Retrieve events

ONTAP 9.12.1 REST API reference

NetApp
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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
message.severity	string	query	False	Filter by message.severity
message.name	string	query	False	Filter by message.name
index	integer	query	False	Filter by index
time	string	query	False	Filter by time
node.uuid	string	query	False	Filter by node.uuid
node.name	string	query	False	Filter by node.name
source	string	query	False	Filter by source
parameters.value	string	query	False	Filter by parameters.value
parameters.name	string	query	False	Filter by parameters.name
filter.name	string	query	False	Filter the collection returned using an event filter - 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. • 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. • Default value: 1 • Max value: 120 • Min value: 0
order_by	array[string]	query	False	Order results by specified fields and optional [asc

Response

```
Status: 200, Ok
```

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

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "action": {
        "confirmation_message": {
          "arguments": {
            "code": "string",
            "message": "string"
          },
          "code": "4",
          "message": "entry doesn't exist"
        },
        "description": {
          "arguments": {
            "code": "string",
            "message": "string"
          },
          "code": "4",
          "message": "entry doesn't exist"
        },
        "href": "/api/resourcelink",
        "method": "PATCH",
        "name": "schedule",
        "parameters": {
          "description": {
            "arguments": {
              "code": "string",
              "message": "string"
            },
            "code": "4",
            "message": "entry doesn't exist"
          },
          "enum": [
            "value-1",
            "value-2"
```

```
        ],
        "format": "date-time",
        "help": {
          "arguments": {
            "code": "string",
            "message": "string"
          },
          "code": "4",
          "message": "entry doesn't exist"
        },
        "items": {
          "type": "string"
        },
        "maxItems": 0,
        "maxLength": 0,
        "maximum": 0,
        "minItems": 0,
        "minLength": 0,
        "minimum": 0,
        "name": "schedule-at",
        "param_in": "body",
        "title": {
          "arguments": {
            "code": "string",
            "message": "string"
          },
          "code": "4",
          "message": "entry doesn't exist"
        },
        "type": "string",
        "validation_error_message": {
          "arguments": {
            "code": "string",
            "message": "string"
          },
          "code": "4",
          "message": "entry doesn't exist"
        }
      },
      "title": {
        "arguments": {
          "code": "string",
          "message": "string"
        },
        "code": "4",
        "message": "entry doesn't exist"
```

```
        }
      },
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "creation_time": "string",
    "history": {
      "log_message": "string",
      "state": "resolving",
      "update_time": "string"
    },
    "index": 1,
    "last_update_time": "string",
    "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"
    },
    "num_occurrences": 0,
    "parameters": {
      "name": "numOps",
      "value": "123"
    },
    "source": "string",
    "state": "resolving",
    "time": "string",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
}
```

Error

