



# Manage NFS export policies

ONTAP 9.14.1 REST API reference

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# Manage NFS export policies

## Protocols NFS export-policies endpoint overview

### Export Policies

#### 1) Retrieve the export policy details

```
# The API:
GET /api/protocols/nfs/export-policies

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/nfs/export-policies"
```

#### 2) Create an export policy for an SVM

```
# The API:
POST /api/protocols/nfs/export-policies

# The call:
curl -d "@test_post_policy_single_rule.txt" -X POST "https://<mgmt-ip>/api/protocols/nfs/export-policies"
test_post_policy_single_rule.txt(body):
{
  "name": "P1",
  "rules": [
    {
      "clients": [
        {
          "match": "host1"
        }
      ],
      "ro_rule": [
        "krb5"
      ],
      "rw_rule": [
        "ntlm"
      ],
      "anonymous_user": "anon1",

```

```
"chown_mode": "restricted",
"allow_suid": true
},
{
  "clients": [
    {
      "match": "host2"
    }
  ],
  "ro_rule": [
    "sys"
  ],
  "rw_rule": [
    "ntlm"
  ],
  "superuser": [
    "any"
  ],
  "allow_device_creation": true,
  "ntfs_unix_security": "fail"
}
]
}
```

---

### 3) Update an export policy for an SVM

---

```
# The API:
PATCH /api/protocols/nfs/export-policies/{policy.id}

# The call:
curl -d "@test_patch_policy.txt" -X PATCH "https://<mgmt-
ip>/api/protocols/nfs/export-policies/8589934594"
test_patch_policy.txt (body):
{
  "name": "S1",
  "rules": [
    {
      "clients": [
        {
          "match": "host4"
        }
      ],
      "ro_rule": [
        "krb5"
      ],
      "rw_rule": [
        "ntlm"
      ]
    }
  ]
}
```

---

#### 4) Delete an export policy for an SVM

---

```
# The API:
DELETE /api/protocols/nfs/export-policies/{policy.id}

# The call:
curl -X DELETE "https://<mgmt-ip>/api/protocols/nfs/export-
policies/8589934594"
```

---

## Export Rules

## 1) Retrieve the export policy rule details for an export policy

---

```
# The API:
GET /api/protocols/nfs/export-policies/{policy.id}/rules

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/nfs/export-policies/8589934595/rules"
```

## 2) Create an export policy rule for an export policy

---

```
# The API:
POST /api/protocols/nfs/export-policies/{policy.id}/rules

# The call:
curl -d "@test_patch_export_rule.txt" -X POST "https://<mgmt-ip>/api/protocols/nfs/export-policies/8589934595/rules"
test_patch_export_rule.txt (body) :
{
  "clients": [
    {
      "match": "host2"
    }
  ],
  "ro_rule": [
    "sys"
  ],
  "rw_rule": [
    "ntlm"
  ]
}
```

## 3) Update an export policy rule for an export policy

---

```
# The API:
PATCH /api/protocols/nfs/export-policies/{policy.id}/rules/{index}

# The call:
curl -d "@test_patch_export_rule.txt" -X PATCH "https://<mgmt-
ip>/api/protocols/nfs/export-policies/8589934595/rules/5?new_index=10"
test_patch_export_rule.txt (body) :
{
  "clients": [
    {
      "match": "host4"
    }
  ],
  "ro_rule": [
    "sys"
  ],
  "rw_rule": [
    "krb5"
  ]
}
```

---

#### 4) Delete an export policy rule for an export policy

---

```
# The API:
DELETE /api/protocols/nfs/export-policies/{policy.id}/rules/{index}

# The call:
curl -X DELETE "https://<mgmt-ip>/api/protocols/nfs/export-
policies/8589934595/rules/15"
```

---

## Export Clients

### 1) Retrieve the export client matches of an export policy rule

---

```
# The API:
GET /api/protocols/nfs/export-policies/{policy.id}/rules/{index}/clients

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/nfs/export-
policies/8589934593/rules/2/clients"
```

---

## 2) Add an export client match to an export policy rule

---

```
# The API:
POST /api/protocols/nfs/export-policies/{policy.id}/rules/{index}/clients

# The call:
curl -d "@add_client_match.txt" -X POST "https://<mgmt-
ip>/api/protocols/nfs/export-policies/8589934593/rules/1/clients"
add_client_match.txt (body):
{
"match" : "host4"
}
```

---

## 3) Delete an export client match from an export policy rule

---

```
# The API:
DELETE /api/protocols/nfs/export-
policies/{policy.id}/rules/{index}/clients/{match}

# The call:
curl -X DELETE "https://<mgmt-ip>/api/protocols/nfs/export-
policies/8589934593/rules/1/clients/host1,host2"
```

---

## Retrieve export policies

```
GET /protocols/nfs/export-policies
```

**Introduced In:** 9.6

---



Retrieves export policies.

