read
|integer
a|Performance metric for read I/O operations.

|total
|integer
a|Performance metric aggregated over all types of I/O operations.

|write
|integer
a|Performance metric for write I/O operations.

|===

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

Performance numbers, such as IOPS latency and throughput.

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

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

|duration
|string
a|The duration over which this sample is calculated. The time durations
are represented in the ISO-8601 standard format. Samples can be calculated
over the following durations:

|iops
|link:#iops[iops]
a|The rate of I/O operations observed at the storage object.

```



```

|latency
|link:#latency[latency]
a|The round trip latency in microseconds observed at the storage object.

|status
|string
a|Errors associated with the sample. For example, if the aggregation of
data over multiple nodes fails, then any partial errors might return "ok"
on success or "error" on an internal uncategorized failure. Whenever a
sample collection is missed but done at a later time, it is back filled to
the previous 15 second timestamp and tagged with "backfilled_data".
"Inconsistent_delta_time" is encountered when the time between two
collections is not the same for all nodes. Therefore, the aggregated value
might be over or under inflated. "Negative_delta" is returned when an
expected monotonically increasing value has decreased in value.
"Inconsistent_old_data" is returned when one or more nodes do not have the
latest data.

|throughput
|link:#throughput[throughput]
a|The rate of throughput bytes per second observed at the storage object.

|timestamp
|string
a|The timestamp of the performance data.

|===

[#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
```

```
= Manage S3 service policies
```

```
:leveloffset: +1
```

```
[[ID041591c307487e5ddd7e8377f2e2da8a]]
```

```
= Protocols S3 services svm.uuid policies endpoint overview
```

```
== Overview
```

An S3 policy is an object that when associated with a resource, defines their permissions. Buckets and objects are defined as resources. Policies are used to manage access to these resources.

```
== Examples
```

```
=== Retrieving all fields for all S3 policies of an SVM
```

```
----
```

```
# The API:
```

```
/api/protocols/s3/services/{svm.uuid}/policies:
```

```
# The call:
```

```
curl -X GET "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-
```

```
0050568ea123/policies?fields=*&return_records=true&return_timeout=15" -H  
"accept: application/json"
```

```
# The response:
```

```
{  
  "num_records": 2,  
  "records": [  
    {  
      "comment": "S3 policy.",  
      "name": "Policy1",  
      "statements": [  
        {  
          "actions": [  
            "*"   
          ],  
          "effect": "allow",
```

```

        "index": 0,
        "resources": [
            "bucket1",
            "bucket1/*"
        ],
        "sid": "FullAccessToBucket1"
    },
    {
        "actions": [
            "DeleteObject"
        ],
        "effect": "deny",
        "index": 1,
        "resources": [
            "*"
        ],
        "sid": "DenyDeleteObjectAccessToAllResources"
    }
],
"svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
},
{
    "comment": "S3 policy 2.",
    "name": "Policy2",
    "statements": [
        {
            "actions": [
                "GetObject"
            ],
            "effect": "allow",
            "index": 3,
            "resources": [
                "*"
            ],
            "sid": "AllowGetObjectAccessToAllResources"
        },
        {
            "actions": [
                "*"
            ],
            "effect": "deny",
            "index": 3,
            "resources": [

```

```

        "*"
    ],
    "sid": "DenyAccessToAllResources"
}
],
"svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
}
]
}
-----

```

=== Retrieving the specified policy in the SVM

The API:

/api/protocols/s3/services/{svm.uuid}/policies/{name}:

The call:

```

curl -X GET "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-
11e9-8c06-0050568ea123/policies/Policy1?fields=*" -H "accept:
application/json"

```

The response:

```

{
  "comment": "S3 policy.",
  "name": "Policy1",
  "statements": [
    {
      "actions": [
        "GetObject",
        "PutObject",
        "DeleteObject",
        "ListBucket",
        "ListMyBuckets",
        "ListBucketMultipartUploads",
        "ListMultipartUploadParts",
        "GetObjectTagging",
        "PutObjectTagging",
        "DeleteObjectTagging",
        "GetBucketVersioning",
        "PutBucketVersioning"
      ],

```

```

    "effect": "deny",
    "index": 0,
    "resources": [
        "*"
    ],
    "sid": "DenyAccessToAllResources"
}
],
"svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
}
}

```

=== Creating an S3 policy for an SVM

The API:

/api/protocols/s3/services/{svm.uuid}/policies

The call:

```

curl -X POST "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-0050568ea123/policies?return_records=true" -H "accept: application/json" -H "authorization: Basic YWRtaW46bmV0YXBwMSE=" -H "Content-Type: application/json" -d "{ \"comment\": \"S3 policy.\", \"name\": \"Policy1\", \"statements\": [ { \"actions\": [ \"ListBucket\", \"ListMyBuckets\", \"CreateBucket\", \"DeleteBucket\" ], \"effect\": \"allow\", \"resources\": [ \"*\" ], \"sid\": \"AllowListAccessToAllResources\" } ]}"

```

The response:

```

HTTP/1.1 202 Accepted
Date: Mon, 16 Mar 2020 11:32:27 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Length: 289
Content-Type: application/json
{
  "num_records": 1,
  "records": [
    {
      "comment": "S3 policy.",
      "name": "Policy1",

```

```

    "statements": [
      {
        "actions": [
          "ListBucket",
          "ListMyBuckets"
        ],
        "effect": "allow",
        "index": 5,
        "resources": [
          "*"
        ],
        "sid": "AllowListAccessToAllResources"
      }
    ],
    "svm": {
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
  }
}

```

=== Updating an S3 policy for an SVM

The API:

/api/protocols/s3/services/{svm.uuid}/policies/{name}:

The call:

```

curl -X PATCH "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-0050568ea123/policies/Policy1" -H "accept: application/json" -H "authorization: Basic YWRtaW46bmV0YXBwMSE=" -H "Content-Type: application/json" -d "{ \"comment\": \"S3 policy.\", \"statements\": [ { \"actions\": [ \"GetObject\", \"PutObject\", \"DeleteObject\", \"ListBucket\", \"ListMyBuckets\", \"CreateBucket\", \"DeleteBucket\"], \"effect\": \"allow\", \"resources\": [ \"bucket1\", \"bucket1/*\" ], \"sid\": \"FullAccessToAllResources\" } ] }"

```

The response:

```

HTTP/1.1 202 Accepted
Date: Mon, 16 Mar 2020 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
----

=== Deleting an S3 policy for a specified SVM

----

# The API:
/api/protocols/s3/services/{svm.uuid}/policies/{name}:

# The call:
curl -X DELETE "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-0050568ea123/policies/Policy1" -H "accept: application/json"

# The response:
HTTP/1.1 202 Accepted
Date: Mon, 16 Mar 2020 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
----

[[ID4b662b80886e0df3f00ccc197463a94b]]
= Retrieve the S3 policies in an SVM configuration

[.api-doc-operation .api-doc-operation-get]#GET# [.api-doc-code-
block]#`/protocols/s3/services/{svm.uuid}/policies`#

*Introduced In:* 9.8

Retrieves the S3 policies SVM configuration.

