



Manage multi-admin-verify rules

ONTAP 9.14.1 REST API reference

NetApp
April 02, 2024

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Manage multi-admin-verify rules

Security multi-admin-verify rules endpoint overview

Overview

Rules define the ONTAP commands (operations) that should be protected by multi-admin approval. While the feature is turned on, any ONTAP operation that is defined with a rule will be enforced with multi-admin approval to execute the command (operation).

Examples

Creating a multi-admin-verify rule

Creates a rule for the specified ONTAP operation.

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

# The call:
curl -X POST "https://<mgmt-ip>/api/security/multi-admin-verify/rules?return_records=true" -H "accept: application/hal+json" -d '{"owner.uuid": "c109634f-7011-11ec-a23d-005056a78fd5", "operation": "volume delete", "query": "-vserver vs0", "required_approvers": 1}'

# The response:
{
  "num_records": 1,
  "records": [
    {
      "owner": {
        "uuid": "c109634f-7011-11ec-a23d-005056a78fd5",
        "_links": {
          "self": {
            "href": "/api/svm/svms/c109634f-7011-11ec-a23d-005056a78fd5"
          }
        }
      },
      "operation": "volume delete",
      "auto_request_create": true,
      "query": "-vserver vs0",
      "required_approvers": 1,
      "create_time": "2022-01-07T22:14:03-05:00",
      "system_defined": false,
      "_links": {
        "self": {
          "href": "/api/security/multi-admin-verify/rules/c109634f-7011-11ec-a23d-005056a78fd5/volume%20delete"
        }
      }
    }
  ]
}
```

Retrieving multi-admin-verify rules

Displays information about multi admin verification rules.

```

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

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

# The response:
{
"records": [
  {
    "owner": {
      "uuid": "52b75787-7011-11ec-a23d-005056a78fd5",
      "name": "cluster1",
      "_links": {
        "self": {
          "href": "/api/svm/svms/52b75787-7011-11ec-a23d-005056a78fd5"
        }
      }
    },
    "operation": "security login password",
    "_links": {
      "self": {
        "href": "/api/security/multi-admin-verify/rules/52b75787-7011-11ec-a23d-005056a78fd5/security%20login%20password"
      }
    }
  },
  {
    "owner": {
      "uuid": "52b75787-7011-11ec-a23d-005056a78fd5",
      "name": "cluster1",
      "_links": {
        "self": {
          "href": "/api/svm/svms/52b75787-7011-11ec-a23d-005056a78fd5"
        }
      }
    },
    "operation": "security login unlock",
    "_links": {
      "self": {
        "href": "/api/security/multi-admin-verify/rules/52b75787-7011-11ec-a23d-005056a78fd5/security%20login%20unlock"
      }
    }
  },
  {

```

```

"owner": {
  "uuid": "52b75787-7011-11ec-a23d-005056a78fd5",
  "name": "cluster1",
  "_links": {
    "self": {
      "href": "/api/svm/svms/52b75787-7011-11ec-a23d-005056a78fd5"
    }
  }
},
"operation": "security multi-admin-verify approval-group create",
"_links": {
  "self": {
    "href": "/api/security/multi-admin-verify/rules/52b75787-7011-11ec-a23d-005056a78fd5/security%20multi-admin-verify%20approval-group%20create"
  }
}
},
{
  "owner": {
    "uuid": "52b75787-7011-11ec-a23d-005056a78fd5",
    "name": "cluster1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/52b75787-7011-11ec-a23d-005056a78fd5"
      }
    }
  },
  "operation": "security multi-admin-verify approval-group delete",
  "_links": {
    "self": {
      "href": "/api/security/multi-admin-verify/rules/52b75787-7011-11ec-a23d-005056a78fd5/security%20multi-admin-verify%20approval-group%20delete"
    }
  }
}
},
{
  "owner": {
    "uuid": "52b75787-7011-11ec-a23d-005056a78fd5",
    "name": "cluster1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/52b75787-7011-11ec-a23d-005056a78fd5"
      }
    }
  }
}
}

```

```

    },
    "operation": "security multi-admin-verify approval-group modify",
    "_links": {
      "self": {
        "href": "/api/security/multi-admin-verify/rules/52b75787-7011-11ec-a23d-005056a78fd5/security%20multi-admin-verify%20approval-group%20modify"
      }
    }
  },
  {
    "owner": {
      "uuid": "52b75787-7011-11ec-a23d-005056a78fd5",
      "name": "cluster1",
      "_links": {
        "self": {
          "href": "/api/svm/svms/52b75787-7011-11ec-a23d-005056a78fd5"
        }
      }
    },
    "operation": "security multi-admin-verify approval-group replace",
    "_links": {
      "self": {
        "href": "/api/security/multi-admin-verify/rules/52b75787-7011-11ec-a23d-005056a78fd5/security%20multi-admin-verify%20approval-group%20replace"
      }
    }
  },
  {
    "owner": {
      "uuid": "52b75787-7011-11ec-a23d-005056a78fd5",
      "name": "cluster1",
      "_links": {
        "self": {
          "href": "/api/svm/svms/52b75787-7011-11ec-a23d-005056a78fd5"
        }
      }
    },
    "operation": "security multi-admin-verify modify",
    "_links": {
      "self": {
        "href": "/api/security/multi-admin-verify/rules/52b75787-7011-11ec-a23d-005056a78fd5/security%20multi-admin-verify%20modify"
      }
    }
  }
}

```