## Related ONTAP commands

- `vserver export-policy show`
- `vserver export-policy rule show`

## Learn more

- [DOC /protocols/nfs/export-policies](#)

## Parameters

Name	Type	In	Required	Description
rules.index	integer	query	False	Filter by rules.index
rules.superuser	string	query	False	Filter by rules.superuser
rules.chown_mode	string	query	False	Filter by rules.chown_mode <ul style="list-style-type: none"><li>• Introduced in: 9.9</li></ul>
rules.allow_device_creation	boolean	query	False	Filter by rules.allow_device_creation <ul style="list-style-type: none"><li>• Introduced in: 9.9</li></ul>
rules.ntfs_unix_security	string	query	False	Filter by rules.ntfs_unix_security <ul style="list-style-type: none"><li>• Introduced in: 9.9</li></ul>
rules.rw_rule	string	query	False	Filter by rules.rw_rule
rules.ro_rule	string	query	False	Filter by rules.ro_rule

Name	Type	In	Required	Description
rules.allow_suid	boolean	query	False	Filter by rules.allow_suid  • Introduced in: 9.9
rules.clients.match	string	query	False	Filter by rules.clients.match
rules.anonymous_user	string	query	False	Filter by rules.anonymous_user
rules.protocols	string	query	False	Filter by rules.protocols
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name
name	string	query	False	Filter by name  • maxLength: 256
id	integer	query	False	Filter by id
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.  • 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="#">_links</a>	
num_records	integer	The number of export policy records
records	array[ <a href="#">export_policy</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "id": 0,
    "rules": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "chown_mode": "restricted",
      "clients": {
        "match": "0.0.0.0/0"
      },
      "ntfs_unix_security": "fail",
      "protocols": {
      },
      "ro_rule": {
      },
      "rw_rule": {
      },
      "superuser": {
      }
    },
    "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	

\_links

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

\_links

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

export\_clients

Name	Type	Description
match	string	<p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"> <li>• As a hostname; for instance, host1</li> <li>• As an IPv4 address; for instance, 10.1.12.24</li> <li>• As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li> <li>• As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li> <li>• As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li> <li>• As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li> <li>• As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li> <li>• As a domain name preceded by the . character; for instance, .example.com</li> </ul>

export\_rules

Name	Type	Description
_links	<a href="#">_links</a>	
allow_device_creation	boolean	Specifies whether or not device creation is allowed.
allow_suid	boolean	Specifies whether or not SetUID bits in SETATTR Op is to be honored.
anonymous_user	string	User ID To Which Anonymous Users Are Mapped.

Name	Type	Description
chown_mode	string	Specifies who is authorized to change the ownership mode of a file.
clients	array[ <a href="#">export_clients</a> ]	Array of client matches
index	integer	Index of the rule within the export policy.
ntfs_unix_security	string	NTFS export UNIX security options.
protocols	array[string]	
ro_rule	array[string]	Authentication flavors that the read-only access rule governs
rw_rule	array[string]	Authentication flavors that the read/write access rule governs
superuser	array[string]	Authentication flavors that the superuser security type governs

svm

SVM, applies only to SVM-scoped objects.

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

export\_policy

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
id	integer	Export Policy ID
name	string	Export Policy Name



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

## Create an export policy

POST /protocols/nfs/export-policies

**Introduced In:** 9.6

Creates an export policy. An SVM can have any number of export policies to define rules for which clients can access data exported by the SVM. A policy with no rules prohibits access.

### Required properties

- `svm.uuid` or `svm.name` - Existing SVM in which to create an export policy.
- `name` - Name of the export policy.

### Recommended optional properties

- `rules` - Rule(s) of an export policy. Used to create the export rule and populate the export policy with export rules in a single request.

- `rules[] .index` - If you specify an index number that already matches a rule, the index number of the existing rule is incremented, as are the index numbers of all subsequent rules, either to the end of the list or to an open space in the list. If you do not specify an index number, the new rule is placed at the end of the policy's list.

## Related ONTAP commands

- `vserver export-policy create`
- `vserver export-policy rule create`

## Learn more

- [DOC /protocols/nfs/export-policies](#)

## Parameters

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

## Request Body

Name	Type	Description
_links	<a href="#">_links</a>	
id	integer	Export Policy ID
name	string	Export Policy Name
rules	array[ <a href="#">export_rules</a> ]	Rules of the Export Policy.
svm	<a href="#">svm</a>	SVM, applies only to SVM-scoped objects.

## Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "id": 0,
  "rules": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "chown_mode": "restricted",
    "clients": {
      "match": "0.0.0.0/0"
    },
    "ntfs_unix_security": "fail",
    "protocols": {
    },
    "ro_rule": {
    },
    "rw_rule": {
    },
    "superuser": {
    }
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```

## Response

Status: 201, Created

<b>Name</b>	<b>Type</b>	<b>Description</b>
_links	<a href="#">_links</a>	
num_records	integer	The number of export policy records
records	array[ <a href="#">export_policy</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "id": 0,
    "rules": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "chown_mode": "restricted",
      "clients": {
        "match": "0.0.0.0/0"
      },
      "ntfs_unix_security": "fail",
      "protocols": {
      },
      "ro_rule": {
      },
      "rw_rule": {
      },
      "superuser": {
      }
    },
    "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
1703952	Invalid ruleset name provided. No spaces allowed in a ruleset name
1703954	Export policy does not exist
1704036	Invalid clientmatch: missing domain name
1704037	Invalid clientmatch: missing network name
1704038	Invalid clientmatch: missing netgroup name
1704039	Invalid clientmatch
1704040	Invalid clientmatch: address bytes masked out by netmask are non-zero
1704041	Invalid clientmatch: address bytes masked to zero by netmask
1704042	Invalid clientmatch: too many bits in netmask
1704043	Invalid clientmatch: invalid netmask
1704044	Invalid clientmatch: invalid characters in host name
1704045	Invalid clientmatch: invalid characters in domain name
1704047	The export policy name cannot be longer than 256 characters
1704049	Invalid clientmatch: clientmatch lists require an effective cluster version of Data ONTAP 9.0 or later. Upgrade all nodes to Data ONTAP 9.0 or above to use features that operate on lists of clientmatch strings in export-policy rules

