



# Manage S3 service policies

## ONTAP 9.9.1 REST API reference

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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",
      ],
      "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\" ], \"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\"], \"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 S3 policies in 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                  |
|--------------------|---------|-------|----------|------------------------------|
| name               | string  | query | False    | Filter by name               |
| statements.index   | integer | query | False    | Filter by statements.index   |
| statements.actions | string  | query | False    | Filter by statements.actions |
| statements.sid     | string  | query | False    | Filter by statements.sid     |



| Name                 | Type          | In    | Required | Description   |
|----------------------|---------------|-------|----------|---|
| statements.resources | string        | query | False    | Filter by statements.resources  |
| statements.effect    | string        | query | False    | Filter by statements.effect   |
| svm.uuid             | string        | query | False    | Filter by svm.uuid  |
| svm.name             | string        | query | False    | Filter by svm.name  |
| read-only            | boolean       | query | False    | Filter by read-only   |
| comment              | string        | query | False    | Filter by comment   |
| 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.<br><br>• 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"> <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"
    }
  },
  "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 | 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 | <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>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. The wildcard character "*" can be used to form a regular expression for specifying actions.</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 and is retrieved using 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

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

#### 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 "-". |
| 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                        |  |

#### error\_arguments

| Name    | Type   | Description      |
|---------|--------|------------------|
| code    | string | Argument code    |
| message | string | Message argument |

#### 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`, `GetObjectTagging`, `PutObjectTagging`, `DeleteObjectTagging`.
- `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.<br><ul style="list-style-type: none"><li>• Default value:</li></ul> |
| <code>svm.uuid</code>       | 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 "-". |
| 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                        |  |

## 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"
    }
  },
  "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

### 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. |

| 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

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>• <code>GetObject</code> - retrieves objects from a bucket.</li><li>• <code>PutObject</code> - puts objects in a bucket.</li><li>• <code>DeleteObject</code> - deletes objects from a bucket.</li><li>• <code>ListBucket</code> - lists the objects in a bucket.</li><li>• <code>GetBucketAcl</code> - retrieves the access control list (ACL) of a bucket.</li><li>• <code>GetObjectAcl</code> - retrieves the access control list (ACL) of an object.</li><li>• <code>ListAllMyBuckets</code> - lists all of the buckets in a server.</li><li>• <code>ListBucketMultipartUploads</code> - lists the multipart uploads in progress for a bucket.</li><li>• <code>ListMultipartUploadParts</code> - lists the parts in a multipart upload.</li><li>• <code>GetObjectTagging</code> - retrieves the tag set of an object.</li><li>• <code>PutObjecttagging</code> - sets the tag set for an object.</li><li>• <code>DeleteObjectTagging</code> - deletes the tag set of an object. The wildcard character "*" can be used to form a regular expression for specifying actions.</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 and is retrieved using 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

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

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 "-". |
| 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                        |  |

collection\_links

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

| Name   | Type   | Description                                 |
|--------|--------|---|
| target | string | 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

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

### Response

Status: 200, Ok

### 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

#### 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 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

| Name     | Type          | In    | Required | Description                                   |
|----------|---------------|-------|----------|---|
| name     | string        | path  | True     | Policy 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.                 |

## Response

Status: 200, Ok

| 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 "-". |

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

### Example response

```
{
  "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 | 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>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. The wildcard character "*" can be used to form a regular expression for specifying actions.</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 and is retrieved using 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

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

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 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

| Name     | Type   | In   | Required | Description                                   |
|----------|--------|------|----------|---|
| name     | string | path | True     | Policy name                                   |
| 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 "-". |
| 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                        |  |

## 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: 200, Ok

## Error

Status: Default

ONTAP Error Response Codes

| Error Code | Description  |
|------------|--|
| 92405906   | The specified action name is invalid.  |
| 92405963   | Failed to create policy statements for policy. Reason: "{reason of failure}". Resolve all issues and retry the operation.                      |
| 92405954   | Object store server read-only policies do not support create, modify, delete, add-statement, delete-statement and modify-statement operations. |

| 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

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>• <code>GetObject</code> - retrieves objects from a bucket.</li><li>• <code>PutObject</code> - puts objects in a bucket.</li><li>• <code>DeleteObject</code> - deletes objects from a bucket.</li><li>• <code>ListBucket</code> - lists the objects in a bucket.</li><li>• <code>GetBucketAcl</code> - retrieves the access control list (ACL) of a bucket.</li><li>• <code>GetObjectAcl</code> - retrieves the access control list (ACL) of an object.</li><li>• <code>ListAllMyBuckets</code> - lists all of the buckets in a server.</li><li>• <code>ListBucketMultipartUploads</code> - lists the multipart uploads in progress for a bucket.</li><li>• <code>ListMultipartUploadParts</code> - lists the parts in a multipart upload.</li><li>• <code>GetObjectTagging</code> - retrieves the tag set of an object.</li><li>• <code>PutObjecttagging</code> - sets the tag set for an object.</li><li>• <code>DeleteObjectTagging</code> - deletes the tag set of an object. The wildcard character "*" can be used to form a regular expression for specifying actions.</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 and is retrieved using 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

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

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 "-". |
| 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                        |  |

error\_arguments

| Name    | Type   | Description      |
|---------|--------|------------------|
| code    | string | Argument code    |
| message | string | Message argument |

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. |

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