



## **Manage protocols S3 services**

### **ONTAP 9.7 REST API reference**

NetApp  
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# Manage protocols S3 services

## 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.

### 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": "s1",
      "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": 104857600,
    "logical_used_size": 78643200,
    "encryption": {
      "enabled": false
    },
    "comment": "s3 bucket"
  }
],
"users": [
  {
    "name": "user-1",
    "comment": "S3 user",
    "access_key":
"3333_wl62ypaTi7_aAQuJo76Z16zc9Gz_W3IN83bDQWkcCN3jYU_z_xn20XATMKKa90509KCH
__r4lh1IPU58vflQlWAJt8k2F1BPjPtM6CsDRX_dOP_QZkF5N9fBuz3"
  },
  {
    "name": "user-2",
    "comment": "",
    "access_key":
"g6T24qhH92dOA6gc1WTcDO_2oNZhQ6Drl2zu5_s5Id_QK1wLgghgxsD2xPlxqG7oX1T_9AI0D
39q65CY3FAg0CbAtVU_903bSnCnht3xqjbrF5_3Cs9RnY8nE_az1Ltc"
  }
]
},
],
"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"
    },
    {
      "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":
"3333_w162ypaTi7_aAQuJo76Z16zc9Gz_W3IN83bDQWkcCN3jYU_z_xn20XATMKKa90509KCH
_r4lh1IPU58vf1QlWAJt8k2F1BPjPtM6CsDRX_dOP_QZkF5N9fBuz3"
},
{
    "name": "user-2",
    "comment": "",
    "access_key":
"g6T24qhH92dOA6gc1WTcDO_2oNZhQ6Dr12zu5_s5Id_QK1wLgghgxsD2xPlxqG7oX1T_9AI0D
39q65CY3FAg0CbAtVU_903bSnCnht3xqjbrF5_3Cs9RnY8nE_az1Ltc"
}
]
}

```

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

```

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

# The call:
curl -X POST "https://10.140.103.139/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":
"x129aL0q9bu3J_4_2S0OcU34AA5DJXXB_j9R34_60tqiqAS5_c8PAgN6Lg1zkv_76P4IxNWir
9st9uhhgldb31u364Cczq_c39C1fUP7HDheUmYY6u4xt61_N7Sw6c33",
          "secret_key":
"gh0pYc__43Csnx_Ks4_C0tb_5AfT4HZTfQl8xN8Dl5TjqB90oNt5ZaPO6Hs4h6Q4Fq4B4uq5C
qht82X6vcE32c3uLZB8pXAAx819LWPgpOSwD5xga2RE3czr1qhCd9V6"
        },
        {
          "name": "user-2",
          "access_key":
"nntYZrNN65mKn57yS04o1sDp_D0AY58jdwCW573_5x2OPW09AbyF186DB7r30N2373_bA12n0
8aovQp8ySItRss9AjsYoSj7TsIiHOW_Y21DaqYP15I2a849b11y8X4c",
          "secret_key":
"bjtsPXV2D8BM6pZNQ9pzmKoXU3qIv2yQ3957dhjK4X7M2dB6Rjtrq1As_8cS_4bSP0jt_P31R
5eLdZ_zcBO9Z_ZRMldTc1Bw_5c7LugBnzG2D3xB91jqLaP2xnKn_Zg"
        }
      ],
      "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://10.140.103.139/api/protocols/s3/services" -H
"accept: application/hal+json" -H "Content-Type: application/json" -d "{
\"buckets\": [ { \"aggregates\": [ { \"name\": \"aggr1\", \"uuid\":
\"1cd8a442-86d1-11e0-aec-123478563412\" } ],
\"constituents_per_aggregate\": 2, \"name\": \"bucket-1\", \"size\":
\"209715200\" }, { \"aggregates\": [ { \"name\": \"aggr1\", \"uuid\":
\"1cd8a442-86d1-11e0-aec-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":
"x129aL0q9bu3J_4_2S0OcU34AA5DJXXB_j9R34_60tqiqAS5_c8PAgN6Lg1zkv_76P4IxNWir
9st9uhhgldb31u364Cczq_c39C1fUP7HDheUmYY6u4xt61_N7Sw6c33",
          "secret_key":
"gh0pYc__43Csnx_Ks4_C0tb_5AfT4HZTfQl8xN8Dl5TjqB90oNt5ZaPO6Hs4h6Q4Fq4B4uq5C
qht82X6vcE32c3uLZB8pXAAx819LWPgpOSwD5xga2RE3czr1qhCd9V6"
        },
        {
          "name": "user-2",
          "access_key":
"nntYZrNN65mKn57yS04o1sDp_D0AY58jdwCW573_5x2OPW09AbyF186DB7r30N2373_bA12n0
8aovQp8ySItRss9AjsYoSj7TsIiHOW_Y21DaqYPl5I2a849b11y8X4c",
          "secret_key":
"bjtsPXV2D8BM6pZNQ9pzmKoXU3qIv2yQ3957dhjK4X7M2dB6Rjtrq1As_8cS_4bSP0jt_P31R
5eLdZ_zcB09Z_ZRMldTc1Bw_5c7LugBnzG2D3xB91jqLaP2xnKn_Zg"
        }
      ]
    }
  ]
}
```