Error Code	Description
1704050	Invalid clientmatch: clientmatch list contains a duplicate string. Duplicate strings in a clientmatch list are not supported
1704054	Invalid clientmatch: invalid characters in netgroup name. Valid characters for a netgroup name are 0-9, A-Z, a-z, ".", "_" and "-"
1704055	Export policies are only supported for data Vservers
1704064	Clientmatch host name too long
1704065	Clientmatch domain name too long
3277000	Upgrade all nodes to ONTAP 9.0.0 or above to use krb5p as a security flavor in export-policy rules
3277083	User ID is not valid. Enter a value for User ID from 0 to 4294967295

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	

\_links

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

export\_clients

Name	Type	Description
match	string	<p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"><li>• As a hostname; for instance, host1</li><li>• As an IPv4 address; for instance, 10.1.12.24</li><li>• As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li><li>• As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li><li>• As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li><li>• As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li><li>• As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li><li>• As a domain name preceded by the . character; for instance, .example.com</li></ul>



## export\_rules

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
allow_device_creation	boolean	Specifies whether or not device creation is allowed.
allow_suid	boolean	Specifies whether or not SetUID bits in SETATTR Op is to be honored.
anonymous_user	string	User ID To Which Anonymous Users Are Mapped.
chown_mode	string	Specifies who is authorized to change the ownership mode of a file.
clients	array[ <a href="#">export_clients</a> ]	Array of client matches
index	integer	Index of the rule within the export policy.
ntfs_unix_security	string	NTFS export UNIX security options.
protocols	array[string]	
ro_rule	array[string]	Authentication flavors that the read-only access rule governs
rw_rule	array[string]	Authentication flavors that the read/write access rule governs
superuser	array[string]	Authentication flavors that the superuser security type governs

## svm

SVM, applies only to SVM-scoped objects.

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

#### export\_policy

Name	Type	Description
_links	<a href="#">_links</a>	
id	integer	Export Policy ID
name	string	Export Policy Name
rules	array[ <a href="#">export_rules</a> ]	Rules of the Export Policy.
svm	<a href="#">svm</a>	SVM, applies only to SVM-scoped objects.

#### \_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

#### returned\_error

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

# Delete an export policy

DELETE /protocols/nfs/export-policies/{id}

Introduced In: 9.6

Deletes an export policy.

## Related ONTAP commands

- `vserver export-policy delete`

## Learn more

- [DOC /protocols/nfs/export-policies](#)

## Parameters

Name	Type	In	Required	Description
id	integer	path	True	Export Policy ID

## Response

```
Status: 200, Ok
```

## Error

```
Status: Default
```

## ONTAP Error Response Codes

Error Code	Description
1703944	Failed to delete rule
1703945	Ruleset is in use by a volume. It cannot be deleted until all volumes that refer to it are first deleted
1703946	Cannot determine if the ruleset is in use by a volume. It cannot be deleted until all volumes that refer to it are first deleted
1703947	Cannot delete default ruleset. This ruleset will be deleted when the owning Vserver is deleted
1703952	Invalid ruleset name provided. No spaces are allowed in a ruleset name

Error Code	Description
1703953	This ruleset is in use by a qtree export policy. It cannot be deleted until all qtree policies that refer to it are first deleted
1704047	The export policy name cannot be longer than 256 characters

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

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned\_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 export policy

GET /protocols/nfs/export-policies/{id}

**Introduced In:** 9.6

Retrieves an export policy.

### Related ONTAP commands

- `vserver export-policy show`
- `vserver export-policy rule show`

### Learn more

- [DOC /protocols/nfs/export-policies](#)

### Parameters

Name	Type	In	Required	Description
id	integer	path	True	Export Policy ID

Name	Type	In	Required	Description
fields	array[string]	query	False	Specify the fields to return.

## Response

Status: 200, Ok

Name	Type	Description
_links	<a href="#">_links</a>	
id	integer	Export Policy ID
name	string	Export Policy Name
rules	array[ <a href="#">export_rules</a> ]	Rules of the Export Policy.
svm	<a href="#">svm</a>	SVM, applies only to SVM-scoped objects.

## Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "id": 0,
  "rules": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "chown_mode": "restricted",
    "clients": {
      "match": "0.0.0.0/0"
    },
    "ntfs_unix_security": "fail",
    "protocols": {
    },
    "ro_rule": {
    },
    "rw_rule": {
    },
    "superuser": {
    }
  },
  "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	

\_links

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

export\_clients

Name	Type	Description
match	string	<p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"><li>• As a hostname; for instance, host1</li><li>• As an IPv4 address; for instance, 10.1.12.24</li><li>• As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li><li>• As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li><li>• As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li><li>• As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li><li>• As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li><li>• As a domain name preceded by the . character; for instance, .example.com</li></ul>

## export\_rules

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
allow_device_creation	boolean	Specifies whether or not device creation is allowed.
allow_suid	boolean	Specifies whether or not SetUID bits in SETATTR Op is to be honored.
anonymous_user	string	User ID To Which Anonymous Users Are Mapped.
chown_mode	string	Specifies who is authorized to change the ownership mode of a file.
clients	array[ <a href="#">export_clients</a> ]	Array of client matches
index	integer	Index of the rule within the export policy.
ntfs_unix_security	string	NTFS export UNIX security options.
protocols	array[string]	
ro_rule	array[string]	Authentication flavors that the read-only access rule governs
rw_rule	array[string]	Authentication flavors that the read/write access rule governs
superuser	array[string]	Authentication flavors that the superuser security type governs

## svm

SVM, applies only to SVM-scoped objects.

