# NetApp

# Support

ONTAP 9.14.1 REST API reference

NetApp
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# Support

## Support overview

### Overview

You can use ONTAP support APIs to manage configuration backups, autosupport settings, and event handling.

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### Configuration backups

Configuration backups are copies of node and cluster settings saved to an external server. Single-node clusters must have configuration backups as protection against corruption of the configuration database. Multi-node clusters back up the configuration automatically between the nodes in the cluster.

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### Event Management System (EMS)

The Event Management System (EMS) collects and processes events, and sends notification of the events through various reporting mechanisms.

### Examples

The following example configures EMS to send a support email when a WAFL event is observed with a severity of error, alert, or emergency.

**Configuring the system-wide email parameters**

```
# The API:
PATCH /support/ems

# The call:
curl -X PATCH "https://<mgmt-ip>/api/support/ems" -H "accept:
application/hal+json" -H "Content-Type: application/json" -d
"@test_ems_config_patch.txt"
test_ems_config_patch.txt(body):
{
"mail_from": "administrator@mycompany.com",
"mail_server": "smtp@mycompany.com"
}

# The response:
200 OK
```

**Configuring a filter with an enclosed rule**

```
# The API:
POST /support/ems/filters

# The call:
curl -X POST "https://<mgmt-ip>/api/support/ems/filters" -H "accept:
application/hal+json" -H "Content-Type: application/json" -d
"@test_ems_filters_post.txt"
test_ems_filters_post.txt(body):
{
"name": "error-wafl",
"rules": [
  {
    "index": 1,
    "type": "include",
    "message_criteria": {
      "name_pattern": "wafl.*",
      "severities": "emergency,alert,error"
    }
  }
]
}

# The response:
201 Created
```

**Setting up an email destination**

```
# The API:
POST /support/ems/destinations

# The call:
curl -X POST "https://<mgmt-ip>/api/support/ems/destinations" -H "accept:
application/hal+json" -H "Content-Type: application/json" -d
"@test_ems_dest_post.txt"
test_ems_dest_post.txt(body):
{
"name": "Technician_Email",
"type": "email",
"destination": "technician@mycompany.com",
"filters": [
  { "name" : "error-wafl" }
]
}


# The response:
201 Created
```

# Manage an automatic update feature

## Support auto-update endpoint overview

### Overview

The Automatic Update feature helps keep the ONTAP cluster current with the latest software component updates by automatically downloading and applying them to the cluster. By enabling this feature, you agree to the following terms:

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**AUTOMATIC UPDATE TERMS**

*These Automatic Update Terms ("Terms") set forth the terms and conditions between NetApp, Inc., NetApp B.V., or any of their affiliates ("NetApp") and End User Customer ("Customer") in connection with the feature enabling Customer to receive software patches, upgrades, and updates to NetApp Software automatically ("Automatic Update"). By agreeing to and accepting Automatic Updates, Customer agrees to be bound by these Terms, as well as NetApp's End User License Agreement and Support Terms available at* [https://www.netapp.com/how-to-buy/sales-terms-and-conditions/](https://www.netapp.com/how-to-buy/sales-terms-and-conditions/)*.*

*By enabling the Automatic Update feature, Customer agrees to receive Automatic Updates that NetApp may provide from time to time, without any additional notice, and NetApp will not be liable for any damages, loss of data or loss of functionalities arising from provision of Automatic Updates. Customer may revoke acceptance of these Terms and disable the receipt of Automatic Updates by setting the feature configuration to "Disabled" in ONTAP.*

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Important note: When the automatic update feature is disabled

- No new updates are shown to the user
- All automatic updates currently scheduled will have their schedules cancelled.
- All automatic updates currently waiting for user confirmation cannot be started until the feature is re-enabled.

## Examples

**Retrieving the current status of the automatic update feature**

The following example shows how to retrieve the current status of the automatic update feature:

```
# The API:
GET /support/auto-update

# The call:
curl -X GET "https://<mgmt-ip>/api/support/auto-update"

# The response:
{
"enabled": true,
"eula": {
  "accepted": true,
  "accepted_timestamp": "2020-12-01T21:24:44-04:00",
  "user_id_accepted": "admin",
  "accepted_ip_address": "192.168.1.125"
},
"_links": {
  "self": {
    "href": "/api/support/auto-update"
  }
}
}
```

**Updating the status of the automatic update feature**

The following example shows how to update the status of the automatic update feature:

```
# The API:
PATCH /support/auto-update

# The call:
curl -X PATCH "https://<mgmt-ip>/api/support/auto-update" -H "accept:
application/hal+json" -d '{ "enabled" : "true" }'

# The response:
200 OK
```

## Retrieve the current status of an automatic update feature

GET `/support/auto-update`

**Introduced In:** 9.10

Retrieves the current status of the automatic update feature and the End User License Agreement (EULA).

### Parameters

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

### Response

```
Status: 200, Ok
```

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| enabled | boolean | Flag indicating feature state. |
| eula | eula | |

**Example response**

```
{
  "_links": {
    "self": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "enabled": 1,
  "eula": {
    "accepted": 1,
    "accepted_ip_address": "192.168.1.125",
    "accepted_timestamp": "2020-12-01 13:12:23 +0000",
    "user_id_accepted": "admin"
  }
}
```

**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 | |

self

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

_links

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

eula

| Name | Type | Description |
|------|------|-------------|
| accepted | boolean | Flag indicating the End User License Agreement (EULA) acceptance. When the feature is enabled, it is assumed that the EULA is accepted. |
| accepted_ip_address | string | IP Address from where the EULA was accepted. |
| accepted_timestamp | string | Date and time when the EULA was accepted. |
| user_id_accepted | string | User ID that provided the EULA acceptance. |

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. |

## Update the current enabled status of an automatic update feature

PATCH `/support/auto-update`

**Introduced In:** 9.10

Updates the current enabled status of the automatic update feature and accepts the EULA.

**Request Body**

| Name | Type | Description |
|---|---|---|
| _links | _links | |
| enabled | boolean | Flag indicating feature state. |
| eula | eula | |

**Example request**

```json
{
  "_links": {
    "self": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "enabled": 1,
  "eula": {
    "accepted": 1,
    "accepted_ip_address": "192.168.1.125",
    "accepted_timestamp": "2020-12-01 13:12:23 +0000",
    "user_id_accepted": "admin"
  }
}
```

**Response**

```
Status: 200, Ok
```

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|------------|-------------|
| 262179 | Unexpected argument. |
| 131072216 | Automatic update requires AutoSupport to be enabled. |
| 131072217 | Automatic update requires AutoSupport OnDemand to be enabled. |
| 131072218 | Automatic update requires AutoSupport to use the HTTPS transport. |

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**

href

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

self

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

_links

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

eula

| Name | Type | Description |
|------|------|-------------|
| accepted | boolean | Flag indicating the End User License Agreement (EULA) acceptance. When the feature is enabled, it is assumed that the EULA is accepted. |
| accepted_ip_address | string | IP Address from where the EULA was accepted. |
| accepted_timestamp | string | Date and time when the EULA was accepted. |
| user_id_accepted | string | User ID that provided the EULA acceptance. |

auto_update_info

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| enabled | boolean | Flag indicating feature state. |
| eula | eula | |

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. |

# Retrieve automatic update configuration

## Support auto-update configurations endpoint overview

### Overview

Use this API to query and retrieve all the configurations for automatic updates.

This API only supports GET calls.

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### Examples

**Retrieving the configuration settings for automatic updates**

The following example shows how to retrieve settings for all automatic updates:

```
# The API:
GET /support/auto-update/configurations/

# The call:
curl -X GET "https://<mgmt-ip>/api/support/auto-
update/configurations?fields=*"

# The response:
{
"records": [
  {
    "uuid": "440ae2e4-fd8f-4225-9bee-94e2da3f8d9d",
    "category": "firmware",
    "description": {
      "message": "SP/BMC Firmware",
      "code": "131072402"
    },
    "action": "confirm",
  }
],
"num_records": 1
}
```

## Retrieve the configuration for an automatic update

GET `/support/auto-update/configurations`

**Introduced In:** 9.10

Retrieves the configuration for automatic updates.

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| uuid | string | query | False | Filter by uuid |
| description.code | string | query | False | Filter by description.code |
| description.message | string | query | False | Filter by description.message |
| action | string | query | False | Filter by action |
| category | string | query | False | Filter by category |

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| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned.<br><br>• Default value: 1 |
| 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.<br><br>• Default value: 1<br>• Max value: 120<br>• 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[auto_update_configuration] | |

**Example response**

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "action": "confirm",
    "category": "disk_fw",
    "description": {
      "code": "string",
      "message": "string"
    },
    "uuid": "572361f3-e769-439d-9c04-2ba48a08ff47"
  }
}
```

**Error**

```
Status: Default, Error
```

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

**Example error**

```json
{
  "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 | |

description

Description of the configuration row. ONTAP Message Codes

| Code | Description |
|------|-------------|
| 131072401 | Storage Firmware |
| 131072402 | SP/BMC Firmware |
| 131072403 | System Files |

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

auto_update_configuration

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| action | string | The action to be taken by the alert source as specified by the user. |
| category | string | Category for the configuration row. |

| Name | Type | Description |
|---|---|---|
| description | description | Description of the configuration row.<br><br>ONTAP Message Codes<br><br>Code — Description<br><br>131072401 — Storage Firmware<br><br>131072402 — SP/BMC Firmware<br><br>131072403 — System Files |
| uuid | string | Unique identifier for the configuration row. |

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. |

# Manage automatic update configuration

## Support auto-update configurations UUID endpoint overview

### Overview

Use this API to query and retrieve a specific automatic package update configuration.

This API supports GET and PATCH calls. PATCH enables the `action` field to be updated for the specified

configuration.

## Examples

**Retrieving settings for a specific automatic update**

The following example shows how to retrieve configuration settings for an automatic update category:

```
# The API:
/support/auto-update/configurations/{uuid}

# The call:
curl -X GET "https://<mgmt-ip>/api/support/auto-
update/configurations/440ae2e4-fd8f-4225-9bee-94e2da3f8d9d"

# The response:
{
"uuid": "440ae2e4-fd8f-4225-9bee-94e2da3f8d9d",
"category": "firmware",
"description": {
  "message": "SP/BMC Firmware",
  "code": "131072402"
},
"action": "confirm",
}
```

**Updating the settings for a specific automatic update**

The following example shows how to modify configuration settings for an automatic update:

```
# The API:
/support/auto-update/configurations/440ae2e4-fd8f-4225-9bee-94e2da3f8d9d

# The call:
curl -X PATCH "https://<mgmt-ip>/api/support/auto-
update/configurations/440ae2e4-fd8f-4225-9bee-94e2da3f8d9d" -H "accept:
application/hal+json" -d '{"action":"confirm"}'

# The response:
200 OK
```

# Retrieve a specific configuration for an automatic update

GET `/support/auto-update/configurations/{uuid}`

**Introduced In:** 9.10

Retrieves the configuration for a specified automatic update.

## Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| uuid | string | path | True | Unique identifier for configuration record. |
| fields | array[string] | query | False | Specify the fields to return. |

## Response

```
Status: 200, Ok
```

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| action | string | The action to be taken by the alert source as specified by the user. |
| category | string | Category for the configuration row. |
| description | description | Description of the configuration row.<br><br>ONTAP Message Codes<br><br>Code — Description<br><br>131072401 — Storage Firmware<br><br>131072402 — SP/BMC Firmware<br><br>131072403 — System Files |
| uuid | string | Unique identifier for the configuration row. |

**Example response**

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "action": "confirm",
  "category": "disk_fw",
  "description": {
    "code": "string",
    "message": "string"
  },
  "uuid": "572361f3-e769-439d-9c04-2ba48a08ff47"
}
```

**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 |
|------|------|-------------|
| self | href | |

description

Description of the configuration row. ONTAP Message Codes

| Code | Description |
|------|-------------|
| 131072401 | Storage Firmware |
| 131072402 | SP/BMC Firmware |
| 131072403 | System Files |

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

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 |

| Name | Type | Description |
|------|------|-------------|
| target | string | The target parameter that caused the error. |

## Modify the configuration for an automatic update

PATCH `/support/auto-update/configurations/{uuid}`

**Introduced In:** 9.10

Updates the configuration for a specified automatic update.

### Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| uuid | string | path | True | Unique identifier for configuration record. |

### Request Body

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| action | string | The action to be taken by the alert source as specified by the user. |
| category | string | Category for the configuration row. |
| description | description | Description of the configuration row. <br><br> ONTAP Message Codes <br><br> Code — Description <br><br> 131072401 — Storage Firmware <br><br> 131072402 — SP/BMC Firmware <br><br> 131072403 — System Files |
| uuid | string | Unique identifier for the configuration row. |

**Example request**

```json
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "action": "confirm",
  "category": "disk_fw",
  "description": {
    "code": "string",
    "message": "string"
  },
  "uuid": "572361f3-e769-439d-9c04-2ba48a08ff47"
}
```

**Response**

```
Status: 200, Ok
```

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|---|---|
| 262179 | Unexpected argument. |

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**

href

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

_links

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

description

Description of the configuration row. ONTAP Message Codes

| Code | Description |
|------|-------------|
| 131072401 | Storage Firmware |
| 131072402 | SP/BMC Firmware |
| 131072403 | System Files |

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

auto_update_configuration

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| action | string | The action to be taken by the alert source as specified by the user. |
| category | string | Category for the configuration row. |

| Name | Type | Description |
|---|---|---|
| description | description | Description of the configuration row.<br><br>ONTAP Message Codes<br><br>Code — Description<br><br>131072401 — Storage Firmware<br><br>131072402 — SP/BMC Firmware<br><br>131072403 — System Files |
| uuid | string | Unique identifier for the configuration row. |

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. |

# Retrieve status for all automatic updates

## Support auto-update updates endpoint overview

### Overview

Use this API to retrieve the status for all the automatic package updates.

This API only supports GET calls.

## Examples

**Retrieving the status of all package updates**

The following example shows how to retrieve the status of all automatic updates:

```
# The API:
GET /support/auto-update/updates/

# The call:
curl -X GET "https://<mgmt-ip>/api/support/auto-update/updates?fields=*"

# The response:
{
"records": [
  {
    "uuid" : "440ae2e4-fd8f-4225-9bee-94e2da3f8d9d",
    "package_id" : "572361f3-e769-439d-9c04-2ba48a08ff47",
    "content_type" : "disk_fw",
    "content_category" : "firmware",
    "description" : "disk_fw version 3.0",
    "state" : "downloading",
    "creation_time" : "2020-12-01T09:12:03Z",
    "expiry_time" : "2021-06-01T09:12:03Z",
    "last_state_change_time" : "2020-12-01T09:12:23Z",
    "start_time": "2020-12-01T09:12:23Z",
    "percent_complete": 25,
    "remaining_time": "PT1M30S",
    "_links": {
      "self": {
        "href": "/support/auto-update/updates/440ae2e4-fd8f-4225-9bee-
94e2da3f8d9d"
      }
    }
  },
  {
    "uuid" : "440ae2e4-fd8f-4225-9bee-94e2da3f9d8d",
    "package_id" : "e2e12753-8501-11e8-a7c1-00505695c997",
    "content_type" : "disk_fw",
    "content_category" : "firmware",
    "description" : "disk_fw version 3.1",
    "state" : "pending_confirmation",
    "creation_time" : "2020-12-01T09:12:03Z",
    "expiry_time" : "2021-06-01T09:12:03Z",
    "last_state_change_time" : "2020-12-01T09:12:23Z",
    "start_time": "2020-12-01T09:12:23Z",
    "_links": {
```

```
      "self": {
        "href": "/support/auto-update/updates/440ae2e4-fd8f-4225-9bee-
94e2da3f8d9d"
      }
    }
  },
  {
    "uuid" : "440ae2e4-fd8f-4225-9aeb-94e2da3f8ef9",
    "package_id" : "e2e12753-8501-11e8-a7c1-00505695c997",
    "content_type" : "shelf_fw",
    "content_category" : "Firmware",
    "description" : "shelf_fw version 4.0",
    "state" : "applying",
    "creation_time" : "2020-12-01T09:11:53Z",
    "expiry_time" : "2021-06-01T09:12:03Z",
    "last_state_change_time" : "2020-12-01T09:12:13Z",
    "start_time": "2020-12-01T09:12:23Z",
    "percent_complete": 85,
    "remaining_time": "PT30S",
    "_links": {
      "self": {
        "href": "/support/auto-update/updates/440ae2e4-fd8f-4225-9aeb-
94e2da3f8ef9"
      }
    }
  }
],
"num_records": 3,
"_links": {
  "self": {
    "href": "/api/support/auto-update/updates?fields=*"
  }
}
}
```

## Retrieve status of all automatic updates

GET /support/auto-update/updates

**Introduced In:** 9.10

Retrieves the status of all updates.

**Parameters**

| Name | Type | In | Required | Description |
|---|---|---|---|---|
| percent_complete | integer | query | False | Filter by percent_complete |
| expiry_time | string | query | False | Filter by expiry_time |
| start_time | string | query | False | Filter by start_time |
| remaining_time | string | query | False | Filter by remaining_time |
| package_id | string | query | False | Filter by package_id |
| content_type | string | query | False | Filter by content_type |
| content_category | string | query | False | Filter by content_category |
| last_state_change_time | string | query | False | Filter by last_state_change_time |
| scheduled_time | string | query | False | Filter by scheduled_time |
| status.code | string | query | False | Filter by status.code |
| status.arguments.code | string | query | False | Filter by status.arguments.code |
| status.arguments.message | string | query | False | Filter by status.arguments.message |
| status.message | string | query | False | Filter by status.message |
| end_time | string | query | False | Filter by end_time |
| description | string | query | False | Filter by description |
| state | string | query | False | Filter by state |

| Name | Type | In | Required | Description |
|---|---|---|---|---|
| creation_time | string | query | False | Filter by creation_time |
| uuid | string | query | False | Filter by uuid |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned.<br><br>• Default value: 1 |
| 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.<br><br>• Default value: 1<br><br>• Max value: 120<br><br>• 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[auto_update_status] | |

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

**Example response**

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "self": {
          "href": "/api/resourcelink"
        }
      }
    },
    "action": "schedule_now",
    "content_category": "Firmware",
    "content_type": "disk_fw",
    "creation_time": "2020-12-01 09:12:23 +0000",
    "description": "disk_fw version 3.0",
    "end_time": "2020-12-01 09:12:23 +0000",
    "expiry_time": "2021-06-01 09:12:23 +0000",
    "last_state_change_time": "2020-12-01 09:12:23 +0000",
    "package_id": "572361f3-e769-439d-9c04-2ba48a08ff47",
    "percent_complete": 85,
    "remaining_time": "PT1H45M13S",
    "schedule_time": "2020-12-20 21:00:00 +0000",
    "scheduled_time": "2020-12-05 09:12:23 +0000",
    "start_time": "2020-12-01 09:12:23 +0000",
    "state": "pending_confirmation",
    "status": {
      "arguments": {
        "code": "string",
        "message": "string"
      },
      "code": "4",
      "message": "entry doesn't exist"
    },
    "uuid": "440ae2e4-fd8f-4225-9bee-94e2da3f9d8d"
  }
}
```

## 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 | |

self

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

_links

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

error_arguments

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

status

Status of the update. ONTAP Message Codes

| Code | Description |
|------|-------------|
| 8650878 | Get-url request to AutoSupport OnDemand Server failed. |
| 131072105 | Package installation successful. |
| 131072106 | Package installation failed. |
| 131072107 | Package installation is in progress. |
| 131072108 | An internal error occurred. |
| 131072109 | No errors found. |
| 131072110 | Failed to extract package. |

| Code | Description |
|---|---|
| 131072111 | Failed to create entry in status table. |
| 131072209 | Failed to download package. |
| 131072210 | Failed to obtain download links. Will be retried. |
| 131072211 | Installation cannot start because the following nodes are not up. Will be retried. |
| 131072212 | Automatic update cannot start. Will be retried. |
| 131072213 | Installation complete. |
| 131072214 | Installation in progress. |
| 131072215 | Scheduled to start. |
| 131072301 | Unable to create directory. |
| 131072302 | Update not required. It is already on the target firmware version. |
| 131072303 | Unable to move installable to installation location. |
| 131072304 | Successfully updated. All nodes already updated and skipped. |
| 131072306 | Firmware distribution starting. |
| 131072307 | Firmware distribution restarting. |
| 131072308 | Firmware distribution failed. |
| 131072309 | Firmware installation successful on node. |
| 131072310 | Firmware installable is corrupt on node. |
| 131072311 | Could not apply firmware update on nodes. |
| 131072312 | Firmware update operation failed. |
| 131072313 | Install failed to initiate on node. |
| 131072314 | Install initiated on node. |
| 131072315 | Install failed on node. |
| 131072316 | Update in progress on node. |
| 131072317 | Unexpected state occurred during firmware installation on node. |
| 131072318 | Successfully updated SP/BMC firmware. |
| 131072319 | Backup SP image is running. Firmware installation failed prematurely on node. |
| 131072320 | SP rebooted with an unexpected firmware version on node. |
| 131072321 | Waiting for shelf firmware to update. |
| 131072322 | Update complete. |

| Code | Description |
|---|---|
| 131072323 | Shelf update timed out. |
| 131072324 | Successfully updated shelves on nodes. |
| 131072325 | Waiting for disk firmware to update. |
| 131072326 | Disk update completed. |
| 131072327 | Disk update timed out. |
| 131072328 | Successfully updated disks on nodes. |
| 131072329 | Waiting for DQP firmware to update. |
| 131072330 | Successfully updated DQP on nodes. |
| 131072331 | DQP update timed out. |
| 131072332 | Failed to copy firmware. |

| Name | Type | Description |
|---|---|---|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |

auto_update_status

| Name | Type | Description |
|---|---|---|
| _links | _links | |
| action | string | Action to be applied to the automatic update. |
| content_category | string | Category of the update |
| content_type | string | Image or package type. |
| creation_time | string | The date and time at which the update request was received. |
| description | string | Description of the update. |
| end_time | string | The date and time at which the update request processing ended. |

| Name | Type | Description |
| --- | --- | --- |
| expiry_time | string | The date and time at which the update request will expire. |
| last_state_change_time | string | The date and time at which the state of the update changed last. |
| package_id | string | Unique identifier provided by the back-end. |
| percent_complete | integer | Percentage of update completed |
| remaining_time | string | The time remaining for the update processing to complete in an ISO-8601 duration formatted string. |
| schedule_time | string | Date and time when an automatic update action is scheduled. This field is required when the action field is set to "schedule". |
| scheduled_time | string | The date and time at which the update request is currently scheduled for. |
| start_time | string | The date and time at which the update request processing started. |
| state | string | Current state of the update. |

| Name | Type | Description |
|------|------|-------------|
| status | status | Status of the update. |
| | | ONTAP Message Codes |
| | | Code — Description |
| | | 8650878 — Get-url request to AutoSupport OnDemand Server failed. |
| | | 131072105 — Package installation successful. |
| | | 131072106 — Package installation failed. |
| | | 131072107 — Package installation is in progress. |
| | | 131072108 — An internal error occurred. |
| | | 131072109 — No errors found. |
| | | 131072110 — Failed to extract package. |
| | | 131072111 — Failed to create entry in status table. |
| | | 131072209 — Failed to download package. |
| | | 131072210 — Failed to obtain download links. Will be retried. |
| | | 131072211 — Installation cannot start because the following nodes are not up. Will be retried. |
| | | 131072212 — Automatic update cannot start. Will be retried. |
| | | 131072213 — Installation complete. |
| | | 131072214 — Installation in progress. |
| | | 131072215 — Scheduled to start. |
| | | 131072301 — Unable to create directory. |
| | | 131072302 — Update not required. It is already on the target firmware version. |

| Name | Type | Description |
| --- | --- | --- |
| uuid | string | Unique identifier for this update. |

| returned_error | | 131072304 — Successfully updated. All nodes already ... |

| 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. |

installation successful on node.

131072310 — Firmware installable is corrupt on node.

# Manage automatic updates

131072311 — Could not apply firmware update on nodes.

## Support auto-update updates UUID endpoint overview

131072312 — Firmware update operation failed.

**Overview**

Use this API to retrieve the status for a specific automatic package update.

131072313 — Install failed to initiate on node.

This API supports GET and PATCH calls. PATCH can be used to perform an action on an automatic update.

131072314 — Install initiated on node.

131072315 — Install failed on node.

**Examples**

131072316 — Update in progress on node.

**Retrieving the status of an update**

The following example shows how to retrieve the status of an automatic update.

131072317 — Unexpected state occurred during firmware installation on node.

131072318 — Successfully updated SP/BMC firmware.

131072319 — Backup SP image is running. Firmware installation failed prematurely on node.

131072320 — SP rebooted with an unexpected firmware version on node.

131072321 — Waiting for shelf firmware to update.

```
# The API:
GET /support/auto-update/updates/440ae2e4-fd8f-4225-9bee-94e2da3f8d9d

# The call:
curl -X GET "https://<mgmt-ip>/api/support/auto-update/updates/440ae2e4-
fd8f-4225-9bee-94e2da3f8d9d"

# The response:
{
"uuid" : "440ae2e4-fd8f-4225-9bee-94e2da3f8d9d",
"package_id" : "572361f3-e769-439d-9c04-2ba48a08ff47",
"content_type" : "disk_fw",
"content_category" : "Firmware",
"description" : "disk_fw version 3.0",
"state" : "downloading",
"creation_time" : "2020-12-01T09:12:03Z",
"expiry_time" : "2021-06-01T09:12:03Z",
"last_state_change_time" : "2020-12-01T09:12:23Z",
"start_time" : "2020-12-01T09:12:23Z",
"percent_complete": 25,
"remaining_time": "PT1M30S",
"status": {
    "message": "Get-url request to AutoSupport OnDemand Server failed.
Error: Couldn't connect to server.",
    "code": "8650878"
},
"_links": {
  "self": {
    "href": "/support/auto-update/updates/440ae2e4-fd8f-4225-9bee-
94e2da3f8d9d"
  }
}
}
```

**Updating the state of an automatic update**

The following example shows how to trigger an automatic update that is waiting for user confirmation:

```
# The API:
PATCH /support/auto-update/updates/440ae2e4-fd8f-4225-9bee-94e2da3f8d9d

# The call:
curl -X PATCH "https://<mgmt-ip>/api/support/auto-update/updates/440ae2e4-
fd8f-4225-9bee-94e2da3f8d9d?action=schedule_now" -H "accept:
application/hal+json"

# The response:
200 OK
```

The following example shows how to dismiss an automatic update that is waiting for user confirmation:

```
# The API:
PATCH /support/auto-update/updates/440ae2e4-fd8f-4225-9bee-94e2da3f8d9d

# The call:
curl -X PATCH "https://<mgmt-ip>/api/support/auto-update/updates/440ae2e4-
fd8f-4225-9bee-94e2da3f8d9d?action=dismiss" -H "accept:
application/hal+json"

# Response
200 OK
```

## Retrieve the status of an update

GET /support/auto-update/updates/{uuid}

**Introduced In:** 9.10

Retrieves the status of an update.

### Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| uuid | string | path | True | Update identifier |
| fields | array[string] | query | False | Specify the fields to return. |

### Response

```
Status: 200, Ok
```

| Name | Type | Description |
|---|---|---|
| _links | _links | |
| action | string | Action to be applied to the automatic update. |
| content_category | string | Category of the update |
| content_type | string | Image or package type. |
| creation_time | string | The date and time at which the update request was received. |
| description | string | Description of the update. |
| end_time | string | The date and time at which the update request processing ended. |
| expiry_time | string | The date and time at which the update request will expire. |
| last_state_change_time | string | The date and time at which the state of the update changed last. |
| package_id | string | Unique identifier provided by the back-end. |
| percent_complete | integer | Percentage of update completed |
| remaining_time | string | The time remaining for the update processing to complete in an ISO-8601 duration formatted string. |
| schedule_time | string | Date and time when an automatic update action is scheduled. This field is required when the action field is set to "schedule". |
| scheduled_time | string | The date and time at which the update request is currently scheduled for. |
| start_time | string | The date and time at which the update request processing started. |
| state | string | Current state of the update. |

| Name | Type | Description |
|---|---|---|
| status | status | Status of the update. |
| | | ONTAP Message Codes |
| | | Code — Description |
| | | 8650878 — Get-url request to AutoSupport OnDemand Server failed. |
| | | 131072105 — Package installation successful. |
| | | 131072106 — Package installation failed. |
| | | 131072107 — Package installation is in progress. |
| | | 131072108 — An internal error occurred. |
| | | 131072109 — No errors found. |
| | | 131072110 — Failed to extract package. |
| | | 131072111 — Failed to create entry in status table. |
| | | 131072209 — Failed to download package. |
| | | 131072210 — Failed to obtain download links. Will be retried. |
| | | 131072211 — Installation cannot start because the following nodes are not up. Will be retried. |
| | | 131072212 — Automatic update cannot start. Will be retried. |
| | | 131072213 — Installation complete. |
| | | 131072214 — Installation in progress. |
| | | 131072215 — Scheduled to start. |
| | | 131072301 — Unable to create directory. |
| | | 131072302 — Update not required. It is already on the target firmware version. |
| | | 131072303 — Unable to move |

| Name | Type | Description |
|------|------|-------------|
| uuid | string | Unique identifier for this update. |

131072304 — Successfully
updated. All nodes already updated
and skipped.

**Example response**

```json
{
  "_links": {
    "self": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "action": "schedule_now",
  "content_category": "Firmware",
  "content_type": "disk_fw",
  "creation_time": "2020-12-01 09:12:23 +0000",
  "description": "disk_fw version 3.0",
  "end_time": "2020-12-01 09:12:23 +0000",
  "expiry_time": "2021-06-01 09:12:23 +0000",
  "last_state_change_time": "2020-12-01 09:12:23 +0000",
  "package_id": "572361f3-e769-439d-9c04-2ba48a08ff47",
  "percent_complete": 85,
  "remaining_time": "PT1H45M13S",
  "schedule_time": "2020-12-20 21:00:00 +0000",
  "scheduled_time": "2020-12-05 09:12:23 +0000",
  "start_time": "2020-12-01 09:12:23 +0000",
  "state": "pending_confirmation",
  "status": {
    "arguments": {
      "code": "string",
      "message": "string"
    },
    "code": "4",
    "message": "entry doesn't exist"
  },
  "uuid": "440ae2e4-fd8f-4225-9bee-94e2da3f9d8d"
}
```

prematurely on node.

**Error**

131072320 — SP rebooted with an

```
Status: Default, Error
```

131072321 — Waiting for shelf
firmware to update.

131072322 — Update complete.

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

out.

131072324 — Successfully

**Example error**

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

**Definitions**

131072330 — Successfully updated DQP on nodes.

131072331 — DQP update timed out.

131072332 — Failed to copy firmware.

