



# Manage S3 service policies

ONTAP 9.15.1 REST API reference

NetApp  
September 11, 2024

# Table of Contents

- Manage S3 service policies ..... 1
- Protocols S3 services svm.uuid policies endpoint overview ..... 1
- Retrieve the S3 policies in an SVM configuration ..... 7
- Create an S3 policy configuration ..... 17

# Manage S3 service policies

## 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
```

## Retrieve the S3 policies in an SVM configuration

GET /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

- [DOC /protocols/s3/services/{svm.uuid}/policies](#)

### Parameters

Name	Type	In	Required	Description
read-only	boolean	query	False	Filter by read-only
svm.name	string	query	False	Filter by svm.name
statements.sid	string	query	False	Filter by statements.sid <ul style="list-style-type: none"><li>• maxLength: 256</li><li>• minLength: 0</li></ul>

Name	Type	In	Required	Description
statements.actions	string	query	False	Filter by statements.actions
statements.index	integer	query	False	Filter by statements.index
statements.resources	string	query	False	Filter by statements.resources
statements.effect	string	query	False	Filter by statements.effect
comment	string	query	False	Filter by comment <ul style="list-style-type: none"> <li>• maxLength: 256</li> <li>• minLength: 0</li> </ul>
name	string	query	False	Filter by name <ul style="list-style-type: none"> <li>• maxLength: 128</li> <li>• minLength: 1</li> </ul>
svm.uuid	string	path	True	UUID of the SVM to which this object belongs.
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. <ul style="list-style-type: none"> <li>• Default value: 1</li> </ul>

Name	Type	In	Required	Description
return_timeout	integer	query	False	<p>The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached.</p> <ul style="list-style-type: none"> <li>• Default value: 1</li> <li>• Max value: 120</li> <li>• Min value: 0</li> </ul>
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>	
num_records	integer	Number of records
records	array[ <a href="#">s3_policy</a> ]	

## Example response

```
{
  "_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

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

s3\_policy\_statement

Specifies information about a single access policy statement.



Name	Type	Description
actions	array[string]	<p>For each resource, S3 supports a set of operations. The resource operations allowed or denied are identified by an action list:</p> <ul style="list-style-type: none"> <li>• <b>GetObject</b> - retrieves objects from a bucket.</li> <li>• <b>PutObject</b> - puts objects in a bucket.</li> <li>• <b>DeleteObject</b> - deletes objects from a bucket.</li> <li>• <b>ListBucket</b> - lists the objects in a bucket.</li> <li>• <b>GetBucketAcl</b> - retrieves the access control list (ACL) of a bucket.</li> <li>• <b>GetObjectAcl</b> - retrieves the access control list (ACL) of an object.</li> <li>• <b>ListAllMyBuckets</b> - lists all of the buckets in a server.</li> <li>• <b>ListBucketMultipartUploads</b> - lists the multipart uploads in progress for a bucket.</li> <li>• <b>ListMultipartUploadParts</b> - lists the parts in a multipart upload.</li> <li>• <b>CreateBucket</b> - creates a new bucket.</li> <li>• <b>DeleteBucket</b> - deletes an existing bucket.</li> <li>• <b>GetObjectTagging</b> - retrieves the tag set of an object.</li> <li>• <b>PutObjecttagging</b> - sets the tag set for an object.</li> <li>• <b>DeleteObjectTagging</b> - deletes the tag set of an object.</li> <li>• <b>GetBucketLocation</b> - retrieves the location of a bucket.</li> <li>• <b>GetBucketVersioning</b> - retrieves the versioning configuration of a bucket.</li> <li>• <b>PutBucketVersioning</b> - modifies the versioning configuration of a bucket.</li> <li>• <b>ListBucketVersions</b> - lists the object versions in a bucket.</li> </ul>



Name	Type	Description
effect	string	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	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]	
sid	string	Specifies the statement identifier which contains additional information about the statement.

#### \_links

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

#### svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

#### 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.

Name	Type	Description
comment	string	Can contain any additional information about the S3 policy.
name	string	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	Specifies whether or not the s3 policy is read only. This parameter should not be specified in the POST method.
statements	array[s3_policy_statement]	Specifies the policy statements.
svm	svm	SVM, applies only to SVM-scoped objects.

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned\_error

Name	Type	Description
arguments	array[error_arguments]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

# Create an S3 policy configuration

POST /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

- [DOC /protocols/s3/services/{svm.uuid}/policies](#)

## Parameters

Name	Type	In	Required	Description
<code>return_records</code>	boolean	query	False	The default is false. If set to true, the records are returned. <ul style="list-style-type: none"><li>• Default value:</li></ul>

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

## Request Body

Name	Type	Description
comment	string	Can contain any additional information about the S3 policy.
name	string	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	Specifies whether or not the s3 policy is read only. This parameter should not be specified in the POST method.
statements	array[s3_policy_statement]	Specifies the policy statements.
svm	svm	SVM, applies only to SVM-scoped objects.