```

    }
  ],
  "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"
      }
    }
  ]
}
```

## Retrieve S3 server configuration for all SVMs

GET /protocols/s3/services

Retrieves the S3 server configuration for all SVMs.

### Related ONTAP commands

- `vserver object-store-server show`

### Learn more

- [DOC /protocols/s3/services](#)

### Parameters

Name	Type	In	Required	Description
name	string	query	False	Filter by name

Name	Type	In	Required	Description
users.comment	string	query	False	Filter by users.comment
users.access_key	string	query	False	Filter by users.access_key
users.name	string	query	False	Filter by users.name
users.svm.uuid	string	query	False	Filter by users.svm.uuid
users.svm.name	string	query	False	Filter by users.svm.name
buckets.svm.uuid	string	query	False	Filter by buckets.svm.uuid
buckets.svm.name	string	query	False	Filter by buckets.svm.name
buckets.encryption.enabled	boolean	query	False	Filter by buckets.encryption.enabled
buckets.uuid	string	query	False	Filter by buckets.uuid
buckets.logical_used_size	integer	query	False	Filter by buckets.logical_used_size
buckets.size	integer	query	False	Filter by buckets.size
buckets.volume.uuid	string	query	False	Filter by buckets.volume.uuid
buckets.volume.name	string	query	False	Filter by buckets.volume.name
buckets.name	string	query	False	Filter by buckets.name
buckets.comment	string	query	False	Filter by buckets.comment

Name	Type	In	Required	Description
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name
enabled	boolean	query	False	Filter by enabled
comment	string	query	False	Filter by comment
fields	array[string]	query	False	Specify the fields to return.
max_records	integer	query	False	Limit the number of records returned.
return_records	boolean	query	False	The default is true for GET calls. When set to false, only the number of records is returned.
return_timeout	integer	query	False	The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached.
order_by	array[string]	query	False	Order results by specified fields and optional [asc

## Response

Status: 200, Ok

Name	Type	Description
_links	<a href="#">collection_links</a>	

Name	Type	Description
num_records	integer	Number of records
records	array[s3_service]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "buckets": {
      "aggregates": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "aggr1",
        "uuid": "1cd8a442-86d1-11e0-aelc-123478563412"
      },
      "comment": "S3 bucket.",
      "constituents_per_aggregate": 4,
      "logical_used_size": 0,
      "name": "bucket-1",
      "size": 1677721600,
      "svm": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "uuid": "414b29a1-3b26-11e9-bd58-0050568ea055",
      "volume": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        }
      }
    }
  }
}
```

```

    }
    },
    "name": "volume1",
    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
  }
},
"comment": "S3 server",
"name": "Server-1",
"svm": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "svm1",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"users": {
  "access_key":
"Pz3SB54G2B_6dsXQPrA5HrTPcf478qoAW6_Xx6qyqZ948AgZ_7YfCf_9nO87YoZmskxx3c
q41U2JAH2M3_fs321B4rkzS3a_oC5_8u7D8j_45N8OsBCBPWGD_1d_ccfq",
  "comment": "S3 user",
  "name": "user-1",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
}
}

