



# **Manage multi-admin-verify approval requests**

ONTAP 9.15.1 REST API reference

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# Table of Contents

- Manage multi-admin-verify approval requests ..... 1
  - Security multi-admin-verify requests endpoint overview ..... 1
  - Retrieve multi-admin-verify requests ..... 3
  - Create a multi-admin-verify request ..... 11

# Manage multi-admin-verify approval requests

## Security multi-admin-verify requests endpoint overview

### Overview

These APIs provide information about multi-admin verification requests. If you need to execute a command that is protected by a multi-admin rule, you must first submit a request to be allowed to execute the command. The request must then be approved by the designated approvers according to the rule associated with the command.

---

### Examples

#### Creating a multi-admin-verify request

Creates a request for the specified ONTAP operation.

---

```

# The API:
/api/security/multi-admin-verify/requests

# The call:
curl -X POST "https://<mgmt-ip>/api/security/multi-admin-verify/requests?return_records=true" -H "accept: application/hal+json" -d '{"operation": "volume delete", "query": "-vserver vs0 -volume v1", "permitted_users": ["user1","user2"]}'

# The response:
{
  "num_records": 1,
  "records": [
    {
      "index": 10,
      "operation": "volume delete",
      "query": "-vserver vs0 -volume v1",
      "state": "pending",
      "required_approvers": 2,
      "pending_approvers": 2,
      "execute_on_approval": false,
      "permitted_users": [
        "user1",
        "user2"
      ],
      "user_requested": "admin",
      "owner": {
        "uuid": "c1483186-6e73-11ec-bc92-005056a7ad04",
        "name": "cluster1",
        "_links": {
          "self": {
            "href": "/api/svm/svms/c1483186-6e73-11ec-bc92-005056a7ad04"
          }
        }
      },
      "create_time": "2022-01-06T16:59:49-05:00",
      "approve_expiry_time": "2022-01-06T19:59:49-05:00",
      "_links": {
        "self": {
          "href": "/api/security/multi-admin-verify/requests/10"
        }
      }
    }
  ]
}

```

## Retrieving multi-admin-verify requests

Retrieves information about multi-admin verification requests.

```
# The API:
/api/security/multi-admin-verify/requests

# The call:
curl -X GET "https://<cluster-ip>/api/security/multi-admin-verify/requests"

# The response:
{
  "records": [
    {
      "index": 1,
      "_links": {
        "self": {
          "href": "/api/security/multi-admin-verify/requests/1"
        }
      }
    },
    {
      "index": 2,
      "_links": {
        "self": {
          "href": "/api/security/multi-admin-verify/requests/2"
        }
      }
    }
  ],
  "num_records": 2,
  "_links": {
    "self": {
      "href": "/api/security/multi-admin-verify/requests"
    }
  }
}
```

## Retrieve multi-admin-verify requests

GET /security/multi-admin-verify/requests

**Introduced In:** 9.11

Retrieves multi-admin-verify requests.

## Parameters

Name	Type	In	Required	Description
approved_users	string	query	False	Filter by approved_users
pending_approvers	integer	query	False	Filter by pending_approvers
comment	string	query	False	Filter by comment
required_approvers	integer	query	False	Filter by required_approvers
user_requested	string	query	False	Filter by user_requested
query	string	query	False	Filter by query
potential_approvers	string	query	False	Filter by potential_approvers
user_vetoed	string	query	False	Filter by user_vetoed
create_time	string	query	False	Filter by create_time
owner.uuid	string	query	False	Filter by owner.uuid
owner.name	string	query	False	Filter by owner.name
index	integer	query	False	Filter by index
execute_on_approval	boolean	query	False	Filter by execute_on_approval  • Introduced in: 9.13

Name	Type	In	Required	Description
execution_expiry_time	string	query	False	Filter by execution_expiry_time
state	string	query	False	Filter by state
operation	string	query	False	Filter by operation
approve_time	string	query	False	Filter by approve_time
permitted_users	string	query	False	Filter by permitted_users
approve_expiry_time	string	query	False	Filter by approve_expiry_time
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	<p>The default is true for GET calls. When set to false, only the number of records is returned.</p> <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 records
records	array[ <a href="#">multi_admin_verify_request</a> ]	



## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "approve_expiry_time": "string",
      "approve_time": "string",
      "approved_users": [
        "string"
      ],
      "comment": "string",
      "create_time": "string",
      "execution_expiry_time": "string",
      "index": 0,
      "operation": "string",
      "owner": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        }
      },
      "name": "svml",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "pending_approvers": 0,
    "permitted_users": [
      "string"
    ],
    "potential_approvers": [
      "string"
    ],
    "query": "string",
    "required_approvers": 0,
    "state": "string",
    "user_requested": "string",
    "user_vetoed": "string"
  ]
}
```