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

#### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

#### returned\_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 export policy properties

PATCH /protocols/nfs/export-policies/{id}

**Introduced In:** 9.6

Updates the properties of an export policy to change an export policy name or replace all export policy rules.

### Related ONTAP commands

- `vserver export-policy rename`
- `vserver export-policy rule delete`
- `vserver export-policy rule create`

### Learn more

- [DOC /protocols/nfs/export-policies](#)

## Parameters

Name	Type	In	Required	Description
id	integer	path	True	Export Policy ID

## Request Body

Name	Type	Description
_links	<a href="#">_links</a>	
id	integer	Export Policy ID
name	string	Export Policy Name
rules	array[ <a href="#">export_rules</a> ]	Rules of the Export Policy.
svm	<a href="#">svm</a>	SVM, applies only to SVM-scoped objects.

## Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "id": 0,
  "rules": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "chown_mode": "restricted",
    "clients": {
      "match": "0.0.0.0/0"
    },
    "ntfs_unix_security": "fail",
    "protocols": {
    },
    "ro_rule": {
    },
    "rw_rule": {
    },
    "superuser": {
    }
  },
  "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
1703950	Failed to rename ruleset
1703952	Invalid ruleset name provided. No spaces are allowed in a ruleset name
1704036	Invalid clientmatch: missing domain name
1704037	Invalid clientmatch: missing network name
1704038	Invalid clientmatch: missing netgroup name
1704039	Invalid clientmatch
1704040	Invalid clientmatch: address bytes masked out by netmask are non-zero
1704041	Invalid clientmatch: address bytes masked to zero by netmask
1704042	Invalid clientmatch: too many bits in netmask
1704043	Invalid clientmatch: invalid netmask
1704044	Invalid clientmatch: invalid characters in host name
1704045	Invalid clientmatch: invalid characters in domain name
1704047	The export policy name cannot be longer than 256 characters
1704050	Invalid clientmatch: clientmatch list contains a duplicate string. Duplicate strings in a clientmatch list are not supported
1704054	Invalid clientmatch: invalid characters in netgroup name. Valid characters for a netgroup name are 0-9, A-Z, a-z, ".", "_", and "-"
1704064	Clientmatch host name too long
1704065	Clientmatch domain name too long
3277000	Upgrade all nodes to ONTAP 9.0.0 or above to use krb5p as a security flavor in export-policy rules
3277083	User ID is not valid. Enter a value for User ID from 0 to 4294967295

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	

\_links

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

export\_clients

Name	Type	Description
match	string	<p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"><li>• As a hostname; for instance, host1</li><li>• As an IPv4 address; for instance, 10.1.12.24</li><li>• As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li><li>• As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li><li>• As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li><li>• As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li><li>• As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li><li>• As a domain name preceded by the . character; for instance, .example.com</li></ul>



## export\_rules

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
allow_device_creation	boolean	Specifies whether or not device creation is allowed.
allow_suid	boolean	Specifies whether or not SetUID bits in SETATTR Op is to be honored.
anonymous_user	string	User ID To Which Anonymous Users Are Mapped.
chown_mode	string	Specifies who is authorized to change the ownership mode of a file.
clients	array[ <a href="#">export_clients</a> ]	Array of client matches
index	integer	Index of the rule within the export policy.
ntfs_unix_security	string	NTFS export UNIX security options.
protocols	array[string]	
ro_rule	array[string]	Authentication flavors that the read-only access rule governs
rw_rule	array[string]	Authentication flavors that the read/write access rule governs
superuser	array[string]	Authentication flavors that the superuser security type governs

## svm

SVM, applies only to SVM-scoped objects.

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

#### export\_policy

Name	Type	Description
_links	<a href="#">_links</a>	
id	integer	Export Policy ID
name	string	Export Policy Name
rules	array[ <a href="#">export_rules</a> ]	Rules of the Export Policy.
svm	<a href="#">svm</a>	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[ <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 export policy rules

GET /protocols/nfs/export-policies/{policy.id}/rules

Introduced In: 9.6

Retrieves export policy rules.

## Related ONTAP commands

- `vserver export-policy rule show`

## Learn more

- [DOC /protocols/nfs/export-policies](#)

## Parameters

Name	Type	In	Required	Description
policy.id	integer	path	True	Export Policy ID
protocols	string	query	False	Filter by protocols
anonymous_user	string	query	False	Filter by anonymous_user
policy.name	string	query	False	Filter by policy.name <ul style="list-style-type: none"><li>• Introduced in: 9.10</li></ul>
allow_device_creation	boolean	query	False	Filter by allow_device_creation <ul style="list-style-type: none"><li>• Introduced in: 9.9</li></ul>
ntfs_unix_security	string	query	False	Filter by ntfs_unix_security <ul style="list-style-type: none"><li>• Introduced in: 9.9</li></ul>
ro_rule	string	query	False	Filter by ro_rule
clients.match	string	query	False	Filter by clients.match
allow_suid	boolean	query	False	Filter by allow_suid <ul style="list-style-type: none"><li>• Introduced in: 9.9</li></ul>