```

## Error

Status: Default, Error

Name	Type	Description
error	<a href="#">error</a>	



### Example error

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

### Definitions

## See Definitions

href

Name	Type	Description
href	string	

collection\_links

Name	Type	Description
next	<a href="#">href</a>	
self	<a href="#">href</a>	

self\_link

Name	Type	Description
self	<a href="#">href</a>	

\_links

Name	Type	Description
self	<a href="#">href</a>	

aggregates

Aggregate

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	
uuid	string	

encryption

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

svm

Name	Type	Description
_links	<a href="#">_links</a>	

Name	Type	Description
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

volume

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

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the volume.
uuid	string	<p>Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move.</p> <ul style="list-style-type: none"> <li>example: 028baa66-41bd-11e9-81d5-00a0986138f7</li> </ul>

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.

Name	Type	Description
aggregates	array[ <a href="#">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.
comment	string	Can contain any additional information about the bucket being created or modified.

Name	Type	Description
constituents_per_aggregate	integer	Specifies the number of constituents or FlexVol volumes per aggregate. A FlexGroup volume consisting of all such constituents across all specified aggregates is created. This option is used along with the aggregates option and cannot be used independently.
encryption	<a href="#">encryption</a>	
logical_used_size	integer	Specifies the bucket logical used size up to this point.
name	string	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 "-".
size	integer	Specifies the bucket size in bytes; ranges from 80MB to 64TB.
svm	<a href="#">svm</a>	
uuid	string	Specifies the unique identifier of the bucket.
volume	<a href="#">volume</a>	Specifies the FlexGroup volume name and UUID where the bucket is hosted.

#### s3\_user

This is a container of S3 users.

Name	Type	Description
access_key	string	Specifies the access key for the user.
comment	string	Can contain any additional information about the user being created or modified.

Name	Type	Description
name	string	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	<a href="#">svm</a>	

#### s3\_service

Specifies the S3 server configuration.

Name	Type	Description
_links	<a href="#">self_link</a>	
buckets	array[ <a href="#">s3_bucket</a> ]	
comment	string	Can contain any additional information about the server being created or modified.
enabled	boolean	Specifies whether the S3 server being created or modified should be up or down.
name	string	Specifies the name of the S3 server. A server name can contain 0 to 15 characters using only the following combination of characters:' 0-9, A-Z, a-z, ".", and "-".
svm	<a href="#">svm</a>	
users	array[ <a href="#">s3_user</a> ]	

#### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

#### error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Create S3 server, users, and buckets configurations

POST /protocols/s3/services

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 user create`

## Learn more

- [DOC /protocols/s3/services](#)

## Parameters

Name	Type	In	Required	Description
return_records	boolean	query	False	The default is false. If set to true, the records are returned.

## Request Body

Name	Type	Description
_links	<a href="#">self_link</a>	
buckets	array[ <a href="#">s3_bucket</a> ]	
comment	string	Can contain any additional information about the server being created or modified.
enabled	boolean	Specifies whether the S3 server being created or modified should be up or down.
name	string	Specifies the name of the S3 server. A server name can contain 0 to 15 characters using only the following combination of characters: '0-9, A-Z, a-z, ".", and "-".
svm	<a href="#">svm</a>	
users	array[ <a href="#">s3_user</a> ]	

## Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "buckets": {
    "aggregates": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "aggr1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "comment": "S3 bucket.",
    "constituents_per_aggregate": 4,
    "logical_used_size": 0,
    "name": "bucket-1",
    "size": 1677721600,
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "uuid": "414b29a1-3b26-11e9-bd58-0050568ea055",
    "volume": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "volume1",
      "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
    }
  },
  "comment": "S3 server",
  "name": "Server-1",
  "svm": {
```



```

    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "users": {
    "access_key":
"Pz3SB54G2B_6dsXQPrA5HrTPcf478qoAW6_Xx6qyqZ948AgZ_7YfCf_9nO87YoZmskxx3c
q41U2JAH2M3_fs321B4rkzS3a_oC5_8u7D8j_45N8OsBCBPWGD_1d_ccfq",
    "comment": "S3 user",
    "name": "user-1",
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
  }
}

```

## Response

Status: 201, Created

Name	Type	Description
num_records	integer	Number of Records
records	array[records]	

## Example response