**See Definitions**

href

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

self

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

_links

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

error_arguments

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

status

Status of the update. ONTAP Message Codes

| Code | Description |
|------|-------------|
| 8650878 | Get-url request to AutoSupport OnDemand Server failed. |
| 131072105 | Package installation successful. |
| 131072106 | Package installation failed. |
| 131072107 | Package installation is in progress. |
| 131072108 | An internal error occurred. |
| 131072109 | No errors found. |
| 131072110 | Failed to extract package. |
| 131072111 | Failed to create entry in status table. |
| 131072209 | Failed to download package. |
| 131072210 | Failed to obtain download links. Will be retried. |
| 131072211 | Installation cannot start because the following nodes are not up. Will be retried. |

| Code | Description |
|------|-------------|
| 131072212 | Automatic update cannot start. Will be retried. |
| 131072213 | Installation complete. |
| 131072214 | Installation in progress. |
| 131072215 | Scheduled to start. |
| 131072301 | Unable to create directory. |
| 131072302 | Update not required. It is already on the target firmware version. |
| 131072303 | Unable to move installable to installation location. |
| 131072304 | Successfully updated. All nodes already updated and skipped. |
| 131072306 | Firmware distribution starting. |
| 131072307 | Firmware distribution restarting. |
| 131072308 | Firmware distribution failed. |
| 131072309 | Firmware installation successful on node. |
| 131072310 | Firmware installable is corrupt on node. |
| 131072311 | Could not apply firmware update on nodes. |
| 131072312 | Firmware update operation failed. |
| 131072313 | Install failed to initiate on node. |
| 131072314 | Install initiated on node. |
| 131072315 | Install failed on node. |
| 131072316 | Update in progress on node. |
| 131072317 | Unexpected state occurred during firmware installation on node. |
| 131072318 | Successfully updated SP/BMC firmware. |
| 131072319 | Backup SP image is running. Firmware installation failed prematurely on node. |
| 131072320 | SP rebooted with an unexpected firmware version on node. |
| 131072321 | Waiting for shelf firmware to update. |
| 131072322 | Update complete. |
| 131072323 | Shelf update timed out. |
| 131072324 | Successfully updated shelves on nodes. |
| 131072325 | Waiting for disk firmware to update. |
| 131072326 | Disk update completed. |
| 131072327 | Disk update timed out. |

| Code | Description |
|------|-------------|
| 131072328 | Successfully updated disks on nodes. |
| 131072329 | Waiting for DQP firmware to update. |
| 131072330 | Successfully updated DQP on nodes. |
| 131072331 | DQP update timed out. |
| 131072332 | Failed to copy firmware. |

| Name | Type | Description |
|------|------|-------------|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |

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. |

# Perform an action on the update

PATCH `/support/auto-update/updates/{uuid}`

**Introduced In:** 9.10

Perform an action on the update.

## Parameters

| Name | Type | In | Required | Description |
|------|------|------|----------|-------------|
| uuid | string | path | True | Update identifier |

| Name | Type | In | Required | Description |
|---|---|---|---|---|
| action | string | query | True | Action to be performed on the update<br><br>&bull; enum: ["cancel_schedule", "dismiss", "schedule", "schedule_now", "abort", "undismiss"] |
| schedule_time | string | query | False | Date and Time for which update is to be scheduled. This parameter is required only when action is "schedule". It should be in the ISO-8601 Date and Time format. Example- "2020-12-05T09:12:23Z".<br><br>&bull; format: date-time |

## Response

```
Status: 200, Ok
```

## Error

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|---|---|
| 262248 | Unexpected parameter missing a delimiter. |
| 131072200 | Invalid Automatic Update ID. |
| 131072201 | No schedule to cancel for automatic update ID. |
| 131072202 | Cannot abort an automatic update that is not in progress. |
| 131072203 | Cannot dismiss a non-pending automatic update. |

| Error Code | Description |
|---|---|
| 131072204 | Cannot reactivate an automatic update that has not been dismissed. |
| 131072205 | Cannot schedule a non-pending automatic update to start. |
| 131072206 | Cannot schedule an automatic update past its expiration date. |
| 131072207 | Cannot schedule an automatic update in the past. |
| 131072208 | Cannot schedule automatic update while the feature is disabled. |

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**

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. |

# Manage AutoSupport configuration

## Support AutoSupport endpoint overview

### Overview

AutoSupport is the NetApp *call home* mechanism. AutoSupport sends configuration details, status details, and error reporting details to NetApp.

This endpoint supports both GET and PATCH calls. GET is used to retrieve AutoSupport configuration details for the cluster and PATCH is used to modify the AutoSupport configuration of the cluster. You can also use GET calls to check AutoSupport connectivity.

### Examples

#### Configuring 'to' addresses

The following example configures AutoSupport to send emails to 'to' addresses.

```
# The API:
PATCH /support/autosupport

# The call:
curl -X PATCH "https://<mgmt-ip>/api/support/autosupport" -H "accept:
application/hal+json" -H "Content-Type: application/json" -d "{ \"to\": [
\"abc@netapp.com\", \"xyz@netapp.com\" ]}"

# The response:
200 OK
{}
```

**Configuring 'SMTP' transport**

The following example configures AutoSupport to use 'SMTP' transport. The default transport is 'HTTPS'.

```
# The API:
PATCH /support/autosupport

# The call:
curl -X PATCH "https://<mgmt-ip>/api/support/autosupport" -H "accept:
application/hal+json" -H "Content-Type: application/json" -d "{
\"transport\": \"smtp\"}"

# The response:
200 OK
{}
```

**Retrieving the AutoSupport configuration**

The following example retrieves AutoSupport configuration for the cluster.

```
# The API:
GET /support/autosupport

# The call:
curl -X GET "https://<mgmt-ip>/api/support/autosupport" -H "accept:
application/hal+json"

# The response:
200 OK
{
"enabled": true,
"mail_hosts": [
  "mailhost"
],
"from": "Postmaster",
"to": [
  "abc@netapp.com",
  "xyz@netapp.com"
],
"contact_support": true,
"transport": "smtp",
"proxy_url": "",
"is_minimal": false,
"_links": {
  "self": {
    "href": "/api/support/autosupport"
  }
}
}
```

**Retrieving AutoSupport connectivity issues**

The following example retrieves AutoSupport connectivity issues for the cluster. The `fields=issues`
parameter must be specified, for the response to return connectivity issues. The `corrective_action`
section might contain commands which needs to be executed on the ONTAP CLI.

Note that the connectivity check can take up to 10 seconds to complete.

```
# The API:
GET /support/autosupport

# The call:
curl -X GET "https://<mgmt-ip>/api/support/autosupport?fields=issues" -H
"accept: application/hal+json"
```

```
# The response:
200 OK
{
"issues": [
  {
    "destination": "mailhost",
    "component": "mail_server",
    "node": {
      "name": "node3",
      "uuid": "0ecfd0a6-f1b3-11e8-9d9f-005056bbaadc",
      "_links": {
        "self": {
          "href": "/api/cluster/nodes/0ecfd0a6-f1b3-11e8-9d9f-
005056bbaadc"
        }
      }
    },
    "issue": {
      "message": "SMTP connectivity check failed for destination:
mailhost. Error: Could not resolve host - 'mailhost'",
      "code": "53149746"
    },
    "corrective_action": {
      "message": "Check the hostname of the SMTP server",
      "code": "53149746"
    }
  },
  {
    "destination": "https://support.netapp.com/aods/asupmessage",
    "component": "ondemand_server",
    "node": {
      "name": "node3",
      "uuid": "0ecfd0a6-f1b3-11e8-9d9f-005056bbaadc",
      "_links": {
        "self": {
          "href": "/api/cluster/nodes/0ecfd0a6-f1b3-11e8-9d9f-
005056bbaadc"
        }
      }
    },
    "issue": {
      "message": "AutoSupport OnDemand is disabled when \"-transport\" is
not set to \"https\".",
      "code": "53149740"
    },
```

```
      "corrective_action": {
        "message": "Run \"system node autosupport modify -transport https
-node <node name>\" to set \"-transport\" to \"https\".",
        "code": "53149740"
      }
    }
  ],
  "_links": {
    "self": {
      "href": "/api/support/autosupport"
    }
  }
}
}
```

**Retrieving AutoSupport configuration and connectivity issues**

The following example retrieves AutoSupport configuration and connectivity issues on the cluster. Use `fields=*,issues` parameter to return both configuration and connectivity issues.

```
# The API:
GET /support/autosupport

# The call:
curl -X GET "https://<mgmt-ip>/api/support/autosupport?fields=*%2Cissues"
-H "accept: application/hal+json"

# The response:
200 OK
{
"enabled": true,
"mail_hosts": [
  "mailhost"
],
"from": "Postmaster",
"to": [
  "abc@netapp.com",
  "xyz@netapp.com"
],
"contact_support": true,
"transport": "smtp",
"proxy_url": "",
"is_minimal": false,
"issues": [
  {
```

```
      "destination": "mailhost",
      "component": "mail_server",
      "node": {
        "name": "node3",
        "uuid": "0ecfd0a6-f1b3-11e8-9d9f-005056bbaadc",
        "_links": {
          "self": {
            "href": "/api/cluster/nodes/0ecfd0a6-f1b3-11e8-9d9f-
005056bbaadc"
          }
        }
      },
      "issue": {
        "message": "SMTP connectivity check failed for destination:
mailhost. Error: Could not resolve host - 'mailhost'",
        "code": "53149746"
      },
      "corrective_action": {
        "message": "Check the hostname of the SMTP server",
        "code": "53149746"
      }
    },
    {
      "destination": "https://support.netapp.com/aods/asupmessage",
      "component": "ondemand_server",
      "node": {
        "name": "node3",
        "uuid": "0ecfd0a6-f1b3-11e8-9d9f-005056bbaadc",
        "_links": {
          "self": {
            "href": "/api/cluster/nodes/0ecfd0a6-f1b3-11e8-9d9f-
005056bbaadc"
          }
        }
      },
      "issue": {
        "message": "AutoSupport OnDemand is disabled when \"-transport\" is
not set to \"https\".",
        "code": "53149740"
      },
      "corrective_action": {
        "message": "Run \"system node autosupport modify -transport https
-node <node name>\" to set \"-transport\" to \"https\".",
        "code": "53149740"
      }
    }
```

```
  ],
  "_links": {
    "self": {
      "href": "/api/support/autosupport"
    }
  }
  }
```

## Retrieve the AutoSupport configuration

GET /support/autosupport

**Introduced In:** 9.6

Retrieves the AutoSupport configuration of the cluster and if requested, returns connectivity issues with the AutoSupport configuration.

Important note:

- The **issues** field consists of a list of objects containing details of the node that has a connectivity issue, the issue description, and corrective action you can take to address the issue. When not empty, this indicates a connection issue to the **HTTPS**, **SMTP**, or **AutoSupport On Demand** server.

**Expensive properties**

There is an added computational cost to retrieving values for these properties. They are not included by default in GET results and must be explicitly requested using the fields query parameter. See Requesting specific fields to learn more.

- issues

**Related ONTAP commands**

- system node autosupport show -instance
- system node autosupport check show-details

**Learn more**

- DOC /support/autosupport

**Parameters**

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

## Response

```
Status: 200, Ok
```

| Name | Type | Description |
|---|---|---|
| contact_support | boolean | Specifies whether to send the AutoSupport messages to vendor support. |
| enabled | boolean | Specifies whether the AutoSupport daemon is enabled. When this setting is disabled, delivery of all AutoSupport messages is turned off. |
| from | string | The e-mail address from which the AutoSupport messages are sent. To generate node-specific 'from' addresses, enable '-node-specific-from' parameter via ONTAP CLI.<br><br>• example: postmaster@example.com<br><br>• format: email<br><br>• Introduced in: 9.6<br><br>• x-nullable: true |
| is_minimal | boolean | Specifies whether the system information is collected in compliant form, to remove private data or in complete form, to enhance diagnostics. |
| issues | array[autosupport_issues] | A list of connectivity issues to the HTTPS/SMTP/AOD AutoSupport destinations on the nodes in the cluster along with the corrective actions. |
| mail_hosts | array[string] | The names of the mail servers used to deliver AutoSupport messages via SMTP. |
| partner_addresses | array[string] | The list of partner addresses. |

| Name | Type | Description |
|---|---|---|
| proxy_url | string | Proxy server for AutoSupport message delivery via HTTPS. Optionally specify a username/password for authentication with the proxy server. |
| to | array[string] | The e-mail addresses to which the AutoSupport messages are sent. |
| transport | string | The name of the transport protocol used to deliver AutoSupport messages.<br><br>ⓘ 'http' transport is no longer supported by AutoSupport servers. |

```
{
    "contact_support": 1,
    "enabled": 1,
    "from": "<a href="
mailto:postmaster@example.com">postmaster@example.com</a>",
    "is_minimal": 1,
    "issues": {
        "component": "mail_server",
        "corrective_action": {
            "code": "53149746",
            "message": "Check the hostname of the SMTP server"
        },
        "destination": "mailhost1.example.com",
        "issue": {
            "code": "53149746",
            "message": "SMTP connectivity check failed for destination:
mailhost. Error: Could not resolve host - 'mailhost'"
        },
        "node": {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "name": "node1",
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        }
    },
    "mail_hosts": [
        "mailhost1.example.com",
        "mailhost2.example.com"
    ],
    "partner_addresses": [
        "<a href="mailto:user1@partner.com">user1@partner.com</a>",
        "<a href="mailto:user2@partner.com">user2@partner.com</a>"
    ],
    "proxy_url": "proxy.company.com",
    "to": [
        "<a href="mailto:user1@example.com">user1@example.com</a>",
        "<a href="mailto:user2@example.com">user2@example.com</a>"
    ],
    "transport": "smtp"
}
```

## Error

```
Status: Default, Error
```

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

## Example error

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

## Definitions

**See Definitions**

autosupport_connectivity_corrective_action

| Name | Type | Description |
|------|------|-------------|
| code | string | Corrective action code |
| message | string | Corrective action message. The corrective action might contain commands which needs to be executed on the ONTAP CLI.<br><br>• example: Check the hostname of the SMTP server<br><br>• readOnly: 1<br><br>• Introduced in: 9.6<br><br>• x-nullable: true |

autosupport_connectivity_issue

| Name | Type | Description |
|------|------|-------------|
| code | string | Error code |
| message | string | Error message |

href

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

_links

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

node

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

autosupport_issues

| Name | Type | Description |
|------|------|-------------|
| component | string | The name of the component where the issue occurred. |
| corrective_action | autosupport_connectivity_corrective_action | |
| destination | string | The HTTPS/SMTP/AOD AutoSupport Destination. |
| issue | autosupport_connectivity_issue | |
| node | node | |

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. |

# Update the AutoSupport configuration for an entire cluster

PATCH `/support/autosupport`

**Introduced In:** 9.6

Updates the AutoSupport configuration for the entire cluster.

**Related ONTAP commands**

* `system node autosupport modify`

**Learn more**

- DOC /support/autosupport

**Request Body**

| Name | Type | Description |
|------|------|-------------|
| contact_support | boolean | Specifies whether to send the AutoSupport messages to vendor support. |
| enabled | boolean | Specifies whether the AutoSupport daemon is enabled. When this setting is disabled, delivery of all AutoSupport messages is turned off. |
| from | string | The e-mail address from which the AutoSupport messages are sent. To generate node-specific 'from' addresses, enable '-node-specific-from' parameter via ONTAP CLI. <br><br> • example: postmaster@example.com <br><br> • format: email <br><br> • Introduced in: 9.6 <br><br> • x-nullable: true |
| is_minimal | boolean | Specifies whether the system information is collected in compliant form, to remove private data or in complete form, to enhance diagnostics. |
| issues | array[autosupport_issues] | A list of connectivity issues to the HTTPS/SMTP/AOD AutoSupport destinations on the nodes in the cluster along with the corrective actions. |
| mail_hosts | array[string] | The names of the mail servers used to deliver AutoSupport messages via SMTP. |
| partner_addresses | array[string] | The list of partner addresses. |

| Name | Type | Description |
|------|------|-------------|
| proxy_url | string | Proxy server for AutoSupport message delivery via HTTPS. Optionally specify a username/password for authentication with the proxy server. |
| to | array[string] | The e-mail addresses to which the AutoSupport messages are sent. |
| transport | string | The name of the transport protocol used to deliver AutoSupport messages.<br><br>ⓘ 'http' transport is no longer supported by AutoSupport servers. |

**Example request**

```json
{
  "contact_support": 1,
  "enabled": 1,
  "from": "<a href="mailto:postmaster@example.com">postmaster@example.com</a>",
  "is_minimal": 1,
  "issues": {
    "component": "mail_server",
    "corrective_action": {
      "code": "53149746",
      "message": "Check the hostname of the SMTP server"
    },
    "destination": "mailhost1.example.com",
    "issue": {
      "code": "53149746",
      "message": "SMTP connectivity check failed for destination: mailhost. Error: Could not resolve host - 'mailhost'"
    },
    "node": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "node1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
  },
  "mail_hosts": [
    "mailhost1.example.com",
    "mailhost2.example.com"
  ],
  "partner_addresses": [
    "<a href="mailto:user1@partner.com">user1@partner.com</a>",
    "<a href="mailto:user2@partner.com">user2@partner.com</a>"
  ],
  "proxy_url": "proxy.company.com",
  "to": [
    "<a href="mailto:user1@example.com">user1@example.com</a>",
    "<a href="mailto:user2@example.com">user2@example.com</a>"
  ],
  "transport": "smtp"
}
```

**Response**

```
Status: 200, Ok
```

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|---|---|
| 8650862 | The SMTP mail host provided cannot be empty |
| 8650863 | A maximum of 5 SMTP mail hosts can be provided |
| 8650864 | A maximum of 5 email addresses can be provided |
| 8650865 | A maximum of 5 partner email addresses can be provided |
| 8650880 | Automatic update requires AutoSupport to be enabled |
| 8650881 | Automatic update requires AutoSupport to use the HTTPS transport |
| 8650882 | Automatic update requires AutoSupport OnDemand to be enabled |
| 53149727 | The proxy URI provided is invalid |
| 53149728 | The SMTP mail host URI provided is invalid |
| 53149732 | The proxy URI provided is invalid. IPv6 addresses must be enclosed within square brackets |
| 53149737 | The proxy URI provided does not specify a scheme or specifies an unsupported scheme |

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**

autosupport_connectivity_corrective_action

| Name | Type | Description |
|------|------|-------------|
| code | string | Corrective action code |
| message | string | Corrective action message. The corrective action might contain commands which needs to be executed on the ONTAP CLI. <br><br> • example: Check the hostname of the SMTP server <br><br> • readOnly: 1 <br><br> • Introduced in: 9.6 <br><br> • x-nullable: true |

autosupport_connectivity_issue

| Name | Type | Description |
|------|------|-------------|
| code | string | Error code |
| message | string | Error message |

href

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

_links

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

node

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

autosupport_issues

| Name | Type | Description |
|---|---|---|
| component | string | The name of the component where the issue occurred. |
| corrective_action | autosupport_connectivity_corrective_action | |
| destination | string | The HTTPS/SMTP/AOD AutoSupport Destination. |
| issue | autosupport_connectivity_issue | |
| node | node | |

autosupport

| Name | Type | Description |
|---|---|---|
| contact_support | boolean | Specifies whether to send the AutoSupport messages to vendor support. |
| enabled | boolean | Specifies whether the AutoSupport daemon is enabled. When this setting is disabled, delivery of all AutoSupport messages is turned off. |
| from | string | The e-mail address from which the AutoSupport messages are sent. To generate node-specific 'from' addresses, enable '-node-specific-from' parameter via ONTAP CLI.<br><br>• example: postmaster@example.com<br>• format: email<br>• Introduced in: 9.6<br>• x-nullable: true |
| is_minimal | boolean | Specifies whether the system information is collected in compliant form, to remove private data or in complete form, to enhance diagnostics. |

| Name | Type | Description |
|---|---|---|
| issues | array[autosupport_issues] | A list of connectivity issues to the HTTPS/SMTP/AOD AutoSupport destinations on the nodes in the cluster along with the corrective actions. |
| mail_hosts | array[string] | The names of the mail servers used to deliver AutoSupport messages via SMTP. |
| partner_addresses | array[string] | The list of partner addresses. |
| proxy_url | string | Proxy server for AutoSupport message delivery via HTTPS. Optionally specify a username/password for authentication with the proxy server. |
| to | array[string] | The e-mail addresses to which the AutoSupport messages are sent. |
| transport | string | The name of the transport protocol used to deliver AutoSupport messages. ⓘ 'http' transport is no longer supported by AutoSupport servers. |

error_arguments

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

returned_error

| Name | Type | Description |
|---|---|---|
| arguments | array[error_arguments] | Message arguments |

| Name | Type | Description |
|------|------|-------------|
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

# Manage AutoSupport messages

## Support AutoSupport messages endpoint overview

### Overview

Use this API to invoke and retrieve AutoSupport messages from the nodes in the cluster.

This API supports POST and GET calls. Use a POST call to invoke AutoSupport and a GET call to retrieve AutoSupport messages.

---

### Examples

**Invoking an AutoSupport on all nodes in the cluster**

The following example invokes an AutoSupport on every node in the cluster. Note that AutoSupport is invoked on all nodes in the cluster if the `node` parameter is omitted. Also, note that the `subject` line is the same when invoking on all nodes.

By default, the response is an empty object. If `return_records=true` is passed in the request, the response includes information about the node and the index of the invoked AutoSupport message.

```
# The API:
POST /support/autosupport/messages

# The call:
curl -X POST "https://<mgmt-
ip>/api/support/autosupport/messages?return_records=true" -H "accept:
application/hal+json" -H "Content-Type: application/json" -d "{
\"message\": \"test_msg\", \"type\": \"all\"}"

# The response:
201 CREATED
{
"num_records": 6,
"records": [
```

```
  {
    "index": 4,
    "node": {
      "name": "node1",
      "uuid": "092e0298-f250-11e8-9a05-005056bb6666",
      "_links": {
        "self": {
          "href": "/api/cluster/nodes/092e0298-f250-11e8-
005056bb6666"
        }
      }
    },
    "_links": {
      "self": {
        "href": "/api/support/autosupport/messages/092e0298-f250-11e8-
9a05-005056bb6666/4/http"
      }
    }
  },
  {
    "index": 4,
    "node": {
      "name": "node1",
      "uuid": "092e0298-f250-11e8-9a05-005056bb6666",
      "_links": {
        "self": {
          "href": "/api/cluster/nodes/092e0298-f250-11e8-9a05-
005056bb6666"
        }
      }
    },
    "_links": {
      "self": {
        "href": "/api/support/autosupport/messages/092e0298-f250-11e8-
9a05-005056bb6666/4/smtp"
      }
    }
  },
  {
    "index": 4,
    "node": {
      "name": "node1",
      "uuid": "092e0298-f250-11e8-9a05-005056bb6666",
      "_links": {
        "self": {
          "href": "/api/cluster/nodes/092e0298-f250-11e8-9a05-
```

```json
          005056bb6666"
          }
        }
      },
      "_links": {
        "self": {
          "href": "/api/support/autosupport/messages/092e0298-f250-11e8-
9a05-005056bb6666/4/noteto"
        }
      }
    },
    {
      "index": 2,
      "node": {
        "name": "node2",
        "uuid": "e47d2630-f250-11e8-b186-005056bb5cab",
        "_links": {
          "self": {
            "href": "/api/cluster/nodes/e47d2630-f250-11e8-b186-
005056bb5cab"
          }
        }
      },
      "_links": {
        "self": {
          "href": "/api/support/autosupport/messages/e47d2630-f250-11e8-
b186-005056bb5cab/2/http"
        }
      }
    },
    {
      "index": 2,
      "node": {
        "name": "node2",
        "uuid": "e47d2630-f250-11e8-b186-005056bb5cab",
        "_links": {
          "self": {
            "href": "/api/cluster/nodes/e47d2630-f250-11e8-b186-
005056bb5cab"
          }
        }
      },
      "_links": {
        "self": {
          "href": "/api/support/autosupport/messages/e47d2630-f250-11e8-
b186-005056bb5cab/2/smtp"
```

```
              }
          }
      },
      {
        "index": 2,
        "node": {
          "name": "node2",
          "uuid": "e47d2630-f250-11e8-b186-005056bb5cab",
          "_links": {
            "self": {
              "href": "/api/cluster/nodes/e47d2630-f250-11e8-b186-
005056bb5cab"
            }
          }
        },
        "_links": {
          "self": {
            "href": "/api/support/autosupport/messages/e47d2630-f250-11e8-
b186-005056bb5cab/2/noteto"
          }
        }
      }
  ],
  "_links": {
    "self": {
      "href": "/api/support/autosupport/messages/"
    }
  }
}
```

**Invoking an AutoSupport on a single node**

The following examples invoke an AutoSupport on a single node in the cluster. Note that AutoSupport is
invoked on all nodes in the cluster if the `node` parameter is omitted. You can specify the node-name with either
`node` or `node.name` parameter. You can also specify UUID of the node with the `node.uuid` parameter.

By default, the response is an empty object. If `return_records=true` is passed in the request, the response
includes information about the node and the index of the invoked AutoSupport message.

```
# The API:
POST /support/autosupport/messages

# The call:
curl -X POST "https://<mgmt-
ip>/api/support/autosupport/messages?return_records=true" -H "accept:
```

```
application/hal+json" -H "Content-Type: application/json" -d "{
\"message\": \"test_msg\", \"type\": \"test\", \"node\": { \"name\":
\"node1\" }}"

# The response:
201 CREATED
{
"num_records": 3,
"records": [
  {
    "index": 8,
    "node": {
      "name": "node1",
      "uuid": "092e0298-f250-11e8-9a05-005056bb6666",
      "_links": {
        "self": {
          "href": "/api/cluster/nodes/092e0298-f250-11e8-9a05-
005056bb6666"
        }
      }
    },
    "_links": {
      "self": {
        "href": "/api/support/autosupport/messages/092e0298-f250-11e8-
9a05-005056bb6666/8/http"
      }
    }
  },
  {
    "index": 8,
    "node": {
      "name": "node1",
      "uuid": "092e0298-f250-11e8-9a05-005056bb6666",
      "_links": {
        "self": {
          "href": "/api/cluster/nodes/092e0298-f250-11e8-9a05-
005056bb6666"
        }
      }
    },
    "_links": {
      "self": {
        "href": "/api/support/autosupport/messages/092e0298-f250-11e8-
9a05-005056bb6666/8/smtp"
      }
    }
```

```
      },
      {
        "index": 8,
        "node": {
          "name": "node1",
          "uuid": "092e0298-f250-11e8-9a05-005056bb6666",
          "_links": {
            "self": {
              "href": "/api/cluster/nodes/092e0298-f250-11e8-9a05-
005056bb6666"
            }
          }
        },
        "_links": {
          "self": {
            "href": "/api/support/autosupport/messages/092e0298-f250-11e8-
9a05-005056bb6666/8/noteto"
          }
        }
      }
    ],
    "_links": {
      "self": {
        "href": "/api/support/autosupport/messages/"
      }
    }
  }
}
```

```
# The call:
curl -X POST "https://<mgmt-
ip>/api/support/autosupport/messages?return_records=true" -H "accept:
application/hal+json" -H "Content-Type: application/json" -d "{
\"message\": \"test_msg\", \"type\": \"test\", \"node.name\":\"node2\"}"

# The response:
201 CREATED
{
"num_records": 3,
"records": [
  {
    "index": 4,
    "node": {
      "name": "node2",
      "uuid": "e47d2630-f250-11e8-b186-005056bb5cab",
      "_links": {
```

```
          "self": {
            "href": "/api/cluster/nodes/e47d2630-f250-11e8-b186-
005056bb5cab"
          }
        }
      },
      "_links": {
        "self": {
          "href": "/api/support/autosupport/messages/e47d2630-f250-11e8-
b186-005056bb5cab/4/http"
        }
      }
    },
    {
      "index": 4,
      "node": {
        "name": "node2",
        "uuid": "e47d2630-f250-11e8-b186-005056bb5cab",
        "_links": {
          "self": {
            "href": "/api/cluster/nodes/e47d2630-f250-11e8-b186-
005056bb5cab"
          }
        }
      },
      "_links": {
        "self": {
          "href": "/api/support/autosupport/messages/e47d2630-f250-11e8-
b186-005056bb5cab/4/smtp"
        }
      }
    },
    {
      "index": 4,
      "node": {
        "name": "node2",
        "uuid": "e47d2630-f250-11e8-b186-005056bb5cab",
        "_links": {
          "self": {
            "href": "/api/cluster/nodes/e47d2630-f250-11e8-b186-
005056bb5cab"
          }
        }
      },
      "_links": {
        "self": {
```

```
              "href": "/api/support/autosupport/messages/e47d2630-f250-11e8-
b186-005056bb5cab/4/noteto"
        }
      }
    },
],
"_links": {
  "self": {
    "href": "/api/support/autosupport/messages/"
  }
}
}
}
```

```
# The call:
curl -X POST "https://<mgmt-
ip>/api/support/autosupport/messages?return_records=true" -H "accept:
application/hal+json" -H "Content-Type: application/json" -d "{
\"message\": \"test_msg\", \"type\": \"test\", \"node.uuid\":\"092e0298-
f250-11e8-9a05-005056bb6666\"}"

# The response:
201 CREATED
{
"num_records": 3,
"records": [
  {
    "index": 5,
    "node": {
      "name": "node1",
      "uuid": "092e0298-f250-11e8-9a05-005056bb6666",
      "_links": {
        "self": {
          "href": "/api/cluster/nodes/092e0298-f250-11e8-9a05-
005056bb6666"
        }
      }
    },
    "_links": {
      "self": {
        "href": "/api/support/autosupport/messages/092e0298-f250-11e8-
9a05-005056bb6666/5/http"
      }
    }
  },
  {
```

```
      "index": 5,
      "node": {
        "name": "node1",
        "uuid": "092e0298-f250-11e8-9a05-005056bb6666",
        "_links": {
          "self": {
            "href": "/api/cluster/nodes/092e0298-f250-11e8-9a05-
005056bb6666"
          }
        }
      },
      "_links": {
        "self": {
          "href": "/api/support/autosupport/messages/092e0298-f250-11e8-
9a05-005056bb6666/5/smtp"
        }
      }
    },
    {
      "index": 5,
      "node": {
        "name": "node1",
        "uuid": "092e0298-f250-11e8-9a05-005056bb6666",
        "_links": {
          "self": {
            "href": "/api/cluster/nodes/092e0298-f250-11e8-9a05-
005056bb6666"
          }
        }
      },
      "_links": {
        "self": {
          "href": "/api/support/autosupport/messages/092e0298-f250-11e8-
9a05-005056bb6666/5/noteto"
        }
      }
    }
  ],
  "_links": {
    "self": {
      "href": "/api/support/autosupport/messages/"
    }
  }
}
}
```

**Retrieving AutoSupport messages from all nodes in the cluster**

The following example retrieves AutoSupport messages from every node in the cluster. Note that if the *fields=*** parameter is not specified, only node, index, and destination fields are returned. Filters can be added on the fields to limit the results.

```
# The API:
GET /support/autosupport/messages

# The call:
curl -X GET "https://<mgmt-
ip>/api/support/autosupport/messages?fields=*&return_timeout=15" -H
"accept: application/hal+json"

# The response:
200 OK
{
"records": [
  {
    "node": {
      "uuid": "092e0298-f250-11e8-9a05-005056bb6666",
      "name": "node1",
      "_links": {
        "self": {
          "href": "/api/cluster/nodes/092e0298-f250-11e8-9a05-
005056bb6666"
        }
      }
    },
    "index": 1,
    "destination": "smtp",
    "subject": "USER_TRIGGERED (TEST:test_msg)",
    "state": "ignore",
    "generated_on": "2019-03-28T10:18:04-04:00",
    "_links": {
      "self": {
        "href": "/api/support/autosupport/messages/092e0298-f250-11e8-
9a05-005056bb6666/1/smtp"
      }
    }
  },
  {
    "node": {
      "uuid": "092e0298-f250-11e8-9a05-005056bb6666",
      "name": "node1",
      "_links": {
        "self": {
```

```
          "href": "/api/cluster/nodes/092e0298-f250-11e8-9a05-
005056bb6666"
        }
      }
    },
    "index": 1,
    "destination": "http",
    "subject": "USER_TRIGGERED (TEST:test_msg)",
    "state": "sent_successful",
    "generated_on": "2019-03-28T10:18:04-04:00",
    "_links": {
      "self": {
        "href": "/api/support/autosupport/messages/092e0298-f250-11e8-
9a05-005056bb6666/1/http"
      }
    }
  },
  {
    "node": {
      "uuid": "092e0298-f250-11e8-9a05-005056bb6666",
      "name": "node1",
      "_links": {
        "self": {
          "href": "/api/cluster/nodes/092e0298-f250-11e8-9a05-
005056bb6666"
        }
      }
    },
    "index": 1,
    "destination": "noteto",
    "subject": "USER_TRIGGERED (TEST:test_msg)",
    "state": "ignore",
    "generated_on": "2019-03-28T10:18:04-04:00",
    "_links": {
      "self": {
        "href": "/api/support/autosupport/messages/092e0298-f250-11e8-
9a05-005056bb6666/1/noteto"
      }
    }
  },
  {
    "node": {
      "uuid": "e47d2630-f250-11e8-b186-005056bb5cab",
      "name": "node2",
      "_links": {
        "self": {
```

```
            "href": "/api/cluster/nodes/e47d2630-f250-11e8-b186-
005056bb5cab"
          }
        }
      },
      "index": 1,
      "destination": "smtp",
      "subject": "USER_TRIGGERED (TEST:test_msg)",
      "state": "ignore",
      "generated_on": "2019-03-28T10:18:06-04:00",
      "_links": {
        "self": {
          "href": "/api/support/autosupport/messages/e47d2630-f250-11e8-
b186-005056bb5cab/1/smtp"
        }
      }
    },
    {
      "node": {
        "uuid": "e47d2630-f250-11e8-b186-005056bb5cab",
        "name": "node2",
        "_links": {
          "self": {
            "href": "/api/cluster/nodes/e47d2630-f250-11e8-b186-
005056bb5cab"
          }
        }
      },
      "index": 1,
      "destination": "http",
      "subject": "USER_TRIGGERED (TEST:test_msg)",
      "state": "sent_successful",
      "generated_on": "2019-03-28T10:18:06-04:00",
      "_links": {
        "self": {
          "href": "/api/support/autosupport/messages/e47d2630-f250-11e8-
b186-005056bb5cab/1/http"
        }
      }
    },
    {
      "node": {
        "uuid": "e47d2630-f250-11e8-b186-005056bb5cab",
        "name": "node2",
        "_links": {
          "self": {
```

```
            "href": "/api/cluster/nodes/e47d2630-f250-11e8-b186-
005056bb5cab"
          }
        }
      },
      "index": 1,
      "destination": "noteto",
      "subject": "USER_TRIGGERED (TEST:test_msg)",
      "state": "ignore",
      "generated_on": "2019-03-28T10:18:06-04:00",
      "_links": {
        "self": {
          "href": "/api/support/autosupport/messages/e47d2630-f250-11e8-
b186-005056bb5cab/1/noteto"
        }
      }
    }
  ],
  "num_records": 6,
  "_links": {
    "self": {
      "href": "/api/support/autosupport/messages?fields=*&return_timeout=15"
    }
  }
}
```

**Retrieving AutoSupport messages from a specific node and has 'sent_successful' state**

The following example retrieves AutoSupport messages from a specific node in the cluster. Note that if the `fields=*` parameter is not specified, only node, index, and destination fields are returned. This example uses a filter on the `node.name` and `state` fields. You can add filters to any fields in the response.

```
# The API:
GET /support/autosupport/messages

# The call:
curl -X GET "https://<mgmt-
ip>/api/support/autosupport/messages?node.name=node1&state=sent_successful
&fields=*&return_timeout=15" -H "accept: application/hal+json"

# The response:
200 OK
{
"records": [
  {
    "node": {
      "uuid": "092e0298-f250-11e8-9a05-005056bb6666",
      "name": "node1",
      "_links": {
        "self": {
          "href": "/api/cluster/nodes/092e0298-f250-11e8-9a05-
005056bb6666"
        }
      }
    },
    "index": 1,
    "destination": "http",
    "subject": "USER_TRIGGERED (TEST:test_msg)",
    "state": "sent_successful",
    "generated_on": "2019-03-28T10:18:04-04:00",
    "_links": {
      "self": {
        "href": "/api/support/autosupport/messages/092e0298-f250-11e8-
9a05-005056bb6666/1/http"
      }
    }
  }
],
"num_records": 1,
"_links": {
  "self": {
    "href":
"/api/support/autosupport/messages?node.name=node1&state=sent_successful&f
ields=*&return_timeout=15"
  }
}
}
```

# Retrieve AutoSupport message history

GET `/support/autosupport/messages`

**Introduced In:** 9.6

Retrieves AutoSupport message history from all nodes in the cluster.