Name	Type	In	Required	Description
rw_rule	string	query	False	Filter by rw_rule
svm.uuid	string	query	False	Filter by svm.uuid <ul style="list-style-type: none"> <li>• Introduced in: 9.10</li> </ul>
svm.name	string	query	False	Filter by svm.name <ul style="list-style-type: none"> <li>• Introduced in: 9.10</li> </ul>
index	integer	query	False	Filter by index
superuser	string	query	False	Filter by superuser
chown_mode	string	query	False	Filter by chown_mode <ul style="list-style-type: none"> <li>• Introduced in: 9.9</li> </ul>
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="#">_links</a>	
num_records	integer	Number of Export Rule records
records	array[ <a href="#">export_rule</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "chown_mode": "restricted",
    "clients": {
      "match": "0.0.0.0/0"
    },
    "ntfs_unix_security": "fail",
    "protocols": {
    },
    "ro_rule": {
    },
    "rw_rule": {
    },
    "superuser": {
    },
    "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	

\_links

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

\_links

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

export\_clients



Name	Type	Description
match	string	<p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"> <li>• As a hostname; for instance, host1</li> <li>• As an IPv4 address; for instance, 10.1.12.24</li> <li>• As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li> <li>• As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li> <li>• As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li> <li>• As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li> <li>• As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li> <li>• As a domain name preceded by the . character; for instance, .example.com</li> </ul>

#### policy

Name	Type	Description
id	integer	Export policy ID
name	string	Export policy name

#### svm

SVM, applies only to SVM-scoped objects.

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

Name	Type	Description
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.

#### export\_rule

Name	Type	Description
_links	<a href="#">_links</a>	
allow_device_creation	boolean	Specifies whether or not device creation is allowed.
allow_suid	boolean	Specifies whether or not SetUID bits in SETATTR Op is to be honored.
anonymous_user	string	User ID To Which Anonymous Users Are Mapped.
chown_mode	string	Specifies who is authorized to change the ownership mode of a file.
clients	array[ <a href="#">export_clients</a> ]	Array of client matches
index	integer	Index of the rule within the export policy.
ntfs_unix_security	string	NTFS export UNIX security options.
policy	<a href="#">policy</a>	
protocols	array[string]	
ro_rule	array[string]	Authentication flavors that the read-only access rule governs
rw_rule	array[string]	Authentication flavors that the read/write access rule governs
superuser	array[string]	Authentication flavors that the superuser security type governs

Name	Type	Description
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 export policy rule

POST /protocols/nfs/export-policies/{policy.id}/rules

**Introduced In:** 9.6

Creates an export policy rule.

### Required properties

- `policy.id` - Existing export policy for which to create an export rule.
- `clients.match` - List of clients (hostnames, ipaddresses, netgroups, domains) to which the export rule applies.
- `ro_rule` - Used to specify the security type for read-only access to volumes that use the export rule.
- `rw_rule` - Used to specify the security type for read-write access to volumes that use the export rule.

### Optional property

- `index` - Used to specify the index number of the export rule that you want to create. If you specify an index number that already matches a rule, the index number of the existing rule is incremented, as are the index

numbers of all subsequent rules, either to the end of the list or to an open space in the list. If you do not specify an index number, the new rule is placed at the end of the policy's list.

## Default property values

If not specified in POST, the following default property values are assigned:

- `protocols` - *any*
- `anonymous_user` - *none*
- `superuser` - *any*
- `allow_device_creation` - *true*
- `ntfs_unix_security` - *fail*
- `chown_mode` - *restricted*
- `allow_suid` - *true*

## Related ONTAP commands

- `vserver export-policy rule create`

## Learn more

- [DOC /protocols/nfs/export-policies](#)

## Parameters

Name	Type	In	Required	Description
<code>policy.id</code>	integer	path	True	Export Policy ID
<code>return_records</code>	boolean	query	False	The default is false. If set to true, the records are returned.  • Default value:

## Request Body

Name	Type	Description
<code>_links</code>	<a href="#">_links</a>	
<code>allow_device_creation</code>	boolean	Specifies whether or not device creation is allowed.

Name	Type	Description
allow_suid	boolean	Specifies whether or not SetUID bits in SETATTR Op is to be honored.
anonymous_user	string	User ID To Which Anonymous Users Are Mapped.
chown_mode	string	Specifies who is authorized to change the ownership mode of a file.
clients	array[ <a href="#">export_clients</a> ]	Array of client matches
index	integer	Index of the rule within the export policy.
ntfs_unix_security	string	NTFS export UNIX security options.
policy	<a href="#">policy</a>	
protocols	array[string]	
ro_rule	array[string]	Authentication flavors that the read-only access rule governs
rw_rule	array[string]	Authentication flavors that the read/write access rule governs
superuser	array[string]	Authentication flavors that the superuser security type governs
svm	<a href="#">svm</a>	SVM, applies only to SVM-scoped objects.

## Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "chown_mode": "restricted",
  "clients": {
    "match": "0.0.0.0/0"
  },
  "ntfs_unix_security": "fail",
  "protocols": {
  },
  "ro_rule": {
  },
  "rw_rule": {
  },
  "superuser": {
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```