```

},
{
  "owner": {
    "uuid": "52b75787-7011-11ec-a23d-005056a78fd5",
    "name": "cluster1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/52b75787-7011-11ec-a23d-005056a78fd5"
      }
    }
  },
  "operation": "security multi-admin-verify rule create",
  "_links": {
    "self": {
      "href": "/api/security/multi-admin-verify/rules/52b75787-7011-11ec-a23d-005056a78fd5/security%20multi-admin-verify%20rule%20create"
    }
  }
},
{
  "owner": {
    "uuid": "52b75787-7011-11ec-a23d-005056a78fd5",
    "name": "cluster1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/52b75787-7011-11ec-a23d-005056a78fd5"
      }
    }
  },
  "operation": "security multi-admin-verify rule delete",
  "_links": {
    "self": {
      "href": "/api/security/multi-admin-verify/rules/52b75787-7011-11ec-a23d-005056a78fd5/security%20multi-admin-verify%20rule%20delete"
    }
  }
},
{
  "owner": {
    "uuid": "52b75787-7011-11ec-a23d-005056a78fd5",
    "name": "cluster1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/52b75787-7011-11ec-a23d-005056a78fd5"
      }
    }
  }
}

```



```

    },
    "operation": "security multi-admin-verify rule modify",
    "_links": {
      "self": {
        "href": "/api/security/multi-admin-verify/rules/52b75787-7011-11ec-a23d-005056a78fd5/security%20multi-admin-verify%20rule%20modify"
      }
    }
  },
  {
    "owner": {
      "uuid": "52b75787-7011-11ec-a23d-005056a78fd5",
      "name": "cluster1",
      "_links": {
        "self": {
          "href": "/api/svm/svms/52b75787-7011-11ec-a23d-005056a78fd5"
        }
      }
    },
    "operation": "volume delete",
    "_links": {
      "self": {
        "href": "/api/security/multi-admin-verify/rules/52b75787-7011-11ec-a23d-005056a78fd5/volume%20delete"
      }
    }
  }
],
"num_records": 11,
"_links": {
  "self": {
    "href": "/api/security/multi-admin-verify/rules"
  }
}
}
}

```

Retrieve multi-admin-verify rules

GET /security/multi-admin-verify/rules

Introduced In: 9.11

Retrieves multi-admin-verify rules.

Parameters

| Name | Type | In | Required | Description |
|----------------------|---------------|-------|----------|---|
| query | string | query | False | Filter by query |
| execution_expiry | string | query | False | Filter by execution_expiry |
| required_approvers | integer | query | False | Filter by required_approvers |
| system_defined | boolean | query | False | Filter by system_defined |
| auto_request_create | boolean | query | False | Filter by auto_request_create |
| owner.uuid | string | query | False | Filter by owner.uuid |
| owner.name | string | query | False | Filter by owner.name |
| approval_groups.name | string | query | False | Filter by approval_groups.name |
| approval_expiry | string | query | False | Filter by approval_expiry |
| create_time | string | query | False | Filter by create_time |
| operation | string | query | False | Filter by operation |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned. <ul style="list-style-type: none">• Default value: 1 |

| Name | Type | In | Required | Description |
|----------------|---------------|-------|----------|--|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |
| order_by | array[string] | query | False | Order results by specified fields and optional [asc |

Response

Status: 200, Ok

| Name | Type | Description |
|-------------|--|-------------------|
| _links | _links | |
| num_records | integer | Number of records |
| records | array[multi_admin_verify_rule] | |

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "approval_groups": {
    },
    "create_time": "string",
    "owner": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
  }
}
```

Error

Status: Default, Error

| Name | Type | Description |
|-------|--------------------------------|-------------|
| error | returned_error | |