There can be a short delay on invoked AutoSupport messages showing in history, dependent on processing of other AutoSupports in the queue.

**Related ONTAP commands**

- `system node autosupport history show`

**Learn more**

- DOC /support/autosupport/messages

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| node.uuid | string | query | False | Filter by node.uuid |
| node.name | string | query | False | Filter by node.name |
| destination | string | query | False | Filter by destination |
| state | string | query | False | Filter by state |
| generated_on | string | query | False | Filter by generated_on |
| index | integer | query | False | Filter by index |
| subject | string | query | False | Filter by subject |
| error.message | string | query | False | Filter by error.message |
| error.code | integer | query | False | Filter by error.code |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned.<br><br>• Default value: 1 |

| Name | Type | In | Required | Description |
|---|---|---|---|---|
| order_by | array[string] | query | False | Order results by specified fields and optional [asc |
| desc] direction. Default direction is 'asc' for ascending. | fields | array[string] | query | False |
| Specify the fields to return. | max_records | integer | query | False |
| Limit the number of records returned. | return_timeout | integer | query | False |

**Response**

```
Status: 200, Ok
```

| Name | Type | Description |
|---|---|---|
| _links | _links | |
| num_records | integer | Number of records |
| records | array[autosupport_message] | List of messages invoked on the node |

**Example response**

```json
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "destination": "http",
    "error": {
      "code": "53149746",
      "message": "Could not resolve host: test.com"
    },
    "generated_on": "2019-03-25 21:30:04 +0000",
    "index": 9,
    "message": "invoked_test_autosupport_rest",
    "node": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "node1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "state": "sent_successful",
    "subject": "WEEKLY_LOG",
    "type": "test",
    "uri": "https://1.2.3.4/delivery_uri"
  }
}
```

**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 | |

error

Last error during delivery attempt. Empty if "status=sent-successful".

| Name | Type | Description |
|------|------|-------------|
| code | integer | Error code |
| message | string | Error message |

_links

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

node

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

autosupport_message

| Name | Type | Description |
|------|------|-------------|
| destination | string | Destination for the AutoSupport |
| error | error | Last error during delivery attempt. Empty if "status=sent-successful". |

| Name | Type | Description |
|---|---|---|
| generated_on | string | Date and Time of AutoSupport generation in ISO-8601 format |
| index | integer | Sequence number of the AutoSupport |
| message | string | Message included in the AutoSupport subject |
| node | node | |
| state | string | State of AutoSupport delivery |
| subject | string | Subject line for the AutoSupport |
| type | string | Type of AutoSupport collection to issue |
| uri | string | Alternate destination for the AutoSupport |

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 and send an AutoSupport message

POST `/support/autosupport/messages`

**Introduced In:** 9.6

Creates and sends an AutoSupport message with the provided input parameters.

Important note:

- By default, the response is an empty object. If `return_records=true` is passed in the request, the response includes information about the node and the index of the invoked AutoSupport message.

**Recommended optional properties**

- `message` - Message included in the AutoSupport subject. Use this to identify the generated AutoSupport message.

**Default property values**

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

- `type` - *all*

- `node.name` or `node.uuid` - Not specifying these properties invokes AutoSupport on all nodes in the cluster.

**Related ONTAP commands**

- `system node autosupport invoke`

**Learn more**

- DOC /support/autosupport/messages

**Parameters**

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

**Request Body**

| Name | Type | Description |
|------|------|-------------|
| destination | string | Destination for the AutoSupport |
| error | error | Last error during delivery attempt. Empty if "status=sent-successful". |

| Name | Type | Description |
|------|------|-------------|
| generated_on | string | Date and Time of AutoSupport generation in ISO-8601 format |
| index | integer | Sequence number of the AutoSupport |
| message | string | Message included in the AutoSupport subject |
| node | node | |
| state | string | State of AutoSupport delivery |
| subject | string | Subject line for the AutoSupport |
| type | string | Type of AutoSupport collection to issue |
| uri | string | Alternate destination for the AutoSupport |

**Example request**

```json
{
  "destination": "http",
  "error": {
    "code": "53149746",
    "message": "Could not resolve host: test.com"
  },
  "generated_on": "2019-03-25 21:30:04 +0000",
  "index": 9,
  "message": "invoked_test_autosupport_rest",
  "node": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "state": "sent_successful",
  "subject": "WEEKLY_LOG",
  "type": "test",
  "uri": "https://1.2.3.4/delivery_uri"
}
```

**Response**

```
Status: 201, Created
```

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| num_records | integer | Number of records |
| records | array[autosupport_message] | List of messages invoked on the node |

**Example response**

```json
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "destination": "http",
    "error": {
      "code": "53149746",
      "message": "Could not resolve host: test.com"
    },
    "generated_on": "2019-03-25 21:30:04 +0000",
    "index": 9,
    "message": "invoked_test_autosupport_rest",
    "node": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "node1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "state": "sent_successful",
    "subject": "WEEKLY_LOG",
    "type": "test",
    "uri": "https://1.2.3.4/delivery_uri"
  }
}
```

**Headers**

| Name | Description | Type |
|------|-------------|------|
| Location | Useful for tracking the resource location | string |

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|---|---|
| 8650866 | The message parameter is not supported with performance AutoSupports |
| 53149748 | The destination URI provided for the invoked AutoSupport is invalid |

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**

error

Last error during delivery attempt. Empty if "status=sent-successful".

| Name | Type | Description |
|------|------|-------------|
| code | integer | Error code |
| message | string | Error message |

href

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

_links

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

node

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

autosupport_message

| Name | Type | Description |
|------|------|-------------|
| destination | string | Destination for the AutoSupport |
| error | error | Last error during delivery attempt. Empty if "status=sent-successful". |
| generated_on | string | Date and Time of AutoSupport generation in ISO-8601 format |
| index | integer | Sequence number of the AutoSupport |
| message | string | Message included in the AutoSupport subject |

| Name | Type | Description |
|---|---|---|
| node | node | |
| state | string | State of AutoSupport delivery |
| subject | string | Subject line for the AutoSupport |
| type | string | Type of AutoSupport collection to issue |
| uri | string | Alternate destination for the AutoSupport |

_links

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

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. |

# Retrieve information about an AutoSupport message

GET `/support/autosupport/messages/{node.uuid}/{index}/{destination}`

**Introduced In:** 9.14

Retrieves information about a single Autosupport message.

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| node.uuid | string | path | True | Node UUID |
| index | string | path | True | AutoSupport message sequence number |
| destination | string | path | True | The destination for this AutoSupport message.<br><br>• enum: ["smtp", "http", "noteto", "retransmit"] |
| fields | array[string] | query | False | Specify the fields to return. |

**Response**

```
Status: 200, Ok
```

| Name | Type | Description |
|------|------|-------------|
| destination | string | Destination for the AutoSupport |
| error | error | Last error during delivery attempt. Empty if "status=sent-successful". |
| generated_on | string | Date and Time of AutoSupport generation in ISO-8601 format |
| index | integer | Sequence number of the AutoSupport |
| message | string | Message included in the AutoSupport subject |
| node | node | |
| state | string | State of AutoSupport delivery |
| subject | string | Subject line for the AutoSupport |

| Name | Type | Description |
|------|------|-------------|
| type | string | Type of AutoSupport collection to issue |
| uri | string | Alternate destination for the AutoSupport |

**Example response**

```
{
  "destination": "http",
  "error": {
    "code": "53149746",
    "message": "Could not resolve host: test.com"
  },
  "generated_on": "2019-03-25 21:30:04 +0000",
  "index": 9,
  "message": "invoked_test_autosupport_rest",
  "node": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "state": "sent_successful",
  "subject": "WEEKLY_LOG",
  "type": "test",
  "uri": "https://1.2.3.4/delivery_uri"
}
```

**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**

error

Last error during delivery attempt. Empty if "status=sent-successful".

| Name | Type | Description |
|------|------|-------------|
| code | integer | Error code |
| message | string | Error message |

href

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

_links

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

node

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

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 |

| Name | Type | Description |
|------|------|-------------|
| target | string | The target parameter that caused the error. |

# Manage cluster configuration backup information

## Support configuration-backup endpoint overview

### Overview

This API retrieves the current settings for the configuration and updates configuration backup settings. The GET operation retrieves the current settings for the configuration and the PATCH operation updates the configuration backup settings.

### Examples

These examples show how to retrieve and update the configuration backup settings.

**Retrieving the configuration backup settings**

---

```
# The API:
/api/support/configuration-backup

# The call:
curl -X GET "https://<mgmt-ip>/api/support/configuration-backup" -H
"accept: application/hal+json"

# The response:
{
  "url": "http://10.224.65.198/backups",
  "username": "me",
  "_links": {
      "self": {
          "href": "/api/support/configuration-backup"
      }
  }
}
```

---

**Updating the configuration backup settings**

---

```
# The API:
/api/support/configuration-backup

# The call:
curl -X PATCH "https://<mgmt-ip>/api/support/configuration-backup" -H
"accept: application/hal+json"

# The body:
{
  "url": "https://10.224.65.198/new_backups",
  "username": "new_me",
  "password": "new_pass",
  "validate_certificate": "true"
}

# The response header:
HTTP/1.1 200 OK
Date: Tue, 05 Jun 2018 18:17:48 GMT
Server: libzapid-httpd
Cache-Control: no-cache,no-store,must-revalidate
Content-Length: 3
Content-Type: application/hal+json
```

## Retrieve cluster configuration backup information

GET `/support/configuration-backup`

**Introduced In:** 9.6

Retrieves the cluster configuration backup information.

**Parameters**

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

**Response**

```
Status: 200, Ok
```

| Name | Type | Description |
|---|---|---|
| password | string | |
| url | string | An external backup location for the cluster configuration. This is mostly required for single node clusters where node and cluster configuration backups cannot be copied to other nodes in the cluster. |
| username | string | |
| validate_certificate | boolean | Use this parameter with the value "true" to validate the digital certificate of the remote server. Digital certificate validation is available only when the HTTPS protocol is used in the URL; it is disabled by default. |

**Example response**

```
{
    "password": "yourpassword",
    "url": "http://10.224.65.198/backups",
    "username": "me"
}
```

**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**

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. |

# Update cluster configuration backup information

PATCH `/support/configuration-backup`

**Introduced In:** 9.6

Updates the cluster configuration backup information.

**Request Body**

| Name | Type | Description |
|------|------|-------------|
| password | string | |
| url | string | An external backup location for the cluster configuration. This is mostly required for single node clusters where node and cluster configuration backups cannot be copied to other nodes in the cluster. |
| username | string | |
| validate_certificate | boolean | Use this parameter with the value "true" to validate the digital certificate of the remote server. Digital certificate validation is available only when the HTTPS protocol is used in the URL; it is disabled by default. |

**Example request**

```
{
    "password": "yourpassword",
    "url": "http://10.224.65.198/backups",
    "username": "me"
}
```

**Response**

```
Status: 200, Ok
```

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|------------|-------------|
| 39387137 | Invalid URL |

| Error Code | Description |
|---|---|
| 39387138 | Invalid URL Scheme |
| 5963792 | Using HTTPS for URL requires an effective cluster version of 9.7.0 or later. |
| 5963794 | Validating the certificate is supported for the HTTPS protocol only. |

| 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**

configuration_backup

| Name | Type | Description |
|------|------|-------------|
| password | string | |
| url | string | An external backup location for the cluster configuration. This is mostly required for single node clusters where node and cluster configuration backups cannot be copied to other nodes in the cluster. |
| username | string | |
| validate_certificate | boolean | Use this parameter with the value "true" to validate the digital certificate of the remote server. Digital certificate validation is available only when the HTTPS protocol is used in the URL; it is disabled by default. |

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. |

# Manage configuration backups

## Support configuration-backup backups endpoint overview

### Overview

This API supports creating, deleting and retrieving configuration backup files. Configuration backups can be 'cluster' or 'node' type. A 'cluster' backup contains cluster-wide configuration in addition to the configuration of each node in the cluster. A 'node' backup contains only node-specific configuration such as configuration files on the root volume and the boot variables. For creating a cluster backup, a cluster-wide job is queued. For creating a node backup, a private job local to the node is queued. In addition to the backups created using this API, ONTAP creates configuration backups automatically based on job schedules. This API supports creating configuration backups on demand only. It supports deleting and retrieving configuration backups that are created automatically or on demand. For information on configuration backup settings for automatically created backups, see DOC /support/configuration-backup

### Examples

**Retrieving a list of configuration backup files**

```
# The API:
/api/support/configuration-backup/backups

# The call:
curl -X GET "https://<mgmt-ip>/api/support/configuration-backup/backups"
-H "accept: application/hal+json"

# The response:
{
"records": [
  {
    "node": {
      "uuid": "5cafe0f6-499f-11e9-b644-005056bbcf93",
      "name": "node1",
      "_links": {
        "self": {
          "href": "/api/cluster/nodes/5cafe0f6-499f-11e9-b644-
005056bbcf93"
        }
      }
    },
    "name": "backup1.7z",
    "_links": {
      "self": {
        "href": "/api/support/configuration-backup/backups/5cafe0f6-499f-
11e9-b644-005056bbcf93/backup1.7z"
      }
    }
  }
],
"num_records": 1,
"_links": {
  "self": {
    "href": "/api/support/configuration-backup/backups"
  }
}
}
```

**Retrieving details of the specified configuration backup file**

```
# The API:
/api/support/configuration-backup/backups/{node.uuid}/{name}

# The call:
curl -X GET "https://<mgmt-ip>/api/support/configuration-
backup/backups/bc2f15d0-8b93-11e9-90e9-005056bb6a30/backup1.7z" -H
"accept: application/hal+json"

# The response:
{
"node": {
  "uuid": "bc2f15d0-8b93-11e9-90e9-005056bb6a30",
  "name": "node1",
  "_links": {
    "self": {
      "href": "/api/cluster/nodes/bc2f15d0-8b93-11e9-90e9-005056bb6a30"
    }
  }
},
"name": "backup1.7z",
"type": "cluster",
"time": "2019-06-10T13:35:06-04:00",
"size": 6058408,
"backup_nodes": [
  {
    "name": "node1"
  },
  {
    "name": "node2"
  }
],
"version": "9.7.0",
"auto": false,
"download_link": "https://10.224.66.113/backups/backup1.7z",
"_links": {
  "self": {
    "href": "/api/support/configuration-backup/backups/bc2f15d0-8b93-11e9-
90e9-005056bb6a30/backup1.7z"
  }
}
}
```

**Creating a configuration backup file**

```
# The API:
/api/support/configuration-backup/backups

# The call:
curl -X POST "https://<mgmt-ip>/api/support/configuration-backup/backups"
-H "accept: application/hal+json" -d "@create_backup.txt"
create_backup.txt:
{
"node":
  {
    "uuid": "ac13c636-4fc9-11e9-94c2-005056bb2516",
    "name": "node1"
  },
"name": "backup3.7z"
}

# The response header:
HTTP/1.1 202 Accepted
Date: Tue, 26 Mar 2019 14:26:24 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Location: /api/support/configuration-backup/backups/ac13c636-4fc9-11e9-
94c2-005056bb2516/backup3.7z
Content-Length: 189
Content-Type: application/hal+json
{
"job": {
  "uuid": "22acfb68-4fd3-11e9-94c2-005056bb2516",
  "_links": {
    "self": {
      "href": "/api/cluster/jobs/22acfb68-4fd3-11e9-94c2-005056bb2516"
    }
  }
}
}
```

**Deleting a configuration backup file**

```
# The API:
/api/support/configuration-backup/backups/{node.uuid}/{name}

# The call:
curl -X DELETE "https://<mgmt-ip>/api/support/configuration-
backup/backups/5cafe0f6-499f-11e9-b644-005056bbcf93/backup1.7z" -H
"content-type: application/json"

# The response header:
HTTP/1.1 200 OK
Date: Tue, 26 Mar 2019 14:32:23 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Length: 3
Content-Type: application/hal+json
```

## Retrieve configuration backup files

GET `/support/configuration-backup/backups`

**Introduced In:** 9.7

Retrieves a list of configuration backup files.

**Related ONTAP commands**

- `system configuration backup show`

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| size | integer | query | False | Filter by size |
| name | string | query | False | Filter by name |
| version | string | query | False | Filter by version |
| node.name | string | query | False | Filter by node.name |
| node.uuid | string | query | False | Filter by node.uuid |
| time | string | query | False | Filter by time |

| Name | Type | In | Required | Description |
| --- | --- | --- | --- | --- |
| type | string | query | False | Filter by type |
| download_link | string | query | False | Filter by download_link |
| auto | boolean | query | False | Filter by auto |
| backup_nodes.name | string | query | False | Filter by backup_nodes.name |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned.<br><br>• Default value: 1 |
| 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.<br><br>• Default value: 1<br><br>• Max value: 120<br><br>• Min value: 0 |
| order_by | array[string] | query | False | Order results by specified fields and optional [asc |
| desc] direction. Default direction is 'asc' for ascending. | fields | array[string] | query | False |

## Response

```
Status: 200, Ok
```

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

**Example response**

```json
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "backup_nodes": {
    },
    "download_link": "https://10.224.65.198/backups/backup_file.7z",
    "name": "backup_file.7z",
    "node": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "node1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "size": 4787563,
    "time": "2019-02-04 18:33:48 +0000",
    "type": "node",
    "version": "9.7.0"
  }
}
```

## 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 | |

backup_node

The node name in the backup.

| Name | Type | Description |
|------|------|-------------|
| name | string | |

_links

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

node

The node that owns the configuration backup.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

configuration_backup_file

The configuration backup file.

| Name | Type | Description |
|------|------|-------------|
| auto | boolean | Indicates if the backup was created automatically. |
| backup_nodes | array[backup_node] | The list of nodes included in the backup. |

| Name | Type | Description |
|------|------|-------------|
| download_link | string | The link to download the backup file. |
| name | string | The backup name. |
| node | node | The node that owns the configuration backup. |
| size | integer | The size of the backup in bytes. |
| time | string | The backup creation time. |
| type | string | The backup type. |
| version | string | The software version. |

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 configuration backup

POST /support/configuration-backup/backups

**Introduced In:** 9.7

Creates a configuration backup. The required backup file name must end with .7z extension.

## Required properties

- `node.uuid` or `node.name` - The node UUID or node name on which the configuration backup will be created.

- `name` - The backup file name

## Related ONTAP commands

- `system configuration backup create`

## Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| return_timeout | integer | query | False | The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.<br><br>• Default value: 1<br><br>• Max value: 120<br><br>• Min value: 0 |

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

**Request Body**

| Name | Type | Description |
|------|------|-------------|
| auto | boolean | Indicates if the backup was created automatically. |
| backup_nodes | array[backup_node] | The list of nodes included in the backup. |
| download_link | string | The link to download the backup file. |
| name | string | The backup name. |
| node | node | The node that owns the configuration backup. |
| size | integer | The size of the backup in bytes. |
| time | string | The backup creation time. |
| type | string | The backup type. |
| version | string | The software version. |

**Example request**

```
{
  "backup_nodes": {
  },
  "download_link": "https://10.224.65.198/backups/backup_file.7z",
  "name": "backup_file.7z",
  "node": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "size": 4787563,
  "time": "2019-02-04 18:33:48 +0000",
  "type": "node",
  "version": "9.7.0"
}
```

**Response**

```
Status: 202, Accepted
```

| Name | Type | Description |
|------|------|-------------|
| job | job_link | |

**Example response**

```
{
  "job": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "uuid": "string"
  }
}
```

**Headers**

| Name | Description | Type |
|------|-------------|------|
| Location | Useful for tracking the resource location | string |

**Response**

```
Status: 201, Created
```

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|------------|-------------|
| 5963818 | Failed to queue private job. |
| 5963819 | Failed to queue cluster job. |
| 5963871 | Requested backup name is missing .7z suffix. |

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**

backup_node

The node name in the backup.

| Name | Type | Description |
|------|------|-------------|
| name | string | |

href

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

_links

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

node

The node that owns the configuration backup.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

configuration_backup_file

The configuration backup file.

| Name | Type | Description |
|------|------|-------------|
| auto | boolean | Indicates if the backup was created automatically. |
| backup_nodes | array[backup_node] | The list of nodes included in the backup. |
| download_link | string | The link to download the backup file. |
| name | string | The backup name. |
| node | node | The node that owns the configuration backup. |

| Name | Type | Description |
|---|---|---|
| size | integer | The size of the backup in bytes. |
| time | string | The backup creation time. |
| type | string | The backup type. |
| version | string | The software version. |

job_link

| Name | Type | Description |
|---|---|---|
| _links | _links | |
| uuid | string | The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation. |

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. |

# Delete a configuration backup

DELETE `/support/configuration-backup/backups/{node.uuid}/{name}`

**Introduced In:** 9.7

Deletes a configuration backup.

**Related ONTAP commands**

- `system configuration backup delete`

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| node.uuid | string | path | True | UUID of the node that owns the configuration backup. |
| name | string | path | True | Name of the configuration backup to be deleted. |

**Response**

```
Status: 200, Ok
```

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|------------|-------------|
| 5963826 | Failed to delete backup file. |

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**

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. |

# Retrieve configuration backup file details

GET `/support/configuration-backup/backups/{node.uuid}/{name}`

**Introduced In:** 9.7

Retrieves details of the specified configuration backup file.

**Related ONTAP commands**

- `system configuration backup show`

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| node.uuid | string | path | True | UUID of the node that owns the configuration backup. |
| name | string | path | True | Name of the configuration backup. |
| fields | array[string] | query | False | Specify the fields to return. |

**Response**

```
Status: 200, Ok
```

| Name | Type | Description |
|------|------|-------------|
| auto | boolean | Indicates if the backup was created automatically. |
| backup_nodes | array[backup_node] | The list of nodes included in the backup. |
| download_link | string | The link to download the backup file. |
| name | string | The backup name. |
| node | node | The node that owns the configuration backup. |
| size | integer | The size of the backup in bytes. |
| time | string | The backup creation time. |
| type | string | The backup type. |

| Name | Type | Description |
|------|------|-------------|
| version | string | The software version. |

**Example response**

```
{
  "backup_nodes": {
  },
  "download_link": "https://10.224.65.198/backups/backup_file.7z",
  "name": "backup_file.7z",
  "node": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "size": 4787563,
  "time": "2019-02-04 18:33:48 +0000",
  "type": "node",
  "version": "9.7.0"
}
```

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|------------|-------------|
| 5963777 | Configuration backup file does not exist. |

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**

backup_node

The node name in the backup.

| Name | Type | Description |
|------|------|-------------|
| name | string | |

href

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

_links

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

node

The node that owns the configuration backup.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

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 |

| Name | Type | Description |
|---|---|---|
| target | string | The target parameter that caused the error. |

# Manage core dumps

## Support coredump coredumps endpoint overview

### Overview

The core dump GET API retrieves all of the core dumps on the cluster or a node. The core dump DELETE API deletes a specified core dump. Some fields are only populated for core dump type "kernel". Refer to the model for further information. Fields will not be displayed if they are not populated. A core can be deleted even if the core is in the process of being saved.

### Examples

**1) Retrieving a list of core dumps from the cluster**

The following example returns a list of core dumps on the cluster:

```
# The API:
/api/support/coredump/coredumps

# The call:
curl -X GET "https://<mgmt-ip>/api/support/coredump/coredumps" -H "accept:
application/hal+json"

# The response:
{
"records": [
  {
    "node": {
      "uuid": "227683c1-e9c7-11eb-b995-005056bbbfb3",
      "name": "node2",
      "_links": {
        "self": {
          "href": "/api/cluster/nodes/227683c1-e9c7-11eb-b995-
005056bbbfb3"
        }
      }
    },
    "type": "kernel",
    "name": "core.4136886422.2021-07-21.20_20_53.nz",
```

```
      "_links": {
        "self": {
          "href": "/api/support/coredump/coredumps/227683c1-e9c7-11eb-b995-
005056bbbfb3/core.4136886422.2021-07-21.20_20_53.nz"
        }
      }
    },
    {
      "node": {
        "uuid": "227683c1-e9c7-11eb-b995-005056bbbfb3",
        "name": "node2",
        "_links": {
          "self": {
            "href": "/api/cluster/nodes/227683c1-e9c7-11eb-b995-
005056bbbfb3"
          }
        }
      },
      "type": "application",
      "name": "mlogd.968.4136886422.2021-07-22.01_10_01.ucore.bz2",
      "_links": {
        "self": {
          "href": "/api/support/coredump/coredumps/227683c1-e9c7-11eb-b995-
005056bbbfb3/mlogd.968.4136886422.2021-07-22.01_10_01.ucore.bz2"
        }
      }
    },
    {
      "node": {
        "uuid": "d583d44e-e9c6-11eb-a270-005056bb47f9",
        "name": "node1",
        "_links": {
          "self": {
            "href": "/api/cluster/nodes/d583d44e-e9c6-11eb-a270-
005056bb47f9"
          }
        }
      },
      "type": "kernel",
      "name": "core.4136886421.2021-07-21.17_57_02.nz",
      "_links": {
        "self": {
          "href": "/api/support/coredump/coredumps/d583d44e-e9c6-11eb-a270-
005056bb47f9/core.4136886421.2021-07-21.17_57_02.nz"
        }
      }
    }
```

```
    },
    {
      "node": {
        "uuid": "d583d44e-e9c6-11eb-a270-005056bb47f9",
        "name": "node1",
        "_links": {
          "self": {
            "href": "/api/cluster/nodes/d583d44e-e9c6-11eb-a270-
005056bb47f9"
          }
        }
      },
      "type": "application",
      "name": "mlogd.979.4136886421.2021-07-22.01_11_37.ucore.bz2",
      "_links": {
        "self": {
          "href": "/api/support/coredump/coredumps/d583d44e-e9c6-11eb-a270-
005056bb47f9/mlogd.979.4136886421.2021-07-22.01_11_37.ucore.bz2"
        }
      }
    }
  ],
  "num_records": 4,
  "_links": {
    "self": {
      "href": "/api/support/coredump/coredumps"
    }
  }
}
```

**2) Retrieving a specific core dump**

The following example returns the requested core dump. If there is no core dump with the requested node UUID and name, an error is returned.

```
# The API:
/api/support/coredump/coredumps/{node.uuid}/{name}

# The call:
curl -X GET "https://<mgmt-ip>/api/support/coredump/coredumps/d583d44e-
e9c6-11eb-a270-005056bb47f9/core.4136886421.2021-07-21.17_57_02.nz" -H
"accept: application/hal+json"

# The response:
{
"node": {
  "uuid": "d583d44e-e9c6-11eb-a270-005056bb47f9",
  "name": "node1",
  "_links": {
    "self": {
      "href": "/api/cluster/nodes/d583d44e-e9c6-11eb-a270-005056bb47f9"
    }
  }
},
"type": "kernel",
"name": "core.4136886421.2021-07-21.17_57_02.nz",
"panic_time": "2021-07-21T13:57:02-04:00",
"size": 945111148,
"md5_data_chksum": "611a6fa50d230a1af402f3724ab320af",
"is_saved": true,
"_links": {
  "self": {
    "href": "/api/support/coredump/coredumps/d583d44e-e9c6-11eb-a270-
005056bb47f9/core.4136886421.2021-07-21.17_57_02.nz"
  }
}
}
```

**3) Deleting a core dump**

The following example deletes the requested core dump. If there is no core dump with the requested node
UUID and name to delete, an error is returned.

```
# The API:
/api/support/coredump/coredumps/{node.uuid}/{name}

# The call:
curl -X DELETE "https://<mgmt-ip>/api/support/coredump/coredumps/d583d44e-
e9c6-11eb-a270-005056bb47f9/mlogd.979.4136886421.2021-07-
22.01_11_37.ucore.bz2" -H "accept: application/hal+json"

# The response header:
HTTP/1.1 200 OK
Date: Thu, 22 Jul 2021 01:32:24 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Length: 3
Content-Type: application/hal+json
```

## Retrieve core dumps

GET `/support/coredump/coredumps`

**Introduced In:** 9.10

Retrieves a collection of coredumps.