== Related ONTAP commands

* `vserver object-store-server policy show`

== Learn more

*
xref:{relative_path}protocols_s3_services_svm.uuid_policies_endpoint_overv

```



```
iew.html[DOC /protocols/s3/services/{svm.uuid}/policies]
```

```
== Parameters
```

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

```
|===
```

```
|Name
```

```
|Type
```

```
|In
```

```
|Required
```

```
|Description
```

```
|read-only
```

```
|boolean
```

```
|query
```

```
|False
```

```
a|Filter by read-only
```

```
|statements.index
```

```
|integer
```

```
|query
```

```
|False
```

```
a|Filter by statements.index
```

```
|statements.effect
```

```
|string
```

```
|query
```

```
|False
```

```
a|Filter by statements.effect
```

```
|statements.sid
```

```
|string
```

```
|query
```

```
|False
```

```
a|Filter by statements.sid
```

```
* maxLength: 256
```

```
* minLength: 0
```

```
|statements.resources
```

```
|string
```

```

|query
|False
a|Filter by statements.resources

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

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

* maxLength: 256
* minLength: 0

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

* maxLength: 128
* minLength: 1

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

|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.

|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.

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

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

|===

== Response

```

```

[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_policy[s3_policy]]
a|

|===

.Example response
[%collapsible%closed]
=====
[source,json,subs=+macros]
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "comment": "S3 policy.",
      "name": "Policy1",
      "statements": [
        {
          "actions": [
            "*"

```

```

    ],
    "effect": "allow",
    "index": 0,
    "resources": [
        "bucket1",
        "bucket1/*"
    ],
    "sid": "FullAccessToBucket1"
  }
],
"svm": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "svm1",
  "uuid": "02c9e252-41be-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|
```

```
|===
```

```
[#s3_policy_statement]
[.api-collapsible-fifth-title]
s3_policy_statement
```

Specifies information about a single access policy statement.

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

```
|actions
|array[string]
```

a|For each resource, S3 supports a set of operations. The resource operations allowed or denied are identified by an action list:

- * GetObject - retrieves objects from a bucket.
- * PutObject - puts objects in a bucket.
- * DeleteObject - deletes objects from a bucket.
- * ListBucket - lists the objects in a bucket.
- * GetBucketAcl - retrieves the access control list (ACL) of a bucket.
- * GetObjectAcl - retrieves the access control list (ACL) of an object.
- * ListAllMyBuckets - lists all of the buckets in a server.
- * ListBucketMultipartUploads - lists the multipart uploads in progress for a bucket.
- * ListMultipartUploadParts - lists the parts in a multipart upload.
- * CreateBucket - creates a new bucket.
- * DeleteBucket - deletes an existing bucket.
- * GetObjectTagging - retrieves the tag set of an object.
- * PutObjecttagging - sets the tag set for an object.
- * DeleteObjectTagging - deletes the tag set of an object.

- * GetBucketLocation - retrieves the location of a bucket.
- * GetBucketVersioning - retrieves the versioning configuration of a bucket.
- * PutBucketVersioning - modifies the versioning configuration of a bucket.
- * ListBucketVersions - lists the object versions in a bucket.
- * PutBucketPolicy - puts bucket policy on the bucket specified.
- * GetBucketPolicy - retrieves the bucket policy of a bucket.
- * DeleteBucketPolicy - deletes the policy created for a bucket.

The wildcard character "*" can be used to form a regular expression for specifying actions.

|effect

|string

a|Specifies whether access is allowed or denied. 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.

|index

|integer

a|Specifies a unique statement index used to identify a particular statement. This parameter should not be specified in the POST method. A statement index is automatically generated. It is not retrieved in the GET method.

|resources

|array[string]

a|

|sid

|string

a|Specifies the statement identifier which contains additional information about the statement.

|===

[#_links]

[.api-collapsible-fifth-title]

_links

[cols=3*,options=header]

|===


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

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

```
|===
```

```
[#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.
```

```
|===
```

```
[#s3_policy]
[.api-collapsible-fifth-title]
s3_policy
```

An S3 policy is an object. It defines resource (bucket, folder or object)

permissions. These policies get evaluated when an object store user user makes a request. Permissions in the policies determine whether the request is allowed or denied.

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|comment
```

```
|string
```

```
a|Can contain any additional information about the S3 policy.
```

```
|name
```

```
|string
```

```
a|Specifies the name of the policy. A policy name length can range from 1 to 128 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-". It cannot be specified in a PATCH method.
```

```
|read-only
```

```
|boolean
```

```
a|Specifies whether or not the s3 policy is read only. This parameter should not be specified in the POST method.
```

```
|statements
```

```
|array[link:#s3_policy_statement[s3_policy_statement]]
```

```
a|Specifies the policy statements.
```

```
|svm
```

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

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

```
|===
```

```
[#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

====

[[IDcf5a193d5d71e49a984ddd5a069f8bb8]]

= Create an S3 policy configuration

[.api-doc-operation .api-doc-operation-post]#POST# [.api-doc-code-block]#`/protocols/s3/services/{svm.uuid}/policies`#

Introduced In: 9.8

Creates the S3 policy configuration.

== Important notes

* Each SVM can have one or more s3 policy configurations.

== Required properties

* `svm.uuid` - Existing SVM in which to create the s3 policy configuration.

* `name` - Policy name that is to be created.

== Recommended optional properties

* `comment` - Short description about the S3 policy.

* `statements.effect` - Indicates whether to allow or deny access.

* `statements.actions` - List of actions that can be allowed or denied access. Example: GetObject, PutObject, DeleteObject, ListBucket, ListMyBuckets, ListBucketMultipartUploads, ListMultipartUploadParts, CreateBucket, DeleteBucket, GetObjectTagging, PutObjectTagging, DeleteObjectTagging, GetBucketVersioning, PutBucketVersioning.

* `statements.resources` - Buckets or objects that can be allowed or denied access.

* `statements.sid` - Statement identifier providing additional information about the statement.

== Related ONTAP commands

* `vserver object-store-server policy create`

* ``vserver object-store-server policy add-statement``

== Learn more

*

xref:{relative_path}protocols_s3_services_svm.uuid_policies_endpoint_overview.html[DOC /protocols/s3/services/{svm.uuid}/policies]

== Parameters

[cols=5*,options=header]

|===

|Name

|Type

|In

|Required

|Description

|return_records

|boolean

|query

|False

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

* Default value:

|svm.uuid

|string

|path

|True

a|UUID of the SVM to which this object belongs.

|===

== Request Body

[cols=3*,options=header]

|===

|Name

|Type

|Description

