



# Create or retrieve SNMP traphosts

## ONTAP 9.7 REST API reference

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# 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"+++</mgmt-ip>+++

```

## 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"}}'+++</mgmt-ip>+++
```

## The response:

```
201 Created
```

## Retrieve SNMP traphosts

GET /support/snmp/traphosts

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.

Name	Type	In	Required	Description
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.
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.
order_by	array[string]	query	False	Order results by specified fields and optional [asc

## Response

Status: 200, Ok

Name	Type	Description
_links	<a href="#">_links</a>	
num_records	integer	Number of records.
records	array[ <a href="#">snmp_traphost</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "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	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	<a href="#">href</a>	
self	<a href="#">href</a>	

\_links

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

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	<a href="#">_links</a>	

Name	Type	Description
name	string	<p>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.</p> <ul style="list-style-type: none"> <li>• example: snmpv3user3</li> </ul>

snmp\_traphost

SNMP manager or host machine that receives SNMP traps from ONTAP.

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
host	string	Fully qualified domain name (FQDN), IPv4 address or IPv6 address of SNMP traphost.
ip_address	string	IPv4 or IPv6 address
user	<a href="#">user</a>	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

error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Create SNMP traphosts

POST `/support/snmp/traphosts`

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.

## Request Body

Name	Type	Description
_links	<a href="#">_links</a>	
host	string	Fully qualified domain name (FQDN), IPv4 address or IPv6 address of SNMP traphost.
ip_address	string	IPv4 or IPv6 address
user	<a href="#">user</a>	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

```
{
  "_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
<a href="#">_links</a>	<a href="#">_links</a>	
num_records	integer	Number of records.
records	array[ <a href="#">snmp_traphost</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "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

### ONTAP Error Response Codes

Error Code	Description
8847365	Unknown host.
9043969	Duplicate traphost entry.
9043980	IPv6 support is disabled.
9043991	Not a USM user.

Error Code	Description
9043993	Current cluster version does not support SNMPv3 traps.
9044001	Failed to create SNMPv1 traphost.
9044002	Failed to create SNMPv3 traphost.

Name	Type	Description
error	error	

### Example error

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

### Definitions



## See Definitions

href

Name	Type	Description
href	string	

\_links

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

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
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	<p>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.</p> <ul style="list-style-type: none"><li>• example: snmpv3user3</li></ul>

snmp\_traphost

SNMP manager or host machine that receives SNMP traps from ONTAP.

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
host	string	Fully qualified domain name (FQDN), IPv4 address or IPv6 address of SNMP trap host.
ip_address	string	IPv4 or IPv6 address
user	<a href="#">user</a>	Optional SNMP user parameter. For an SNMPv3 trap host, this property refers to an SNMPv3 or User-based Security Model (USM) user. For an SNMPv1 or SNMPv2c trap host, this property refers to an SNMP community.

#### [\\_links](#)

Name	Type	Description
next	<a href="#">href</a>	
self	<a href="#">href</a>	

#### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

#### error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

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