## Response

Status: 201, Created

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

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "chown_mode": "restricted",
    "clients": {
      "match": "0.0.0.0/0"
    },
    "ntfs_unix_security": "fail",
    "protocols": {
    },
    "ro_rule": {
    },
    "rw_rule": {
    },
    "superuser": {
    },
    "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
1703954	Export policy does not exist
1704036	Invalid clientmatch: missing domain name
1704037	Invalid clientmatch: missing network name
1704038	Invalid clientmatch: missing netgroup name
1704039	Invalid clientmatch
1704040	Invalid clientmatch: address bytes masked out by netmask are non-zero
1704041	Invalid clientmatch: address bytes masked to zero by netmask
1704042	Invalid clientmatch: too many bits in netmask
1704043	Invalid clientmatch: invalid netmask
1704044	Invalid clientmatch: invalid characters in host name
1704045	Invalid clientmatch: invalid characters in domain name
1704050	Invalid clientmatch: clientmatch list contains a duplicate string. Duplicate strings in a clientmatch list are not supported
1704054	Invalid clientmatch: invalid characters in netgroup name. Valid characters for a netgroup name are 0-9, A-Z, a-z, ".", "_", and "-"
1704064	Clientmatch host name too long
1704065	Clientmatch domain name too long
3277000	Upgrade all nodes to ONTAP 9.0.0 or above to use krb5p as a security flavor in export-policy rules
3277083	User ID is not valid. Enter a value for User ID from 0 to 4294967295



Error Code	Description
3277163	The system cannot automatically specify an "index" for this rule, because a rule with "index" 4294967295 exists. Either specify an unused "index", or update the existing rules so that "index" 4294967295 is not used.

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	

\_links

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

export\_clients

Name	Type	Description
match	string	<p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"><li>• As a hostname; for instance, host1</li><li>• As an IPv4 address; for instance, 10.1.12.24</li><li>• As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li><li>• As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li><li>• As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li><li>• As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li><li>• As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li><li>• As a domain name preceded by the . character; for instance, .example.com</li></ul>

## policy

Name	Type	Description
id	integer	Export policy ID
name	string	Export policy name

## svm

SVM, applies only to SVM-scoped objects.

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

## export\_rule

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
allow_device_creation	boolean	Specifies whether or not device creation is allowed.
allow_suid	boolean	Specifies whether or not SetUID bits in SETATTR Op is to be honored.
anonymous_user	string	User ID To Which Anonymous Users Are Mapped.
chown_mode	string	Specifies who is authorized to change the ownership mode of a file.
clients	array[ <a href="#">export_clients</a> ]	Array of client matches
index	integer	Index of the rule within the export policy.

Name	Type	Description
ntfs_unix_security	string	NTFS export UNIX security options.
policy	<a href="#">policy</a>	
protocols	array[string]	
ro_rule	array[string]	Authentication flavors that the read-only access rule governs
rw_rule	array[string]	Authentication flavors that the read/write access rule governs
superuser	array[string]	Authentication flavors that the superuser security type governs
svm	<a href="#">svm</a>	SVM, applies only to SVM-scoped objects.

#### \_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

#### returned\_error

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

# Delete an export policy rule

DELETE /protocols/nfs/export-policies/{policy.id}/rules/{index}

Introduced In: 9.6

Deletes an export policy rule.

## Related ONTAP commands

- `vserver export-policy rule delete`

## Learn more

- [DOC /protocols/nfs/export-policies](#)

## Parameters

Name	Type	In	Required	Description
policy.id	integer	path	True	Export Policy ID
index	integer	path	True	Export Rule Index

## Response

```
Status: 200, Ok
```

## Error

```
Status: Default
```

## ONTAP Error Response Codes

Error Code	Description
1703945	Ruleset is in use by a volume. It cannot be deleted until all volumes that refer to it are first deleted
1703946	Cannot determine if the ruleset is in use by a volume. It cannot be deleted until all volumes that refer to it are first deleted
1703954	Export policy does not exist

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

#### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

#### returned\_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 export policy rule

GET /protocols/nfs/export-policies/{policy.id}/rules/{index}

Introduced In: 9.6

Retrieves an export policy rule

## Related ONTAP commands

- `vserver export-policy rule show`

## Learn more

- [DOC /protocols/nfs/export-policies](#)

## Parameters

Name	Type	In	Required	Description
policy.id	integer	path	True	Export Policy ID
index	integer	path	True	Export Rule Index
fields	array[string]	query	False	Specify the fields to return.

## Response

Status: 200, Ok

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
allow_device_creation	boolean	Specifies whether or not device creation is allowed.
allow_suid	boolean	Specifies whether or not SetUID bits in SETATTR Op is to be honored.
anonymous_user	string	User ID To Which Anonymous Users Are Mapped.
chown_mode	string	Specifies who is authorized to change the ownership mode of a file.
clients	array[ <a href="#">export_clients</a> ]	Array of client matches
index	integer	Index of the rule within the export policy.

Name	Type	Description
ntfs_unix_security	string	NTFS export UNIX security options.
policy	<a href="#">policy</a>	
protocols	array[string]	
ro_rule	array[string]	Authentication flavors that the read-only access rule governs
rw_rule	array[string]	Authentication flavors that the read/write access rule governs
superuser	array[string]	Authentication flavors that the superuser security type governs
svm	<a href="#">svm</a>	SVM, applies only to SVM-scoped objects.



## Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "chown_mode": "restricted",
  "clients": {
    "match": "0.0.0.0/0"
  },
  "ntfs_unix_security": "fail",
  "protocols": {
  },
  "ro_rule": {
  },
  "rw_rule": {
  },
  "superuser": {
  },
  "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	

\_links

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

export\_clients

Name	Type	Description
match	string	<p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"><li>• As a hostname; for instance, host1</li><li>• As an IPv4 address; for instance, 10.1.12.24</li><li>• As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li><li>• As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li><li>• As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li><li>• As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li><li>• As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li><li>• As a domain name preceded by the . character; for instance, .example.com</li></ul>

## policy

Name	Type	Description
id	integer	Export policy ID
name	string	Export policy name

## svm

SVM, applies only to SVM-scoped objects.