```

|comment
|string
a|Can contain any additional information about the S3 policy.

|name
|string
a|Specifies the name of the policy. A policy name length can range from 1
to 128 characters and can only contain the following combination of
characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-". It cannot
be specified in a PATCH method.

|read-only
|boolean
a|Specifies whether or not the s3 policy is read only. This parameter
should not be specified in the POST method.

|statements
|array[link:#s3_policy_statement[s3_policy_statement]]
a|Specifies the policy statements.

|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.

|===

.Example request
[%collapsible%closed]
=====
[source,json,subs=+macros]
{
  "comment": "S3 policy.",
  "name": "Policy1",
  "statements": [
    {
      "actions": [
        "*"
      ],
      "effect": "allow",
      "index": 0,
      "resources": [

```

```

        "bucket1",
        "bucket1/*"
    ],
    "sid": "FullAccessToBucket1"
}
],
"svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
}
}
====

== Response

```

Status: 201, Created

```

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

|num_records
|integer
a|Number of records

|records
|array[link:#s3_policy[s3_policy]]
a|

|===

.Example response
[%collapsible%closed]
====
[source,json,subs=+macros]
{
    "num_records": 1,
    "records": [
        {
            "comment": "S3 policy.",
            "name": "Policy1",
            "statements": [

```

```

    {
      "actions": [
        "*"
      ],
      "effect": "allow",
      "index": 0,
      "resources": [
        "bucket1",
        "bucket1/*"
      ],
      "sid": "FullAccessToBucket1"
    }
  ],
  "svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
====

```

=== Headers

```

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

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

== Error

```

Status: Default

ONTAP Error Response Codes


```

//start table
[cols=2__,options=header]
|===
//header
| Error Code | Description
//end header
//end row
//start row
|92405906 +
//end row
//start row
|The specified action name is invalid.
//end row
//start row
|92405947 +
//end row
//start row
|Creating an object store server policy or statement requires an effective
cluster version of 9.8 or later.
//end row
//start row
|92405948 +
//end row
//start row
|Policy name is not valid. Policy names must have between 1 and 128
characters.
//end row
//start row
|92405949 +
//end row
//start row
|Policy name contains invalid characters. Valid characters: 0-9, A-Z, a-z,
"_", "+", "=", ",", ".", "@", and "-".
//end row
//start row
|92405950 +
//end row
//start row
|Policy name already exists for SVM.
//end row
//start row
|92405954 +
//end row
//start row
|Policy name is reserved for read-only policies. Cannot be used for custom
policy creation.

```

```
//end row
//start row
|92405963 +
//end row
//start row
|Failed to create policy statements for policy. Reason: "{reason of
failure}". Resolve all issues and retry the operation.
//end row
//start row
|92405863 +
//end row
//start row
|Failed to create s3 policy statements. Reason: "{reason of failure}".
Valid ways to specify a resource are "__", "+++<bucket-name>+++",
"+++<bucket-name>+++/\.../\...". Resolve all the issues and retry the
operation. //end row |=== //end table+++</bucket-name>++++++</bucket-
name>+++
```

== Definitions

```
[.api-def-first-level]
.See Definitions
[%collapsible%closed]
//Start collapsible Definitions block
====
[#s3_policy_statement]
[.api-collapsible-fifth-title]
s3_policy_statement
```

Specifies information about a single access policy statement.

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

|actions
|array[string]
a|For each resource, S3 supports a set of operations. The resource
operations allowed or denied are identified by an action list:

* GetObject - retrieves objects from a bucket.
* PutObject - puts objects in a bucket.
```

- * DeleteObject - deletes objects from a bucket.
- * ListBucket - lists the objects in a bucket.
- * GetBucketAcl - retrieves the access control list (ACL) of a bucket.
- * GetObjectAcl - retrieves the access control list (ACL) of an object.
- * ListAllMyBuckets - lists all of the buckets in a server.
- * ListBucketMultipartUploads - lists the multipart uploads in progress for a bucket.
- * ListMultipartUploadParts - lists the parts in a multipart upload.
- * CreateBucket - creates a new bucket.
- * DeleteBucket - deletes an existing bucket.
- * GetObjectTagging - retrieves the tag set of an object.
- * PutObjecttagging - sets the tag set for an object.
- * DeleteObjectTagging - deletes the tag set of an object.
- * GetBucketLocation - retrieves the location of a bucket.
- * GetBucketVersioning - retrieves the versioning configuration of a bucket.
- * PutBucketVersioning - modifies the versioning configuration of a bucket.
- * ListBucketVersions - lists the object versions in a bucket.
- * PutBucketPolicy - puts bucket policy on the bucket specified.
- * GetBucketPolicy - retrieves the bucket policy of a bucket.
- * DeleteBucketPolicy - deletes the policy created for a bucket.

The wildcard character "*" can be used to form a regular expression for specifying actions.

|effect

|string

a|Specifies whether access is allowed or denied. 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.

|index

|integer

a|Specifies a unique statement index used to identify a particular statement. This parameter should not be specified in the POST method. A statement index is automatically generated. It is not retrieved in the GET method.

|resources

|array[string]

a|

|sid

```

|string
a|Specifies the statement identifier which contains additional information
about the statement.

|===

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

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

|href
|string
a|

|===

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

SVM, applies only to SVM-scoped objects.

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

|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.
```

```
|===
```

```
[#s3_policy]
[.api-collapsible-fifth-title]
s3_policy
```

An S3 policy is an object. It defines resource (bucket, folder or object) permissions. These policies get evaluated when an object store user makes a request. Permissions in the policies determine whether the request is allowed or denied.

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

|comment
|string
a|Can contain any additional information about the S3 policy.
```

```
|name
|string
a|Specifies the name of the policy. A policy name length can range from 1
to 128 characters and can only contain the following combination of
characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-". It cannot
be specified in a PATCH method.
```

```
|read-only
|boolean
a|Specifies whether or not the s3 policy is read only. This parameter
should not be specified in the POST method.
```

```
|statements
|array[link:#s3_policy_statement[s3_policy_statement]]
a|Specifies the policy statements.
```

```

|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.

|===

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

====

[[IDa742a87b6abc143d5c5602331a400284]]

= Delete an S3 policy configuration

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

Introduced In: 9.8

Deletes the S3 policy configuration of an SVM.

== Related ONTAP commands

* `vserver object-store-server policy delete`

* `vserver object-store-server policy delete-statement`

== Learn more

*

xref:{relative_path}protocols_s3_services_svm.uuid_policies_endpoint_overview.html[DOC /protocols/s3/services/{svm.uuid}/policies]

== Parameters

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

```
|Name
|Type
|In
|Required
|Description
```

```
|name
|string
|path
|True
a|Policy name
```

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

|===
```

== Response

Status: 200, Ok

== Error

Status: Default

```
ONTAP Error Response Codes
//start table
[cols=2*,options=header]
|===
//header
| Error Code | Description
//end header
//end row
//start row
|92405858 +
```



```
//end row
//start row
|Failed to "delete" the "policy" because the operation is only supported
on data SVMs.
//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
====
[#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
=====

[[IDd63cd7979bf43dcda1c32b8136e1a1a2]]
= Retrieve an S3 policy configuration

[.api-doc-operation .api-doc-operation-get]#GET# [.api-doc-code-
block]#`/protocols/s3/services/{svm.uuid}/policies/{name}`#

*Introduced In:* 9.8

Retrieves the S3 policy configuration of an SVM.