### Related ONTAP commands

- `system node coredump show`

### Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| panic_time | string | query | False | Filter by panic_time |
| type | string | query | False | Filter by type |
| is_partial | boolean | query | False | Filter by is_partial |
| name | string | query | False | Filter by name |
| node.name | string | query | False | Filter by node.name |
| node.uuid | string | query | False | Filter by node.uuid |

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| size | integer | query | False | Filter by size |
| md5_data_checksum | string | query | False | Filter by md5_data_checksum |
| is_saved | boolean | query | False | Filter by is_saved |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned.<br><br>• Default value: 1 |
| 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.<br><br>• Default value: 1<br><br>• Max value: 120<br><br>• 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[coredump] | |

**Example response**

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "md5_data_checksum": "5118488cc5065e33a16986001b1ffa48",
    "name": "core.4136886413.2021-03-01.22_09_11.nz",
    "node": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "node1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "panic_time": "2021-03-01 22:09:11 +0000",
    "size": 1161629804,
    "type": "kernel"
  }
}
```

**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 | |

### _links

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

### node

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

### coredump

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| is_partial | boolean | Specifies whether or not the core is a partial core. Applicable only to kernel core dump type. |
| is_saved | boolean | Specifies whether or not the core file is saved. |
| md5_data_checksum | string | MD5 checksum of the compressed data of core. Applicable only to kernel core dump type. |
| name | string | Core name |
| node | node | |

| Name | Type | Description |
|------|------|-------------|
| panic_time | string | Time of panic that generated the core. |
| size | integer | Size of core, in bytes. Applicable only to kernel core dump type. |
| type | string | Core type, kernel or application |

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. |

# Delete a core dump

DELETE `/support/coredump/coredumps/{node.uuid}/{name}`

**Introduced In:** 9.10

Deletes a core dump.

## Related ONTAP commands

* `system node coredump delete`

## Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| return_timeout | integer | query | False | The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.<br><br>• Default value: 1<br><br>• Max value: 120<br><br>• Min value: 0 |

## Response

```
Status: 200, Ok
```

## 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**

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. |

# Retrieve a core dump

GET /support/coredump/coredumps/{node.uuid}/{name}

**Introduced In:** 9.10

Retrieves a specific core dump.

**Related ONTAP commands**

- `system node coredump show`

**Parameters**

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

**Response**

```
Status: 200, Ok
```

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| is_partial | boolean | Specifies whether or not the core is a partial core. Applicable only to kernel core dump type. |
| is_saved | boolean | Specifies whether or not the core file is saved. |
| md5_data_checksum | string | MD5 checksum of the compressed data of core. Applicable only to kernel core dump type. |
| name | string | Core name |
| node | node | |
| panic_time | string | Time of panic that generated the core. |
| size | integer | Size of core, in bytes. Applicable only to kernel core dump type. |
| type | string | Core type, kernel or application |

**Example response**

```json
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "md5_data_checksum": "5118488cc5065e33a16986001b1ffa48",
  "name": "core.4136886413.2021-03-01.22_09_11.nz",
  "node": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "panic_time": "2021-03-01 22:09:11 +0000",
  "size": 1161629804,
  "type": "kernel"
}
```

**Error**

```
Status: Default, Error
```

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

**Example error**

```json
{
  "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 | |

node

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

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. |

# Manage EMS configuration

# Support EMS endpoint overview

## Overview

This endpoint is used to configure general parameters of the Event Management System (EMS).

## Examples

**Configuring the system-wide email parameters**

```
# The API:
PATCH /support/ems

# The call:
curl -X PATCH "https://<mgmt-ip>/api/support/ems" -H "accept:
application/hal+json" -H "Content-Type: application/json" -d
"@test_ems_config_patch.txt"
test_ems_config_patch.txt(body):
{
"mail_from": "administrator@mycompany.com",
"mail_server": "smtp@mycompany.com"
}

# The response:
200 OK
```

**Retrieving the EMS configuration**

The following example retrieves EMS configuration for the cluster.

```
# The API:
GET /support/ems

# The call:
curl -X GET "https://<mgmt-ip>/api/support/ems" -H "accept:
application/hal+json"

# The response:
200 OK
{
"mail_from": "admin@localhost",
"mail_server": "localhost",
"pubsub_enabled": true,
"_links": {
  "self": {
    "href": "/api/support/ems"
  }
}
}
```

## Retrieve an EMS configuration

GET `/support/ems`

**Introduced In:** 9.6

Retrieves the EMS configuration.

**Related ONTAP commands**

- `event config show`

**Parameters**

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

**Response**

```
Status: 200, Ok
```

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

| Name | Type | Description |
|---|---|---|
| mail_from | string | Mail from |
| mail_server | string | Mail server (SMTP) |
| proxy_password | string | Password for HTTP/HTTPS proxy |
| proxy_url | string | HTTP/HTTPS proxy URL |
| proxy_user | string | User name for HTTP/HTTPS proxy |
| pubsub_enabled | boolean | Is Publish/Subscribe Messaging Enabled? |

**Example response**

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "mail_from": "<a href="
mailto:administrator@mycompany.com">administrator@mycompany.com</a>",
  "mail_server": "mail.mycompany.com",
  "proxy_password": "password",
  "proxy_url": "https://proxyserver.mycompany.com",
  "proxy_user": "proxy_user",
  "pubsub_enabled": 1
}
```

**Error**

```
Status: Default, Error
```

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

**Example error**

```json
{
  "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 | |

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. |

# Update an EMS configuration

PATCH `/support/ems`

**Introduced In:** 9.6

Updates the EMS configuration.

**Related ONTAP commands**

- `event config modify`

## Request Body

| Name | Type | Description |
|---|---|---|
| _links | _links | |
| mail_from | string | Mail from |
| mail_server | string | Mail server (SMTP) |
| proxy_password | string | Password for HTTP/HTTPS proxy |
| proxy_url | string | HTTP/HTTPS proxy URL |
| proxy_user | string | User name for HTTP/HTTPS proxy |
| pubsub_enabled | boolean | Is Publish/Subscribe Messaging Enabled? |

## Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "mail_from": "<a href="
mailto:administrator@mycompany.com">administrator@mycompany.com</a>",
  "mail_server": "mail.mycompany.com",
  "proxy_password": "password",
  "proxy_url": "https://proxyserver.mycompany.com",
  "proxy_user": "proxy_user",
  "pubsub_enabled": 1
}
```

## Response

```
Status: 200, Ok
```

## Error

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
| --- | --- |
| 983123 | The validation of the mail server provided failed |
| 983136 | The proxy URL cannot contain a username or password |
| 983137 | The proxy URL provided is invalid |
| 983139 | The IPv6 proxy URL provided is invalid |
| 983140 | The proxy URL provided contains an invalid scheme. The only supported scheme is 'http' |
| 983160 | The provided parameter requires an effective cluster version of ONTAP 9.9.1 or later |

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**

href

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

_links

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

ems_config

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| mail_from | string | Mail from |
| mail_server | string | Mail server (SMTP) |
| proxy_password | string | Password for HTTP/HTTPS proxy |
| proxy_url | string | HTTP/HTTPS proxy URL |
| proxy_user | string | User name for HTTP/HTTPS proxy |
| pubsub_enabled | boolean | Is Publish/Subscribe Messaging Enabled? |

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 |

| Name | Type | Description |
|------|------|-------------|
| message | string | Error message |
| target | string | The target parameter that caused the error. |

# Manage application logs

## Support EMS application-logs endpoint overview

### Overview

A POST request allows a standalone application to log its events on the ONTAP system as EMS events and optionally generate AutoSupports. This event information is encapsulated in an app.log.x event, or callhome.client.app.x event in case AutoSupport generation is required, based on the event's severity.

ⓘ This API only supports POST. Generated events can be retrieved using the /api/support/ems/events API.

### Examples

**Creating a new app.log.* event**

The following example generates an app.log.error event.

```
# The API:
POST /api/support/ems/application-logs

# The call:
curl -X POST "https://<mgmt-ip>/api/support/ems/application-logs" -H
"accept: application/hal+json" -H "Content-Type: application/json" -d "{
\"computer_name\": \"W12-R2-DC\", \"event_source\": \"SnapCenter
Software\", \"app_version\": \"3.0.0.2373\", \"event_id\": 10001,
\"category\": \"error\", \"event_description\": \"Clone split job
failed\", \"severity\": \"error\", \"autosupport_required\": false}"

# The response:
201 CREATED
{}
```

**Retrieving a list of events generated by this API**

The following example retrieves all app.log.* events.

```
# The API:
GET /api/support/ems/events

# The call:
curl -X GET "https://<mgmt-
ip>/api/support/ems/events?message.name=app.log.*" -H "accept:
application/hal+json"

# The response:
200 OK
{
"records": [
  {
    "node": {
      "name": "node1",
      "uuid": "d96d5d8d-118a-11ec-aad8-005056bb974c",
      "_links": {
        "self": {
          "href": "/api/cluster/nodes/d96d5d8d-118a-11ec-aad8-
005056bb974c"
        }
      }
    },
    "index": 7865,
    "time": "2021-09-17T09:36:28-04:00",
    "message": {
      "severity": "emergency",
      "name": "app.log.emerg"
    },
    "log_message": "app.log.emerg: iMac: iPad ipad3: (10001) handheld:
TestLine1",
    "_links": {
      "self": {
        "href": "/api/support/ems/events/node1/7865"
      }
    }
  }
],
"num_records": 1,
"_links": {
  "self": {
    "href": "/api/support/ems/events?message.name=app.log.*"
  }
}
}
```

# Create an application log

POST /support/ems/application-logs

**Introduced In:** 9.11

Creates an app.log.* event. Setting the "autosupport_required" flag causes callhome.client.app.* events also to be generated, which in turn triggers AutoSupports.

**Required properties**

* `computer_name` - Client computer connected to the cluster.
* `event_source` - Client application that generated this event.
* `app_version` - Client application version.
* `event_id` - Application eventID.
* `category` - Event category.
* `event_description` - Event description.
* `severity` - Severity of the event.
* `autosupport_required` - Indicates whether AutoSupport generation is required.

**Parameters**

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

**Request Body**

| Name | Type | Description |
|------|------|-------------|
| app_version | string | Client application version. |
| autosupport_required | boolean | Indicates whether AutoSupport generation is required. |
| category | string | Event category. |
| computer_name | string | Client computer connected to the cluster. |

| Name | Type | Description |
|------|------|-------------|
| event_description | string | Event description, which corresponds to the subject parameter in the generated event. |
| event_id | integer | Application eventID. |
| event_source | string | Client application that generated this event. |
| severity | string | Severity |

**Example request**

```
{
    "app_version": "3.0.0.2373",
    "autosupport_required": "",
    "category": "Error",
    "computer_name": "W12-R2-DC",
    "event_description": "Clone split job failed",
    "event_id": 10001,
    "event_source": "SnapCenter Software",
    "severity": "error"
}
```

**Response**

```
Status: 201, Created
```

**Headers**

| Name | Description | Type |
|------|-------------|------|
| Location | Useful for tracking the resource location | string |

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
| --- | --- |
| 983173 | Application log event generation failed. |

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**

ems_application_log

Input for generation of app.log.x and callhome.client.app.x events.

| Name | Type | Description |
|------|------|-------------|
| app_version | string | Client application version. |
| autosupport_required | boolean | Indicates whether AutoSupport generation is required. |
| category | string | Event category. |
| computer_name | string | Client computer connected to the cluster. |
| event_description | string | Event description, which corresponds to the subject parameter in the generated event. |
| event_id | integer | Application eventID. |
| event_source | string | Client application that generated this event. |
| severity | string | Severity |

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 |

| Name | Type | Description |
|---|---|---|
| target | string | The target parameter that caused the error. |

# Manage event destinations

## Support EMS destinations endpoint overview

### Overview

Manages the list of destinations. A destination is defined by a type and a place to which an event's information is transmitted.

### Destination Types

An EMS destination is defined by a single type, which is one of the following:

- email
- syslog
- rest_api
- snmp

#### Email

The 'email' type allows you to define a mailbox where information about an observed event is sent by SMTP. Enter the address in the destination field in a valid format. For example: administrator@mycompany.com

#### Syslog

The 'syslog' type allows you to specify a remote syslog server that can receive information about an observed event. Enter the hostname or IP address in the destination field. For example: syslog.mycompany.com, 192.168.1.1

You can optionally specify the port and transport protocol to be used. The supported transport protocols are:

- udp_unencrypted
- tcp_unencrypted
- tcp_encrypted

\#

If transport is specified and the port is not specified, the default port for each transport is automatically selected. The default port for udp_unencrypted is 514, for tcp_unencrypted 601, and for tcp_encrypted 6514. The default transport protocol is udp_unencrypted.

\#

The message format to be used can also be optionally specified. The supported message formats are:

- legacy_netapp (format: <PRIVAL>TIMESTAMP [HOSTNAME:Event-name:Event-severity]: MSG)
- rfc_5424 (format: <PRIVAL>VERSION TIMESTAMP HOSTNAME Event-source - Event-name - MSG)

#

If the default timestamp or hostname formats in the message format needs to be overridden, use timestamp_override and hostname_override properties.

The supported timestamp formats are:

- no_override (timestamp format based on the syslog.format.message property i.e. rfc_3164 if syslog.format.message is legacy_netapp, iso_8601_local_time if syslog.format.message is rfc_5424)
- rfc_3164 (format: Mmm dd hh:mm:ss)
- iso_8601_local_time (format: YYYY-MM-DDThh:mm:ss+/-hh:mm)
- iso_8601_utc (format: YYYY-MM-DDThh:mm:ssZ)

#

The supported hostname formats are:

- no_override (hostname format based on the syslog.format.message property i.e. fqdn if syslog.format.message is rfc_5424, hostname_only if syslog.format.message is legacy_netapp)
- fqdn (Fully Qualified Domain Name)
- hostname_only

**Rest API**

The 'rest_api' type allows you to define a URL where information about an observed event is sent using the REST protocol. Enter the URL in the destination field. The URL must contain a valid transmission schema which can be one of the following:

- http
- https

#

Using the *https* schema, you can configure a client-side certificate for mutual authentication. A client-side certificate is specified by the `ca` and `serial_number` fields in the `certificate` object. The `name` field of the `certificate` object is read-only and cannot be used to configure a client-side certificate.

For example: http://rest.mycompany.com, https://192.168.1.1

**SNMP**

The 'snmp' type describes addresses where information about an observed event is sent using SNMP traps. The system defines a default instance of this type and it is restricted to read-only. This type has the following limitations:

- Cannot create new destinations of type 'snmp'
- Cannot modify the default 'snmp' destination

SNMP trap host details need to be configured through one of the following:

| Type | Command / API |
|------|---------------|
| CLI | 'system snmp traphost' |
| ZAPI | 'snmp-traphost-add' / 'snmp-traphost-delete' |

**Examples**

**Retrieving the list of active destinations**

```
# The API:
GET /api/support/ems/destinations

# The call:
curl -X GET "https://<mgmt-ip>/api/support/ems/destinations" -H "accept:
application/hal+json"

# The response:
200 OK

# JSON Body
{
"records": [
  {
    "name": "snmp-traphost",
    "_links": {
      "self": {
        "href": "/api/support/ems/destinations/snmp-traphost"
      }
    }
  }
],
"num_records": 1,
"_links": {
  "self": {
    "href": "/api/support/ems/destinations"
  }
}
}
```

**Creating a new 'email' destination**

```
# The API:
POST /support/ems/destinations

# The call:
curl -X POST "https://<mgmt-ip>/api/support/ems/destinations" -H "accept:
application/hal+json" -H "Content-Type: application/json" -d
"@test_ems_destinations_post.txt"
test_ems_destinations_post.txt(body):

# JSON Body
{
"name": "Technician_Email",
"type": "email",
"destination": "technician@mycompany.com",
"filters": [
  { "name" : "critical-wafl" }
]
}

# The response:
201 Created
```

**Creating a new 'syslog' destination**

```
# The API:
POST /support/ems/destinations

# The call:
curl -X POST "https://<mgmt-ip>/api/support/ems/destinations" -H "accept:
application/hal+json" -H "Content-Type: application/json" -d
"@test_ems_destinations_syslog_post.txt"
test_ems_destinations_syslog_post.txt(body):

# JSON Body
{
"name": "Syslog_dest",
"type": "syslog",
"destination": "syslog.mycompany.com",
"syslog": {
  "port": 601,
  "transport": "tcp_unencrypted",
  "format": {
    "message": "rfc_5424",
    "hostname_override": "fqdn",
    "timestamp_override": "iso_8601_local_time"
  }
},
"filters": [
  { "name" : "critical-wafl" }
]
}

# The response:
201 Created
```

## Retrieve a collection of event destinations

GET /support/ems/destinations

**Introduced In:** 9.6

Retrieves a collection of event destinations.

**Related ONTAP commands**

- `event notification destination show`

- `event notification show`

## Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| type | string | query | False | Filter by type |
| filters.name | string | query | False | Filter by filters.name |
| syslog.format.message | string | query | False | Filter by syslog.format.message<br><br>• Introduced in: 9.12 |
| syslog.format.timestamp_override | string | query | False | Filter by syslog.format.timestamp_override<br><br>• Introduced in: 9.12 |
| syslog.format.hostname_override | string | query | False | Filter by syslog.format.hostname_override<br><br>• Introduced in: 9.12 |
| syslog.transport | string | query | False | Filter by syslog.transport<br><br>• Introduced in: 9.12 |
| syslog.port | integer | query | False | Filter by syslog.port<br><br>• Introduced in: 9.12 |
| destination | string | query | False | Filter by destination |
| system_defined | boolean | query | False | Filter by system_defined<br><br>• Introduced in: 9.10 |

| Name | Type | In | Required | Description |
|------|------|----|----|-------------|
| access_control_role. name | string | query | False | Filter by access_control_role. name<br><br>• Introduced in: 9.13 |
| connectivity.state | string | query | False | Filter by connectivity.state<br><br>• Introduced in: 9.11 |
| connectivity.errors.n ode.name | string | query | False | Filter by connectivity.errors.n ode.name<br><br>• Introduced in: 9.11 |
| connectivity.errors.n ode.uuid | string | query | False | Filter by connectivity.errors.n ode.uuid<br><br>• Introduced in: 9.11 |
| connectivity.errors.m essage.code | string | query | False | Filter by connectivity.errors.m essage.code<br><br>• Introduced in: 9.11 |
| connectivity.errors.m essage.arguments.c ode | string | query | False | Filter by connectivity.errors.m essage.arguments.c ode<br><br>• Introduced in: 9.11 |
| connectivity.errors.m essage.arguments.m essage | string | query | False | Filter by connectivity.errors.m essage.arguments. message<br><br>• Introduced in: 9.11 |

| Name | Type | In | Required | Description |
|---|---|---|---|---|
| connectivity.errors.message.message | string | query | False | Filter by connectivity.errors.message.message<br><br>• Introduced in: 9.11 |
| certificate.name | string | query | False | Filter by certificate.name<br><br>• Introduced in: 9.11 |
| certificate.ca | string | query | False | Filter by certificate.ca<br><br>• maxLength: 256<br>• minLength: 1 |
| certificate.serial_number | string | query | False | Filter by certificate.serial_number<br><br>• maxLength: 40<br>• minLength: 1 |
| name | string | query | False | Filter by name |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| 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.<br><br>• Default value: 1<br><br>• Max value: 120<br><br>• Min value: 0 |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned.<br><br>• Default value: 1 |
| 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[records] | |

**Example response**

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "access_control_role": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "admin"
    },
    "certificate": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "ca": "VeriSign",
      "name": "string",
      "serial_number": 1234567890
    },
    "connectivity": {
      "errors": {
        "message": {
          "arguments": {
            "code": "string",
            "message": "string"
          },
          "code": "4",
          "message": "entry doesn't exist"
        },
```

```
          "node": {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "name": "node1",
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
          }
        },
        "state": "fail"
      },
      "destination": "<a href="
mailto:administrator@mycompany.com">administrator@mycompany.com</a>",
      "filters": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "important-events"
      },
      "name": "Admin_Email",
      "syslog": {
        "format": {
          "hostname_override": "no_override",
          "message": "legacy_netapp",
          "timestamp_override": "no_override"
        },
        "port": 514,
        "transport": "udp_unencrypted"
      },
      "system_defined": 1,
      "type": "email"
    }
  }
```

**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 | |

_links

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

access_control_role

Indicates the access control role that created the event destination and is used to control access to the destination based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | Role name |

certificate

Specifies the client-side certificate used by the ONTAP system when mutual authentication is required. This object is only applicable for **rest_api** type destinations. Both the `ca` and `serial_number` fields must be specified when configuring a certificate in a PATCH or POST request. The `name` field is read-only and cannot be used to configure a client-side certificate.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| ca | string | Client certificate issuing CA |
| name | string | Certificate name |
| serial_number | string | Client certificate serial number |

arguments

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

message

Information to be displayed to the user.

| Name | Type | Description |
|---|---|---|
| arguments | array[arguments] | Message arguments |
| code | string | Unique message code. |
| message | string | User message. |

node

| Name | Type | Description |
|---|---|---|
| _links | _links | |
| name | string | |
| uuid | string | |

errors

Error object included in the event of connectivity failure.

| Name | Type | Description |
|---|---|---|
| message | message | Information to be displayed to the user. |
| node | node | |

connectivity

| Name | Type | Description |
|---|---|---|
| errors | array[errors] | A list of errors encountered during connectivity checks. |
| state | string | Current connectivity state. |

filters

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |

format

| Name | Type | Description |
|------|------|-------------|
| hostname_override | string | Syslog Hostname Format Override. The supported hostname formats are no_override (hostname format based on the syslog.format.message property i.e. fqdn if syslog.format.message is rfc_5424, hostname_only if syslog.format.message is legacy_netapp), fqdn (Fully Qualified Domain Name) and hostname_only. |
| message | string | Syslog Message Format. The supported message formats are legacy_netapp (format: <PRIVAL>TIMESTAMP [HOSTNAME:Event-name:Event-severity]: MSG) and rfc_5424 (format: <PRIVAL>VERSION TIMESTAMP HOSTNAME Event-source - Event-name - MSG). |
| timestamp_override | string | Syslog Timestamp Format Override. The supported timestamp formats are no_override (timestamp format based on the syslog.format.message property i.e. rfc_3164 if syslog.format.message is legacy_netapp, iso_8601_local_time if syslog.format.message is rfc_5424), rfc_3164 (format: Mmm dd hh:mm:ss), iso_8601_local_time (format: YYYY-MM-DDThh:mm:ss+/-hh:mm) and iso_8601_utc (format: YYYY-MM-DDThh:mm:ssZ). |

syslog

| Name | Type | Description |
|---|---|---|
| format | format | |
| port | integer | Syslog Port. |
| transport | string | Syslog Transport Protocol. |

records

| Name | Type | Description |
|---|---|---|
| _links | _links | |
| access_control_role | access_control_role | Indicates the access control role that created the event destination and is used to control access to the destination based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset. |
| certificate | certificate | Specifies the client-side certificate used by the ONTAP system when mutual authentication is required. This object is only applicable for **rest_api** type destinations. Both the `ca` and `serial_number` fields must be specified when configuring a certificate in a PATCH or POST request. The `name` field is read-only and cannot be used to configure a client-side certificate.<br><br>• Introduced in: 9.6 |
| connectivity | connectivity | |
| destination | string | Event destination |
| filters | array[filters] | |
| name | string | Destination name. Valid in POST. |
| syslog | syslog | |
| system_defined | boolean | Flag indicating system-defined destinations. |

| Name | Type | Description |
|------|------|-------------|
| type | string | Type of destination. Valid in POST. |

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 event destination

POST `/support/ems/destinations`

**Introduced In:** 9.6

Creates an event destination.

### Required properties

- `name` - String that uniquely identifies the destination.
- `type` - Type of destination that is to be created.
- `destination` - String that identifies the destination. The contents of this property changes depending on type.

### Recommended optional properties

- `filters.name` - List of filter names that should direct to this destination.
- `certificate` - When specifying a rest api destination, a client certificate can be provided.
- `syslog` - When specifying a syslog destination, a port, transport protocol, message format, timestamp

format and hostname format can be provided.

**Related ONTAP commands**

* `event notification destination create`
* `event notification create`

**Parameters**

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

**Request Body**

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| access_control_role | access_control_role | Indicates the access control role that created the event destination and is used to control access to the destination based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset. |
| certificate | certificate | Specifies the client-side certificate used by the ONTAP system when mutual authentication is required. This object is only applicable for **rest_api** type destinations. Both the `ca` and `serial_number` fields must be specified when configuring a certificate in a PATCH or POST request. The `name` field is read-only and cannot be used to configure a client-side certificate.<br><br>• Introduced in: 9.6 |
| connectivity | connectivity | |
| destination | string | Event destination |
| filters | array[filters] | |

| Name | Type | Description |
|---|---|---|
| name | string | Destination name. Valid in POST. |
| syslog | syslog | |
| system_defined | boolean | Flag indicating system-defined destinations. |
| type | string | Type of destination. Valid in POST. |

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "access_control_role": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "admin"
  },
  "certificate": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "ca": "VeriSign",
    "name": "string",
    "serial_number": 1234567890
  },
  "connectivity": {
    "errors": {
      "message": {
        "arguments": {
          "code": "string",
          "message": "string"
        },
        "code": "4",
        "message": "entry doesn't exist"
      },
      "node": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "node1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    },
```

```
      "state": "fail"
    },
    "destination": "<a href="
mailto:administrator@mycompany.com">administrator@mycompany.com</a>",
    "filters": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "important-events"
    },
    "name": "Admin_Email",
    "syslog": {
      "format": {
        "hostname_override": "no_override",
        "message": "legacy_netapp",
        "timestamp_override": "no_override"
      },
      "port": 514,
      "transport": "udp_unencrypted"
    },
    "system_defined": 1,
    "type": "email"
  }
```

**Response**

```
Status: 201, Created
```

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

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "access_control_role": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "admin"
    },
    "certificate": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "ca": "VeriSign",
      "name": "string",
      "serial_number": 1234567890
    },
    "connectivity": {
      "errors": {
        "message": {
          "arguments": {
            "code": "string",
            "message": "string"
          },
          "code": "4",
          "message": "entry doesn't exist"
        },
```

```
          "node": {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "name": "node1",
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
          }
        },
        "state": "fail"
      },
      "destination": "<a href="
mailto:administrator@mycompany.com">administrator@mycompany.com</a>",
      "filters": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "important-events"
      },
      "name": "Admin_Email",
      "syslog": {
        "format": {
          "hostname_override": "no_override",
          "message": "legacy_netapp",
          "timestamp_override": "no_override"
        },
        "port": 514,
        "transport": "udp_unencrypted"
      },
      "system_defined": 1,
      "type": "email"
  }
}
```

**Headers**

| Name | Description | Type |
|---|---|---|
| Location | Useful for tracking the resource location | string |

## Error

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
| --- | --- |
| 983104 | The syslog destination provided is invalid |
| 983107 | A provided filter does not exist |
| 983116 | The number of notifications has reached maximum capacity |
| 983117 | The number of destinations has reached maximum capacity |
| 983129 | The rest-api destination provided must contain a valid scheme, such as http// or https// |
| 983130 | The rest-api destination provided contains an invalid URL |
| 983131 | The rest-api destination provided contains an invalid IPv6 URL |
| 983144 | The security certificate information provided is incomplete. Provide the certificate and serial number |
| 983145 | The rest-api destination provided has an 'http://' scheme. It is invalid to provide certificate information |
| 983149 | New SNMP destinations cannot be created |
| 983152 | Default destinations cannot be modified or removed |
| 983153 | The security certificate provided does not exist |
| 983154 | The necessary private key is not installed on the system |
| 983170 | Connectivity check is not supported for the specified destination type on the node |
| 983171 | Connectivity check failed for the specified destination on the node |
| 983176 | Connectivity check is only supported for TCP-based syslog destinations |
| 983179 | The value for the destination field cannot be empty |
| 983180 | The destination name provided cannot be empty |
| 983181 | The destination name provided cannot contain spaces |

| Error Code | Description |
|---|---|
| 983182 | The destination name provided is invalid. The destination name must contain between 2 and 64 characters and start and end with an alphanumeric symbol or _(underscore). The allowed special characters are _(underscore) and -(hyphen) |
| 983184 | A provided property cannot be configured on the requested destination type |
| 983200 | Access control role compatibility issue with provided filters |

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

### href

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

### _links

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

### access_control_role

Indicates the access control role that created the event destination and is used to control access to the destination based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | Role name |

### certificate

Specifies the client-side certificate used by the ONTAP system when mutual authentication is required. This object is only applicable for **rest_api** type destinations. Both the `ca` and `serial_number` fields must be specified when configuring a certificate in a PATCH or POST request. The `name` field is read-only and cannot be used to configure a client-side certificate.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| ca | string | Client certificate issuing CA |
| name | string | Certificate name |
| serial_number | string | Client certificate serial number |

### arguments

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

message

Information to be displayed to the user.

| Name | Type | Description |
| --- | --- | --- |
| arguments | array[arguments] | Message arguments |
| code | string | Unique message code. |
| message | string | User message. |

node

| Name | Type | Description |
| --- | --- | --- |
| _links | _links | |
| name | string | |
| uuid | string | |

errors

Error object included in the event of connectivity failure.

| Name | Type | Description |
| --- | --- | --- |
| message | message | Information to be displayed to the user. |
| node | node | |

connectivity

| Name | Type | Description |
| --- | --- | --- |
| errors | array[errors] | A list of errors encountered during connectivity checks. |
| state | string | Current connectivity state. |

filters

| Name | Type | Description |
| --- | --- | --- |
| _links | _links | |
| name | string | |

format

| Name | Type | Description |
|---|---|---|
| hostname_override | string | Syslog Hostname Format Override. The supported hostname formats are no_override (hostname format based on the syslog.format.message property i.e. fqdn if syslog.format.message is rfc_5424, hostname_only if syslog.format.message is legacy_netapp), fqdn (Fully Qualified Domain Name) and hostname_only. |
| message | string | Syslog Message Format. The supported message formats are legacy_netapp (format: <PRIVAL>TIMESTAMP [HOSTNAME:Event-name:Event-severity]: MSG) and rfc_5424 (format: <PRIVAL>VERSION TIMESTAMP HOSTNAME Event-source - Event-name - MSG). |
| timestamp_override | string | Syslog Timestamp Format Override. The supported timestamp formats are no_override (timestamp format based on the syslog.format.message property i.e. rfc_3164 if syslog.format.message is legacy_netapp, iso_8601_local_time if syslog.format.message is rfc_5424), rfc_3164 (format: Mmm dd hh:mm:ss), iso_8601_local_time (format: YYYY-MM-DDThh:mm:ss+/-hh:mm) and iso_8601_utc (format: YYYY-MM-DDThh:mm:ssZ). |

syslog

| Name | Type | Description |
|---|---|---|
| format | format | |
| port | integer | Syslog Port. |

| Name | Type | Description |
|---|---|---|
| transport | string | Syslog Transport Protocol. |

ems_destination

| Name | Type | Description |
|---|---|---|
| _links | _links | |
| access_control_role | access_control_role | Indicates the access control role that created the event destination and is used to control access to the destination based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset. |
| certificate | certificate | Specifies the client-side certificate used by the ONTAP system when mutual authentication is required. This object is only applicable for **rest_api** type destinations. Both the `ca` and `serial_number` fields must be specified when configuring a certificate in a PATCH or POST request. The `name` field is read-only and cannot be used to configure a client-side certificate.<br><br>• Introduced in: 9.6 |
| connectivity | connectivity | |
| destination | string | Event destination |
| filters | array[filters] | |
| name | string | Destination name. Valid in POST. |
| syslog | syslog | |
| system_defined | boolean | Flag indicating system-defined destinations. |
| type | string | Type of destination. Valid in POST. |

_links

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

records

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| access_control_role | access_control_role | Indicates the access control role that created the event destination and is used to control access to the destination based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset. |
| certificate | certificate | Specifies the client-side certificate used by the ONTAP system when mutual authentication is required. This object is only applicable for **rest_api** type destinations. Both the `ca` and `serial_number` fields must be specified when configuring a certificate in a PATCH or POST request. The `name` field is read-only and cannot be used to configure a client-side certificate.<br><br>• Introduced in: 9.6 |
| connectivity | connectivity | |
| destination | string | Event destination |
| filters | array[filters] | |
| name | string | Destination name. Valid in POST. |
| syslog | syslog | |
| system_defined | boolean | Flag indicating system-defined destinations. |
| type | string | Type of destination. Valid in POST. |

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. |

# Manage an event destination instance

## Support EMS destinations name endpoint overview

### Overview

Manages a specific instance of a destination. There are limits to the information that you can modify after a destination is created. For example, you cannot change a destination's type, but you can modify the underlying details of the type.