```
{
  "records": {
    "_links": {
      "next": {
        "href": "/api/resourcelink"
      },
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "job": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "uuid": "string"
    },
    "users": {
      "_links": {
        "next": {
          "href": "/api/resourcelink"
        },
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "access_key":
        "Pz3SB54G2B_6dsXQPrA5HrTPcf478qoAW6_Xx6qyqZ948AgZ_7YfCf_9nO87YoZmskxx3c
        q41U2JAH2M3_fs321B4rkzS3a_oC5_8u7D8j_45N8OsBCBPWGD_1d_ccfq",
      "name": "user-1",
      "secret_key":
        "A20_tDhC_cux2C2BmtL45bXB_a_Q65c_96FsAcOdo14Az8V31jBKDTc0uCL62Bh559gPB8
        s9rrn0868QrF38_1dsV2u1_9H2tSf3qQ5xp9NT259C6z_GiZQ883Qn63X1"
    }
  }
}
```

## Error

Status: Default

## ONTAP Error Response Codes

Error Code	Description
2621706	The specified SVM UUID is incorrect for the specified SVM name.
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 1 and 15 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.
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.
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.

Name	Type	Description
error	<a href="#">error</a>	

### Example error

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

**Definitions**

## See Definitions

href

Name	Type	Description
href	string	

self\_link

Name	Type	Description
self	<a href="#">href</a>	

\_links

Name	Type	Description
self	<a href="#">href</a>	

aggregates

Aggregate

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	
uuid	string	

encryption

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

svm

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

volume

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

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the volume.
uuid	string	Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. <ul style="list-style-type: none"><li>• example: 028baa66-41bd-11e9-81d5-00a0986138f7</li></ul>

### 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.

Name	Type	Description
aggregates	array[ <a href="#">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.
comment	string	Can contain any additional information about the bucket being created or modified.
constituents_per_aggregate	integer	Specifies the number of constituents or FlexVol volumes per aggregate. A FlexGroup volume consisting of all such constituents across all specified aggregates is created. This option is used along with the aggregates option and cannot be used independently.
encryption	<a href="#">encryption</a>	
logical_used_size	integer	Specifies the bucket logical used size up to this point.

Name	Type	Description
name	string	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 "-".
size	integer	Specifies the bucket size in bytes; ranges from 80MB to 64TB.
svm	<a href="#">svm</a>	
uuid	string	Specifies the unique identifier of the bucket.
volume	<a href="#">volume</a>	Specifies the FlexGroup volume name and UUID where the bucket is hosted.

#### s3\_user

This is a container of S3 users.

Name	Type	Description
access_key	string	Specifies the access key for the user.
comment	string	Can contain any additional information about the user being created or modified.
name	string	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	<a href="#">svm</a>	

#### s3\_service

Specifies the S3 server configuration.

Name	Type	Description
_links	<a href="#">self_link</a>	
buckets	array[ <a href="#">s3_bucket</a> ]	

Name	Type	Description
comment	string	Can contain any additional information about the server being created or modified.
enabled	boolean	Specifies whether the S3 server being created or modified should be up or down.
name	string	Specifies the name of the S3 server. A server name can contain 0 to 15 characters using only the following combination of characters:' 0-9, A-Z, a-z, ".", and "-".
svm	<a href="#">svm</a>	
users	array[ <a href="#">s3_user</a> ]	

#### collection\_links

Name	Type	Description
next	<a href="#">href</a>	
self	<a href="#">href</a>	

#### job\_link

Name	Type	Description
_links	<a href="#">_links</a>	
uuid	string	The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation.

#### s3\_service\_user\_post\_response

Name	Type	Description
_links	<a href="#">collection_links</a>	
access_key	string	Specifies the access key for the user.
name	string	The name of the user.
secret_key	string	Specifies the secret key for the user.



#### records

Name	Type	Description
_links	<a href="#">collection_links</a>	
job	<a href="#">job_link</a>	
users	array[ <a href="#">s3_service_user_post_response</a> ]	

#### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

#### error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Delete the S3 server configuration for an SVM

```
DELETE /protocols/s3/services/{svm.uuid}
```

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

- [DOC /protocols/s3/services](#)

## Parameters

Name	Type	In	Required	Description
svm.uuid	string	path	True	UUID of the SVM to which this object belongs.
delete_all	boolean	query	False	Delete S3 server and associated users and empty buckets.  • Default value: 1

## Response

Status: 200, Ok

Name	Type	Description
num_records	integer	Number of Records
records	array[records]	

## Example response

```
{
  "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.