== Related ONTAP commands

* `vserver object-store-server policy show`

== Learn more

*
xref:{relative_path}protocols_s3_services_svm.uuid_policies_endpoint_overv
iew.html[DOC /protocols/s3/services/{svm.uuid}/policies]

== Parameters

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

|Name
|Type
|In
|Required

```

```

|Description

|name
|string
|path
|True
a|Policy name


|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

|comment
|string
a|Can contain any additional information about the S3 policy.


|name
|string
a|Specifies the name of the policy. A policy name length can range from 1
to 128 characters and can only contain the following combination of
characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-". It cannot
be specified in a PATCH method.

```

|read-only
|boolean
a|Specifies whether or not the s3 policy is read only. This parameter should not be specified in the POST method.

|statements
|array[link:#s3_policy_statement[s3_policy_statement]]
a|Specifies the policy statements.

|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.

|===

.Example response

[%collapsible%closed]

====

```
[source,json,subs=+macros]
{
  "comment": "S3 policy.",
  "name": "Policy1",
  "statements": [
    {
      "actions": [
        "*"
      ],
      "effect": "allow",
      "index": 0,
      "resources": [
        "bucket1",
        "bucket1/*"
      ],
      "sid": "FullAccessToBucket1"
    }
  ],
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  }
}
```

```

    },
    "name": "svm1",
    "uuid": "02c9e252-41be-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
====
[#s3_policy_statement]
[.api-collapsible-fifth-title]
s3_policy_statement
```

Specifies information about a single access policy statement.

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

|actions
|array[string]
```

a|For each resource, S3 supports a set of operations. The resource operations allowed or denied are identified by an action list:

- * GetObject - retrieves objects from a bucket.
- * PutObject - puts objects in a bucket.
- * DeleteObject - deletes objects from a bucket.
- * ListBucket - lists the objects in a bucket.
- * GetBucketAcl - retrieves the access control list (ACL) of a bucket.
- * GetObjectAcl - retrieves the access control list (ACL) of an object.
- * ListAllMyBuckets - lists all of the buckets in a server.
- * ListBucketMultipartUploads - lists the multipart uploads in progress for a bucket.
- * ListMultipartUploadParts - lists the parts in a multipart upload.
- * CreateBucket - creates a new bucket.
- * DeleteBucket - deletes an existing bucket.
- * GetObjectTagging - retrieves the tag set of an object.
- * PutObjecttagging - sets the tag set for an object.
- * DeleteObjectTagging - deletes the tag set of an object.
- * GetBucketLocation - retrieves the location of a bucket.
- * GetBucketVersioning - retrieves the versioning configuration of a bucket.
- * PutBucketVersioning - modifies the versioning configuration of a bucket.
- * ListBucketVersions - lists the object versions in a bucket.
- * PutBucketPolicy - puts bucket policy on the bucket specified.
- * GetBucketPolicy - retrieves the bucket policy of a bucket.
- * DeleteBucketPolicy - deletes the policy created for a bucket.

The wildcard character "*" can be used to form a regular expression for

specifying actions.

|effect

|string

a|Specifies whether access is allowed or denied. 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.

|index

|integer

a|Specifies a unique statement index used to identify a particular statement. This parameter should not be specified in the POST method. A statement index is automatically generated. It is not retrieved in the GET method.

|resources

|array[string]

a|

|sid

|string

a|Specifies the statement identifier which contains additional information about the statement.

|===

[#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|
```

```
|===
```

```
[#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.
```

```
|===
```

```
[#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
=====
```

```
[[IDc995e2fdccb821b80a09530023983a2d]]
= Update an S3 policy configuration
```

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

Introduced In: 9.8

Updates the S3 policy configuration of an SVM.

== Important notes

* The following fields can be modified for a policy:

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

*** `statements` - Specifies the array of policy statements.

== Related ONTAP commands

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

== Learn more

*

xref:{relative_path}protocols_s3_services_svm.uuid_policies_endpoint_overv
iew.html[DOC /protocols/s3/services/{svm.uuid}/policies]

== Parameters

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

```
|Name
|Type
|In
|Required
|Description
```

```
|name
|string
|path
|True
a|Policy name
```

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

```
|===
```

== Request Body

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

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

```
|comment
|string
a|Can contain any additional information about the S3 policy.
```

```
|read-only
|boolean
a|Specifies whether or not the s3 policy is read only. This parameter
should not be specified in the POST method.
```

```
|statements
|array[link:#s3_policy_statement[s3_policy_statement]]
a|Specifies the policy statements.
```

```
|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.
```

```
|===
```

```
.Example request
[%collapsible%closed]
=====
[source,json,subs=+macros]
{
  "comment": "S3 policy.",
  "statements": [
    {
      "actions": [
        "*"
      ],
      "effect": "allow",
      "index": 0,
      "resources": [
        "bucket1",
        "bucket1/*"
      ],
      "sid": "FullAccessToBucket1"
    }
  ],
  "svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
=====
```

```
== Response
```

Status: 200, Ok

```
== Error
```

ONTAP Error Response Codes

```
//start table
[cols=2__,options=header]
|===
//header
| Error Code | Description
//end header
//end row
//start row
|92405906 +
//end row
//start row
|The specified action name is invalid.
//end row
//start row
|92405963 +
//end row
//start row
|Failed to create s3 policy statements "{policy name}". Reason: "{reason
of failure}". Resolve all issues and retry the operation.
//end row
//start row
|92405953 +
//end row
//start row
|Object store server read-only policies do not support create, modify,
delete, add-statement, delete-statement and modify-statement operations.
//end row
//start row
|92406075 +
//end row
//start row
|Failed to modify policy statement for policy "{policy name}". Reason:
"{reason of failure}". Valid ways to specify a resource are "__",
"+++<bucket-name>+++", "+++<bucket-name>+++/\.../\...". //end row |===
//end table+++</bucket-name>++++++</bucket-name>+++
```

== Definitions

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

```
====
```

```
[#s3_policy_statement]  
[.api-collapsible-fifth-title]  
s3_policy_statement
```

Specifies information about a single access policy statement.

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