> ⓘ  The system defines default destinations that cannot be removed or modified. These destinations are specified by setting the "system_defined" field to "true".

See the documentation for /support/ems/destinations for details on the various properties in a destination.

### Connectivity Test

Optionally, you can request the connectivity object by specifically requesting the object in the fields query. This will perform an additional test to determine the state of the destination. The state response can include one of the following values:

- success
- fail
- not_supported

**success**

If the connectivity object indicates a state of 'success', then the destination check passed.

| | Currently, only the 'rest_api' destination type is supported. A successful result indicates that the server received the event. |
|---|---|

**fail**

If the connectivity object indicates a state of 'fail', then the destination check has not passed. The object will contain a 'error' object with additional information regarding the failure.

**not_supported**

If the connectivity object indicates a state of 'not_supported', then the destination check is not available for the indicated destination type. This is not considered a failure condition.

| | Currently, only the 'rest_api' destination type is supported for connectivity testing. |
|---|---|

**Examples**

**Retrieving a specific destination instance**

```
# The API:
GET /api/support/ems/destinations/{name}

# The call:
curl -X GET "https://<mgmt-ip>/api/support/ems/destinations/snmp-traphost"
-H "accept: application/hal+json"

# The response:
200 OK

# JSON Body
{
"name": "snmp-traphost",
"type": "snmp",
"destination": "",
"filters": [
  {
    "name": "default-trap-events",
    "_links": {
      "self": {
        "href": "/api/support/ems/filters/default-trap-events"
      }
    }
  }
],
"_links": {
  "self": {
    "href": "/api/support/ems/destinations/snmp-traphost"
  }
}
}
```

**Check whether a destination passes connectivity tests**

```
# The API:
GET /api/support/ems/destinations/{name}

# The call:
curl -X GET "https://<mgmt-ip>/api/support/ems/destinations/rest-api-
destination?fields=name,connectivity.*" -H "accept: application/hal+json"

# The response:
200 OK

# JSON Body
{
"name": "rest-api-destination",
"connectivity": {
  "state": "fail",
  "errors": [
    {
      "message": {
        "message": "Cannot reach host mail@mail.com.",
        "code": "4",
        "arguments": [
          {
            "code": "5",
            "message": "mail@mail.com"
          }
        ],
      },
      "node": {
        "name": "node1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    }
  ]
},
"_links": {
  "self": {
    "href": "/api/support/ems/destinations/rest-api-
destination?fields=name,connectivity.*"
  }
}
}
```

**Updating an existing destination (change of email address)**

```
# The API:
PATCH /api/support/ems/destinations/{name}

# The call:
curl -X POST "https://<mgmt-ip>/api/support/ems/destinations/test-
destination" -H "accept: application/hal+json" -H "Content-Type:
application/json" -d "@test_ems_destinations_patch.txt"
test_ems_destinations_patch.txt(body):
{
"destination": "support@mycompany.com"
}


# The response:
200 OK
```

**Deleting an existing destination**

```
# The API:
DELETE /api/support/ems/destinations/{name}

# The call:
curl -X DELETE "https://<mgmt-ip>/api/support/ems/destinations/test-
destination" -H "accept: application/hal+json"

# The response:
200 OK
```

# Delete an event destination

DELETE /support/ems/destinations/{name}

**Introduced In:** 9.6

Deletes an event destination.

**Related ONTAP commands**

* `event notification destination delete`

* `event notification delete`

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| name | string | path | True | Destination name |

## Response

```
Status: 200, Ok
```

## Error

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|---|---|
| 983152 | Default destinations cannot be modified or removed |

Also see the table of common errors in the Response body overview section of this documentation.

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

**Example error**

```json
{
  "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[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

## Retrieve an event destination

GET `/support/ems/destinations/{name}`

**Introduced In:** 9.6

Retrieves event destinations.

### Expensive properties

There is an added computational cost to retrieving values for these properties. They are not included by default in GET results and must be explicitly requested using the `fields` query parameter.

* `connectivity.*`

### Related ONTAP commands

* `event notification destination show`
* `event notification show`

### Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| name | string | path | True | Destination name |

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

**Response**

```
Status: 200, Ok
```

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| access_control_role | access_control_role | Indicates the access control role that created the event destination and is used to control access to the destination based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset. |
| certificate | certificate | Specifies the client-side certificate used by the ONTAP system when mutual authentication is required. This object is only applicable for **rest_api** type destinations. Both the `ca` and `serial_number` fields must be specified when configuring a certificate in a PATCH or POST request. The `name` field is read-only and cannot be used to configure a client-side certificate.<br><br>• Introduced in: 9.6 |
| connectivity | connectivity | |
| destination | string | Event destination |
| filters | array[filters] | |
| name | string | Destination name. Valid in POST. |
| syslog | syslog | |
| system_defined | boolean | Flag indicating system-defined destinations. |
| type | string | Type of destination. Valid in POST. |

```json
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "access_control_role": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "admin"
  },
  "certificate": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "ca": "VeriSign",
    "name": "string",
    "serial_number": 1234567890
  },
  "connectivity": {
    "errors": {
      "message": {
        "arguments": {
          "code": "string",
          "message": "string"
        },
        "code": "4",
        "message": "entry doesn't exist"
      },
      "node": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "node1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    },
```

```
      "state": "fail"
    },
    "destination": "<a href="
mailto:administrator@mycompany.com">administrator@mycompany.com</a>",
    "filters": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "important-events"
    },
    "name": "Admin_Email",
    "syslog": {
      "format": {
        "hostname_override": "no_override",
        "message": "legacy_netapp",
        "timestamp_override": "no_override"
      },
      "port": 514,
      "transport": "udp_unencrypted"
    },
    "system_defined": 1,
    "type": "email"
  }
```

**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 |
|------|------|-------------|
| self | href | |

### access_control_role

Indicates the access control role that created the event destination and is used to control access to the destination based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | Role name |

### certificate

Specifies the client-side certificate used by the ONTAP system when mutual authentication is required. This object is only applicable for **rest_api** type destinations. Both the `ca` and `serial_number` fields must be specified when configuring a certificate in a PATCH or POST request. The `name` field is read-only and cannot be used to configure a client-side certificate.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| ca | string | Client certificate issuing CA |
| name | string | Certificate name |
| serial_number | string | Client certificate serial number |

### arguments

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

message

Information to be displayed to the user.

| Name | Type | Description |
| --- | --- | --- |
| arguments | array[arguments] | Message arguments |
| code | string | Unique message code. |
| message | string | User message. |

node

| Name | Type | Description |
| --- | --- | --- |
| _links | _links | |
| name | string | |
| uuid | string | |

errors

Error object included in the event of connectivity failure.

| Name | Type | Description |
| --- | --- | --- |
| message | message | Information to be displayed to the user. |
| node | node | |

connectivity

| Name | Type | Description |
| --- | --- | --- |
| errors | array[errors] | A list of errors encountered during connectivity checks. |
| state | string | Current connectivity state. |

filters

| Name | Type | Description |
| --- | --- | --- |
| _links | _links | |
| name | string | |

format

| Name | Type | Description |
|---|---|---|
| hostname_override | string | Syslog Hostname Format Override. The supported hostname formats are no_override (hostname format based on the syslog.format.message property i.e. fqdn if syslog.format.message is rfc_5424, hostname_only if syslog.format.message is legacy_netapp), fqdn (Fully Qualified Domain Name) and hostname_only. |
| message | string | Syslog Message Format. The supported message formats are legacy_netapp (format: <PRIVAL>TIMESTAMP [HOSTNAME:Event-name:Event-severity]: MSG) and rfc_5424 (format: <PRIVAL>VERSION TIMESTAMP HOSTNAME Event-source - Event-name - MSG). |
| timestamp_override | string | Syslog Timestamp Format Override. The supported timestamp formats are no_override (timestamp format based on the syslog.format.message property i.e. rfc_3164 if syslog.format.message is legacy_netapp, iso_8601_local_time if syslog.format.message is rfc_5424), rfc_3164 (format: Mmm dd hh:mm:ss), iso_8601_local_time (format: YYYY-MM-DDThh:mm:ss+/-hh:mm) and iso_8601_utc (format: YYYY-MM-DDThh:mm:ssZ). |

syslog

| Name | Type | Description |
|---|---|---|
| format | format | |
| port | integer | Syslog Port. |

| Name | Type | Description |
|---|---|---|
| transport | string | Syslog Transport Protocol. |

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. |

## Update an event destination

PATCH `/support/ems/destinations/{name}`

**Introduced In:** 9.6

Updates an event destination.

**Recommended optional properties**

* `filters.name` - New list of filters that should direct to this destination. The existing list is discarded.

* `certificate` - New certificate parameters when the destination type is `rest api`.

**Related ONTAP commands**

* `event notification destination modify`

* `event notification modify`

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| name | string | path | True | Destination name |

**Request Body**

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| access_control_role | access_control_role | Indicates the access control role that created the event destination and is used to control access to the destination based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset. |
| certificate | certificate | Specifies the client-side certificate used by the ONTAP system when mutual authentication is required. This object is only applicable for **rest_api** type destinations. Both the `ca` and `serial_number` fields must be specified when configuring a certificate in a PATCH or POST request. The `name` field is read-only and cannot be used to configure a client-side certificate.<br><br>• Introduced in: 9.6 |
| connectivity | connectivity | |
| destination | string | Event destination |
| filters | array[filters] | |
| name | string | Destination name. Valid in POST. |
| syslog | syslog | |
| system_defined | boolean | Flag indicating system-defined destinations. |
| type | string | Type of destination. Valid in POST. |

**Example request**

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "access_control_role": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "admin"
  },
  "certificate": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "ca": "VeriSign",
    "name": "string",
    "serial_number": 1234567890
  },
  "connectivity": {
    "errors": {
      "message": {
        "arguments": {
          "code": "string",
          "message": "string"
        },
        "code": "4",
        "message": "entry doesn't exist"
      },
      "node": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "node1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    },
```

```
      "state": "fail"
    },
    "destination": "<a href="
mailto:administrator@mycompany.com">administrator@mycompany.com</a>",
    "filters": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "important-events"
    },
    "name": "Admin_Email",
    "syslog": {
      "format": {
        "hostname_override": "no_override",
        "message": "legacy_netapp",
        "timestamp_override": "no_override"
      },
      "port": 514,
      "transport": "udp_unencrypted"
    },
    "system_defined": 1,
    "type": "email"
  }
```

**Response**

```
Status: 200, Ok
```

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| access_control_role | access_control_role | Indicates the access control role that created the event destination and is used to control access to the destination based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset. |

| Name | Type | Description |
|---|---|---|
| certificate | certificate | Specifies the client-side certificate used by the ONTAP system when mutual authentication is required. This object is only applicable for **rest_api** type destinations. Both the `ca` and `serial_number` fields must be specified when configuring a certificate in a PATCH or POST request. The `name` field is read-only and cannot be used to configure a client-side certificate.<br><br>• Introduced in: 9.6 |
| connectivity | connectivity | |
| destination | string | Event destination |
| filters | array[filters] | |
| name | string | Destination name. Valid in POST. |
| syslog | syslog | |
| system_defined | boolean | Flag indicating system-defined destinations. |
| type | string | Type of destination. Valid in POST. |

```json
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "access_control_role": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "admin"
  },
  "certificate": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "ca": "VeriSign",
    "name": "string",
    "serial_number": 1234567890
  },
  "connectivity": {
    "errors": {
      "message": {
        "arguments": {
          "code": "string",
          "message": "string"
        },
        "code": "4",
        "message": "entry doesn't exist"
      },
      "node": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "node1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    },
```

```
      "state": "fail"
    },
    "destination": "<a href="
mailto:administrator@mycompany.com">administrator@mycompany.com</a>",
    "filters": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "important-events"
    },
    "name": "Admin_Email",
    "syslog": {
      "format": {
        "hostname_override": "no_override",
        "message": "legacy_netapp",
        "timestamp_override": "no_override"
      },
      "port": 514,
      "transport": "udp_unencrypted"
    },
    "system_defined": 1,
    "type": "email"
}
```

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|---|---|
| 983088 | The destination name provided cannot be empty |
| 983089 | The destination name provided cannot contain spaces |
| 983094 | The destination name provided is invalid. The destination name must contain between 2 and 64 characters and start and end with an alphanumeric symbol or _(underscore). The allowed special characters are _(underscore) and -(hyphen) |
| 983104 | The syslog destination provided is invalid |
| 983107 | A provided filter does not exist |

| Error Code | Description |
|---|---|
| 983116 | The number of notifications has reached maximum capacity |
| 983117 | The number of destinations has reached maximum capacity |
| 983129 | The rest-api destination must contain a valid scheme, such as http// or https// |
| 983130 | The rest-api destination provided contains an invalid URL |
| 983131 | The rest-api destination provided contains an invalid IPv6 URL |
| 983142 | The security certificate provided does not exist |
| 983143 | The private security key provided does not exist |
| 983144 | The security certificate information provided is incomplete. Provide the certificate and serial number |
| 983145 | The rest-api destination provided has an 'http://' scheme. It is invalid to provide certificate information |
| 983150 | The type of an existing destination cannot be changed |
| 983152 | Default destinations cannot be modified or removed |
| 983184 | A provided property cannot be configured on the requested destination type |
| 983200 | Access control role compatibility issue with provided filters |

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**

href

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

_links

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

access_control_role

Indicates the access control role that created the event destination and is used to control access to the destination based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | Role name |

certificate

Specifies the client-side certificate used by the ONTAP system when mutual authentication is required. This object is only applicable for **rest_api** type destinations. Both the `ca` and `serial_number` fields must be specified when configuring a certificate in a PATCH or POST request. The `name` field is read-only and cannot be used to configure a client-side certificate.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| ca | string | Client certificate issuing CA |
| name | string | Certificate name |
| serial_number | string | Client certificate serial number |

arguments

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

**message**

Information to be displayed to the user.

| Name | Type | Description |
|------|------|-------------|
| arguments | array[arguments] | Message arguments |
| code | string | Unique message code. |
| message | string | User message. |

**node**

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

**errors**

Error object included in the event of connectivity failure.

| Name | Type | Description |
|------|------|-------------|
| message | message | Information to be displayed to the user. |
| node | node | |

**connectivity**

| Name | Type | Description |
|------|------|-------------|
| errors | array[errors] | A list of errors encountered during connectivity checks. |
| state | string | Current connectivity state. |

**filters**

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |

**format**

| Name | Type | Description |
|---|---|---|
| hostname_override | string | Syslog Hostname Format Override. The supported hostname formats are no_override (hostname format based on the syslog.format.message property i.e. fqdn if syslog.format.message is rfc_5424, hostname_only if syslog.format.message is legacy_netapp), fqdn (Fully Qualified Domain Name) and hostname_only. |
| message | string | Syslog Message Format. The supported message formats are legacy_netapp (format: <PRIVAL>TIMESTAMP [HOSTNAME:Event-name:Event-severity]: MSG) and rfc_5424 (format: <PRIVAL>VERSION TIMESTAMP HOSTNAME Event-source - Event-name - MSG). |
| timestamp_override | string | Syslog Timestamp Format Override. The supported timestamp formats are no_override (timestamp format based on the syslog.format.message property i.e. rfc_3164 if syslog.format.message is legacy_netapp, iso_8601_local_time if syslog.format.message is rfc_5424), rfc_3164 (format: Mmm dd hh:mm:ss), iso_8601_local_time (format: YYYY-MM-DDThh:mm:ss+/-hh:mm) and iso_8601_utc (format: YYYY-MM-DDThh:mm:ssZ). |

syslog

| Name | Type | Description |
|---|---|---|
| format | format | |
| port | integer | Syslog Port. |

| Name | Type | Description |
|---|---|---|
| transport | string | Syslog Transport Protocol. |

ems_destination

| Name | Type | Description |
|---|---|---|
| _links | _links | |
| access_control_role | access_control_role | Indicates the access control role that created the event destination and is used to control access to the destination based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset. |
| certificate | certificate | Specifies the client-side certificate used by the ONTAP system when mutual authentication is required. This object is only applicable for **rest_api** type destinations. Both the `ca` and `serial_number` fields must be specified when configuring a certificate in a PATCH or POST request. The `name` field is read-only and cannot be used to configure a client-side certificate.<br><br>• Introduced in: 9.6 |
| connectivity | connectivity | |
| destination | string | Event destination |
| filters | array[filters] | |
| name | string | Destination name. Valid in POST. |
| syslog | syslog | |
| system_defined | boolean | Flag indicating system-defined destinations. |
| type | string | Type of destination. Valid in POST. |

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. |

# Retrieve events

## Support EMS events endpoint overview

### Overview

Queries a live collection of observed events on the system. Note: The `filter.name` parameter is used to pass a filter to be applied to the event collection returned. To retrieve the list of available filters, refer to /support/ems/filters

### Example

**Querying for the latest event received by EMS**

```
# The API:
GET /api/support/ems/events

# The call:
curl -X GET "https://<mgmt-
ip>/api/support/ems/events?fields=message.name&max_records=1" -H "accept:
application/hal+json"

# The response:
200 OK

# JSON Body
{
"records": [
  {
    "node": {
      "name": "node1",
      "uuid": "f087b8e3-99ac-11e8-b5a5-005056bb4ec7",
      "_links": {
        "self": {
          "href": "/api/cluster/nodes/f087b8e3-99ac-11e8-b5a5-
005056bb4ec7"
        }
      }
    },
    "index": 661,
    "message": {
      "name": "raid.aggr.log.CP.count"
    },
    "_links": {
      "self": {
        "href": "/api/support/ems/events/node1/661"
      }
    }
  }
],
"num_records": 1,
"_links": {
  "self": {
    "href": "/api/support/ems/events?fields=message.name&max_records=1"
  },
}
}
```

# Retrieve observed events

GET `/support/ems/events`

**Introduced In:** 9.6

Retrieves a collection of observed events.

**Related ONTAP commands**

* `event log show`

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| log_message | string | query | False | Filter by log_message |
| source | string | query | False | Filter by source |
| index | integer | query | False | Filter by index |
| message.severity | string | query | False | Filter by message.severity |
| message.name | string | query | False | Filter by message.name |
| node.name | string | query | False | Filter by node.name |
| node.uuid | string | query | False | Filter by node.uuid |
| time | string | query | False | Filter by time |
| parameters.name | string | query | False | Filter by parameters.name |
| parameters.value | string | query | False | Filter by parameters.value |
| filter.name | string | query | False | Filter the collection returned using an event filter <br><br> • Introduced in: 9.8 |

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned.<br><br>• Default value: 1 |
| 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.<br><br>• Default value: 1<br><br>• Max value: 120<br><br>• 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[records] | |

**Example response**

```json
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "index": 1,
    "message": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "callhome.spares.low",
      "severity": "emergency"
    },
    "node": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "node1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "parameters": {
      "name": "numOps",
      "value": 123
    },
    "source": "string",
    "time": "string"
  }
}
```

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|------------|-------------|
| 983093 | The provided filter is unknown. |

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**

href

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

_links

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

self

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

_links

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

_links

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

message

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | Message name of the event. Returned by default. |
| severity | string | Severity of the event. Returned by default. |

node

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |

| Name | Type | Description |
|------|------|-------------|
| uuid | string | |

## parameters

| Name | Type | Description |
|------|------|-------------|
| name | string | Name of parameter |
| value | string | Value of parameter |

## records

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| index | integer | Index of the event. Returned by default. |
| log_message | string | A formatted text string populated with parameter details. Returned by default. |
| message | message | |
| node | node | |
| parameters | array[parameters] | A list of parameters provided with the EMS event. |
| source | string | Source |
| time | string | Timestamp of the event. Returned by default. |

## error_arguments

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

## returned_error

| Name | Type | Description |
|------|------|-------------|
| arguments | array[error_arguments] | Message arguments |

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| Name | Type | Description |
|---|---|---|
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

# Create or retrieve event filters

## Support EMS filters endpoint overview

### Overview

Manages the list of available filters. A filter is a named collection of rules that enable the system to identify events that require additional handling. A filter is linked with a destination to which the system sends specific events.

When EMS processes an event, each filter is evaluated for a match. More than one filter can handle a single event.

> ℹ️ The system defines default filters that cannot be removed or modified. These filters are specified by setting the "system_defined" field to "true".

#### Filter rule position

A filter's rules are evaluated sequentially, according to their position index. When a rule is added or modified, the position can be set to customize the filter's logic. If no position is specified, a new rule is appended to the end of the list.

#### Filter rule types

A filter rule can be one of two types: 'include' or 'exclude'. If an event matches the criteria of the rule, the type dictates whether it should be forwarded to the destination or ignored.

#### Filter rule matching criteria

A valid filter rule must contain at least one set of criteria.

#### Name pattern

A name pattern is matched against an event's name. Multiple characters can be matched using the wildcard character '*'.

#### Severity

The severity pattern is matched against an event's severity. Multiple severities can be specified in a comma separated list. A single wildcard * will match all severities. When multiple severities are provided in a rule, all must match for the rule to be considered matched. A pattern can include one or more wildcard * characters.

Valid values are:

- emergency

- alert

- error

- notice

- informational

- debug

**SNMP trap type**

The SNMP trap type pattern is matched against an event's trap type. Multiple trap types can be specified in a comma separated list. A single wildcard * matches all trap types. When multiple trap types are provided in a rule, all must match for the rule to be considered matched. A pattern can include one or more wildcard * characters. Valid values are:

- standard

- built_in

- severity_based

**Parameter criteria**

A parameter criterion is matched against events' parameters. Each parameter consists of a name and a value. When multiple parameter criteria are provided in a rule, all must match for the rule to be considered matched. A pattern can include one or more wildcard '*' characters.

**Examples**

**Retrieving a list of filters whose names contain a hyphen**

```
# The API:
GET /api/support/ems/filters

# The call:
curl -X GET "https://<mgmt-ip>/api/support/ems/filters?name=*-*" -H
"accept: application/hal+json"

# The response:
200 OK

# JSON Body
{
"records": [
  {
    "name": "default-trap-events",
    "_links": {
      "self": {
        "href": "/api/support/ems/filters/default-trap-events"
      }
    }
  },
  {
    "name": "important-events",
    "_links": {
      "self": {
        "href": "/api/support/ems/filters/important-events"
      }
    }
  },
  {
    "name": "no-info-debug-events",
    "_links": {
      "self": {
        "href": "/api/support/ems/filters/no-info-debug-events"
      }
    }
  }
],
"num_records": 3,
"_links": {
  "self": {
    "href": "/api/support/ems/filters?name=*-*"
  }
}
}
```

**Creating a new filter using various matching criteria**

```
# The API:
POST /api/support/ems/filters

# The call:
curl -X POST "https://<mgmt-ip>/api/support/ems/filters" -H "accept:
application/hal+json" -H "Content-Type: application/json" -d
"@test_ems_filters_post.txt"
test_ems_filters_post.txt(body):
{
"name": "test-filter",
"rules": [
  {
    "index": 1,
    "type": "include",
    "message_criteria": {
      "name_pattern": "LUN.*",
      "severities": "alert,error",
      "snmp_trap_types": "severity_based"
    },
    "parameter_criteria": [
      {
        "name_pattern": "type",
        "value_pattern": "volume"
      },
      {
        "name_pattern": "vol",
        "value_pattern": "cloud*"
      }
    ]
  }
]
}

# The response:
201 Created
```

## Retrieve event filters

GET /support/ems/filters

**Introduced In:** 9.6

Retrieves a collection of event filters.

## Related ONTAP commands

- `event filter show`

## Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| rules.message_criteria.snmp_trap_types | string | query | False | Filter by rules.message_criteria.snmp_trap_types |
| rules.message_criteria.name_pattern | string | query | False | Filter by rules.message_criteria.name_pattern |
| rules.message_criteria.severities | string | query | False | Filter by rules.message_criteria.severities |
| rules.parameter_criteria.value_pattern | string | query | False | Filter by rules.parameter_criteria.value_pattern<br><br>• Introduced in: 9.13 |
| rules.parameter_criteria.name_pattern | string | query | False | Filter by rules.parameter_criteria.name_pattern<br><br>• Introduced in: 9.13 |
| rules.index | integer | query | False | Filter by rules.index |
| rules.type | string | query | False | Filter by rules.type |
| system_defined | boolean | query | False | Filter by system_defined<br><br>• Introduced in: 9.10 |
| access_control_role.name | string | query | False | Filter by access_control_role.name<br><br>• Introduced in: 9.13 |

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| name | string | query | False | Filter by name |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned.<br><br>• Default value: 1 |
| 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.<br><br>• Default value: 1<br>• Max value: 120<br>• 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 | |

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

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "access_control_role": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "admin"
    },
    "name": "wafl-critical-events",
    "rules": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "index": 1,
      "message_criteria": {
        "_links": {
          "related": {
            "href": "/api/resourcelink"
          }
        },
        "name_pattern": "wafl.*",
        "severities": "emergency,alert,error",
        "snmp_trap_types": "standard,built_in"
      },
      "parameter_criteria": {
        "name_pattern": "vol",
```

```
          "value_pattern": "cloud*"
        },
        "type": "include"
      },
      "system_defined": 1
    }
  }
```

**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 | |

_links

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

access_control_role

Indicates the access control role that created the event filter and is used to control access to the filter based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | Role name |

_links

| Name | Type | Description |
|------|------|-------------|
| related | href | |

message_criteria

Matching message definitions for the filter. A property must be specified.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name_pattern | string | Message name filter on which to match. Supports wildcards. Defaults to * if not specified. |
| severities | string | A comma-separated list of severities or a wildcard. |

| Name | Type | Description |
|------|------|-------------|
| snmp_trap_types | string | A comma separated list of snmp_trap_types or a wildcard. |

parameter_criteria

Criterion used for parameter based filtering

| Name | Type | Description |
|------|------|-------------|
| name_pattern | string | Parameter name pattern. Wildcard character '*' is supported. |
| value_pattern | string | Parameter value pattern. Wildcard character '*' is supported. |

rules

Rule for an event filter

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| index | integer | Rule index. Rules are evaluated in ascending order. If a rule's index order is not specified during creation, the rule is appended to the end of the list. |
| message_criteria | message_criteria | Matching message definitions for the filter. A property must be specified. |
| parameter_criteria | array[parameter_criteria] | Parameter criteria used to match against events' parameters. Each parameter consists of a name and a value. When multiple parameter criteria are provided in a rule, all must match for the rule to be considered matched. A pattern can include one or more wildcard '*' characters. |
| type | string | Rule type |

records

| Name | Type | Description |
|---|---|---|
| _links | _links | |
| access_control_role | access_control_role | Indicates the access control role that created the event filter and is used to control access to the filter based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset. |
| name | string | Filter name |
| rules | array[rules] | Array of event filter rules on which to match. |
| system_defined | boolean | Flag indicating system-defined filters. |

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 event filter

POST `/support/ems/filters`

**Introduced In:** 9.6

Creates an event filter.

**Required properties**

- `name` - String that uniquely identifies the filter.

**Recommended optional properties**

- `rules` - List of criteria which is used to match a filter with an event.

**Related ONTAP commands**

- `event filter create`

**Parameters**

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

**Request Body**

| Name | Type | Description |
|---|---|---|
| _links | _links | |
| access_control_role | access_control_role | Indicates the access control role that created the event filter and is used to control access to the filter based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset. |
| name | string | Filter name |
| rules | array[rules] | Array of event filter rules on which to match. |
| system_defined | boolean | Flag indicating system-defined filters. |

**Example request**

```json
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "access_control_role": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "admin"
  },
  "name": "wafl-critical-events",
  "rules": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "index": 1,
    "message_criteria": {
      "_links": {
        "related": {
          "href": "/api/resourcelink"
        }
      },
      "name_pattern": "wafl.*",
      "severities": "emergency,alert,error",
      "snmp_trap_types": "standard,built_in"
    },
    "parameter_criteria": {
      "name_pattern": "vol",
      "value_pattern": "cloud*"
    },
    "type": "include"
  },
  "system_defined": 1
}
```

## Response

Status: 201, Created

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

```json
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "access_control_role": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "admin"
    },
    "name": "wafl-critical-events",
    "rules": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "index": 1,
      "message_criteria": {
        "_links": {
          "related": {
            "href": "/api/resourcelink"
          }
        },
        "name_pattern": "wafl.*",
        "severities": "emergency,alert,error",
        "snmp_trap_types": "standard,built_in"
      },
      "parameter_criteria": {
        "name_pattern": "vol",
```

```
        "value_pattern": "cloud*"
      },
      "type": "include"
    },
    "system_defined": 1
  }
}
```

## Headers

| Name | Description | Type |
|---|---|---|
| Location | Useful for tracking the resource location | string |

## Error

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|---|---|
| 983088 | The filter name provided is empty |
| 983089 | The filter name provided cannot contain spaces |
| 983092 | The index of the rule provided is outside the allowed range for the filter provided |
| 983094 | The filter name provided is invalid. The filter name must contain between 2 and 64 characters and start and end with an alphanumeric symbol or (underscore). The allowed special characters are (underscore) and -(hyphen) |
| 983095 | The rule index provided is invalid for the filter provided |
| 983101 | No event is matched by the rule provided |
| 983113 | Default filters cannot be modified or removed |
| 983114 | The maximum number of filters is reached |
| 983115 | The maximum number of filter rules is reached |
| 983126 | A rule requires at least one name_pattern, severities, snmp_trap_types, or parameter pattern to be defined |
| 983127 | A property cannot contain a combination of the wildcard character and other values |
| 983128 | An invalid value is provided for the property 'snmp_trap_types' |

| Error Code | Description |
|---|---|
| 983146 | An invalid value is provided for the property 'severities' |
| 983147 | The severities provided are not supported |
| 983155 | The provided severities property does not match that of the name_pattern |
| 983156 | The provided snmp_trap_types property does not match that of the name_pattern |
| 983157 | The provided severities and snmp_trap_types properties do not match those of the name_pattern |
| 983158 | The name_pattern provided does not exist |
| 983195 | Empty field in parameter_criteria. Both name and value patterns must be specified |
| 983196 | name_pattern and value_pattern fields in parameter_criteria are empty |
| 983211 | Parameter criteria based filtering is not supported in this version of ONTAP |

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

### href

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

### _links

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

### access_control_role

Indicates the access control role that created the event filter and is used to control access to the filter based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | Role name |

### _links

| Name | Type | Description |
|------|------|-------------|
| related | href | |

### message_criteria

Matching message definitions for the filter. A property must be specified.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name_pattern | string | Message name filter on which to match. Supports wildcards. Defaults to * if not specified. |
| severities | string | A comma-separated list of severities or a wildcard. |
| snmp_trap_types | string | A comma separated list of snmp_trap_types or a wildcard. |

### parameter_criteria

Criterion used for parameter based filtering

| Name | Type | Description |
|------|------|-------------|
| name_pattern | string | Parameter name pattern. Wildcard character '*' is supported. |
| value_pattern | string | Parameter value pattern. Wildcard character '*' is supported. |

rules

Rule for an event filter

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| index | integer | Rule index. Rules are evaluated in ascending order. If a rule's index order is not specified during creation, the rule is appended to the end of the list. |
| message_criteria | message_criteria | Matching message definitions for the filter. A property must be specified. |
| parameter_criteria | array[parameter_criteria] | Parameter criteria used to match against events' parameters. Each parameter consists of a name and a value. When multiple parameter criteria are provided in a rule, all must match for the rule to be considered matched. A pattern can include one or more wildcard '*' characters. |
| type | string | Rule type |

ems_filter

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

| Name | Type | Description |
|---|---|---|
| access_control_role | access_control_role | Indicates the access control role that created the event filter and is used to control access to the filter based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset. |
| name | string | Filter name |
| rules | array[rules] | Array of event filter rules on which to match. |
| system_defined | boolean | Flag indicating system-defined filters. |

_links

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

records

| Name | Type | Description |
|---|---|---|
| _links | _links | |
| access_control_role | access_control_role | Indicates the access control role that created the event filter and is used to control access to the filter based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset. |
| name | string | Filter name |
| rules | array[rules] | Array of event filter rules on which to match. |
| system_defined | boolean | Flag indicating system-defined filters. |

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. |

# Manage event filters

## Support EMS filters name endpoint overview

### Overview

Manages a specific filter instance. See the documentation for /support/ems/filters for details on the various properties.

### Examples

**Retrieving a specific filter instance**

```
# The API:
GET /api/support/ems/filters/{name}

# The call:
curl -X GET "https://<mgmt-ip>/api/support/ems/filters/aggregate-events"
-H "accept: application/hal+json"

# The response:
200 OK

# JSON Body
{
"name": "aggregate-events",
"rules": [
```

```
  {
    "index": 1,
    "type": "include",
    "message_criteria": {
      "name_pattern": "*",
      "severities": "emergency,alert,error,notice",
      "snmp_trap_types": "*",
      "_links": {
        "related": {
          "href":
"/api/support/ems/messages?name=*&severity=emergency,alert,error,notice&sn
mp_trap_type=*"
        }
      }
    },
    "parameter_criteria": [
      {
        "name_pattern": "type",
        "value_pattern": "aggregate"
      }
    ],
    "_links": {
      "self": {
        "href": "/api/support/ems/filters/aggregate-events/rules/1"
      }
    }
  },
  {
    "index": 2,
    "type": "exclude",
    "message_criteria": {
      "name_pattern": "*",
      "severities": "*",
      "snmp_trap_types": "*",
      "_links": {
        "related": {
          "href":
"/api/support/ems/messages?name=*&severity=*&snmp_trap_type=*"
        }
      }
    },
    "parameter_criteria": [
      {
        "name_pattern": "*",
        "value_pattern": "*"
      }
```

```
      ],
      "_links": {
        "self": {
          "href": "/api/support/ems/filters/aggregate-events/rules/2"
        }
      }
    }
  ],
  "_links": {
    "self": {
      "href": "/api/support/ems/filters/aggregate-events"
    }
  }
}
}
```

**Updating an existing filter with a new rule**

```
# The API:
PATCH /api/support/ems/filters/{name}

# The call:
curl -X PATCH "https://<mgmt-ip>/api/support/ems/filters/test-filter" -H
"accept: application/hal+json" -H "Content-Type: application/json" -d
"@test_ems_filters_patch.txt"
test_ems_filters_patch.txt(body):
{
"rules": [
  {
    "type": "include",
    "message_criteria": {
      "name_pattern": "wafl.*",
      "severities": "error"
    }
  }
]
}

# The response:
200 OK
```

**Deleting an existing filter**
```

```
# The API:
DELETE /api/support/ems/filters/{name}

# The call:
curl -X DELETE "https://<mgmt-ip>/api/support/ems/filters/test-filter" -H
"accept: application/hal+json"

# The response:
200 OK
```

## Delete an event filter

DELETE /support/ems/filters/{name}

**Introduced In:** 9.6

Deletes an event filter.