Name	Type	Description
error	<a href="#">error</a>	

### Example error

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

## Definitions

## See Definitions

href

Name	Type	Description
href	string	

\_links

Name	Type	Description
self	<a href="#">href</a>	

job\_link

Name	Type	Description
_links	<a href="#">_links</a>	
uuid	string	The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation.

records

Name	Type	Description
job	<a href="#">job_link</a>	

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

# Retrieve the S3 server configuration for an SVM

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

Retrieves the S3 Server configuration of an SVM.

## Related ONTAP commands

- `vserver object-store-server show`

## Learn more

- [DOC /protocols/s3/services](#)

## Parameters

Name	Type	In	Required	Description
svm.uuid	string	path	True	UUID of the SVM to which this object belongs.
fields	array[string]	query	False	Specify the fields to return.

## Response

Status: 200, Ok

Name	Type	Description
_links	<a href="#">self_link</a>	
buckets	array[ <a href="#">s3_bucket</a> ]	
comment	string	Can contain any additional information about the server being created or modified.
enabled	boolean	Specifies whether the S3 server being created or modified should be up or down.
name	string	Specifies the name of the S3 server. A server name can contain 0 to 15 characters using only the following combination of characters: '0-9, A-Z, a-z, ".", and "-".

Name	Type	Description
svm	svm	
users	array[s3_user]	

## Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "buckets": {
    "aggregates": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "aggr1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "comment": "S3 bucket.",
    "constituents_per_aggregate": 4,
    "logical_used_size": 0,
    "name": "bucket-1",
    "size": 1677721600,
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "uuid": "414b29a1-3b26-11e9-bd58-0050568ea055",
    "volume": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "volume1",
      "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
    }
  },
  "comment": "S3 server",
  "name": "Server-1",
  "svm": {
```

```

    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "users": {
    "access_key":
"Pz3SB54G2B_6dsXQPrA5HrTPcf478qoAW6_Xx6qyqZ948AgZ_7YfCf_9nO87YoZmskxx3c
q41U2JAH2M3_fs321B4rkzS3a_oC5_8u7D8j_45N8OsBCBPWGD_1d_ccfq",
    "comment": "S3 user",
    "name": "user-1",
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
  }
}

```

## Error

Status: Default, Error

Name	Type	Description
error	<a href="#">error</a>	



### Example error

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

### Definitions

## See Definitions

href

Name	Type	Description
href	string	

self\_link

Name	Type	Description
self	<a href="#">href</a>	

\_links

Name	Type	Description
self	<a href="#">href</a>	

aggregates

Aggregate

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	
uuid	string	

encryption

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

svm

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

volume

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

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the volume.
uuid	string	Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. <ul style="list-style-type: none"><li>• example: 028baa66-41bd-11e9-81d5-00a0986138f7</li></ul>

### 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.

Name	Type	Description
aggregates	array[ <a href="#">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.
comment	string	Can contain any additional information about the bucket being created or modified.
constituents_per_aggregate	integer	Specifies the number of constituents or FlexVol volumes per aggregate. A FlexGroup volume consisting of all such constituents across all specified aggregates is created. This option is used along with the aggregates option and cannot be used independently.
encryption	<a href="#">encryption</a>	
logical_used_size	integer	Specifies the bucket logical used size up to this point.

Name	Type	Description
name	string	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 "-".
size	integer	Specifies the bucket size in bytes; ranges from 80MB to 64TB.
svm	<a href="#">svm</a>	
uuid	string	Specifies the unique identifier of the bucket.
volume	<a href="#">volume</a>	Specifies the FlexGroup volume name and UUID where the bucket is hosted.

s3\_user

This is a container of S3 users.

Name	Type	Description
access_key	string	Specifies the access key for the user.
comment	string	Can contain any additional information about the user being created or modified.
name	string	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	<a href="#">svm</a>	

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

## error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Update the S3 server configuration for an SVM

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

Updates the S3 Server configuration of an SVM.

### Related ONTAP commands

- `vserver object-store-server modify`

### Learn more

- [DOC /protocols/s3/services](#)

### Parameters

Name	Type	In	Required	Description
svm.uuid	string	path	True	UUID of the SVM to which this object belongs.

### Request Body

Name	Type	Description
_links	<a href="#">self_link</a>	
buckets	array[ <a href="#">s3_bucket</a> ]	
comment	string	Can contain any additional information about the server being created or modified.

Name	Type	Description
enabled	boolean	Specifies whether the S3 server being created or modified should be up or down.
name	string	Specifies the name of the S3 server. A server name can contain 0 to 15 characters using only the following combination of characters: '0-9, A-Z, a-z, ".", and "-".
svm	<a href="#">svm</a>	
users	array[ <a href="#">s3_user</a> ]	

## Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "buckets": {
    "aggregates": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "aggr1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "comment": "S3 bucket.",
    "constituents_per_aggregate": 4,
    "logical_used_size": 0,
    "name": "bucket-1",
    "size": 1677721600,
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "uuid": "414b29a1-3b26-11e9-bd58-0050568ea055",
    "volume": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "volume1",
      "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
    }
  },
  "comment": "S3 server",
  "name": "Server-1",
  "svm": {
```

```

    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "users": {
    "access_key":
"Pz3SB54G2B_6dsXQPrA5HrTPcf478qoAW6_Xx6qyqZ948AgZ_7YfCf_9nO87YoZmskxx3c
q41U2JAH2M3_fs321B4rkzS3a_oC5_8u7D8j_45N8OsBCBPWGD_1d_ccfq",
    "comment": "S3 user",
    "name": "user-1",
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
  }
}