```
|actions  
|array[string]
```

a|For each resource, S3 supports a set of operations. The resource operations allowed or denied are identified by an action list:

- * GetObject - retrieves objects from a bucket.
- * PutObject - puts objects in a bucket.
- * DeleteObject - deletes objects from a bucket.
- * ListBucket - lists the objects in a bucket.
- * GetBucketAcl - retrieves the access control list (ACL) of a bucket.
- * GetObjectAcl - retrieves the access control list (ACL) of an object.
- * ListAllMyBuckets - lists all of the buckets in a server.
- * ListBucketMultipartUploads - lists the multipart uploads in progress for a bucket.
- * ListMultipartUploadParts - lists the parts in a multipart upload.
- * CreateBucket - creates a new bucket.
- * DeleteBucket - deletes an existing bucket.
- * GetObjectTagging - retrieves the tag set of an object.
- * PutObjecttagging - sets the tag set for an object.
- * DeleteObjectTagging - deletes the tag set of an object.
- * GetBucketLocation - retrieves the location of a bucket.
- * GetBucketVersioning - retrieves the versioning configuration of a bucket.
- * PutBucketVersioning - modifies the versioning configuration of a bucket.
- * ListBucketVersions - lists the object versions in a bucket.
- * PutBucketPolicy - puts bucket policy on the bucket specified.
- * GetBucketPolicy - retrieves the bucket policy of a bucket.
- * DeleteBucketPolicy - deletes the policy created for a bucket.

The wildcard character "*" can be used to form a regular expression for specifying actions.

```

|effect
|string
a|Specifies whether access is allowed or denied. 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.

|index
|integer
a|Specifies a unique statement index used to identify a particular
statement. This parameter should not be specified in the POST method. A
statement index is automatically generated. It is not retrieved in the GET
method.

|resources
|array[string]
a|

|sid
|string
a|Specifies the statement identifier which contains additional information
about the statement.

|===

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

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

|href
|string
a|

|===

[#\_links]

```



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

SVM, applies only to SVM-scoped objects.

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

```
|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.

```
|===
```

```
[#s3_policy]
[.api-collapsible-fifth-title]
s3_policy
```

An S3 policy is an object. It defines resource (bucket, folder or object) permissions. These policies get evaluated when an object store user user makes a request. Permissions in the policies determine whether the request is allowed or denied.

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

```
|comment
|string
```

```

a|Can contain any additional information about the S3 policy.

|read-only
|boolean
a|Specifies whether or not the s3 policy is read only. This parameter
should not be specified in the POST method.

|statements
|array[link:#s3_policy_statement[s3_policy_statement]]
a|Specifies the policy statements.

|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.

|===

[#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

= Manage S3 service users

:leveloffset: +1

[[IDcef414f98f5568c8970e9cec3d137a8c]]
= Protocols S3 services svm.uuid users endpoint overview

```

== Overview

An S3 user account is created on the S3 server. Buckets that are created for the server are associated with that user (as the owner of the buckets).

The creation of the user account involves generating a pair of keys "access" and "secret".

These keys are shared with clients (by the administrator out of band) who want to access the S3 server. The access_key is sent in the request and it identifies the user performing the operation. The client or server never send the secret_key over the wire.

Only the access_key can be retrieved from a GET operation. The secret_key along with the access_key is returned from a POST operation and from a PATCH operation if the administrator needs to regenerate the keys.

== Examples

=== Retrieving S3 user configurations for a particular SVM

The API:

/api/protocols/s3/services/{svm.uuid}/users

The call:

```
curl -X GET "https://<mgmt-ip>/api/protocols/s3/services/db2ec036-8375-11e9-99e1-0050568e3ed9/users?fields=*&return_records=true" -H "accept: application/hal+json"
```

The response:

```
{
  "records": [
    {
      "svm": {
        "uuid": "db2ec036-8375-11e9-99e1-0050568e3ed9",
        "name": "vs1",
        "_links": {
          "self": {
            "href": "/api/svm/svms/db2ec036-8375-11e9-99e1-0050568e3ed9"
          }
        }
      },
      "name": "user-1",
      "comment": "S3 user",
    }
  ]
}
```

```

    "access_key": "JJJA3240AD5ZTSHXNC35",
    "key_time_to_live": "PT3H5M",
    "key_expiry_time": "2023-02-20T10:04:31Z",
    "_links": {
      "self": {
        "href": "/api/protocols/s3/services/db2ec036-8375-11e9-99e1-0050568e3ed9/users/user-1"
      }
    }
  },
  {
    "svm": {
      "uuid": "db2ec036-8375-11e9-99e1-0050568e3ed9",
      "name": "vs1",
      "_links": {
        "self": {
          "href": "/api/svm/svms/db2ec036-8375-11e9-99e1-0050568e3ed9"
        }
      }
    },
    "name": "user-2",
    "comment": "s3-user",
    "access_key": "C87S021Q59JJAAQNJP7R",
    "_links": {
      "self": {
        "href": "/api/protocols/s3/services/db2ec036-8375-11e9-99e1-0050568e3ed9/users/user-2"
      }
    }
  }
],
"num_records": 2,
"_links": {
  "self": {
    "href": "/api/protocols/s3/services/db2ec036-8375-11e9-99e1-0050568e3ed9/users?fields=*&return_records=true"
  }
}
}
}
-----

```

=== Retrieving the user configuration of a specific S3 user

The API:

```
/api/protocols/s3/services/{svm.uuid}/users/{name}
```

```
# The call:
```

```
curl -X GET "https://<mgmt-ip>/api/protocols/s3/services/db2ec036-8375-11e9-99e1-0050568e3ed9/users/user-1" -H "accept: application/hal+json"
```

```
# The response:
```

```
{
  "svm": {
    "uuid": "db2ec036-8375-11e9-99e1-0050568e3ed9",
    "name": "vs1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/db2ec036-8375-11e9-99e1-0050568e3ed9"
      }
    }
  },
  "name": "user-1",
  "comment": "s3-user",
  "access_key": "JJJA3240AD5ZTSHXNC35",
  "key_time_to_live": "P6DT1H5M",
  "key_expiry_time": "2023-02-20T10:04:31Z",
  "_links": {
    "self": {
      "href": "/api/protocols/s3/services/db2ec036-8375-11e9-99e1-0050568e3ed9/users/user-1"
    }
  }
}
```

```
----
```

```
=== Creating an S3 user configuration
```

```
----
```

```
# The API:
```

```
/api/protocols/s3/services/{svm.uuid}/users
```

```
# The call:
```

```
curl -X POST "https://<mgmt-ip>/api/protocols/s3/services/db2ec036-8375-11e9-99e1-0050568e3ed9/users" -H "accept: application/json" -H "Content-Type: application/json" -d '{"name": "user-1"}'
```

```
# The response:
```

```
HTTP/1.1 201 Created
```

```
Date: Fri, 31 May 2019 09:34:25 GMT
```

```

Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Location: /api/protocols/s3/services/db2ec036-8375-11e9-99e1-0050568e3ed9/users/user-1
Content-Length: 244
Content-Type: application/json
{
  "num_records": 1,
  "records": [
    {
      "name": "user-1",
      "access_key": "JJJA3240AD5ZTSHXNC36",
      "secret_key": "_n8NAqU3A8TN73698j1uJ2YA7oxZ_Va6q4ETMB47"
    }
  ]
}
----

=== Creating an S3 user configuration with key expiration configuration

----

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

# The call:
curl -X POST "https://<mgmt-ip>/api/protocols/s3/services/db2ec036-8375-11e9-99e1-0050568e3ed9/users" -H "accept: application/json" -H "Content-Type: application/json" -d '{"comment": "S3 user3", "key_time_to_live": "P6DT1H5M", "name": "user-3"}'

# The response:
HTTP/1.1 201 Created
Date: Tue, 14 Feb 2023 08:59:31 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Security-Policy: default-src 'self'; script-src 'self' 'unsafe-inline'; style-src 'self' 'unsafe-inline'; img-src 'self' data:; frame-ancestors: 'self'
Location: /api/protocols/s3/services/6573ac2b-ab66-11ed-b53d-005056bb4b9b/users/user-3
Content-Length: 337
Content-Type: application/hal+json
Vary: Origin