**Related ONTAP commands**

- event filter delete

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| name | string | path | True | Filter name |

**Response**

```
Status: 200, Ok
```

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|------------|-------------|
| 983113 | Default filters cannot be modified or removed |
| 983124 | Filter is being referenced by a destination |
| 983204 | Filter is being used for role-based operations |

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**

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. |

# Retrieve an event filter

GET `/support/ems/filters/{name}`

**Introduced In:** 9.6

Retrieves an event filter.

## Related ONTAP commands

- `event filter show`

## Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| name | string | path | True | Filter name |
| fields | array[string] | query | False | Specify the fields to return. |

## Response

```
Status: 200, Ok
```

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| access_control_role | access_control_role | Indicates the access control role that created the event filter and is used to control access to the filter based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset. |
| name | string | Filter name |
| rules | array[rules] | Array of event filter rules on which to match. |
| system_defined | boolean | Flag indicating system-defined filters. |

**Example response**

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "access_control_role": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "admin"
  },
  "name": "wafl-critical-events",
  "rules": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "index": 1,
    "message_criteria": {
      "_links": {
        "related": {
          "href": "/api/resourcelink"
        }
      },
      "name_pattern": "wafl.*",
      "severities": "emergency,alert,error",
      "snmp_trap_types": "standard,built_in"
    },
    "parameter_criteria": {
      "name_pattern": "vol",
      "value_pattern": "cloud*"
    },
    "type": "include"
  },
  "system_defined": 1
}
```

## Error

```
Status: Default, Error
```

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

## Example error

```json
{
  "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 | |

access_control_role

Indicates the access control role that created the event filter and is used to control access to the filter based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | Role name |

_links

| Name | Type | Description |
|------|------|-------------|
| related | href | |

message_criteria

Matching message definitions for the filter. A property must be specified.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name_pattern | string | Message name filter on which to match. Supports wildcards. Defaults to * if not specified. |
| severities | string | A comma-separated list of severities or a wildcard. |
| snmp_trap_types | string | A comma separated list of snmp_trap_types or a wildcard. |

parameter_criteria

Criterion used for parameter based filtering

| Name | Type | Description |
|------|------|-------------|
| name_pattern | string | Parameter name pattern. Wildcard character '*' is supported. |
| value_pattern | string | Parameter value pattern. Wildcard character '*' is supported. |

rules

Rule for an event filter

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| index | integer | Rule index. Rules are evaluated in ascending order. If a rule's index order is not specified during creation, the rule is appended to the end of the list. |
| message_criteria | message_criteria | Matching message definitions for the filter. A property must be specified. |
| parameter_criteria | array[parameter_criteria] | Parameter criteria used to match against events' parameters. Each parameter consists of a name and a value. When multiple parameter criteria are provided in a rule, all must match for the rule to be considered matched. A pattern can include one or more wildcard '*' characters. |
| type | string | Rule type |

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. |

# Update an event filter

PATCH `/support/ems/filters/{name}`

**Introduced In:** 9.6

Updates an event filter.

### Recommended optional properties

* `new_name` - New string that uniquely identifies a filter.

* `rules` - New list of criteria used to match the filter with an event. The existing list is discarded.

### Related ONTAP commands

* `event filter rename`

* `event filter rule add`

* `event filter rule delete`

* `event filter rule reorder`

### Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| name | string | path | True | Filter name |
| new_name | string | query | False | New filter name for renames. Valid in PATCH. |

### Request Body

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

| Name | Type | Description |
|------|------|-------------|
| access_control_role | access_control_role | Indicates the access control role that created the event filter and is used to control access to the filter based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset. |
| name | string | Filter name |
| rules | array[rules] | Array of event filter rules on which to match. |
| system_defined | boolean | Flag indicating system-defined filters. |

**Example request**

```json
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "access_control_role": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "admin"
  },
  "name": "wafl-critical-events",
  "rules": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "index": 1,
    "message_criteria": {
      "_links": {
        "related": {
          "href": "/api/resourcelink"
        }
      },
      "name_pattern": "wafl.*",
      "severities": "emergency,alert,error",
      "snmp_trap_types": "standard,built_in"
    },
    "parameter_criteria": {
      "name_pattern": "vol",
      "value_pattern": "cloud*"
    },
    "type": "include"
  },
  "system_defined": 1
}
```

## Response

```
Status: 200, Ok
```

## Error

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|---|---|
| 983088 | The filter name provided is empty |
| 983089 | The filter name provided cannot contain spaces |
| 983092 | The index of the rule provided is outside the allowed range for the filter provided |
| 983094 | The filter name provided is invalid. The filter name must contain between 2 and 64 characters and start and end with an alphanumeric symbol or (underscore). The allowed special characters are (underscore) and -(hyphen) |
| 983095 | The rule index provided is invalid for the filter provided |
| 983101 | No event is matched by the rule provided |
| 983113 | Default filters cannot be modified or removed |
| 983114 | The maximum number of filters is reached |
| 983115 | The maximum number of filter rules is reached |
| 983126 | A rule requires at least one name_pattern, severities, snmp_trap_types, or parameter pattern to be defined |
| 983127 | A property cannot contain a combination of the wildcard characters and other values |
| 983128 | An invalid value is provided for the property 'snmp_trap_types' |
| 983146 | An invalid value is provided for the property 'severities' |
| 983147 | The severities provided are not supported |
| 983155 | The provided severities property does not match that of the name_pattern |
| 983156 | The provided snmp_trap_types property does not match that of the name_pattern |
| 983157 | The provided severities and snmp_trap_types properties do not match those of the name_pattern |
| 983158 | The name_pattern provided does not exist |

| Error Code | Description |
| --- | --- |
| 983195 | Empty field in parameter_criteria. Both name and value patterns must be specified |
| 983196 | name_pattern and value_pattern fields in parameter_criteria are empty |
| 983211 | Parameter criteria based filtering is not supported in this version of ONTAP |

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

### href

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

### _links

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

### access_control_role

Indicates the access control role that created the event filter and is used to control access to the filter based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | Role name |

### _links

| Name | Type | Description |
|------|------|-------------|
| related | href | |

### message_criteria

Matching message definitions for the filter. A property must be specified.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name_pattern | string | Message name filter on which to match. Supports wildcards. Defaults to * if not specified. |
| severities | string | A comma-separated list of severities or a wildcard. |
| snmp_trap_types | string | A comma separated list of snmp_trap_types or a wildcard. |

### parameter_criteria

Criterion used for parameter based filtering

| Name | Type | Description |
|------|------|-------------|
| name_pattern | string | Parameter name pattern. Wildcard character '*' is supported. |
| value_pattern | string | Parameter value pattern. Wildcard character '*' is supported. |

rules

Rule for an event filter

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| index | integer | Rule index. Rules are evaluated in ascending order. If a rule's index order is not specified during creation, the rule is appended to the end of the list. |
| message_criteria | message_criteria | Matching message definitions for the filter. A property must be specified. |
| parameter_criteria | array[parameter_criteria] | Parameter criteria used to match against events' parameters. Each parameter consists of a name and a value. When multiple parameter criteria are provided in a rule, all must match for the rule to be considered matched. A pattern can include one or more wildcard '*' characters. |
| type | string | Rule type |

ems_filter

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

| Name | Type | Description |
|------|------|-------------|
| access_control_role | access_control_role | Indicates the access control role that created the event filter and is used to control access to the filter based on role-based access control (RBAC) rules. If created by the 'admin' user, the field is unset. |
| name | string | Filter name |
| rules | array[rules] | Array of event filter rules on which to match. |
| system_defined | boolean | Flag indicating system-defined filters. |

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 or retrieve filter rules

## Support EMS filters name rules endpoint overview

### Overview

Manages the list of rules associated with a specific filter. A filter contains a list of rules that are evaluated to determine whether an event matches the filter. When a rule matches an event, the filter is considered a match.

See the documentation for /support/ems/filters for details on the various properties in a rule.

**Examples**

**Retrieving the collection of rules connected to a filter**

```
# The API:
GET /api/support/ems/filters/{name}/rules

# The call:
curl -X GET "https://<mgmt-ip>/api/support/ems/filters/no-info-debug-
events/rules" -H "accept: application/hal+json"

# The response:
200 OK

# JSON Body
{
"records": [
   {
     "index": 1,
     "_links": {
       "self": {
         "href": "/api/support/ems/filters/no-info-debug-events/rules/1"
       }
     }
   },
   {
     "index": 2,
     "_links": {
       "self": {
         "href": "/api/support/ems/filters/no-info-debug-events/rules/2"
       }
     }
   }
],
"num_records": 2,
"_links": {
   "self": {
     "href": "/api/support/ems/filters/no-info-debug-events/rules"
   }
}
}
```

**Creating a new rule under an existing filter**

ℹ️  The absence of a position index appends the rule to the end of the list.

```
# The API:
POST /api/support/ems/filters/{name}/rules

# The call:
curl -X POST "https://<mgmt-ip>/api/support/ems/filters/test-filter/rules"
-H "accept: application/hal+json" -H "Content-Type: application/json" -d
"@test_ems_filter_rules_post.txt"
test_ems_filter_rules_post.txt(body):

# JSON Body
{
"type": "include",
"message_criteria": {
  "name_pattern": "wafl.*",
  "severities": "error,informational"
}
}

# The response:
201 Created
```

## Retrieve event filter rules

GET /support/ems/filters/{name}/rules

**Introduced In:** 9.6

Retrieves event filter rules.

### Related ONTAP commands

- event filter show

### Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| name | string | path | True | Filter Name |
| message_criteria.snmp_trap_types | string | query | False | Filter by message_criteria.snmp_trap_types |

| Name | Type | In | Required | Description |
|---|---|---|---|---|
| message_criteria.name_pattern | string | query | False | Filter by message_criteria.name_pattern |
| message_criteria.severities | string | query | False | Filter by message_criteria.severities |
| parameter_criteria.value_pattern | string | query | False | Filter by parameter_criteria.value_pattern<br><br>• Introduced in: 9.13 |
| parameter_criteria.name_pattern | string | query | False | Filter by parameter_criteria.name_pattern<br><br>• Introduced in: 9.13 |
| index | integer | query | False | Filter by index |
| type | string | query | False | Filter by type |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned.<br><br>• Default value: 1 |

| Name | Type | In | Required | Description |
|---|---|---|---|---|
| return_timeout | integer | query | False | 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.<br><br>• Default value: 1<br><br>• Max value: 120<br><br>• 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[records] | |

**Example response**

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "index": 1,
    "message_criteria": {
      "_links": {
        "related": {
          "href": "/api/resourcelink"
        }
      },
      "name_pattern": "wafl.*",
      "severities": "emergency,alert,error",
      "snmp_trap_types": "standard,built_in"
    },
    "parameter_criteria": {
      "name_pattern": "vol",
      "value_pattern": "cloud*"
    },
    "type": "include"
  }
}
```

**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 | |

_links

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

_links

| Name | Type | Description |
|------|------|-------------|
| related | href | |

message_criteria

Matching message definitions for the filter. A property must be specified.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name_pattern | string | Message name filter on which to match. Supports wildcards. Defaults to * if not specified. |
| severities | string | A comma-separated list of severities or a wildcard. |
| snmp_trap_types | string | A comma separated list of snmp_trap_types or a wildcard. |

parameter_criteria

Criterion used for parameter based filtering

| Name | Type | Description |
|---|---|---|
| name_pattern | string | Parameter name pattern. Wildcard character '*' is supported. |
| value_pattern | string | Parameter value pattern. Wildcard character '*' is supported. |

records

Rule for an event filter

| Name | Type | Description |
|---|---|---|
| _links | _links | |
| index | integer | Rule index. Rules are evaluated in ascending order. If a rule's index order is not specified during creation, the rule is appended to the end of the list. |
| message_criteria | message_criteria | Matching message definitions for the filter. A property must be specified. |
| parameter_criteria | array[parameter_criteria] | Parameter criteria used to match against events' parameters. Each parameter consists of a name and a value. When multiple parameter criteria are provided in a rule, all must match for the rule to be considered matched. A pattern can include one or more wildcard '*' characters. |
| type | string | Rule type |

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 event filter rule

POST `/support/ems/filters/{name}/rules`

**Introduced In:** 9.6

Creates an event filter rule.

### Required properties

* `type` - Enumeration indicating whether the rule is for include or exclude.
* `message_criteria` - Message criteria used by a rule to match an event.
* `parameter_criteria` - Parameter criteria used by a rule to match an event. Note: At least one pattern needs to be provided for message_criteria and / or parameter_criteria.

### Recommended optional properties

* `index` - One-based position index of the new rule.

### Related ONTAP commands

* `event filter rule add`

### Parameters

| Name | Type | In | Required | Description |
|------|------|------|----------|-------------|
| name | string | path | True | Filter name |
| return_records | boolean | query | False | The default is false. If set to true, the records are returned.<br><br>• Default value: |

**Request Body**

| Name | Type | Description |
| --- | --- | --- |
| _links | _links | |
| index | integer | Rule index. Rules are evaluated in ascending order. If a rule's index order is not specified during creation, the rule is appended to the end of the list. |
| message_criteria | message_criteria | Matching message definitions for the filter. A property must be specified. |
| parameter_criteria | array[parameter_criteria] | Parameter criteria used to match against events' parameters. Each parameter consists of a name and a value. When multiple parameter criteria are provided in a rule, all must match for the rule to be considered matched. A pattern can include one or more wildcard '*' characters. |
| type | string | Rule type |

**Example request**

```json
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "index": 1,
  "message_criteria": {
    "_links": {
      "related": {
        "href": "/api/resourcelink"
      }
    },
    "name_pattern": "wafl.*",
    "severities": "emergency,alert,error",
    "snmp_trap_types": "standard,built_in"
  },
  "parameter_criteria": {
    "name_pattern": "vol",
    "value_pattern": "cloud*"
  },
  "type": "include"
}
```

**Response**

```
Status: 201, Created
```

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

**Example response**

```json
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "index": 1,
    "message_criteria": {
      "_links": {
        "related": {
          "href": "/api/resourcelink"
        }
      },
      "name_pattern": "wafl.*",
      "severities": "emergency,alert,error",
      "snmp_trap_types": "standard,built_in"
    },
    "parameter_criteria": {
      "name_pattern": "vol",
      "value_pattern": "cloud*"
    },
    "type": "include"
  }
}
```

**Headers**

| Name | Description | Type |
|------|-------------|------|
| Location | Useful for tracking the resource location | string |

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|---|---|
| 983092 | The index of the rule provided is outside the allowed range for the filter provided |
| 983095 | The rule index provided is invalid for the filter provided |
| 983113 | Default filters cannot be modified or removed |
| 983115 | The maximum number of filter rules is reached |
| 983126 | A rule requires at least one name_pattern, severities, snmp_trap_types, or parameter pattern to be defined |
| 983127 | A property cannot contain a combination of the wildcard characters and other values |
| 983128 | An invalid value is provided for the property 'snmp_trap_types' |
| 983146 | An invalid value is provided for the property 'severities' |
| 983147 | The severities provided are not supported |
| 983155 | The provided severities property does not match that of the name_pattern |
| 983156 | The provided snmp_trap_types property does not match that of the name_pattern |
| 983157 | The provided severities and snmp_trap_types properties do not match those of the name_pattern |
| 983158 | The name_pattern provided does not exist |
| 983195 | Empty field in parameter_criteria. Both name and value patterns must be specified |
| 983196 | name_pattern and value_pattern fields in parameter_criteria are empty |
| 983211 | Parameter criteria based filtering is not supported in this version of ONTAP |

Also see the table of common errors in the Response body overview section of this documentation.

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

**Example error**

```json
{
  "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 | |

_links

| Name | Type | Description |
|------|------|-------------|
| related | href | |

message_criteria

Matching message definitions for the filter. A property must be specified.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name_pattern | string | Message name filter on which to match. Supports wildcards. Defaults to * if not specified. |
| severities | string | A comma-separated list of severities or a wildcard. |
| snmp_trap_types | string | A comma separated list of snmp_trap_types or a wildcard. |

parameter_criteria

Criterion used for parameter based filtering

| Name | Type | Description |
|------|------|-------------|
| name_pattern | string | Parameter name pattern. Wildcard character '*' is supported. |
| value_pattern | string | Parameter value pattern. Wildcard character '*' is supported. |

## ems_filter_rule

Rule for an event filter

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| index | integer | Rule index. Rules are evaluated in ascending order. If a rule's index order is not specified during creation, the rule is appended to the end of the list. |
| message_criteria | message_criteria | Matching message definitions for the filter. A property must be specified. |
| parameter_criteria | array[parameter_criteria] | Parameter criteria used to match against events' parameters. Each parameter consists of a name and a value. When multiple parameter criteria are provided in a rule, all must match for the rule to be considered matched. A pattern can include one or more wildcard '*' characters. |
| type | string | Rule type |

## _links

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

records

Rule for an event filter

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| index | integer | Rule index. Rules are evaluated in ascending order. If a rule's index order is not specified during creation, the rule is appended to the end of the list. |

| Name | Type | Description |
|---|---|---|
| message_criteria | message_criteria | Matching message definitions for the filter. A property must be specified. |
| parameter_criteria | array[parameter_criteria] | Parameter criteria used to match against events' parameters. Each parameter consists of a name and a value. When multiple parameter criteria are provided in a rule, all must match for the rule to be considered matched. A pattern can include one or more wildcard '*' characters. |
| type | string | Rule type |

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. |

# Manage event filter rules

## Support EMS filters name rules index endpoint overview

### Overview

Manages a specific instance of a rule within a filter. See the documentation for /support/ems/filters for details on the various properties in a rule.

## Examples

**Retrieving a single instance of a rule**

```
# The API:
GET /api/support/ems/filters/{name}/rules/{index}

# The call:
curl -X GET "https://<mgmt-ip>/api/support/ems/filters/no-info-debug-
events/rules/1" -H "accept: application/hal+json"

# The response:
200 OK

# JSON Body
{
"name": "no-info-debug-events",
"index": 1,
"type": "include",
"message_criteria": {
  "name_pattern": "*",
  "severities": "emergency,alert,error,notice",
  "snmp_trap_types": "*",
  "_links": {
    "self": {
      "href":
"/api/support/ems/messages?name=*&severity=emergency,alert,error,notice&sn
mp_trap_type=*"
    }
  }
},
"parameter_criteria": [
  {
    "name_pattern": "*",
    "value_pattern": "*"
  }
],
"_links": {
  "self": {
    "href": "/api/support/ems/filters/no-info-debug-events/rules/1"
  }
}
}
```

**Updating an existing rule to use severity emergency**

```
# The API:
PATCH /api/support/ems/filters/{name}/rules/{index}

# The call:
curl -X PATCH "https://<mgmt-ip>/api/support/ems/filters/test-
filter/rules/1" -H "accept: application/hal+json" -H "Content-Type:
application/json" -d "@test_ems_filter_rules_patch.txt"
test_ems_filter_rules_patch.txt(body):
{
"message_criteria": {
  "severities": "emergency"
}
}


# The response:
200 OK
```

**Deleting a rule from an existing filter**

```
# The API:
DELETE /api/support/ems/filters/{name}/rules/{index}

# The call:
curl -X DELETE "https://<mgmt-ip>/api/support/ems/filters/test-
filter/rules/1" -H "accept: application/hal+json"

# The response:
200 OK
```

# Delete an event filter rule

DELETE /support/ems/filters/{name}/rules/{index}

**Introduced In:** 9.6

Deletes an event filter rule.

**Related ONTAP commands**

- `event filter rule delete`

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| name | string | path | True | Filter name |
| index | string | path | True | Filter rule index |

## Response

```
Status: 200, Ok
```

## Error

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|------------|-------------|
| 983091 | A default rule cannot be removed |
| 983092 | The index of the rule provided is outside the allowed range for the filter provided |
| 983095 | The rule index provided is invalid for the filter provided |
| 983110 | There are no user defined rules in the filter provided |
| 983113 | Default filters cannot be modified or removed |

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**

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. |

# Retrieve an event filter rule

GET /support/ems/filters/{name}/rules/{index}

**Introduced In:** 9.6

Retrieves an event filter rule.

**Related ONTAP commands**

* `event filter show`

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| name | string | path | True | Filter name |
| index | string | path | True | Filter rule index |
| fields | array[string] | query | False | Specify the fields to return. |

**Response**

```
Status: 200, Ok
```

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| index | integer | Rule index. Rules are evaluated in ascending order. If a rule's index order is not specified during creation, the rule is appended to the end of the list. |
| message_criteria | message_criteria | Matching message definitions for the filter. A property must be specified. |
| parameter_criteria | array[parameter_criteria] | Parameter criteria used to match against events' parameters. Each parameter consists of a name and a value. When multiple parameter criteria are provided in a rule, all must match for the rule to be considered matched. A pattern can include one or more wildcard '*' characters. |
| type | string | Rule type |

**Example response**

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "index": 1,
  "message_criteria": {
    "_links": {
      "related": {
        "href": "/api/resourcelink"
      }
    },
    "name_pattern": "wafl.*",
    "severities": "emergency,alert,error",
    "snmp_trap_types": "standard,built_in"
  },
  "parameter_criteria": {
    "name_pattern": "vol",
    "value_pattern": "cloud*"
  },
  "type": "include"
}
```

**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 |
|------|------|-------------|
| self | href | |

_links

| Name | Type | Description |
|------|------|-------------|
| related | href | |

message_criteria

Matching message definitions for the filter. A property must be specified.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name_pattern | string | Message name filter on which to match. Supports wildcards. Defaults to * if not specified. |
| severities | string | A comma-separated list of severities or a wildcard. |
| snmp_trap_types | string | A comma separated list of snmp_trap_types or a wildcard. |

parameter_criteria

Criterion used for parameter based filtering

| Name | Type | Description |
|------|------|-------------|
| name_pattern | string | Parameter name pattern. Wildcard character '*' is supported. |
| value_pattern | string | Parameter value pattern. Wildcard character '*' is supported. |

## 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. |

# Update an event filter rule

PATCH /support/ems/filters/{name}/rules/{index}

**Introduced In:** 9.6

Updates an event filter rule.

## Recommended optional properties

- `message_criteria` - Message criteria used by a rule to match an event.
- `parameter_criteria` - Parameter criteria used by a rule to match an event.

## Related ONTAP commands

- `event filter rule add`
- `event filter rule delete`

## Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| name | string | path | True | Filter name |
| index | string | path | True | Filter rule index |

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| new_index | integer | query | False | New position for the filter rule index |

## Request Body

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| index | integer | Rule index. Rules are evaluated in ascending order. If a rule's index order is not specified during creation, the rule is appended to the end of the list. |
| message_criteria | message_criteria | Matching message definitions for the filter. A property must be specified. |
| parameter_criteria | array[parameter_criteria] | Parameter criteria used to match against events' parameters. Each parameter consists of a name and a value. When multiple parameter criteria are provided in a rule, all must match for the rule to be considered matched. A pattern can include one or more wildcard '*' characters. |
| type | string | Rule type |

**Example request**

```json
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "index": 1,
  "message_criteria": {
    "_links": {
      "related": {
        "href": "/api/resourcelink"
      }
    },
    "name_pattern": "wafl.*",
    "severities": "emergency,alert,error",
    "snmp_trap_types": "standard,built_in"
  },
  "parameter_criteria": {
    "name_pattern": "vol",
    "value_pattern": "cloud*"
  },
  "type": "include"
}
```

## Response

```
Status: 200, Ok
```

## Error

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|---|---|
| 983092 | The index of the rule provided is outside the allowed range for the filter provided |
| 983095 | The rule index provided is invalid for the filter provided |
| 983113 | Default filters cannot be modified or removed |

| Error Code | Description |
|---|---|
| 983126 | A rule requires at least one name_pattern, severities, snmp_trap_types, or parameter pattern to be defined |
| 983127 | A property cannot contain a combination of the wildcard characters and other values. |
| 983128 | An invalid value is provided for the property 'snmp_trap_types' |
| 983146 | An invalid value is provided for the property 'severities' |
| 983147 | The severities provided are not supported |
| 983155 | The provided severities property does not match that of the name_pattern |
| 983156 | The provided snmp_trap_types property does not match that of the name_pattern |
| 983157 | The provided severities and snmp_trap_types properties do not match those of the name_pattern |
| 983158 | The name_pattern provided does not exist |
| 983195 | Empty field in parameter_criteria. Both name and value patterns must be specified |
| 983196 | name_pattern and value_pattern fields in parameter_criteria are empty |
| 983211 | Parameter criteria based filtering is not supported in this version of ONTAP |

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**

href

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

_links

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

_links

| Name | Type | Description |
|------|------|-------------|
| related | href | |

message_criteria

Matching message definitions for the filter. A property must be specified.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name_pattern | string | Message name filter on which to match. Supports wildcards. Defaults to * if not specified. |
| severities | string | A comma-separated list of severities or a wildcard. |
| snmp_trap_types | string | A comma separated list of snmp_trap_types or a wildcard. |

parameter_criteria

Criterion used for parameter based filtering

| Name | Type | Description |
|------|------|-------------|
| name_pattern | string | Parameter name pattern. Wildcard character '*' is supported. |
| value_pattern | string | Parameter value pattern. Wildcard character '*' is supported. |

## ems_filter_rule

Rule for an event filter

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| index | integer | Rule index. Rules are evaluated in ascending order. If a rule's index order is not specified during creation, the rule is appended to the end of the list. |
| message_criteria | message_criteria | Matching message definitions for the filter. A property must be specified. |
| parameter_criteria | array[parameter_criteria] | Parameter criteria used to match against events' parameters. Each parameter consists of a name and a value. When multiple parameter criteria are provided in a rule, all must match for the rule to be considered matched. A pattern can include one or more wildcard '*' characters. |
| type | string | Rule type |

## 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. |

# Manage the EMS event catalog

## Support EMS messages endpoint overview

### Overview

Allows access to the EMS event catalog. The catalog contains a list of all events supported by the system and their corresponding descriptions, the reason for an event occurrence, and how to correct issues related to the event.

### Example

**Querying for the first event that has a message name beginning with 'C'**

```
# The API:
GET /api/support/ems/messages

# The call:
curl -X GET "https://<mgmt-
ip>/api/support/ems/messages?fields=name&max_records=1&name=C*" -H
"accept: application/hal+json"

# The response:
200 OK

# JSON Body
{
"records": [
  {
    "name": "CR.Data.File.Inaccessible",
    "_links": {
      "self": {
        "href": "/api/support/ems/messages/CR.Data.File.Inaccessible"
      }
    }
  }
],
"num_records": 1,
"_links": {
  "self": {
    "href": "/api/support/ems/messages?fields=name&max_records=1&name=C*"
  },
}
}
```

# Retrieve event catalog definitions

GET `/support/ems/messages`

**Introduced In:** 9.6

Retrieves the event catalog definitions.

**Related ONTAP commands**

* `event catalog show`

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| description | string | query | False | Filter by description |
| severity | string | query | False | Filter by severity |
| name | string | query | False | Filter by name |
| snmp_trap_type | string | query | False | Filter by snmp_trap_type |
| deprecated | boolean | query | False | Filter by deprecated |
| corrective_action | string | query | False | Filter by corrective_action |
| filter.name | string | query | False | The filter name that applies to the query.<br><br>• Introduced in: 9.14 |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned.<br><br>• Default value: 1 |

| Name | Type | In | Required | Description |
|---|---|---|---|---|
| return_timeout | integer | query | False | 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.<br><br>• Default value: 1<br><br>• Max value: 120<br><br>• 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[records] | |

**Example response**

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "corrective_action": "string",
    "deprecated": 1,
    "description": "string",
    "name": "callhome.spares.low",
    "severity": "error",
    "snmp_trap_type": "standard"
  }
}
```

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|------------|-------------|
| 983093 | The provided filter is unknown. |

Also see the table of common errors in the Response body overview section of this documentation.