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

## error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

## returned\_error

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

# Update the properties of an export policy rule

PATCH /protocols/nfs/export-policies/{policy.id}/rules/{index}

**Introduced In:** 9.6

Updates the properties of an export policy rule to change an export policy rule's index or fields.

## Related ONTAP commands

- `vserver export-policy rule modify`
- `vserver export-policy rule setindex`

## Learn more

- [DOC /protocols/nfs/export-policies](#)

## Parameters

Name	Type	In	Required	Description
policy.id	integer	path	True	Export Policy ID
index	integer	path	True	Export Rule Index
new_index	integer	query	False	New Export Rule Index

## Request Body

Name	Type	Description
_links	<a href="#">_links</a>	
allow_device_creation	boolean	Specifies whether or not device creation is allowed.
allow_suid	boolean	Specifies whether or not SetUID bits in SETATTR Op is to be honored.
anonymous_user	string	User ID To Which Anonymous Users Are Mapped.
chown_mode	string	Specifies who is authorized to change the ownership mode of a file.

Name	Type	Description
clients	array[ <a href="#">export_clients</a> ]	Array of client matches
index	integer	Index of the rule within the export policy.
ntfs_unix_security	string	NTFS export UNIX security options.
policy	<a href="#">policy</a>	
protocols	array[string]	
ro_rule	array[string]	Authentication flavors that the read-only access rule governs
rw_rule	array[string]	Authentication flavors that the read/write access rule governs
superuser	array[string]	Authentication flavors that the superuser security type governs
svm	<a href="#">svm</a>	SVM, applies only to SVM-scoped objects.

## Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "chown_mode": "restricted",
  "clients": {
    "match": "0.0.0.0/0"
  },
  "ntfs_unix_security": "fail",
  "protocols": {
  },
  "ro_rule": {
  },
  "rw_rule": {
  },
  "superuser": {
  },
  "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
1703954	Export policy does not exist
1704036	Invalid clientmatch: missing domain name
1704037	Invalid clientmatch: missing network name
1704038	Invalid clientmatch: missing netgroup name
1704039	Invalid clientmatch
1704040	Invalid clientmatch: address bytes masked out by netmask are non-zero
1704041	Invalid clientmatch: address bytes masked to zero by netmask
1704042	Invalid clientmatch: too many bits in netmask
1704043	Invalid clientmatch: invalid netmask
1704044	Invalid clientmatch: invalid characters in host name
1704045	Invalid clientmatch: invalid characters in domain name
1704050	Invalid clientmatch: clientmatch list contains a duplicate string. Duplicate strings in a clientmatch list are not supported
1704054	Invalid clientmatch: invalid characters in netgroup name. Valid characters for a netgroup name are 0-9, A-Z, a-z, ".", "_", and "-"
1704064	Clientmatch host name too long
1704065	Clientmatch domain name too long
3277000	Upgrade all nodes to ONTAP 9.0.0 or above to use krb5p as a security flavor in export-policy rules
3277083	User ID is not valid. Enter a value for User ID from 0 to 4294967295

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	

\_links

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

export\_clients

Name	Type	Description
match	string	<p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"><li>• As a hostname; for instance, host1</li><li>• As an IPv4 address; for instance, 10.1.12.24</li><li>• As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li><li>• As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li><li>• As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li><li>• As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li><li>• As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li><li>• As a domain name preceded by the . character; for instance, .example.com</li></ul>

## policy

Name	Type	Description
id	integer	Export policy ID
name	string	Export policy name

## svm

SVM, applies only to SVM-scoped objects.

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

## export\_rule

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
allow_device_creation	boolean	Specifies whether or not device creation is allowed.
allow_suid	boolean	Specifies whether or not SetUID bits in SETATTR Op is to be honored.
anonymous_user	string	User ID To Which Anonymous Users Are Mapped.
chown_mode	string	Specifies who is authorized to change the ownership mode of a file.
clients	array[ <a href="#">export_clients</a> ]	Array of client matches
index	integer	Index of the rule within the export policy.

Name	Type	Description
ntfs_unix_security	string	NTFS export UNIX security options.
policy	<a href="#">policy</a>	
protocols	array[string]	
ro_rule	array[string]	Authentication flavors that the read-only access rule governs
rw_rule	array[string]	Authentication flavors that the read/write access rule governs
superuser	array[string]	Authentication flavors that the superuser security type governs
svm	<a href="#">svm</a>	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[ <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 export policy rule clients

GET /protocols/nfs/export-policies/{policy.id}/rules/{index}/clients

Introduced In: 9.6

Retrieves export policy rule clients.

## Learn more

- [DOC /protocols/nfs/export-policies](#)

## Parameters

Name	Type	In	Required	Description
policy.id	integer	path	True	Export Policy ID
index	integer	path	True	Export Rule Index
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>
return_timeout	integer	query	False	The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached. <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
<code>_links</code>	<code>_links</code>	
<code>num_records</code>	integer	Number of export rule client records
<code>records</code>	array[ <code>export_client</code> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "index": 0,
    "match": "0.0.0.0/0",
    "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	

\_links

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

policy

Name	Type	Description
id	integer	Export policy ID

\_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.

export\_client

Name	Type	Description
index	integer	Index of the rule within the export policy.