```

```
{
  "num_records": 1,
  "records": [
    {
      "name": "user-3",
      "access_key": "JJJA3240AD5ZTSHXNC35",
      "secret_key": "OXx6J_GkTc94Xx91cYrNBar_OT3BY6lWOHI_HSR5",
      "key_expiry_time": "2023-06-16T12:08:38Z",
      "_links": {
        "self": {
          "href": "/api/protocols/s3/services/6573ac2b-ab66-11ed-b53d-005056bb4b9b/users/user-3"
        }
      }
    }
  ]
}
```

=== Regenerating keys for a specific S3 user for the specified SVM

The API:

/api/protocols/s3/services/{svm.uuid}/users/{name}

The call:

```
curl -X PATCH "https://<mgmt-ip>/api/protocols/s3/services/db2ec036-8375-11e9-99e1-0050568e3ed9/users/user-2?regenerate_keys=true" -H "accept: application/hal+json" -H "Content-Type: application/json" -d "{ }"
```

The response:

HTTP/1.1 200 OK

Date: Fri, 31 May 2019 09:55:45 GMT

Server: libzapid-httpd

X-Content-Type-Options: nosniff

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

Content-Length: 391

Content-Type: application/hal+json

```
{
  "num_records": 1,
  "records": [
    {
      "name": "user-2",
      "access_key": "KEOYV21G156K8AB4ZISH",
      "secret_key": "au__5oyYSs3c_QtoD5FH9f9rL888rwgD6fQS8chl",
```



```

    "_links": {
      "self": {
        "href": "/api/protocols/s3/services/db2ec036-8375-11e9-99e1-0050568e3ed9/users/user-2"
      }
    }
  }
]
}
-----

```

=== Regenerating keys and setting new expiry configuration for a specific S3 user for the specified SVM

The API:

/api/protocols/s3/services/{svm.uuid}/users/{name}

The call:

```

curl -X PATCH "https://<mgmt-ip>/api/protocols/s3/services/db2ec036-8375-11e9-99e1-0050568e3ed9/users/user-2?regenerate_keys=true" -H "accept: application/hal+json" -H "Content-Type: application/json" -d "{ \"key_time_to_live\": \"PT6H3M\" }"

```

The response:

HTTP/1.1 200 OK

Date: Fri, 31 May 2019 09:55:45 GMT

Server: libzapid-httpd

X-Content-Type-Options: nosniff

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

Content-Length: 391

Content-Type: application/hal+json

```

{
  "num_records": 1,
  "records": [
    {
      "name": "user-2",
      "access_key": "KEOYV21G156K8AB4ZISH",
      "secret_key": "au__5oyYSs3c_QtoD5FH9f9rL888rwgD6fQS8chl",
      "key_expiry_time": "2023-06-16T16:19:06Z",
      "_links": {
        "self": {
          "href": "/api/protocols/s3/services/db2ec036-8375-11e9-99e1-0050568e3ed9/users/user-2"
        }
      }
    }
  ]
}

```

```
    }  
  }  
]  
}  
----
```

=== Deleting keys for a specific S3 user for a specified SVM

The API:

/api/protocols/s3/services/{svm.uuid}/users/{name}

The call:

```
curl -X PATCH "https://<mgmt-ip>/api/protocols/s3/services/db2ec036-8375-  
11e9-99e1-0050568e3ed9/users/user-2?delete_keys=true" -H "accept:  
application/hal+json" -H "Content-Type: application/json" -d "{ }"
```

The response:

HTTP/1.1 200 OK

Date: Wed, 08 Feb 2023 13:40:04 GMT

Server: libzapid-httpd

X-Content-Type-Options: nosniff

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

Content-Security-Policy: default-src 'self'; script-src 'self' 'unsafe-
inline'; style-src 'self' 'unsafe-inline'; img-src 'self' data:; frame-
ancestors: 'self'

Content-Length: 3

Content-Type: application/hal+json

Vary: Origin

```
{  
}
```

=== Deleting the specified S3 user configuration for a specified SVM

The API:

/api/protocols/s3/services/{svm.uuid}/users/{name}

The call:

```
curl -X DELETE "https://<mgmt-ip>/api/protocols/s3/services/03ce5c36-f269-  
11e8-8852-0050568e5298/users/user-2" -H "accept: application/json"
```

```
[[IDa9d491db1b96ffb86152b89a98d17583]]
```

= Retrieve the SVM configuration for an S3 user

```
[.api-doc-operation .api-doc-operation-get]#GET# [.api-doc-code-  
block]#`/protocols/s3/services/{svm.uuid}/users`#
```

Introduced In: 9.7

Retrieves the S3 user's SVM configuration.

== Related ONTAP commands

* `vserver object-store-server user show`

== Learn more

*

```
xref:{relative_path}protocols_s3_services_svm.uuid_users_endpoint_overview  
.html[DOC /protocols/s3/services/{svm.uuid}/users]
```

== Parameters

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

```
|===
```

```
|Name
```

```
|Type
```

```
|In
```

```
|Required
```

```
|Description
```

```
|comment
```

```
|string
```

```
|query
```

```
|False
```

```
a|Filter by comment
```

* maxLength: 256

* minLength: 0

```
|key_expiry_time
```

```
|string
```

```
|query
|False
a|Filter by key_expiry_time
```

* Introduced in: 9.14

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

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

* Introduced in: 9.14

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

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

* maxLength: 64
* minLength: 1

```
|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.

|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.

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

|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_user[s3_user]]
a|

|===

.Example response
[%collapsible%closed]
=====
[source,json,subs=+macros]
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "access_key": "HJAKU28M3SXTE2UXUACV",
      "comment": "S3 user",
      "key_expiry_time": "2023-12-31 19:00:00 -0500",
      "key_time_to_live": "PT6H3M",
```

```

    "name": "user-1",
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-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|
```

```
|===
```

```
[#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.