```

## Response

Status: 200, Ok

## Error

Status: Default

### ONTAP Error Response Codes

Error Code	Description
92405789	The specified object server name contains invalid characters. Valid characters for an object store server name are 0-9, A-Z, a-z, ".", and "-".
92405790	Object store server names must have between 1 and 15 characters.



Name	Type	Description
error	error	

### Example error

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

### Definitions

## See Definitions

href

Name	Type	Description
href	string	

self\_link

Name	Type	Description
self	<a href="#">href</a>	

\_links

Name	Type	Description
self	<a href="#">href</a>	

aggregates

Aggregate

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	
uuid	string	

encryption

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

svm

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

volume

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

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the volume.
uuid	string	Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. <ul style="list-style-type: none"><li>• example: 028baa66-41bd-11e9-81d5-00a0986138f7</li></ul>

### 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.

Name	Type	Description
aggregates	array[ <a href="#">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.
comment	string	Can contain any additional information about the bucket being created or modified.
constituents_per_aggregate	integer	Specifies the number of constituents or FlexVol volumes per aggregate. A FlexGroup volume consisting of all such constituents across all specified aggregates is created. This option is used along with the aggregates option and cannot be used independently.
encryption	<a href="#">encryption</a>	
logical_used_size	integer	Specifies the bucket logical used size up to this point.

Name	Type	Description
name	string	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 "-".
size	integer	Specifies the bucket size in bytes; ranges from 80MB to 64TB.
svm	<a href="#">svm</a>	
uuid	string	Specifies the unique identifier of the bucket.
volume	<a href="#">volume</a>	Specifies the FlexGroup volume name and UUID where the bucket is hosted.

#### s3\_user

This is a container of S3 users.

Name	Type	Description
access_key	string	Specifies the access key for the user.
comment	string	Can contain any additional information about the user being created or modified.
name	string	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	<a href="#">svm</a>	

#### s3\_service

Specifies the S3 server configuration.

Name	Type	Description
_links	<a href="#">self_link</a>	
buckets	array[ <a href="#">s3_bucket</a> ]	

Name	Type	Description
comment	string	Can contain any additional information about the server being created or modified.
enabled	boolean	Specifies whether the S3 server being created or modified should be up or down.
name	string	Specifies the name of the S3 server. A server name can contain 0 to 15 characters using only the following combination of characters:' 0-9, A-Z, a-z, ".", and "-".
svm	<a href="#">svm</a>	
users	array[ <a href="#">s3_user</a> ]	

#### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

#### error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

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