Name	Type	Description
match	string	<p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"> <li>• As a hostname; for instance, host1</li> <li>• As an IPv4 address; for instance, 10.1.12.24</li> <li>• As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li> <li>• As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li> <li>• As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li> <li>• As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li> <li>• As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li> <li>• As a domain name preceded by the . character; for instance, .example.com</li> </ul>
policy	<a href="#">policy</a>	
svm	<a href="#">svm</a>	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[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Create an export policy rule client

POST `/protocols/nfs/export-policies/{policy.id}/rules/{index}/clients`

**Introduced In:** 9.6

Creates an export policy rule client

### Required properties

- `policy.id` - Existing export policy that contains export policy rules for the client being added.
- `index` - Existing export policy rule for which to create an export client.
- `match` - Base name for the export policy client.

### Related ONTAP commands

- `vserver export-policy rule add-clientmatches`

### Learn more

- [DOC /protocols/nfs/export-policies](#)

### Parameters

Name	Type	In	Required	Description
<code>policy.id</code>	integer	path	True	Export Policy ID
<code>index</code>	integer	path	True	Export Rule Index

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

## Request Body

Name	Type	Description
index	integer	Index of the rule within the export policy.
match	string	<p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"> <li>• As a hostname; for instance, host1</li> <li>• As an IPv4 address; for instance, 10.1.12.24</li> <li>• As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li> <li>• As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li> <li>• As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li> <li>• As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li> <li>• As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li> <li>• As a domain name preceded by the . character; for instance, .example.com</li> </ul>
policy	policy	

Name	Type	Description
svm	<a href="#">svm</a>	SVM, applies only to SVM-scoped objects.

### Example request

```
{
  "index": 0,
  "match": "0.0.0.0/0",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resource/link"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```

### Response

Status: 201, Created

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
num_records	integer	Number of export rule client records
records	array[ <a href="#">export_client</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "index": 0,
    "match": "0.0.0.0/0",
    "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
1703954	Export policy does not exist
1704036	Invalid clientmatch: missing domain name

Error Code	Description
1704037	Invalid clientmatch: missing network name
1704038	Invalid clientmatch: missing netgroup name
1704039	Invalid clientmatch
1704040	Invalid clientmatch: address bytes masked out by netmask are non-zero
1704041	Invalid clientmatch: address bytes masked to zero by netmask
1704042	Invalid clientmatch: too many bits in netmask
1704043	Invalid clientmatch: invalid netmask
1704044	Invalid clientmatch: invalid characters in host name
1704045	Invalid clientmatch: invalid characters in domain name
1704050	Invalid clientmatch: the clientmatch list contains a duplicate string. Duplicate strings in a clientmatch list are not supported
1704054	Invalid clientmatch: invalid characters in netgroup name. Valid characters for a netgroup name are 0-9, A-Z, a-z, ".", "_" and "-"
1704064	Clientmatch host name too long
1704065	Clientmatch domain name too long

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

### policy

Name	Type	Description
id	integer	Export policy ID

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

### export\_client

Name	Type	Description
index	integer	Index of the rule within the export policy.



Name	Type	Description
match	string	<p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"> <li>• As a hostname; for instance, host1</li> <li>• As an IPv4 address; for instance, 10.1.12.24</li> <li>• As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li> <li>• As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li> <li>• As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li> <li>• As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li> <li>• As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li> <li>• As a domain name preceded by the . character; for instance, .example.com</li> </ul>
policy	<a href="#">policy</a>	
svm	<a href="#">svm</a>	SVM, applies only to SVM-scoped objects.

#### [\\_links](#)

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

[export\\_client](#)

Name	Type	Description
index	integer	Index of the rule within the export policy.
match	string	<p>Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:</p> <ul style="list-style-type: none"> <li>• As a hostname; for instance, host1</li> <li>• As an IPv4 address; for instance, 10.1.12.24</li> <li>• As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li> <li>• As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li> <li>• As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li> <li>• As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li> <li>• As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li> <li>• As a domain name preceded by the . character; for instance, .example.com</li> </ul>
policy	<a href="#">policy</a>	
svm	<a href="#">svm</a>	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[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Delete an export policy client

DELETE /protocols/nfs/export-policies/{policy.id}/rules/{index}/clients/{match}

Introduced In: 9.6

Deletes an export policy client

### Related ONTAP commands

- `vserver export-policy rule remove-clientmatches`

### Learn more

- [DOC /protocols/nfs/export-policies](#)

### Parameters

Name	Type	In	Required	Description
policy.id	integer	path	True	Export Policy ID
index	integer	path	True	Export Rule Index
match	string	path	True	Export Client Match
return_records	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>

## Response

Status: 200, Ok

## Error

Status: Default

### ONTAP Error Response Codes

Error Code	Description
1703954	Export policy does not exist
1704036	Invalid clientmatch: missing domain name
1704037	Invalid clientmatch: missing network name
1704038	Invalid clientmatch: missing netgroup name
1704039	Invalid clientmatch
1704040	Invalid clientmatch: address bytes masked out by netmask are non-zero
1704041	Invalid clientmatch: address bytes masked to zero by netmask
1704042	Invalid clientmatch: too many bits in netmask
1704043	Invalid clientmatch: invalid netmask
1704044	Invalid clientmatch: invalid characters in host name
1704045	Invalid clientmatch: invalid characters in domain name
1704050	Invalid clientmatch: the clientmatch list contains a duplicate string. Duplicate strings in a clientmatch list are not supported
1704054	Invalid clientmatch: invalid characters in netgroup name. Valid characters for a netgroup name are 0-9, A-Z, a-z, ".", "_", and "-"
1704064	Clientmatch host name too long
1704065	Clientmatch domain name too long

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

#### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

#### returned\_error

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

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