



Manage multi-admin-verify approval requests

ONTAP 9.11.1 REST API reference

NetApp
April 02, 2024

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,
      "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
user_requested	string	query	False	Filter by user_requested
index	integer	query	False	Filter by index
approve_time	string	query	False	Filter by approve_time
approved_users	string	query	False	Filter by approved_users
owner.uuid	string	query	False	Filter by owner.uuid
owner.name	string	query	False	Filter by owner.name
state	string	query	False	Filter by state
potential_approvers	string	query	False	Filter by potential_approvers
user_vetoed	string	query	False	Filter by user_vetoed
query	string	query	False	Filter by query
create_time	string	query	False	Filter by create_time
pending_approvers	integer	query	False	Filter by pending_approvers
permitted_users	string	query	False	Filter by permitted_users
comment	string	query	False	Filter by comment
required_approvers	integer	query	False	Filter by required_approvers

Name	Type	In	Required	Description
operation	string	query	False	Filter by operation
execution_expiry_time	string	query	False	Filter by execution_expiry_time
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	The default is true for GET calls. When set to false, only the number of records is returned. <ul style="list-style-type: none"> • Default value: 1
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"> • Default value: 1 • Max value: 120 • Min value: 0
order_by	array[string]	query	False	Order results by specified fields and optional [asc

Response

Status: 200, Ok

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

Example response

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

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	

_links

Name	Type	Description
next	href	
self	href	

_links

Name	Type	Description
self	href	

owner

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

Name	Type	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

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	
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"> • readOnly: 1 • Introduced in: 9.11
user_vetoed	string	The user that vetoed the request.

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 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	The default is false. If set to true, the records are returned. <ul style="list-style-type: none"> • Default value:

Request Body

Name	Type	Description
approve_expiry_time	string	
approve_time	string	
approved_users	array[string]	The users that have approved the request.

Name	Type	Description
comment	string	Optional user-provided comment that is sent to the approval-group email indicating why the request was made.
create_time	string	
execution_expiry_time	string	
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"> • readOnly: 1 • Introduced in: 9.11

Name	Type	Description
user_vetoed	string	The user that vetoed the request.

Example request

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

Response

Status: 201, Created

Name	Type	Description
_links	_links	

Name	Type	Description
num_records	integer	Number of records
records	array[multi_admin_verify_request]	

Example response

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

Error

Status: Default

ONTAP Error Response Codes

Error Code	Description
262148	The specified command is not recognized.
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.

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	

_links

Name	Type	Description
self	href	

owner

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

Name	Type	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

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	
execution_expiry_time	string	
index	integer	Unique index that represents a request.
operation	string	The command to execute.

Name	Type	Description
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"> • readOnly: 1 • Introduced in: 9.11
user_vetoed	string	The user that vetoed the request.

_links

Name	Type	Description
next	href	
self	href	

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.

Copyright information

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

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

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

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

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

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

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

Trademark information

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