



Manage S3 service policies

ONTAP 9.14.1 REST API reference

NetApp
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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
statements.index	integer	query	False	Filter by statements.index
statements.effect	string	query	False	Filter by statements.effect

Name	Type	In	Required	Description
statements.sid	string	query	False	Filter by statements.sid <ul style="list-style-type: none"> • maxLength: 256 • minLength: 0
statements.resources	string	query	False	Filter by statements.resources
statements.actions	string	query	False	Filter by statements.actions
comment	string	query	False	Filter by comment <ul style="list-style-type: none"> • maxLength: 256 • minLength: 0
name	string	query	False	Filter by name <ul style="list-style-type: none"> • maxLength: 128 • minLength: 1
svm.name	string	query	False	Filter by svm.name
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"> • Default value: 1

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"> • Default value: 1 • Max value: 120 • Min value: 0
order_by	array[string]	query	False	Order results by specified fields and optional [asc

Response

Status: 200, Ok

Name	Type	Description
_links	collection_links	
num_records	integer	Number of records
records	array[s3_policy]	

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	returned_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	

collection_links

Name	Type	Description
next	href	
self	href	

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"> • 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.

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	href	

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
<u>_links</u>	_links	
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">• Default value:

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	collection_links	
num_records	integer	Number of records
records	array[s3_policy]	

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 |[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] ==== [#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.

====

= 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	[s3_policy_statement] 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/resource/link" } }, "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"> • 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.

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	href	

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
_links	_links	
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

Name	Type	Description
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

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