```
|===
```

```
[#s3_user]  
[.api-collapsible-fifth-title]  
s3_user
```

This is a container of S3 users.

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

```
|===
```

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

```
|access_key  
|string
```

a|Specifies the access key for the user.

```
|comment  
|string
```

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

```
|key_expiry_time  
|string
```

a|Specifies the date and time after which keys expire and are no longer valid.

```
|key_time_to_live  
|string
```

a|Indicates the time period from when this parameter is specified:

- * when creating or modifying a user or
- * when the user keys were last regenerated, after which the user keys expire and are no longer valid.
- * Valid format is: 'PnDTnHnMnS\|PnW'. For example, P2DT6H3M10S specifies a time period of 2 days, 6 hours, 3 minutes, and 10 seconds.
- * If the value specified is '0' seconds, then the keys won't expire.

```
|name
|string
a|Specifies the name of the user. A user name length can range from 1 to
64 characters and can only contain the following combination of characters
0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".
```

```
|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.
```

```
|===
```

```
[#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
=====
```

```
[[IDb7cf2eff91f58fb471c65f16b8a3100a]]
= Create an S3 user configuration
```

```
[.api-doc-operation .api-doc-operation-post]#POST# [.api-doc-code-
block]#`/protocols/s3/services/{svm.uuid}/users`#
```

Introduced In: 9.7

Creates the S3 user configuration.

== Important notes

- * Each SVM can have one or more user configurations.
- * If user creation is successful, a user access_key and secret_key is returned as part of the response.
- * If user keys have expiry configuration, then "key_expiry_time" is also returned as part of the response.

== Required properties

- * `svm.uuid` - Existing SVM in which to create the user configuration.
- * `name` - User name that is to be created.

== Default property values

- * `comment` - ""

== Related ONTAP commands

- * `vserver object-store-server user create`

== Learn more

*

xref:{relative_path}protocols_s3_services_svm.uuid_users_endpoint_overview.html[DOC /protocols/s3/services/{svm.uuid}/users]

== Parameters

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

|Name
|Type
|In
|Required
|Description

|return_records
|boolean
|query
|False

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

* Default value:

|svm.uuid
|string
|path
|True

a|UUID of the SVM to which this object belongs.

|==

== Request Body

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

```
|===
```

```
|Name
```

```
|Type
```

```
|Description
```

```
|access_key
```

```
|string
```

a|Specifies the access key for the user.

```
|comment
```

```
|string
```

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

```
|key_expiry_time
```

```
|string
```

a|Specifies the date and time after which keys expire and are no longer valid.

```
|key_time_to_live
```

```
|string
```

a|Indicates the time period from when this parameter is specified:

- * when creating or modifying a user or

- * when the user keys were last regenerated, after which the user keys expire and are no longer valid.

- * Valid format is: 'PnDTnHnMnS\|PnW'. For example, P2DT6H3M10S specifies a time period of 2 days, 6 hours, 3 minutes, and 10 seconds.

- * If the value specified is '0' seconds, then the keys won't expire.

```
|name
```

```
|string
```

a|Specifies the name of the user. A user name length can range from 1 to 64 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

```
|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.

|===

.Example request
[%collapsible%closed]
=====
[source,json,subs=+macros]
{
  "access_key": "HJAKU28M3SXTE2UXUACV",
  "comment": "S3 user",
  "key_expiry_time": "2023-12-31 19:00:00 -0500",
  "key_time_to_live": "PT6H3M",
  "name": "user-1",
  "svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
=====

== Response
```

Status: 201, Created

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

|num_records
|integer
a|Number of records

|records
|array[link:#s3_service_user_post_response[s3_service_user_post_response]]
a|

|===
```

```
.Example response
[%collapsible%closed]
====
[source,json,subs=+macros]
{
  "num_records": 1,
  "records": [
    {
      "access_key": "HJAKU28M3SXTE2UXUACV",
      "name": "user-1",
      "secret_key": "BcA_HX6If4581lhnx3n1TCO3mg4roCXG0ddYf_cJ"
    }
  ]
}
====

=== Headers

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

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

== Error
```

Status: Default

ONTAP Error Response Codes

```
|===
| Error Code | Description

| 92405787
| User name "User#1" contains invalid characters. Valid characters for a
```



```
|===
```

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

SVM, applies only to SVM-scoped objects.

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

```
|===
```

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

```
|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.

```
|===
```

```
[#s3_user]  
[.api-collapsible-fifth-title]  
s3_user
```

This is a container of S3 users.

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

```
|===
```

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

```

|access_key
|string
a|Specifies the access key for the user.

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

|key_expiry_time
|string
a|Specifies the date and time after which keys expire and are no longer
valid.

|key_time_to_live
|string
a|Indicates the time period from when this parameter is specified:

* when creating or modifying a user or
* when the user keys were last regenerated, after which the user keys
expire and are no longer valid.
* Valid format is: 'PnDTnHnMnS\|PnW'. For example, P2DT6H3M10S specifies a
time period of 2 days, 6 hours, 3 minutes, and 10 seconds.
* If the value specified is '0' seconds, then the keys won't expire.

|name
|string
a|Specifies the name of the user. A user name length can range from 1 to
64 characters and can only contain the following combination of characters
0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.

|===

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

```

```

[#s3_service_user_post_response]
[.api-collapsible-fifth-title]
s3_service_user_post_response

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

|access_key
|string
a|Specifies the access key for the user.

|name
|string
a|The name of the user.

|secret_key
|string
a|Specifies the secret key for the user.

|===

[#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
====

[[ID2dea4278a9daf57acf960bcd6db582f]]
= Delete an S3 user configuration

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

```

Introduced In: 9.7

Deletes the S3 user configuration of an SVM.

== Related ONTAP commands

* `vserver object-store-server user delete`

== Learn more

*

xref:{relative_path}protocols_s3_services_svm.uuid_users_endpoint_overview.html[DOC /protocols/s3/services/{svm.uuid}/users]

== Parameters

[cols=5*,options=header]

|===

|Name

|Type

|In

|Required

|Description

|name

|string

|path

|True

a|User name

|svm.uuid

|string

|path

|True

a|UUID of the SVM to which this object belongs.

|===

== Response

Status: 200, Ok

```
== 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
====
[#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
=====

[[IDc9ef0fdc85b1837f2c08af1e62c9102c]]
= Retrieve the S3 user configuration for an SVM

[.api-doc-operation .api-doc-operation-get]#GET# [.api-doc-code-
block]#`/protocols/s3/services/{svm.uuid}/users/{name}`#

*Introduced In:* 9.7

Retrieves the S3 user configuration of an SVM.

