



Create or retrieve SNMP traphosts

ONTAP 9.9.1 REST API reference

NetApp
August 29, 2024

Table of Contents

- Create or retrieve SNMP traps 1
- Support SNMP traps endpoint overview 1
- Retrieve SNMP traps 4
- Create SNMP traps 10

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

Response

Status: 200, Ok

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

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 | 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 | <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"> • example: snmpv3user3 • Introduced in: 9.7 |

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. |

error_arguments

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

error

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

Create 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. • 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

```
{
  "_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

```
{
  "_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. |

| Error Code | Description |
|------------|--|
| 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. |

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

Example error

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

Definitions

See Definitions

href

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

_links

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

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 | <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">• example: snmpv3user3• Introduced in: 9.7 |

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 trap host. |
| ip_address | string | IPv4 or IPv6 address |
| user | user | 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 | href | |
| self | href | |

error_arguments

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

error

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

Copyright information

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

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

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

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

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

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

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

Trademark information

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