```
]
}
```

## 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>	

owner

The owner of the request. This can identify the cluster or an SVM.

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.

multi\_admin\_verify\_request

Name	Type	Description
approve_expiry_time	string	
approve_time	string	
approved_users	array[string]	The users that have approved the request.
comment	string	Optional user-provided comment that is sent to the approval-group email indicating why the request was made.

Name	Type	Description
create_time	string	
execute_on_approval	boolean	Specifies that the operation is executed automatically on final approval.
execution_expiry_time	string	
index	integer	Unique index that represents a request.
operation	string	The command to execute.
owner	<a href="#">owner</a>	The owner of the request. This can identify the cluster or an SVM.
pending_approvers	integer	The number of approvers remaining that are required to approve.
permitted_users	array[string]	List of users that can execute the operation once approved. If not set, any authorized user can perform the operation.
potential_approvers	array[string]	The users that are able to approve the request.
query	string	Identifies the specific entry upon which the user wants to operate.
required_approvers	integer	The number of required approvers, excluding the user that made the request.
state	string	The state of the request. PATCH supports approved and vetoed. The state only changes after setting to approved once no more approvers are required.

Name	Type	Description
user_requested	string	The user that created the request. Automatically set by ONTAP.  <ul style="list-style-type: none"> <li>• readOnly: 1</li> <li>• Introduced in: 9.11</li> <li>• x-nullable: true</li> </ul>
user_vetoed	string	The user that vetoed the request.

#### 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 a multi-admin-verify request

POST /security/multi-admin-verify/requests

**Introduced In:** 9.11

Creates a multi-admin-verify request.

### Parameters

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
approve_expiry_time	string	
approve_time	string	
approved_users	array[string]	The users that have approved the request.
comment	string	Optional user-provided comment that is sent to the approval-group email indicating why the request was made.
create_time	string	
execute_on_approval	boolean	Specifies that the operation is executed automatically on final approval.
execution_expiry_time	string	
index	integer	Unique index that represents a request.
operation	string	The command to execute.
owner	<a href="#">owner</a>	The owner of the request. This can identify the cluster or an SVM.
pending_approvers	integer	The number of approvers remaining that are required to approve.
permitted_users	array[string]	List of users that can execute the operation once approved. If not set, any authorized user can perform the operation.

Name	Type	Description
potential_approvers	array[string]	The users that are able to approve the request.
query	string	Identifies the specific entry upon which the user wants to operate.
required_approvers	integer	The number of required approvers, excluding the user that made the request.
state	string	The state of the request. PATCH supports approved and vetoed. The state only changes after setting to approved once no more approvers are required.
user_requested	string	<p>The user that created the request. Automatically set by ONTAP.</p> <ul style="list-style-type: none"> <li>• readOnly: 1</li> <li>• Introduced in: 9.11</li> <li>• x-nullable: true</li> </ul>
user_vetoed	string	The user that vetoed the request.

## Example request

```
{
  "approve_expiry_time": "string",
  "approve_time": "string",
  "approved_users": [
    "string"
  ],
  "comment": "string",
  "create_time": "string",
  "execution_expiry_time": "string",
  "index": 0,
  "operation": "string",
  "owner": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svml",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "pending_approvers": 0,
  "permitted_users": [
    "string"
  ],
  "potential_approvers": [
    "string"
  ],
  "query": "string",
  "required_approvers": 0,
  "state": "string",
  "user_requested": "string",
  "user_vetoed": "string"
}
```

## Response

Status: 201, Created

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



<b>Name</b>	<b>Type</b>	<b>Description</b>
num_records	integer	Number of records
records	array[multi_admin_verify_request]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "approve_expiry_time": "string",
      "approve_time": "string",
      "approved_users": [
        "string"
      ],
      "comment": "string",
      "create_time": "string",
      "execution_expiry_time": "string",
      "index": 0,
      "operation": "string",
      "owner": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "svml",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "pending_approvers": 0,
      "permitted_users": [
        "string"
      ],
      "potential_approvers": [
        "string"
      ],
      "query": "string",
      "required_approvers": 0,
      "state": "string",
      "user_requested": "string",
      "user_vetoed": "string"
    }
  ]
}
```

```
]
}
```

## Headers

Name	Description	Type
Location	Useful for tracking the resource location	string

## Error

```
Status: Default
```

## ONTAP Error Response Codes

Error Code	Description
262148	The specified command is not recognized.
262279	Invalid field set.
262304	Too many requests. Delete one before creating another.
262305	Can't approve non-pending request.
262306	Can't veto an expired request.
262308	The specified command is not supported by this feature.
262309	The feature must be enabled first.
262311	Value must be greater than zero.
262312	Number of required approvers must be less than the total number of unique approvers in the approval-groups.
262313	Number of unique approvers in the approval-groups must be greater than the number of required approvers.
262326	Failed to parse query.
262327	Failed to create the request.
262328	There is no matching rule for this request.
262330	Cannot approve/veto a request multiple times.
262334	The parameter specified in the command is not supported.
262337	Cannot approve/veto the user's own request.

Also see the table of common errors in the [Response body](#) overview section of this documentation.

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>	

owner

The owner of the request. This can identify the cluster or an SVM.

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.

multi\_admin\_verify\_request

Name	Type	Description
approve_expiry_time	string	
approve_time	string	
approved_users	array[string]	The users that have approved the request.
comment	string	Optional user-provided comment that is sent to the approval-group email indicating why the request was made.
create_time	string	
execute_on_approval	boolean	Specifies that the operation is executed automatically on final approval.
execution_expiry_time	string	

Name	Type	Description
index	integer	Unique index that represents a request.
operation	string	The command to execute.
owner	owner	The owner of the request. This can identify the cluster or an SVM.
pending_approvers	integer	The number of approvers remaining that are required to approve.
permitted_users	array[string]	List of users that can execute the operation once approved. If not set, any authorized user can perform the operation.
potential_approvers	array[string]	The users that are able to approve the request.
query	string	Identifies the specific entry upon which the user wants to operate.
required_approvers	integer	The number of required approvers, excluding the user that made the request.
state	string	The state of the request. PATCH supports approved and vetoed. The state only changes after setting to approved once no more approvers are required.
user_requested	string	The user that created the request. Automatically set by ONTAP. <ul style="list-style-type: none"> <li>• readOnly: 1</li> <li>• Introduced in: 9.11</li> <li>• x-nullable: true</li> </ul>
user_vetoed	string	The user that vetoed the request.

\_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.

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