## Example request

```
{
  "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"
  }
}
```

## Response

Status: 201, Created

Name	Type	Description
_links	<a href="#">collection_links</a>	
num_records	integer	Number of records
records	<a href="#">array[s3_policy]</a>	

## Example response

```
{
  "_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"
      }
    }
  ]
}
```

## Headers

Name	Description	Type
Location	Useful for tracking the resource location	string

## Error

Status: Default

### ONTAP Error Response Codes

Error Code	Description
92405906	The specified action name is invalid.
92405947	Creating an object store server policy or statement requires an effective cluster version of 9.8 or later.
92405948	Policy name is not valid. Policy names must have between 1 and 128 characters.
92405949	Policy name contains invalid characters. Valid characters: 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".
92405950	Policy name already exists for SVM.
92405954	Policy name is reserved for read-only policies. Cannot be used for custom policy creation.
92405963	Failed to create policy statements for policy. Reason: "{reason of failure}". Resolve all issues and retry the operation.
92405863	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

|Name |Type |Description

|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] ===== [#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 |[href](#) a|

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

SVM, applies only to SVM-scoped objects.

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

|Name |Type |Description

|\_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[s3\_policy\_statement] a|Specifies the policy statements.

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

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

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

|Name |Type |Description

|next |href a|

|self |href 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[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.

====

= Delete an S3 policy configuration

```
DELETE /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

\* [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 [cols=2\*,options=header]

Error Code	Description
------------	-------------

92405858	Failed to "delete" the "policy" because the operation is only supported on data SVMs.
----------	---

[cols=3\*,options=header]

Name	Type	Description
------	------	-------------

error	<a href="#">returned_error</a>	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] ===== [#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[ <a href="#">error_arguments</a> ] a	Message arguments
-----------	--	-------------------

code	string a	Error code
------	----------	------------

message	string a	Error message
---------	----------	---------------

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

```
=====
```

= Retrieve an S3 policy configuration

```
GET /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

\* [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[s3\_policy\_statement] a|Specifies the policy statements.

|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 |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] ===== [#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 |[href](#) a|

```
[#svm] [.api-collapsible-fifth-title] svm  
SVM, applies only to SVM-scoped objects.  
[cols=3*,options=header]
```

|Name |Type |Description

|\_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[[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.

====

= Update an S3 policy configuration

PATCH /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

\* [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.
---------	--------	---

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	[ <a href="#">s3_policy_statement</a> ] a Specifies the policy statements.
------------	-------	--



|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": { "links": { "self": { "href": "/api/resourcelink" } }, "name": "svm1", "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7" } } =====
```

== Response

```
` Status: 200, Ok `
```

== Error

```
` Status: Default `
```

ONTAP Error Response Codes [cols=2\_,options=header]

Error Code	Description
92405906	The specified action name is invalid.
92405963	Failed to create s3 policy statements "{policy name}". Reason: "{reason of failure}". Resolve all issues and retry the operation.
92405953	Object store server read-only policies do not support create, modify, delete, add-statement, delete-statement and modify-statement operations.
92406075	Failed to modify policy statement for policy "{policy name}". Reason: "{reason of failure}". Valid ways to specify a resource are "__", "<bucket-name>", "<bucket-name>/.../...".

Name	Type	Description
error	returned_error	

### Example error

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

## Definitions

## See Definitions

s3\_policy\_statement

Specifies information about a single access policy statement.



Name	Type	Description
actions	array[string]	<p>For each resource, S3 supports a set of operations. The resource operations allowed or denied are identified by an action list:</p> <ul style="list-style-type: none"> <li>• <b>GetObject</b> - retrieves objects from a bucket.</li> <li>• <b>PutObject</b> - puts objects in a bucket.</li> <li>• <b>DeleteObject</b> - deletes objects from a bucket.</li> <li>• <b>ListBucket</b> - lists the objects in a bucket.</li> <li>• <b>GetBucketAcl</b> - retrieves the access control list (ACL) of a bucket.</li> <li>• <b>GetObjectAcl</b> - retrieves the access control list (ACL) of an object.</li> <li>• <b>ListAllMyBuckets</b> - lists all of the buckets in a server.</li> <li>• <b>ListBucketMultipartUploads</b> - lists the multipart uploads in progress for a bucket.</li> <li>• <b>ListMultipartUploadParts</b> - lists the parts in a multipart upload.</li> <li>• <b>CreateBucket</b> - creates a new bucket.</li> <li>• <b>DeleteBucket</b> - deletes an existing bucket.</li> <li>• <b>GetObjectTagging</b> - retrieves the tag set of an object.</li> <li>• <b>PutObjecttagging</b> - sets the tag set for an object.</li> <li>• <b>DeleteObjectTagging</b> - deletes the tag set of an object.</li> <li>• <b>GetBucketLocation</b> - retrieves the location of a bucket.</li> <li>• <b>GetBucketVersioning</b> - retrieves the versioning configuration of a bucket.</li> <li>• <b>PutBucketVersioning</b> - modifies the versioning configuration of a bucket.</li> <li>• <b>ListBucketVersions</b> - lists the object versions in a bucket.</li> </ul>

Name	Type	Description
effect	string	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	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]	
sid	string	Specifies the statement identifier which contains additional information about the statement.

href

Name	Type	Description
href	string	

\_links

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

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the SVM. This field cannot be specified in a PATCH method.

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

### 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.

Name	Type	Description
comment	string	Can contain any additional information about the S3 policy.
name	string	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	Specifies whether or not the s3 policy is read only. This parameter should not be specified in the POST method.
statements	array[s3_policy_statement]	Specifies the policy statements.
svm	svm	SVM, applies only to SVM-scoped objects.

### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

### returned\_error

Name	Type	Description
arguments	array[error_arguments]	Message arguments

<b>Name</b>	<b>Type</b>	<b>Description</b>
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Copyright information

Copyright © 2024 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

## Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.