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

**Example error**

```json
{
  "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 | |

records

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| corrective_action | string | Corrective action |
| deprecated | boolean | Is deprecated? |
| description | string | Description of the event. |
| name | string | Name of the event. |
| severity | string | Severity |
| snmp_trap_type | string | SNMP trap type |

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. |

# View and create EMS role-based configurations

## Support EMS role-configs endpoint overview

### Overview

Manages the list of access control roles that have limited access to the EMS events and configurations. Access to the EMS events and configurations are controlled by the EMS role-based configuration, which has the following two properties:

- `event_filter`
- `limit_access_to_global_configs`

**Role-based event filter**

A role-based event filter is a filter assigned to an access control role that limits what events users of that role have access to. It is applied transparently when a user of that role performs GET requests on the following endpoints:

- `/support/ems/events`
- `/support/ems/messages`

## It is also applied when events are forwarded as notifications to destinations created by users of that role. To those destinations, only events that match the role-based filter in addition to the filters configured on the destinations are forwarded.

**Limiting access to the global EMS configurations**

The APIs at the `/api/support/ems` endpoint expose several configuration properties that affect how EMS handles events. The following properties are always accessible by all roles that have access to the `/api/support/ems` APIs.

- `mail_from`
- `mail_server`
- `proxy_url`
- `proxy_user`

- proxy_password

## Access to the following property by an access control role can be restricted:

- pubsub_enabled

## Limiting access to EMS events and configurations is typically applied for an access control role that is designed to have limited administrative capabilities. For example, when the cluster is physically managed by a service provider and the services are managed by the customer.

**Examples**

**Retrieving the list of EMS role-based configurations**

```
# The API:
GET /api/support/ems/role-configs

# The call:
curl -X GET "https://<mgmt-ip>/api/support/ems/role-configs" -H "accept:
application/hal+json"

# The response:
200 OK

# JSON Body
{
"records": [
  {
    "access_control_role": {
      "name": "storage-admin",
      "_links": {
        "self": {
          "href": "/api/security/roles/0b2580c8-de36-4213-bfca-
88cdaaaf3ae6/storage-admin"
        }
      }
    },
    "event_filter": {
      "name": "storage-admin-events",
      "_links": {
        "self": {
          "href": "/api/support/ems/filters/storage-admin-events"
        }
      }
    },
    "limit_access_to_global_configs": true,
    "_links": {
      "self": {
```

```
              "href": "/api/support/ems/role-configs/storage-admin"
          }
        }
      },
      {
        "access_control_role": {
          "name": "network-admin",
          "_links": {
            "self": {
              "href": "/api/security/roles/0b2580c8-de36-4213-bfca-
88cdaaaf3ae6/network-admin"
            }
          }
        },
        "filter_filter": {
          "name": "network-admin-events",
          "_links": {
            "self": {
              "href": "/api/support/ems/filters/network-admin-events"
            }
          }
        },
        "limit_access_to_global_configs": true,
        "_links": {
          "self": {
            "href": "/api/support/ems/role-configs/network-admin"
          }
        }
      }
    ],
    "num_records": 2,
    "_links": {
      "self": {
        "href": "/api/support/ems/role-configs"
      }
    }
  }
}
```

**Creating an EMS role-based configuration for an access control role**

```
# The API:
POST /api/support/ems/role-configs

# The call:
curl -X POST "https://<mgmt-ip>/api/support/ems/role-configs" -H "accept:
application/hal+json" -H "Content-Type: application/json" -d
"@role_configs_post.txt"
role_configs_post.txt(body):
{
"access_control_role": {
  "name": "storage-admin"
},
"event_filter": {
  "name": "storage-admin-events"
},
"limit_access_to_global_configs": true
}

# The response:
201 Created
```

## Retrieve EMS role-based configurations

GET `/support/ems/role-configs`

**Introduced In:** 9.13

Retrieves a collection of the EMS role-based configurations.

**Related ONTAP commands**

- `event role-config show`

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| access_control_role.name | string | query | False | Filter by access_control_role.name |
| event_filter.name | string | query | False | Filter by event_filter.name |
| limit_access_to_global_configs | boolean | query | False | Filter by limit_access_to_global_configs |

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned.<br><br>• Default value: 1 |
| 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.<br><br>• Default value: 1<br><br>• Max value: 120<br><br>• 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[records] | |

**Example response**

```json
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "access_control_role": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "admin"
    },
    "event_filter": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "important-events"
    }
  }
}
```

**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 | |

_links

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

access_control_role

Access control role that the event filter is assigned to.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | Role name |

event_filter

Event filter that is assigned to the access control role.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |

records

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| access_control_role | access_control_role | Access control role that the event filter is assigned to. |
| event_filter | event_filter | Event filter that is assigned to the access control role. |

| Name | Type | Description |
|---|---|---|
| limit_access_to_global_configs | boolean | Indicates whether the access control has limited access to global EMS configurations. |

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 EMS role-based configuration for an access control role

POST `/support/ems/role-configs`

**Introduced In:** 9.13

Creates an EMS role-based configuration for an access control role.

**Required properties**

* `access_control_role` - Uniquely identifies the access control role.

**Recommended optional properties**

* `event_filter` - Identifies the event filter.
* `limit_access_to_global_configs` - Indicates whether the access control role has limited access to global EMS configurations.

**Related ONTAP commands**

* `event role-config create`

**Parameters**

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

**Request Body**

| Name | Type | Description |
|---|---|---|
| _links | _links | |
| access_control_role | access_control_role | Access control role that the event filter is assigned to. |
| event_filter | event_filter | Event filter that is assigned to the access control role. |
| limit_access_to_global_configs | boolean | Indicates whether the access control has limited access to global EMS configurations. |

**Example request**

```json
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "access_control_role": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "admin"
  },
  "event_filter": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "important-events"
  }
}
```

**Response**

```
Status: 201, Created
```

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

**Example response**

```json
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "access_control_role": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "admin"
    },
    "event_filter": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "important-events"
    }
  }
}
```

**Headers**

| Name | Description | Type |
|------|-------------|------|
| Location | Useful for tracking the resource location | string |

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|------------|-------------|
| 983198 | The event filter provided does not exist. |
| 983199 | The access control role provided does not exist. |

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**

href

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

_links

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

access_control_role

Access control role that the event filter is assigned to.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | Role name |

event_filter

Event filter that is assigned to the access control role.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |

ems_role_config

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| access_control_role | access_control_role | Access control role that the event filter is assigned to. |
| event_filter | event_filter | Event filter that is assigned to the access control role. |
| limit_access_to_global_configs | boolean | Indicates whether the access control has limited access to global EMS configurations. |

_links

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

records

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| access_control_role | access_control_role | Access control role that the event filter is assigned to. |
| event_filter | event_filter | Event filter that is assigned to the access control role. |
| limit_access_to_global_configs | boolean | Indicates whether the access control has limited access to global EMS configurations. |

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. |

# Manage EMS role-based configurations

## Support EMS role-configs access_control_role.name endpoint overview

## Overview

Manages the EMS role-based configuration of a specific access control role.

## See the documentation for [/support/ems/role-configs](/support/ems/role-configs) for details on the various properties.

## Examples

**Retrieving the EMS role-based configuration of an access control role**

```
# The API:
GET /api/support/ems/role-configs/{access_control_role.name}

# The call:
curl -X GET "https://<mgmt-ip>/api/support/ems/role-configs/storage-admin"
-H "accept: application/hal+json"

# The response:
200 OK

# JSON Body
{
"access_control_role": {
  "name": "storage-admin",
  "_links": {
    "self": {
      "href": "/api/security/roles/0b2580c8-de36-4213-bfca-
88cdaaaf3ae6/storage-admin"
    }
  }
},
"event_filter": {
  "name": "storage-admin-events",
  "_links": {
    "self": {
      "href": "/api/support/ems/filters/storage-admin-events"
    }
  },
  "limit_access_to_global_configs": true
},
"_links": {
  "self": {
    "href": "/api/support/ems/role-configs/storage-admin"
  }
}
}
```

**Updating the EMS role-based configuration of an access control role**

```
# The API:
PATCH /api/support/ems/event-configs/{access_control_role.name}

# The call:
curl -X PATCH "https://<mgmt-ip>/api/support/ems/role-configs/storage-
admin" -H "accept: application/hal+json" -H "Content-Type:
application/json" -d "@role_configs_patch.txt"
role_configs_patch.txt(body):
{
"event_filter": {
  "name": "new-storage-admin-events"
},
"limit_access_to_global_configs": false
}

# The response:
200 OK
```

**Removing the EMS role-based configuration of an access control role**

```
# The API:
DELETE /api/support/ems/role-configs/{access_control_role.name}

# The call:
curl -X DELETE "https://<mgmt-ip>/api/support/ems/role-configs/storage-
admin" -H "accept: application/hal+json"

# The response:
200 OK
```

# Remove the EMS role-based configuration for an access control role

DELETE /support/ems/role-configs/{access_control_role.name}

**Introduced In:** 9.13

Removes the EMS role-based configuration of the access control role.

**Related ONTAP commands**

• `event role-config delete`

## Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| access_control_role. name | string | path | True | Access control role name |

## Response

```
Status: 200, Ok
```

## 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

**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. |

# Retrieve the EMS role-based configuration for an access control role

GET /support/ems/role-configs/{access_control_role.name}

**Introduced In:** 9.13

Retrieves the EMS role-based configuration of the access control role.

**Related ONTAP commands**

* `event role-config show`

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| access_control_role. name | string | path | True | Access control role name |
| fields | array[string] | query | False | Specify the fields to return. |

**Response**

Status: 200, Ok

| Name | Type | Description |
|---|---|---|
| _links | _links | |
| access_control_role | access_control_role | Access control role that the event filter is assigned to. |
| event_filter | event_filter | Event filter that is assigned to the access control role. |
| limit_access_to_global_configs | boolean | Indicates whether the access control has limited access to global EMS configurations. |

**Example response**

```
{
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "access_control_role": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        "name": "admin"
    },
    "event_filter": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        "name": "important-events"
    }
}
```

## 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 |
|------|------|-------------|
| self | href | |

access_control_role

Access control role that the event filter is assigned to.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | Role name |

event_filter

Event filter that is assigned to the access control role.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |

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 |

| Name | Type | Description |
|------|------|-------------|
| target | string | The target parameter that caused the error. |

## Update the EMS role-based configuration for an access control role

PATCH /support/ems/role-configs/{access_control_role.name}

**Introduced In:** 9.13

Updates the EMS role-based configuration of the access control role.

### Recommended optional properties

- `event_filter` - Identifies the event filter.

- `limit_access_to_global_configs` - Indicates whether the access control role has limited access to global EMS configurations.

### Related ONTAP commands

- `event role-config modify`

### Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| access_control_role. name | string | path | True | Access control role name |

### Request Body

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| access_control_role | access_control_role | Access control role that the event filter is assigned to. |
| event_filter | event_filter | Event filter that is assigned to the access control role. |
| limit_access_to_global_configs | boolean | Indicates whether the access control has limited access to global EMS configurations. |

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "access_control_role": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "admin"
  },
  "event_filter": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "important-events"
  }
}
```

**Response**

```
Status: 200, Ok
```

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|---|---|
| 983197 | The event filter provided is the same as the currently assigned filter. |
| 983198 | The event filter provided does not exist. |

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

### href

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

### _links

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

### access_control_role

Access control role that the event filter is assigned to.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | Role name |

### event_filter

Event filter that is assigned to the access control role.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | |

### ems_role_config

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| access_control_role | access_control_role | Access control role that the event filter is assigned to. |
| event_filter | event_filter | Event filter that is assigned to the access control role. |
| limit_access_to_global_configs | boolean | Indicates whether the access control has limited access to global EMS configurations. |

### 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. |

# Manage cluster-wide SNMP configuration

## Support SNMP endpoint overview

### Overview

Cluster wide SNMP configuration. You can configure or retrieve the following SNMP parameters using this endpoint:

- enable or disable SNMP
- enable or disable SNMP authentication traps
- enable or disable SNMP traps

## This endpoint can also be used to trigger an SNMP test trap.

### Examples

**Disables SNMP protocol in the cluster.**

```
# The API:
PATCH "/api/support/snmp"

# The call
curl -H "accept: application/json" -H "Content-Type: application/json" -X
PATCH "https://<mgmt-ip>/api/support/snmp" -d '{"enabled":"false"}'

# The response
200 OK
{}
```

**Enables SNMP authentication traps in the cluster.**

```
# The call
curl -H "accept: application/json" -H "Content-Type: application/json" -X
PATCH "https://<mgmt-ip>/api/support/snmp" -d
'{"auth_traps_enabled":"true"}'

# The response
200 OK
{}
```

**Enables SNMP protocol and SNMP authentication traps in the cluster.**

```
# The call
curl -H "accept: application/json" -H "Content-Type: application/json" -X
PATCH "https://<mgmt-ip>/api/support/snmp" -d '{"enabled":"true",
"auth_traps_enabled":"true"}'

# The response
200 OK
{}
```

**Disables the SNMP trap subsystem in the cluster. Once the SNMP trap subsystem is disabled, the cluster stops sending SNMP traps.**

```
# The call
curl -H "accept: application/json" -H "Content-Type: application/json" -X
PATCH "https://<mgmt-ip>/api/support/snmp" -d '{"traps_enabled":"false"}'

# The response
200 OK
{}
```

**Triggers an SNMP test trap.**

```
# The call
curl -H "accept: application/json" -H "Content-Type: application/json" -X
PATCH "https://<mgmt-ip>/api/support/snmp" -d
'{"trigger_test_trap":"true"}'

#The response
200 OK
{}
```

**Enables the SNMP protocol in the cluster, SNMP traps, and triggers an SNMP test trap.**

```
# The call
curl -H "accept: application/json" -H "Content-Type: application/json" -X
PATCH "https://<mgmt-ip>/api/support/snmp" -d '{"enabled":"true",
"traps_enabled":"true", "trigger_test_trap":"true"}'

# The response
200 OK
{}
```

## Retrieve the cluster-wide SNMP configuration

GET `/support/snmp`

**Introduced In:** 9.7

Retrieves the cluster wide SNMP configuration.

**Related ONTAP commands**

* `options snmp.enable`

* `system snmp show`

## Learn more

## Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned.<br><br>• Default value: 1 |
| 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.<br><br>• Default value: 1<br><br>• Max value: 120<br><br>• 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 | self_link | |
| auth_traps_enabled | boolean | Specifies whether to enable or disable SNMP authentication traps. |
| enabled | boolean | Specifies whether to enable or disable SNMP. |
| traps_enabled | boolean | Specifies whether to enable or disable SNMP traps. |
| trigger_test_trap | boolean | Trigger a test SNMP trap. |

**Example response**

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "auth_traps_enabled": 1,
  "enabled": 1,
  "traps_enabled": 1,
  "trigger_test_trap": 1
}
```

**Error**

```
Status: Default, Error
```

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

**Example error**

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

**Definitions**

## See Definitions

### href

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

### self_link

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

### 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. |

# Update the cluster-wide SNMP configuration

PATCH `/support/snmp`

**Introduced In:** 9.7

Updates the cluster wide SNMP configuration, such as, enabling or disabling SNMP, enabling or disabling SNMP traps, and enabling or disabling authentication traps. It can also be used to trigger an SNMP test trap.

**Related ONTAP commands**

- `options snmp.enable`

- `system snmp authtrap`

- `system snmp init`

**Learn more**

- DOC /support/snmp

**Request Body**

| Name | Type | Description |
|------|------|-------------|
| _links | self_link | |
| auth_traps_enabled | boolean | Specifies whether to enable or disable SNMP authentication traps. |
| enabled | boolean | Specifies whether to enable or disable SNMP. |
| traps_enabled | boolean | Specifies whether to enable or disable SNMP traps. |
| trigger_test_trap | boolean | Trigger a test SNMP trap. |

**Example request**

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "auth_traps_enabled": 1,
  "enabled": 1,
  "traps_enabled": 1,
  "trigger_test_trap": 1
}
```

**Response**

```
Status: 200, Ok
```

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|---|---|
| 1179738 | Cluster identification not available for modification since a cluster has not been created. |
| 1179739 | Cluster identification modification is not available in maintenance mode or other boot modes. |

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**

href

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

self_link

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

snmp

Cluster-wide SNMP configuration.

| Name | Type | Description |
|------|------|-------------|
| _links | self_link | |
| auth_traps_enabled | boolean | Specifies whether to enable or disable SNMP authentication traps. |
| enabled | boolean | Specifies whether to enable or disable SNMP. |
| traps_enabled | boolean | Specifies whether to enable or disable SNMP traps. |
| trigger_test_trap | boolean | Trigger a test SNMP trap. |

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 |

| Name | Type | Description |
|------|------|-------------|
| message | string | Error message |
| target | string | The target parameter that caused the error. |

# Create or retrieve SNMP traphosts

## Support SNMP traphosts endpoint overview

### Overview

This SNMP endpoint is used to retrieve, configure and reconfigure SNMP traphosts. An SNMP traphost is a host machine that is configured to receive SNMP traps from ONTAP. An SNMP traphost can be an SNMPv1/SNMPv2c traphost or an SNMPv3 traphost. ONTAP sends SNMPv1/SNMPv2c traps to an SNMPv1/SNMPv2c traphost over the SNMPv1/SNMPv2c protocol. Similarly, it sends SNMPv3 traps to an SNMPv3 traphost over the SNMPv3 protocol.

### Examples

**Retrieves a list of SNMP traphosts in the cluster, sorted by IP address**

```
# The API:
GET "/api/support/snmp/traphosts"

# The call:
curl -H "accept: application/hal+json" -X GET "https://<mgmt-
ip>/api/support/snmp/traphosts?order_by=ip_address"

# The response:
{
"records": [
  {
    "host": "scspr0651011001.gdl.englab.netapp.com",
    "ip_address": "10.235.36.62",
    "_links": {
      "self": {
        "href":
"/api/support/snmp/traphosts/scspr0651011001.gdl.englab.netapp.com"
      }
    }
  },
  {
    "host": "scspr0647726006.gdl.englab.netapp.com",
    "ip_address": "10.235.36.139",
```

```
      "_links": {
        "self": {
          "href":
"/api/support/snmp/traphosts/scspr0647726006.gdl.englab.netapp.com"
        }
      }
    },
    {
      "host": "scspr0651055012.gdl.englab.netapp.com",
      "ip_address": "10.237.245.106",
      "_links": {
        "self": {
          "href":
"/api/support/snmp/traphosts/scspr0651055012.gdl.englab.netapp.com"
        }
      }
    }
  ],
  "num_records": 3,
  "_links": {
    "self": {
      "href": "/api/support/snmp/traphosts?order_by=ip_address"
    }
  }
}
}
```

**Retrieves a list of SNMP traphosts in the cluster for which SNMP user is 'snmpv3user1'**

```
# The call:
curl -H "accept: application/hal+json" -X GET "https://<mgmt-
ip>/api/support/snmp/traphosts?name=snmpv3user1"

# The response:
{
"records": [
  {
    "host": "scspr0653246020.gdl.englab.netapp.com",
    "user": {
      "name": "snmpv3user1",
      "_links": {
        "self": {
          "href":
"/api/support/snmp/users/800003150558b57e8dbd9ce9119d82005056a7b4e5/snmpv3
user1"
        }
      }
    },
    "_links": {
      "self": {
        "href":
"/api/support/snmp/traphosts/scspr0653246020.gdl.englab.netapp.com"
      }
    }
  }
],
"num_records": 1,
"_links": {
  "self": {
    "href": "/api/support/snmp/traphosts?user.name=snmpv3user1"
  }
}
}
```

**Adds an SNMPv1 or SNMPv2c traphost**

```
# The API:
POST "/api/support/snmp/traphosts"

# The call:
curl -H "accept: application/json" -H "Content-Type: application/json" -X
POST "https://<mgmt-ip>/api/support/snmp/traphosts" -d
'{"host":"10.140.128.48"}'

# The response:
201 Created
{}
```

**Adds an SNMPv3 traphost**

```
# The API:
POST "/api/support/snmp/traphosts"

# The call:
curl -H "accept: application/json" -H "Content-Type: application/json" -X
POST "https://<mgmt-ip>/api/support/snmp/traphosts" -d '{"host":"fd-
geoycpi-uno.gycpi.b.yahoodns.net", "user":{"name":"snmpv3user1"}}'

# The response:
201 Created
{}
```

# Retrieve SNMP traphosts

GET /support/snmp/traphosts

**Introduced In:** 9.7

Retrieves the list of SNMP traphosts along with the SNMP users configured for those traphosts.

**Related ONTAP commands**

- `system snmp traphost show`

**Learn more**

- DOC /support/snmp/traphosts

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| host | string | query | False | Filter by host |
| ip_address | string | query | False | Filter by ip_address |
| user.name | string | query | False | Filter by user.name |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned.<br><br>• Default value: 1 |
| 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.<br><br>• Default value: 1<br><br>• Max value: 120<br><br>• 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[snmp_traphost] | |

**Example response**

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "host": "traphost.example.com",
    "ip_address": "10.10.10.7",
    "user": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "snmpv3user3"
    }
  }
}
```

**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 | |

_links

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

user

Optional SNMP user parameter. For an SNMPv3 traphost, this property refers to an SNMPv3 or User-based Security Model (USM) user. For an SNMPv1 or SNMPv2c traphost, this property refers to an SNMP community.

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

| Name | Type | Description |
|------|------|-------------|
| name | string | Optional SNMPv1/SNMPv2c or SNMPv3 user name. For an SNMPv3 traphost, this object refers to an SNMPv3 or User-based Security Model (USM) user. For an SNMPv1 or SNMPv2c traphost, this object refers to an SNMP community. For an SNMPv3 traphost, this object is mandatory and refers to an SNMPv3 or User-based Security Model (USM) user. For an SNMPv1 or SNMPv2c traphost, ONTAP automatically uses "public", if the same is configured, or any other configured community as user. So, for an SNMPv1 or SNMPv2c traphost, this property should not be provided in the "POST" method. However, the configured community for the SNMPv1/SNMPv2c traphost is returned by the "GET" method.<br><br>• example: snmpv3user3<br><br>• Introduced in: 9.7<br><br>• x-nullable: true |

snmp_traphost

SNMP manager or host machine that receives SNMP traps from ONTAP.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| host | string | Fully qualified domain name (FQDN), IPv4 address or IPv6 address of SNMP traphost. |
| ip_address | string | IPv4 or IPv6 address |

| Name | Type | Description |
|------|------|-------------|
| user | user | Optional SNMP user parameter. For an SNMPv3 traphost, this property refers to an SNMPv3 or User-based Security Model (USM) user. For an SNMPv1 or SNMPv2c traphost, this property refers to an SNMP community. |

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 SNMP traphosts

POST `/support/snmp/traphosts`

**Introduced In:** 9.7

Creates SNMP traphosts. While adding an SNMPv3 traphost, an SNMPv3 user configured in ONTAP must be specified. ONTAP uses this user's credentials to authenticate and/or encrypt traps sent to this SNMPv3 traphost. While adding an SNMPv1/SNMPv2c traphost, SNMPv1/SNMPv2c user or community need not be specified.

**Required properties**

* `host` - Fully Qualified Domain Name (FQDN), IPv4 address or IPv6 address of SNMP traphost.

## Recommended optional properties

* If `host` refers to an SNMPv3 traphost, the following field is required:

  ◦ `user` - SNMPv3 or User-based Security Model (USM) user.

* For an SNMPv1/SNMPv2c traphost, ONTAP automatically uses 'public' if 'public' is configured or no community is configured. Otherwise, ONTAP uses the first configured community.

## Related ONTAP commands

* `system snmp traphost add`

## Learn more

* DOC /support/snmp/traphosts

## Parameters

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

## Request Body

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| host | string | Fully qualified domain name (FQDN), IPv4 address or IPv6 address of SNMP traphost. |
| ip_address | string | IPv4 or IPv6 address |
| user | user | Optional SNMP user parameter. For an SNMPv3 traphost, this property refers to an SNMPv3 or User-based Security Model (USM) user. For an SNMPv1 or SNMPv2c traphost, this property refers to an SNMP community. |

**Example request**

```json
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "host": "traphost.example.com",
  "ip_address": "10.10.10.7",
  "user": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "snmpv3user3"
  }
}
```

**Response**

```
Status: 201, Created
```

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

**Example response**

```json
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "host": "traphost.example.com",
    "ip_address": "10.10.10.7",
    "user": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "snmpv3user3"
    }
  }
}
```

**Headers**

| Name | Description | Type |
|------|-------------|------|
| Location | Useful for tracking the resource location | string |

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|---|---|
| 8847365 | Unknown host. |
| 9043969 | Duplicate traphost entry. |
| 9043980 | IPv6 support is disabled. |
| 9043991 | Not a USM user. |
| 9043993 | Current cluster version does not support SNMPv3 traps. |
| 9044001 | Failed to create SNMPv1 traphost. |
| 9044002 | Failed to create SNMPv3 traphost. |

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**

href

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

_links

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

user

Optional SNMP user parameter. For an SNMPv3 traphost, this property refers to an SNMPv3 or User-based Security Model (USM) user. For an SNMPv1 or SNMPv2c traphost, this property refers to an SNMP community.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | Optional SNMPv1/SNMPv2c or SNMPv3 user name. For an SNMPv3 traphost, this object refers to an SNMPv3 or User-based Security Model (USM) user. For an SNMPv1 or SNMPv2c traphost, this object refers to an SNMP community. For an SNMPv3 traphost, this object is mandatory and refers to an SNMPv3 or User-based Security Model (USM) user. For an SNMPv1 or SNMPv2c traphost, ONTAP automatically uses "public", if the same is configured, or any other configured community as user. So, for an SNMPv1 or SNMPv2c traphost, this property should not be provided in the "POST" method. However, the configured community for the SNMPv1/SNMPv2c traphost is returned by the "GET" method.<br><br>• example: snmpv3user3<br><br>• Introduced in: 9.7<br><br>• x-nullable: true |

## snmp_traphost

SNMP manager or host machine that receives SNMP traps from ONTAP.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| host | string | Fully qualified domain name (FQDN), IPv4 address or IPv6 address of SNMP traphost. |
| ip_address | string | IPv4 or IPv6 address |
| user | user | Optional SNMP user parameter. For an SNMPv3 traphost, this property refers to an SNMPv3 or User-based Security Model (USM) user. For an SNMPv1 or SNMPv2c traphost, this property refers to an SNMP community. |

## _links

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

## 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. |

# Manage individual SNMP traphosts

## Support SNMP traphosts host endpoint overview

### Overview

Defines, retrieves or deletes an individual SNMP traphost.

### Examples

**Retrieves an individual traphost in the cluster**

```
# The API:
GET "/api/support/snmp/traphosts/{host}"

# The call
curl -H "accept: application/hal+json" -X GET "https://<mgmt-
ip>/api/support/snmp/traphosts/10.235.36.62"

# The response
{
"host": "scspr0651011001.gdl.englab.netapp.com",
"ip_address": "10.235.36.62",
"user": {
  "name": "public",
  "_links": {
    "self": {
      "href":
"/api/support/snmp/users/800003150558b57e8dbd9ce9119d82005056a7b4e5/public
"
    }
  }
},
"_links": {
  "self": {
    "href": "/api/support/snmp/traphosts/10.235.36.62"
  }
}
}
```

**Deletes an individual traphost in the cluster**

```
# The API:
DELETE "/api/support/snmp/traphosts/{host}"

# The call:
curl -H "accept: application/json" -H "Content-Type: application/json" -X
DELETE "https://<mgmt-
ip>/api/support/snmp/traphosts/3ffe:ffff:100:f102::1"

# The response:
200 OK
{}
```

## Delete an SNMP traphost

DELETE /support/snmp/traphosts/{host}

**Introduced In:** 9.7

Deletes an SNMP traphost.

**Learn more**

- DOC /support/snmp/traphosts/{host}

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| host | string | path | True | Fully Qualified Domain Name (FQDN), IPv4 address or IPv6 address of SNMP traphost. |

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| return_timeout | integer | query | False | The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.<br><br>• Default value: 1<br><br>• Max value: 120<br><br>• Min value: 0 |

## Response

```
Status: 200, Ok
```

## Error

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|------------|-------------|
| 9043970 | Traphost entry does not exist. |

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**

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. |

# Retrieve SNMP traphost details

GET `/support/snmp/traphosts/{host}`

**Introduced In:** 9.7

Retrieves the details of an SNMP traphost along with the SNMP user configured for that traphost.

## Learn more

- DOC /support/snmp/traphosts/{host}

## Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| host | string | path | True | Fully Qualified Domain Name (FQDN), IPv4 address or IPv6 address of SNMP traphost. |
| fields | array[string] | query | False | Specify the fields to return. |
| 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.<br><br>• Default value: 1<br><br>• Max value: 120<br><br>• Min value: 0 |

## Response

```
Status: 200, Ok
```

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| host | string | Fully qualified domain name (FQDN), IPv4 address or IPv6 address of SNMP traphost. |
| ip_address | string | IPv4 or IPv6 address |
| user | user | Optional SNMP user parameter. For an SNMPv3 traphost, this property refers to an SNMPv3 or User-based Security Model (USM) user. For an SNMPv1 or SNMPv2c traphost, this property refers to an SNMP community. |

**Example response**

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "host": "traphost.example.com",
  "ip_address": "10.10.10.7",
  "user": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "snmpv3user3"
  }
}
```

**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 |
|------|------|-------------|
| self | href | |

user

Optional SNMP user parameter. For an SNMPv3 traphost, this property refers to an SNMPv3 or User-based Security Model (USM) user. For an SNMPv1 or SNMPv2c traphost, this property refers to an SNMP community.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| name | string | Optional SNMPv1/SNMPv2c or SNMPv3 user name. For an SNMPv3 traphost, this object refers to an SNMPv3 or User-based Security Model (USM) user. For an SNMPv1 or SNMPv2c traphost, this object refers to an SNMP community. For an SNMPv3 traphost, this object is mandatory and refers to an SNMPv3 or User-based Security Model (USM) user. For an SNMPv1 or SNMPv2c traphost, ONTAP automatically uses "public", if the same is configured, or any other configured community as user. So, for an SNMPv1 or SNMPv2c traphost, this property should not be provided in the "POST" method. However, the configured community for the SNMPv1/SNMPv2c traphost is returned by the "GET" method.<br><br>• example: snmpv3user3<br><br>• Introduced in: 9.7<br><br>• x-nullable: true |

### 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. |

# Retrieve and create SNMP users

## Support SNMP users endpoint overview

### Overview

Defines, retrieves and adds new SNMP users. An SNMP user can be an SNMPv1/SNMPv2c user or an SNMPv3 user. SNMPv1/SNMPv2c user is also called a "community" user. Use a "community" user to query ONTAP SNMP server over SNMPv1/SNMPv2c protocol. An SNMPv3 user, also called a User-based Security Model (USM) user, can be a local SNMPv3 user or a remote SNMPv3 user. Use a local SNMPv3 user to query ONTAP SNMP server over SNMPv3 and/or to send SNMPv3 traps. A remote SNMPv3 user is configured in ONTAP as well as on a remote switch. ONTAP SNMP client uses a remote SNMPv3 user to query the switch over SNMPv3.