Example error

```
{
  "error": {
    "arguments": {
      "code": "string",
      "message": "string"
    },
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| next | href | |
| self | href | |

approval_groups

| Name | Type | Description |
|------|--------|-----------------------------|
| name | string | Name of the approval group. |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

owner

The owner of the rule. The only valid owner is currently the cluster.

| Name | Type | Description |
|--------|------------------------|---|
| _links | _links | |
| name | string | The name of the SVM. This field cannot be specified in a PATCH method. |
| uuid | string | The unique identifier of the SVM. This field cannot be specified in a PATCH method. |

multi_admin_verify_rule

| Name | Type | Description |
|-----------------|--------|--|
| approval_expiry | string | Time for requests to be approved, in ISO-8601 duration format. If not set, the global setting is used. |

| Name | Type | Description |
|---------------------|------------------------|---|
| approval_groups | array[approval_groups] | List of approval groups that are allowed to approve requests for rules that don't have approval groups. |
| auto_request_create | boolean | When true, ONTAP automatically creates a request for any failed operation where there is no matching pending request. <ul style="list-style-type: none"> • Default value: • Introduced in: 9.11 • x-nullable: true |
| create_time | string | |
| execution_expiry | string | Time for requests to be executed once approved, in ISO-8601 duration format. If not set, the global setting is used. |
| operation | string | Command that requires one or more approvals. |
| owner | owner | The owner of the rule. The only valid owner is currently the cluster. |
| query | string | When specified, this property limits the entries that require approvals to those that match the specified query. |
| required_approvers | integer | The number of required approvers, excluding the user that made the request. |
| system_defined | boolean | Specifies whether the rule is system-defined or user-defined. |

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 a multi-admin-verify rule

POST /security/multi-admin-verify/rules

Introduced In: 9.11

Creates a multi-admin-verify rule.

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 |
|-----------------|--|---|
| approval_expiry | string | Time for requests to be approved, in ISO-8601 duration format. If not set, the global setting is used. |
| approval_groups | array[approval_groups] | List of approval groups that are allowed to approve requests for rules that don't have approval groups. |

| Name | Type | Description |
|---------------------|-----------------------|---|
| auto_request_create | boolean | When true, ONTAP automatically creates a request for any failed operation where there is no matching pending request. <ul style="list-style-type: none"> • Default value: 1 • Introduced in: 9.11 • x-nullable: true |
| create_time | string | |
| execution_expiry | string | Time for requests to be executed once approved, in ISO-8601 duration format. If not set, the global setting is used. |
| operation | string | Command that requires one or more approvals. |
| owner | owner | The owner of the rule. The only valid owner is currently the cluster. |
| query | string | When specified, this property limits the entries that require approvals to those that match the specified query. |
| required_approvers | integer | The number of required approvers, excluding the user that made the request. |
| system_defined | boolean | Specifies whether the rule is system-defined or user-defined. |

Example request

```
{
  "approval_groups": {
  },
  "create_time": "string",
  "owner": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
  },
  "name": "svm1",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
}
```

Response

Status: 201, Created

| Name | Type | Description |
|-------------|--|-------------------|
| _links | _links | |
| num_records | integer | Number of records |
| records | array[multi_admin_verify_rule] | |

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "approval_groups": {
    },
    "create_time": "string",
    "owner": {
      "_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 |
|------------|--|
| 262148 | The specified command is not recognized. |

| Error Code | Description |
|------------|---|
| 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. |
| 262314 | Some approval-groups were not found. |
| 262316 | Value must be in the range one second to two weeks. |
| 262326 | Failed to parse query. |
| 262335 | The query string must be contained in either the "operation" or "query" parameters but not in both. |

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

| Name | Type | Description |
|-------|--------------------------------|-------------|
| error | returned_error | |

Example error

```
{
  "error": {
    "arguments": {
      "code": "string",
      "message": "string"
    },
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

approval_groups

| Name | Type | Description |
|------|--------|-----------------------------|
| name | string | Name of the approval group. |

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

owner

The owner of the rule. The only valid owner is currently the cluster.

| Name | Type | Description |
|------------------------|------------------------|---|
| _links | _links | |
| name | string | The name of the SVM. This field cannot be specified in a PATCH method. |
| uuid | string | The unique identifier of the SVM. This field cannot be specified in a PATCH method. |

multi_admin_verify_rule

| Name | Type | Description |
|-----------------|--|---|
| approval_expiry | string | Time for requests to be approved, in ISO-8601 duration format. If not set, the global setting is used. |
| approval_groups | array[approval_groups] | List of approval groups that are allowed to approve requests for rules that don't have approval groups. |

| Name | Type | Description |
|---------------------|-----------------------|---|
| auto_request_create | boolean | When true, ONTAP automatically creates a request for any failed operation where there is no matching pending request. <ul style="list-style-type: none"> • Default value: 1 • Introduced in: 9.11 • x-nullable: true |
| create_time | string | |
| execution_expiry | string | Time for requests to be executed once approved, in ISO-8601 duration format. If not set, the global setting is used. |
| operation | string | Command that requires one or more approvals. |
| owner | owner | The owner of the rule. The only valid owner is currently the cluster. |
| query | string | When specified, this property limits the entries that require approvals to those that match the specified query. |
| required_approvers | integer | The number of required approvers, excluding the user that made the request. |
| system_defined | boolean | Specifies whether the rule is system-defined or user-defined. |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| next | href | |
| self | href | |

error_arguments

| Name | Type | Description |
|------|--------|---------------|
| code | string | Argument code |

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

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