== Related ONTAP commands

* `vserver object-store-server user show`

== Learn more

*
xref:{relative_path}protocols_s3_services_svm.uuid_users_endpoint_overview
.html[DOC /protocols/s3/services/{svm.uuid}/users]

== Parameters

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

|Name
|Type
|In
|Required
|Description

|name
|string
|path

```

```
|True
a|User name

|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

|access_key
|string
a|Specifies the access key for the user.

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

|key_expiry_time
|string
a|Specifies the date and time after which keys expire and are no longer
valid.
```

```
|key_time_to_live
|string
a|Indicates the time period from when this parameter is specified:

* when creating or modifying a user or
* when the user keys were last regenerated, after which the user keys
expire and are no longer valid.
* Valid format is: 'PnDTnHnMnS\|PnW'. For example, P2DT6H3M10S specifies a
time period of 2 days, 6 hours, 3 minutes, and 10 seconds.
* If the value specified is '0' seconds, then the keys won't expire.
```

```
|name
|string
a|Specifies the name of the user. A user name length can range from 1 to
64 characters and can only contain the following combination of characters
0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".
```

```
|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.
```

```
|===
```

```
.Example response
[%collapsible%closed]
====
[source,json,subs=+macros]
{
  "access_key": "HJAKU28M3SXTE2UXUACV",
  "comment": "S3 user",
  "key_expiry_time": "2023-12-31 19:00:00 -0500",
  "key_time_to_live": "PT6H3M",
  "name": "user-1",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-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|

|===

[#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.

|===

[#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
====

[[IDf40dc86dd3886b0796af718a6779f756]]
= Update an S3 user configuration

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

*Introduced In:* 9.7

Updates the S3 user configuration of an SVM.

== Important notes

* User access_key and secret_key pair can be regenerated using the PATCH
operation.
* User access_key and secret_key is returned in a PATCH operation if the

```

"regenerate_keys" field is specified as true.

* If "regenerate_keys" is true and user keys have expiry configuration, then "key_expiry_time" is also returned as part of response.

* User access_key and secret_key pair can be deleted using the PATCH operation.

== Recommended optional properties

* `regenerate_keys` - Specifies if secret_key and access_key need to be regenerated.

* `delete_keys` - Specifies if secret_key and access_key need to be deleted.

* `comment` - Any information related to the S3 user.

== Related ONTAP commands

* `vserver object-store-server user show`

* `vserver object-store-server user regenerate-keys`

* `vserver object-store-server user delete-keys`

== Learn more

*

xref:{relative_path}protocols_s3_services_svm.uuid_users_endpoint_overview.html[DOC /protocols/s3/services/{svm.uuid}/users]

== Parameters

[cols=5*,options=header]

|===

|Name

|Type

|In

|Required

|Description

|name

|string

|path

|True

a|User name

|regenerate_keys

|boolean


```
|query
|False
a|Specifies whether or not to regenerate the user keys.
```

* Default value:

```
|delete_keys
|boolean
|query
|False
a|Specifies whether or not to delete the user keys.
```

* Introduced in: 9.14

* Default value:

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

|===

== Request Body

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

```
|access_key
|string
a|Specifies the access key for the user.
```

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

```
|key_expiry_time
```

```

|string
a|Specifies the date and time after which keys expire and are no longer
valid.

|key_time_to_live
|string
a|Indicates the time period from when this parameter is specified:

* when creating or modifying a user or
* when the user keys were last regenerated, after which the user keys
expire and are no longer valid.
* Valid format is: 'PnDTnHnMnS\|PnW'. For example, P2DT6H3M10S specifies a
time period of 2 days, 6 hours, 3 minutes, and 10 seconds.
* If the value specified is '0' seconds, then the keys won't expire.

|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.

|===

.Example request
[%collapsible%closed]
====
[source,json,subs=+macros]
{
  "access_key": "HJAKU28M3SXTE2UXUACV",
  "comment": "S3 user",
  "key_expiry_time": "2023-12-31 19:00:00 -0500",
  "key_time_to_live": "PT6H3M",
  "svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
====

== Response

```

Status: 200, Ok

```

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

|num_records
|integer
a|Number of records


|records
|array[link:#s3_service_user_post_response[s3_service_user_post_response]]
a|

|===

.Example response
[%collapsible%closed]
=====
[source,json,subs=+macros]
{
  "num_records": 1,
  "records": [
    {
      "access_key": "HJAKU28M3SXTE2UXUACV",
      "name": "user-1",
      "secret_key": "BcA_HX6If4581lhnx3n1TCO3mg4roCXG0ddYf_cJ"
    }
  ]
}
=====

== Error

```

Status: Default

ONTAP Error Response Codes

```

|===
| Error Code | Description

| 92405792
| Failed to regenerate access-key and secret-key for user.

```

| 92406082
 | Cannot perform "regenerate_keys" and "delete_keys" operations simultaneously on an S3 user.

| 92406081
 | The "regenerate_keys" operation on S3 User "user-2" in SVM "vs1" succeeded. However, modifying all of the other S3 user properties failed. Reason: resource limit exceeded. Retry the operation again without specifying the "regenerate_keys" parameter.

| 92406080
 | Cannot delete root user keys because there exists at least one S3 SnapMirror relationship that is using these keys.

| 92406083
 | The maximum supported value for user key expiry configuration is "1095" days.

| 92406088
 | The "key_time_to_live" parameter can only be used when the "regenerate_keys" operation is performed.

| 92406096
 | The user does not have permission to access the requested resource \"{0}\".

| 92406097
 | Internal error. The operation configuration is not correct.
 |===

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

SVM, applies only to SVM-scoped objects.

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

|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.

|===

[#s3_user]
[.api-collapsible-fifth-title]
s3_user

This is a container of S3 users.

[cols=3*,options=header]

```

```

|===
|Name
|Type
|Description

|access_key
|string
a|Specifies the access key for the user.

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

|key_expiry_time
|string
a|Specifies the date and time after which keys expire and are no longer
valid.

|key_time_to_live
|string
a|Indicates the time period from when this parameter is specified:

* when creating or modifying a user or
* when the user keys were last regenerated, after which the user keys
expire and are no longer valid.
* Valid format is: 'PnDTnHnMnS\|PnW'. For example, P2DT6H3M10S specifies a
time period of 2 days, 6 hours, 3 minutes, and 10 seconds.
* If the value specified is '0' seconds, then the keys won't expire.

|svm
|link:#svm[svm]
a|SVM, applies only to SVM-scoped objects.

|===

[#collection_links]
[.api-collapsible-fifth-title]
collection_links
[#s3_service_user_post_response]
[.api-collapsible-fifth-title]

```

s3_service_user_post_response

[cols=3*,options=header]

|===

|Name

|Type

|Description

|access_key

|string

a|Specifies the access key for the user.

|name

|string

a|The name of the user.

|secret_key

|string

a|Specifies the secret key for the user.

|===

[#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

:leveloffset: -1

```


<<<

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