### Examples

**Retrieves a list of SNMP users in the cluster, sorted by SVM UUID**

```
# The API:
GET "/api/support/snmp/users"

# The call:
curl -H "accept: application/hal+json" -X GET "https://<mgmt-
ip>/api/support/snmp/users?order_by=owner.uuid"

# The response:
```

```
{
"records": [
  {
    "engine_id": "80000315052d7d2c4410b8e911bc9f005056bb942e",
    "name": "snmpv1user1",
    "owner": {
      "uuid": "442c7d2d-b810-11e9-bc9f-005056bb942e"
    },
    "_links": {
      "self": {
        "href":
"/api/support/snmp/users/80000315052d7d2c4410b8e911bc9f005056bb942e/snmpv1
user1"
      }
    }
  },
  {
    "engine_id": "80000315058e02057c0fb8e911bc9f005056bb942e",
    "name": "snmpv3user1",
    "owner": {
      "uuid": "7c05028e-b80f-11e9-bc9f-005056bb942e"
    },
    "_links": {
      "self": {
        "href":
"/api/support/snmp/users/80000315058e02057c0fb8e911bc9f005056bb942e/snmpv3
user1"
      }
    }
  }
],
"num_records": 2,
"_links": {
  "self": {
    "href": "/api/support/snmp/users?order_by=owner.uuid"
  }
}
}
```

**Creates an SNMPv1 or SNMPv2c community user**

```
# The API:
POST "/api/support/snmp/users"

# The call
curl -H "accept: application/json" -H "Content-Type: application/json" -X
POST "https://<mgmt-ip>/api/support/snmp/users" -d
'{"owner":{"uuid":"02c9e252-41be-11e9-81d5-00a0986138f7",
"name":"cluster1"}, "name":"public", "authentication_method":"community"}'

# The response:
201 Created
{}
```

**Creates a local SNMPv3 user**

```
# The API:
POST "/api/support/snmp/users"

# The call
curl -H "accept: application/json" -H "Content-Type: application/json" -X
POST "https://<mgmt-ip>/api/support/snmp/users" -d
'{"owner":{"uuid":"02c9e252-41be-11e9-81d5-00a0986138f7",
"name":"cluster1"}, "name":"snmpv3u1", "authentication_method":"usm",
"snmpv3":{"authentication_protocol":"sha",
"authentication_password":"jelly22fi$h", "privacy_protocol":"aes",
"privacy_password":"a11Black$"}}'

# The response:
201 Created
{}
```

**Creates a remote SNMPv3 user**

```
# The API:
POST "/api/support/snmp/users"

# The call
curl -H "accept: application/json" -H "Content-Type: application/json" -X
POST "https://<mgmt-ip>/api/support/snmp/users" -d
'{"owner":{"uuid":"02c9e252-41be-11e9-81d5-00a0986138f7",
"name":"cluster1"},
"engine_id":"8000031505b67667a26975e9118a480050568e6f74",
"name":"switchuser1", "authentication_method":"usm",
"switch_address":"fdf8:f53b:82e4::53",
"snmpv3":{"authentication_protocol":"md5",
"authentication_password":"TfhIeliw601lS.Rw$3pm"}}'

# The response:
201 Created
{}
```

## Retrieve SNMP users on a cluster

GET `/support/snmp/users`

**Introduced In:** 9.7

Retrieves the list of SNMP users on the cluster.

### Related ONTAP commands

- `security snmpusers`
- `security login show -application snmp`

### Learn more

- [DOC /support/snmp/users](#)

### Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| owner.uuid | string | query | False | Filter by owner.uuid |
| owner.name | string | query | False | Filter by owner.name |
| name | string | query | False | Filter by name<br><br>• maxLength: 32 |

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| comment | string | query | False | Filter by comment<br><br>   • maxLength: 128<br><br>   • minLength: 0 |
| scope | string | query | False | Filter by scope |
| authentication_method | string | query | False | Filter by authentication_method |
| snmpv3.authentication_protocol | string | query | False | Filter by snmpv3.authentication_protocol |
| snmpv3.privacy_protocol | string | query | False | Filter by snmpv3.privacy_protocol |
| engine_id | string | query | False | Filter by engine_id |
| switch_address | string | query | False | Filter by switch_address |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned.<br><br>   • Default value: 1 |

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| return_timeout | integer | query | False | 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.<br><br>• Default value: 1<br><br>• Max value: 120<br><br>• 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[snmp_user] | |

**Example response**

```json
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "authentication_method": "usm",
    "comment": "This is a comment.",
    "engine_id": "80000315055415ab26d4aae811ac4d005056bb792e",
    "name": "snmpv3user2",
    "owner": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "scope": "svm",
    "snmpv3": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "authentication_password": "humTdumt*@t0nAwa11",
      "authentication_protocol": "sha2_256",
      "privacy_password": "p@**GOandCLCt*200",
      "privacy_protocol": "aes128"
    },
    "switch_address": "10.23.34.45"
  }
}
```

## 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 | |

### _links

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

### owner

Optional name and UUID of owning Storage Virtual Machine (SVM).

| 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. |

### snmpv3

Optional parameter that can be specified only for an SNMPv3 user i.e. when 'authentication_method' is either 'usm' or 'both'. This parameter defines the SNMPv3 credentials for an SNMPv3 user.

| Name | Type | Description |
| --- | --- | --- |
| _links | _links | |
| authentication_password | string | Authentication protocol password. |
| authentication_protocol | string | Authentication protocol. |
| privacy_password | string | Privacy protocol password. |

| Name | Type | Description |
|---|---|---|
| privacy_protocol | string | Privacy protocol. |

## snmp_user

An SNMP user can be an SNMPv1/SNMPv2c user or an SNMPv3 user. SNMPv1/SNMPv2c user is also called a "community" user. An SNMPv3 user, also called a User-based Security Model (USM) user, can be a local SNMPv3 user or a remote SNMPv3 user. A local SNMPv3 user can be used for querying ONTAP SNMP server over SNMPv3 and/or for sending SNMPv3 traps. The local SNMPv3 user used for sending SNMPv3 traps must be configured with the same authentication and privacy credentials on the traphost receiver as well. A remote SNMPv3 user is also configured on a remote switch and used by ONTAP SNMP client functionality to query the remote switch over SNMPv3. An SNMP user is scoped to its owning Storage Virtual Machine (SVM). Owning SVM could be a data SVM or the administrative SVM.

| Name | Type | Description |
|---|---|---|
| _links | _links | |
| authentication_method | string | Optional authentication method. |
| comment | string | Optional comment text. |
| engine_id | string | Optional SNMPv3 engine identifier. For a local SNMP user belonging to the administrative Storage Virtual Machine (SVM), the default value of this parameter is the SNMPv3 engine identifier for the administrative SVM. For a local SNMP user belonging to a data SVM, the default value of this parameter is the SNMPv3 engine identifier for that data SVM. For an SNMPv1/SNMPv2c community, this parameter should not be specified in "POST" method. For a remote switch SNMPv3 user, this parameter specifies the SNMPv3 engine identifier for the remote switch. This parameter can also optionally specify a custom engine identifier. |
| name | string | SNMP user name. |
| owner | owner | Optional name and UUID of owning Storage Virtual Machine (SVM). |

| Name | Type | Description |
|------|------|-------------|
| scope | string | Set to "svm" for data Storage Virtual Machine (SVM) SNMP users and to "cluster" for administrative SVM SNMP users. |
| snmpv3 | snmpv3 | Optional parameter that can be specified only for an SNMPv3 user i.e. when 'authentication_method' is either 'usm' or 'both'. This parameter defines the SNMPv3 credentials for an SNMPv3 user. |
| switch_address | string | Optional remote switch address. It can be an IPv4 address or an IPv6 address. A remote switch can be queried over SNMPv3 using ONTAP SNMP client functionality. Querying such a switch requires an SNMPv3 user (remote switch user) to be configured on the switch. Since ONTAP requires remote switch user's SNMPv3 credentials (to query it), this user must be configured in ONTAP as well. This parameter is specified when configuring such a user.<br><br>• example: 10.23.34.45<br><br>• Introduced in: 9.7<br><br>• readCreate: 1<br><br>• x-nullable: true |

error_arguments

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

returned_error

| Name | Type | Description |
|------|------|-------------|
| arguments | array[error_arguments] | Message arguments |

| Name | Type | Description |
|------|------|-------------|
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

## Create a cluster-scoped or an SVM-scoped SNMP user

POST `/support/snmp/users`

**Introduced In:** 9.7

Creates either a cluster-scoped or an SVM-scoped SNMP user. This user can be an SNMPv1 or SNMPv2c community user or an SNMPv3 user. An SNMPv3 user can be a local SNMPv3 user or a remote SNMPv3 user.

### Required properties

- `owner` - Name and UUID of owning SVM.
- `engine_id` - Engine ID of owning SVM or remote switch.
- `name` - SNMP user name
- `authentication_method` - Authentication method

### Optional properties

- `switch_address` - Optional remote switch address
- `snmpv3` - SNMPv3-specific credentials
- `comment` - Comment text

### Default property values

- `snmpv3.authentication_protocol` - none
- `snmpv3.privacy_protocol` - none

### Related ONTAP commands

- `security login create`
- `system snmp community add`

### Learn more

- DOC /support/snmp/users

## Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| return_records | boolean | query | False | The default is false. If set to true, the records are returned.<br><br>• Default value: |
| return_timeout | integer | query | False | The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.<br><br>• Default value: 1<br><br>• Max value: 120<br><br>• Min value: 0 |

## Request Body

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| authentication_method | string | Optional authentication method. |

| Name | Type | Description |
|---|---|---|
| comment | string | Optional comment text. |
| engine_id | string | Optional SNMPv3 engine identifier. For a local SNMP user belonging to the administrative Storage Virtual Machine (SVM), the default value of this parameter is the SNMPv3 engine identifier for the administrative SVM. For a local SNMP user belonging to a data SVM, the default value of this parameter is the SNMPv3 engine identifier for that data SVM. For an SNMPv1/SNMPv2c community, this parameter should not be specified in "POST" method. For a remote switch SNMPv3 user, this parameter specifies the SNMPv3 engine identifier for the remote switch. This parameter can also optionally specify a custom engine identifier. |
| name | string | SNMP user name. |
| owner | owner | Optional name and UUID of owning Storage Virtual Machine (SVM). |
| scope | string | Set to "svm" for data Storage Virtual Machine (SVM) SNMP users and to "cluster" for administrative SVM SNMP users. |
| snmpv3 | snmpv3 | Optional parameter that can be specified only for an SNMPv3 user i.e. when 'authentication_method' is either 'usm' or 'both'. This parameter defines the SNMPv3 credentials for an SNMPv3 user. |

| Name | Type | Description |
|---|---|---|
| switch_address | string | Optional remote switch address. It can be an IPv4 address or an IPv6 address. A remote switch can be queried over SNMPv3 using ONTAP SNMP client functionality. Querying such a switch requires an SNMPv3 user (remote switch user) to be configured on the switch. Since ONTAP requires remote switch user's SNMPv3 credentials (to query it), this user must be configured in ONTAP as well. This parameter is specified when configuring such a user.<br><br>• example: 10.23.34.45<br>• Introduced in: 9.7<br>• readCreate: 1<br>• x-nullable: true |

## Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "authentication_method": "usm",
  "comment": "This is a comment.",
  "engine_id": "80000315055415ab26d4aae811ac4d005056bb792e",
  "name": "snmpv3user2",
  "owner": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "scope": "svm",
  "snmpv3": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "authentication_password": "humTdumt*@t0nAwa11",
    "authentication_protocol": "sha2_256",
    "privacy_password": "p@**GOandCLCt*200",
    "privacy_protocol": "aes128"
  },
  "switch_address": "10.23.34.45"
}
```

## Response

```
Status: 201, Created
```

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

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| Name | Type | Description |
|---|---|---|
| authentication_method | string | Optional authentication method. |
| comment | string | Optional comment text. |
| engine_id | string | Optional SNMPv3 engine identifier. For a local SNMP user belonging to the administrative Storage Virtual Machine (SVM), the default value of this parameter is the SNMPv3 engine identifier for the administrative SVM. For a local SNMP user belonging to a data SVM, the default value of this parameter is the SNMPv3 engine identifier for that data SVM. For an SNMPv1/SNMPv2c community, this parameter should not be specified in "POST" method. For a remote switch SNMPv3 user, this parameter specifies the SNMPv3 engine identifier for the remote switch. This parameter can also optionally specify a custom engine identifier. |
| name | string | SNMP user name. |
| owner | owner | Optional name and UUID of owning Storage Virtual Machine (SVM). |
| scope | string | Set to "svm" for data Storage Virtual Machine (SVM) SNMP users and to "cluster" for administrative SVM SNMP users. |
| snmpv3 | snmpv3 | Optional parameter that can be specified only for an SNMPv3 user i.e. when 'authentication_method' is either 'usm' or 'both'. This parameter defines the SNMPv3 credentials for an SNMPv3 user. |

| Name | Type | Description |
|---|---|---|
| switch_address | string | Optional remote switch address. It can be an IPv4 address or an IPv6 address. A remote switch can be queried over SNMPv3 using ONTAP SNMP client functionality. Querying such a switch requires an SNMPv3 user (remote switch user) to be configured on the switch. Since ONTAP requires remote switch user's SNMPv3 credentials (to query it), this user must be configured in ONTAP as well. This parameter is specified when configuring such a user.<br><br>• example: 10.23.34.45<br>• Introduced in: 9.7<br>• readCreate: 1<br>• x-nullable: true |

**Example response**

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "authentication_method": "usm",
  "comment": "This is a comment.",
  "engine_id": "80000315055415ab26d4aae811ac4d005056bb792e",
  "name": "snmpv3user2",
  "owner": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "scope": "svm",
  "snmpv3": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "authentication_password": "humTdumt*@t0nAwa11",
    "authentication_protocol": "sha2_256",
    "privacy_password": "p@**GOandCLCt*200",
    "privacy_protocol": "aes128"
  },
  "switch_address": "10.23.34.45"
}
```

**Headers**

| Name | Description | Type |
|------|-------------|------|
| Location | Useful for tracking the resource location | string |

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|------------|-------------|
| 2621475 | This operation is not allowed on a node SVM. |
| 2621601 | This operation is not permitted on a system SVM. |
| 5636101 | One role for all applications and authentication methods is recommended for a user account. |
| 5636106 | Engine ID starting with first bit set as 1 in first octet should have a minimum of 5 or maximum of 32 octets. |
| 5636107 | Engine ID specified is based on an IP address, and must therefore be 9 octets in length. |
| 5636108 | Engine ID specified is based on an IPv6 address, and must therefore be 21 octets in length. |
| 5636109 | Engine ID specified is based on a MAC address, and must therefore be 11 octets in length. |
| 5636110 | Engine ID starting with first bit set as 0 in the first octet needs to be 12 octets in length. |
| 5636111 | Engine ID cannot have all zeroes. |
| 5636112 | Invalid Engine ID specified. |
| 5636113 | Cannot enable SNMP user capability for data SVM. |
| 5636116 | Cannot read SNMP user capability for data SVM. |
| 5636121 | User account name is reserved for use by the system. |
| 5636123 | Cannot create an SNMP user with a role other than readonly, none, or admin. |
| 5636124 | Cannot create an SNMP user with a role other than vsadmin-readonly, none, or vsadmin. |
| 5636126 | Cannot create a user with the user name, group name, or role "autosupport" because it is reserved by the system. |
| 5636148 | Failed to discover SNMPv3 engine ID of remote SNMP agent. |
| 5636150 | The switch_address parameter can be specified only for administrative SVMs. |
| 5636152 | 0.0.0.0 cannot be specified as the IP Address for the switch_address parameter. |
| 5636153 | Engine ID is already associated with user. |

| Error Code | Description |
|---|---|
| 5832711 | The only application permitted for user "diag" is "console." |
| 7077897 | Invalid character in username. Valid characters":" A-Z, a-z, 0-9, ".", "_", and "-". Note that the user name cannot start with "-". |
| 7077898 | The username must contain both letters and numbers. |
| 7077899 | Username does not meet length requirements. |
| 7077906 | Cannot use given role with this SVM because a role with that name has not been defined for the SVM. |
| 9043995 | Failed to create SNMP community. Reason":" SNMPv1 and SNMPv2c are not supported when cluster FIPS mode is enabled. |
| 9043999 | ONTAP failed to create an SNMPv3 user because SNMPv3 is disabled in the cluster. |

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**

href

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

_links

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

owner

Optional name and UUID of owning Storage Virtual Machine (SVM).

| 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. |

snmpv3

Optional parameter that can be specified only for an SNMPv3 user i.e. when 'authentication_method' is either 'usm' or 'both'. This parameter defines the SNMPv3 credentials for an SNMPv3 user.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| authentication_password | string | Authentication protocol password. |
| authentication_protocol | string | Authentication protocol. |
| privacy_password | string | Privacy protocol password. |
| privacy_protocol | string | Privacy protocol. |

snmp_user

An SNMP user can be an SNMPv1/SNMPv2c user or an SNMPv3 user. SNMPv1/SNMPv2c user is also called a "community" user. An SNMPv3 user, also called a User-based Security Model (USM) user, can be a local SNMPv3 user or a remote SNMPv3 user. A local SNMPv3 user can be used for querying

ONTAP SNMP server over SNMPv3 and/or for sending SNMPv3 traps. The local SNMPv3 user used for sending SNMPv3 traps must be configured with the same authentication and privacy credentials on the traphost receiver as well. A remote SNMPv3 user is also configured on a remote switch and used by ONTAP SNMP client functionality to query the remote switch over SNMPv3. An SNMP user is scoped to its owning Storage Virtual Machine (SVM). Owning SVM could be a data SVM or the administrative SVM.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| authentication_method | string | Optional authentication method. |
| comment | string | Optional comment text. |
| engine_id | string | Optional SNMPv3 engine identifier. For a local SNMP user belonging to the administrative Storage Virtual Machine (SVM), the default value of this parameter is the SNMPv3 engine identifier for the administrative SVM. For a local SNMP user belonging to a data SVM, the default value of this parameter is the SNMPv3 engine identifier for that data SVM. For an SNMPv1/SNMPv2c community, this parameter should not be specified in "POST" method. For a remote switch SNMPv3 user, this parameter specifies the SNMPv3 engine identifier for the remote switch. This parameter can also optionally specify a custom engine identifier. |
| name | string | SNMP user name. |
| owner | owner | Optional name and UUID of owning Storage Virtual Machine (SVM). |
| scope | string | Set to "svm" for data Storage Virtual Machine (SVM) SNMP users and to "cluster" for administrative SVM SNMP users. |

| Name | Type | Description |
|------|------|-------------|
| snmpv3 | snmpv3 | Optional parameter that can be specified only for an SNMPv3 user i.e. when 'authentication_method' is either 'usm' or 'both'. This parameter defines the SNMPv3 credentials for an SNMPv3 user. |
| switch_address | string | Optional remote switch address. It can be an IPv4 address or an IPv6 address. A remote switch can be queried over SNMPv3 using ONTAP SNMP client functionality. Querying such a switch requires an SNMPv3 user (remote switch user) to be configured on the switch. Since ONTAP requires remote switch user's SNMPv3 credentials (to query it), this user must be configured in ONTAP as well. This parameter is specified when configuring such a user.<br><br>• example: 10.23.34.45<br>• Introduced in: 9.7<br>• readCreate: 1<br>• x-nullable: true |

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 |

| Name | Type | Description |
|------|------|-------------|
| target | string | The target parameter that caused the error. |

# Manage individual SNMP users

## Support SNMP users engine_id name endpoint overview

### Overview

Defines, retrieves, updates and deletes an individual SNMP user.

### Examples

**Retrieves the details of an SNMP user**

```
# The API:
GET "/api/support/snmp/users/{engine_id}/{name}"

# The call:
curl -H "accept: application/hal+json" -X GET "https://<mgmt-
ip>/api/support/snmp/users/80000315056622e52625a9e911a981005056bb1dcb/snmp
v1user2"

# The response:
{
"engine_id": "80000315056622e52625a9e911a981005056bb1dcb",
"name": "snmpv1user2",
"scope": "cluster",
"owner": {
  "name": "cluster-1",
  "uuid": "26e52266-a925-11e9-a981-005056bb1dcb"
},
"authentication_method": "community",
"_links": {
  "self": {
    "href":
"/api/support/snmp/users/80000315056622e52625a9e911a981005056bb1dcb/snmpv1
user2"
  }
}
}
```

**Updates the comment parameter for an individual SNMP user**

```
# The API:
PATCH "/api/support/snmp/users/{engine_id}/{name}"

# The call:
curl -H "accept: application/json" -H "Content-Type: application/json" -X
PATCH "https://<mgmt-
ip>/api/support/snmp/users/8000031505b67667a26975e9118a480050568e6f74/publ
ic" -d '{"comment":"Default SNMP community"}'

# The response:
200 OK
{}
```

**Deletes an individual SNMP user in the cluster**

```
# The API:
DELETE "/api/support/snmp/users/{engine_id}/{name}"

# The call:
curl -H "accept: application/json" -H "Content-Type: application/json" -X
DELETE "https://<mgmt-
ip>/api/support/snmp/users/8000031505b67667a26975e9118a480050568e6f74/snmp
user"

# The response:
200 OK
{}
```

# Delete an SNMP user

DELETE /support/snmp/users/{engine_id}/{name}

**Introduced In:** 9.7

Deletes an SNMP user. The engine ID can be the engine ID of the administrative SVM or a data SVM. It can also be the SNMPv3 engine ID of a remote switch.

**Related ONTAP commands**

* security login delete

* system snmp community delete

## Learn more

- DOC /support/snmp/users/{engine_id}/{name}

## Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| engine_id | string | path | True | Engine ID of owning SVM or remote switch. |
| name | string | path | True | SNMP user name. |
| fields | array[string] | query | False | Specify the fields to return. |
| return_timeout | integer | query | False | The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202. <br><br> • Default value: 1 <br> • Max value: 120 <br> • Min value: 0 |

## Response

```
Status: 200, Ok
```

## Error

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|---|---|
| 2621475 | This operation is not allowed on a node SVM. |
| 2621699 | This operation is not allowed on a system SVM. |
| 5636123 | Cannot create an SNMP user with a role other than readonly, none, or admin. |
| 5636124 | Cannot create an SNMP user with a role other than vsadmin-readonly, none, or vsadmin. |
| 5832712 | Cannot modify attributes for user "diag." |
| 7077906 | Cannot use given role with this SVM because a role with that name has not been defined for the SVM. |
| 9043999 | ONTAP failed to create an SNMPv3 user because SNMPv3 is disabled in the cluster. |

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**

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. |

## Retrieve SNMP user details

GET /support/snmp/users/{engine_id}/{name}

**Introduced In:** 9.7

Retrieves the details of an SNMP user. The engine ID can be the engine ID of the administrative SVM or a data SVM. It can also be the SNMPv3 engine ID of a remote switch.

**Related ONTAP commands**

* `security snmpusers -vserver <SVM Name> -username <User Name>`

* `security login show -application snmp -vserver <SVM Name> -user-or-group-name <User Name>`

**Learn more**

* DOC /support/snmp/users/{engine_id}/{name}

**Parameters**

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| engine_id | string | path | True | Engine ID of owning SVM or remote switch. |
| name | string | path | True | SNMP user name. |
| fields | array[string] | query | False | Specify the fields to return. |
| 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.<br><br>• Default value: 1<br><br>• Max value: 120<br><br>• Min value: 0 |

## Response

```
Status: 200, Ok
```

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| authentication_method | string | Optional authentication method. |
| comment | string | Optional comment text. |

| Name | Type | Description |
|------|------|-------------|
| engine_id | string | Optional SNMPv3 engine identifier. For a local SNMP user belonging to the administrative Storage Virtual Machine (SVM), the default value of this parameter is the SNMPv3 engine identifier for the administrative SVM. For a local SNMP user belonging to a data SVM, the default value of this parameter is the SNMPv3 engine identifier for that data SVM. For an SNMPv1/SNMPv2c community, this parameter should not be specified in "POST" method. For a remote switch SNMPv3 user, this parameter specifies the SNMPv3 engine identifier for the remote switch. This parameter can also optionally specify a custom engine identifier. |
| name | string | SNMP user name. |
| owner | owner | Optional name and UUID of owning Storage Virtual Machine (SVM). |
| scope | string | Set to "svm" for data Storage Virtual Machine (SVM) SNMP users and to "cluster" for administrative SVM SNMP users. |
| snmpv3 | snmpv3 | Optional parameter that can be specified only for an SNMPv3 user i.e. when 'authentication_method' is either 'usm' or 'both'. This parameter defines the SNMPv3 credentials for an SNMPv3 user. |

| Name | Type | Description |
|---|---|---|
| switch_address | string | Optional remote switch address. It can be an IPv4 address or an IPv6 address. A remote switch can be queried over SNMPv3 using ONTAP SNMP client functionality. Querying such a switch requires an SNMPv3 user (remote switch user) to be configured on the switch. Since ONTAP requires remote switch user's SNMPv3 credentials (to query it), this user must be configured in ONTAP as well. This parameter is specified when configuring such a user. <br><br> • example: 10.23.34.45 <br> • Introduced in: 9.7 <br> • readCreate: 1 <br> • x-nullable: true |

**Example response**

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "authentication_method": "usm",
  "comment": "This is a comment.",
  "engine_id": "80000315055415ab26d4aae811ac4d005056bb792e",
  "name": "snmpv3user2",
  "owner": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "scope": "svm",
  "snmpv3": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "authentication_password": "humTdumt*@t0nAwa11",
    "authentication_protocol": "sha2_256",
    "privacy_password": "p@**GOandCLCt*200",
    "privacy_protocol": "aes128"
  },
  "switch_address": "10.23.34.45"
}
```

**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 |
|------|------|-------------|
| self | href | |

### owner

Optional name and UUID of owning Storage Virtual Machine (SVM).

| 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. |

### snmpv3

Optional parameter that can be specified only for an SNMPv3 user i.e. when 'authentication_method' is either 'usm' or 'both'. This parameter defines the SNMPv3 credentials for an SNMPv3 user.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| authentication_password | string | Authentication protocol password. |
| authentication_protocol | string | Authentication protocol. |
| privacy_password | string | Privacy protocol password. |
| privacy_protocol | string | Privacy protocol. |

### 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. |

# Update the comment parameter of an SNMP user

PATCH /support/snmp/users/{engine_id}/{name}

**Introduced In:** 9.7

Updates the comment parameter of an SNMP user.

## Optional properties

- `comment` - Comment text.

## Related ONTAP commands

- `security login modify`

## Learn more

- [DOC /support/snmp/users/{engine_id}/{name}](#)

## Parameters

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| engine_id | string | path | True | Engine ID of owning SVM or remote switch. |
| name | string | path | True | SNMP user name. |

| Name | Type | In | Required | Description |
|------|------|-----|----------|-------------|
| return_timeout | integer | query | False | The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202. <br><br> • Default value: 1 <br><br> • Max value: 120 <br><br> • Min value: 0 |

## Request Body

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| authentication_method | string | Optional authentication method. |
| comment | string | Optional comment text. |

| Name | Type | Description |
|------|------|-------------|
| engine_id | string | Optional SNMPv3 engine identifier. For a local SNMP user belonging to the administrative Storage Virtual Machine (SVM), the default value of this parameter is the SNMPv3 engine identifier for the administrative SVM. For a local SNMP user belonging to a data SVM, the default value of this parameter is the SNMPv3 engine identifier for that data SVM. For an SNMPv1/SNMPv2c community, this parameter should not be specified in "POST" method. For a remote switch SNMPv3 user, this parameter specifies the SNMPv3 engine identifier for the remote switch. This parameter can also optionally specify a custom engine identifier. |
| name | string | SNMP user name. |
| owner | owner | Optional name and UUID of owning Storage Virtual Machine (SVM). |
| scope | string | Set to "svm" for data Storage Virtual Machine (SVM) SNMP users and to "cluster" for administrative SVM SNMP users. |
| snmpv3 | snmpv3 | Optional parameter that can be specified only for an SNMPv3 user i.e. when 'authentication_method' is either 'usm' or 'both'. This parameter defines the SNMPv3 credentials for an SNMPv3 user. |

| Name | Type | Description |
|---|---|---|
| switch_address | string | Optional remote switch address. It can be an IPv4 address or an IPv6 address. A remote switch can be queried over SNMPv3 using ONTAP SNMP client functionality. Querying such a switch requires an SNMPv3 user (remote switch user) to be configured on the switch. Since ONTAP requires remote switch user's SNMPv3 credentials (to query it), this user must be configured in ONTAP as well. This parameter is specified when configuring such a user.<br><br>• example: 10.23.34.45<br>• Introduced in: 9.7<br>• readCreate: 1<br>• x-nullable: true |

**Example request**

```json
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "authentication_method": "usm",
  "comment": "This is a comment.",
  "engine_id": "80000315055415ab26d4aae811ac4d005056bb792e",
  "name": "snmpv3user2",
  "owner": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "scope": "svm",
  "snmpv3": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "authentication_password": "humTdumt*@t0nAwa11",
    "authentication_protocol": "sha2_256",
    "privacy_password": "p@**GOandCLCt*200",
    "privacy_protocol": "aes128"
  },
  "switch_address": "10.23.34.45"
}
```

**Response**

```
Status: 200, Ok
```

**Error**

```
Status: Default
```

ONTAP Error Response Codes

| Error Code | Description |
|---|---|
| 2621475 | This operation is not allowed on a node SVM. |
| 2621699 | This operation is not allowed on a system SVM. |
| 5636123 | Cannot create an SNMP user with a role other than readonly, none, or admin. |
| 5636124 | Cannot create an SNMP user with a role other than vsadmin-readonly, none, or vsadmin. |
| 5832712 | Cannot modify attributes for user "diag." |
| 7077906 | Cannot use given role with this SVM because a role with that name has not been defined for the SVM. |
| 9043999 | ONTAP failed to create an SNMPv3 user because SNMPv3 is disabled in the cluster. |

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

### href

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

### _links

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

### owner

Optional name and UUID of owning Storage Virtual Machine (SVM).

| 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. |

### snmpv3

Optional parameter that can be specified only for an SNMPv3 user i.e. when 'authentication_method' is either 'usm' or 'both'. This parameter defines the SNMPv3 credentials for an SNMPv3 user.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| authentication_password | string | Authentication protocol password. |
| authentication_protocol | string | Authentication protocol. |
| privacy_password | string | Privacy protocol password. |
| privacy_protocol | string | Privacy protocol. |

### snmp_user

An SNMP user can be an SNMPv1/SNMPv2c user or an SNMPv3 user. SNMPv1/SNMPv2c user is also called a "community" user. An SNMPv3 user, also called a User-based Security Model (USM) user, can be a local SNMPv3 user or a remote SNMPv3 user. A local SNMPv3 user can be used for querying

ONTAP SNMP server over SNMPv3 and/or for sending SNMPv3 traps. The local SNMPv3 user used for sending SNMPv3 traps must be configured with the same authentication and privacy credentials on the traphost receiver as well. A remote SNMPv3 user is also configured on a remote switch and used by ONTAP SNMP client functionality to query the remote switch over SNMPv3. An SNMP user is scoped to its owning Storage Virtual Machine (SVM). Owning SVM could be a data SVM or the administrative SVM.

| Name | Type | Description |
|------|------|-------------|
| _links | _links | |
| authentication_method | string | Optional authentication method. |
| comment | string | Optional comment text. |
| engine_id | string | Optional SNMPv3 engine identifier. For a local SNMP user belonging to the administrative Storage Virtual Machine (SVM), the default value of this parameter is the SNMPv3 engine identifier for the administrative SVM. For a local SNMP user belonging to a data SVM, the default value of this parameter is the SNMPv3 engine identifier for that data SVM. For an SNMPv1/SNMPv2c community, this parameter should not be specified in "POST" method. For a remote switch SNMPv3 user, this parameter specifies the SNMPv3 engine identifier for the remote switch. This parameter can also optionally specify a custom engine identifier. |
| name | string | SNMP user name. |
| owner | owner | Optional name and UUID of owning Storage Virtual Machine (SVM). |
| scope | string | Set to "svm" for data Storage Virtual Machine (SVM) SNMP users and to "cluster" for administrative SVM SNMP users. |

| Name | Type | Description |
|------|------|-------------|
| snmpv3 | snmpv3 | Optional parameter that can be specified only for an SNMPv3 user i.e. when 'authentication_method' is either 'usm' or 'both'. This parameter defines the SNMPv3 credentials for an SNMPv3 user. |
| switch_address | string | Optional remote switch address. It can be an IPv4 address or an IPv6 address. A remote switch can be queried over SNMPv3 using ONTAP SNMP client functionality. Querying such a switch requires an SNMPv3 user (remote switch user) to be configured on the switch. Since ONTAP requires remote switch user's SNMPv3 credentials (to query it), this user must be configured in ONTAP as well. This parameter is specified when configuring such a user.<br><br>• example: 10.23.34.45<br>• Introduced in: 9.7<br>• readCreate: 1<br>• x-nullable: true |

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 |

| Name | Type | Description |
|---|---|---|
| target | string | The target parameter that caused the error. |