```
Status: Default, Error
```

Name	Type	Description
error	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	

arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

confirmation_message

Confirmation message that is presented in user facing applications, confirming the action to take.

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

description

Description of the action is presented in user facing applications.

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

description

Description of the parameter that is presented in user facing applications.

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

help

Help message of the parameter that is presented in user facing applications.

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

title

Title of the parameter that is presented in user facing applications.

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

validation_error_message

Error message that is presented in user facing applications, in cases where parameter validation fails.

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

parameters

Name	Type	Description
description	description	Description of the parameter that is presented in user facing applications.
enum	array[string]	Specifies the possible values of the parameter.
exclusiveMaximum	boolean	Specifies whether the "maximum" value is excluded in the parameter value range.
exclusiveMinimum	boolean	Specifies whether the "minimum" value is excluded in the parameter value range.
format	string	An optional modifier that serves as a hint at the content and format of the parameter.
help	help	Help message of the parameter that is presented in user facing applications.
items	string	If the type of the parameter is an array, this specifies the type of items in the form of a JSON object, {"type":"type-value"}, where the type-value is one of the values for the type property.
maxItems	integer	Specifies the maximum length of an array type parameter.
maxLength	integer	Specifies the maximum length of a string type parameter.
maximum	integer	Specifies the maximum value of the parameter.
minItems	integer	Specifies the minimum length of an array type parameter.
minLength	integer	Specifies the minimum length of a string type parameter.
minimum	integer	Specifies the minimum value of the parameter.

Name	Type	Description
name	string	Parameter name.
param_in	string	Specifies where the parameter is placed when invoking the action.
title	title	Title of the parameter that is presented in user facing applications.
type	string	Parameter type.
validation_error_message	validation_error_message	Error message that is presented in user facing applications, in cases where parameter validation fails.

request_body_template

JSON object describing the structure of the request body if arguments must be provided in the body when invoking the action. A JSON string value that takes the form of {parameter-name} must be substituted by user input values encoded as the appropriate JSON type. The following table gives examples where the parameter type is a string, an integer, and an array:

request_body_template value	parameter value	request body
{"name": "{user-name}"}	user-name="Joe"	{"name": "Joe"}
{"retry count": "{count}"}	count=10	{"retry_count": 10}
{"domains": "{dns_names}"}	dns_names=["dns-1", "dns-2"]	{"domains": ["dns-1", "dns-2"]}

Only JSON string values that start with a '{' and end with a '}' should be considered for parameter substitutions. A JSON string value such as "{user-name} is the syntax" should be treated as a literal string with no parameter substitution to be performed. Double curly braces '{{' and '}}' are used to escape parameter substitutions, therefore double curly braces must be converted to single curly braces. For example, "{{user-name}}" is converted to the JSON string value "{user-name}". Note that this rule only applies if a JSON string starts with '{{' and ends with '}}'. The following table provides examples of when parameter substitutions must not be performed:

request_body_template value	request body
{"name": "{user-name} is bad"}	{"name": "{user-name} is bad"}
{"name": "{{user-name}}"}	{"name": "{user-name}"}
{"name": "{{user-name}} is bad"}	{"name": "{{user-name}} is bad"}
{"name": "{{{{user-name}}}}"}	{"name": "{{user-name}}"}

title

Title of the action that is presented in user facing applications.

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

action

Name	Type	Description
confirmation_message	confirmation_message	Confirmation message that is presented in user facing applications, confirming the action to take.
description	description	Description of the action is presented in user facing applications.
href	string	URI on which to perform the action, using the HTTP method specified in the method property.
method	string	HTTP verb, such as PATCH, POST, used to perform the action.
name	string	Name of the action.
parameters	array[parameters]	Parameter list for the action.
request_body_template	request_body_template	JSON object describing the structure of the request body if arguments must be provided in the body when invoking the action. A JSON string value that takes the form of {parameter-name} must be substituted by user input values encoded as the appropriate JSON type. The following table gives examples where the parameter type is a string, an integer, and an array:

| request_body_template value | parameter value | request body

| {"name": "{user-name}"} | user-name="Joe" | {"name": "Joe"}

| {"retry count": "{count}"} | count=10 | {"retry_count": 10}

| {"domains": "{dns_names}"} | dns_names=["dns-1", "dns-2"] | {"domains": ["dns-1", "dns-2"]}

Only JSON string values that start with a '{' and end with a '}' should be considered for parameter substitutions. A JSON string value such as "{user-name} is the syntax" should be treated as a literal string with no parameter substitution to be performed. Double curly braces '{{' and '}}' are used to escape parameter substitutions, therefore double curly braces must be converted to single curly braces. For example, "{{user-name}}" is converted to the JSON string value "{user-name}". Note that this rule only applies if a JSON string starts with '{{' and ends with '}}'. The following table provides examples of when parameter substitutions must not be performed:

| request_body_template value | request body

| {"name": "{user-name} is bad"} | {"name": "{user-name} is bad"}

| {"name": "{{user-name}}"} | {"name": "{user-name}"}

| {"name": "{{user-name}} is bad"} | {"name": "{{user-name}} is bad"}

| {"name": "{{{{user-name}}}}"} | {"name": "{{user-name}}"}

title

title
Title of the action that is presented in user facing applications.

self

Name	Type	Description
href	string	

_links

Name	Type	Description
action	array[action]	Actions that can be performed to remediate the issue that the event instance is reporting. To perform an action, send a request to the `href` URL using the HTTP `method` with an appropriate set of parameter values.
self	self	

action

Some automatic remediation actions included in the `action` link relations are links to the event instance itself, while others are to other public REST APIs. In cases where the `action` link points to the event instance itself, this property is used in a PATCH request body to trigger a remediation action. The value

included as the value of the property depends on each remediation action.

history

Name	Type	Description
log_message	string	A formatted text string about the update.
state	string	State of the event instance when the update is raised.
update_time	string	Timestamp of the update.

_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	
uuid	string	

parameters

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

records

Name	Type	Description
_links	_links	
action	action	Some automatic remediation actions included in the `action` link relations are links to the event instance itself, while others are to other public REST APIs. In cases where the `action` link points to the event instance itself, this property is used in a PATCH request body to trigger a remediation action. The value included as the value of the property depends on each remediation action.
actionable	boolean	Indicates whether the event instance currently has actions that can be performed.
creation_time	string	Timestamp of the event creation.
history	array[history]	History of updates to the event instance.
index	integer	Index of the event. Returned by default.
last_update_time	string	Timestamp of the last update to the event instance.
log_message	string	A formatted text string populated with parameter details. Returned by default. When changing the state of an event instance, include the 'state' property and this property in a PATCH request. The value of this property should describe why the state is changed.
message	message	
node	node	
num_occurrences	integer	Number of times the event has repeatedly reported the issue.

Name	Type	Description
parameters	array[parameters]	A list of parameters provided with the EMS event.
source	string	Source
state	string	Indicates the event state. A stateful event tracks the state changes of a system condition and reflects the current system condition. This property and the 'action' property are mutually exclusive in a PATCH request. The state of an event instance can be changed to 'resolved' or 'closed' by sending a PATCH request with this property along with the 'log_message' property describing the reason. An event instance changes its state to 'resolving' only as a result of the user triggering an automatic remediation action, which is done by invoking an action specified in the 'action' link relation.
stateful	boolean	Indicates whether the event is stateful. A stateful event tracks the state changes of a system condition and reflects the current system condition while a stateless event simply reports a certain system condition that has occurred sometime in the past.
time	string	Timestamp of the event. Returned by default.
uuid	string	The UUID that uniquely identifies the event instance.

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

Name	Type	Description
arguments	array[error_arguments]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.