



# Manage NIS configuration

## ONTAP 9.9.1 REST API reference

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# Manage NIS configuration

## Security authentication cluster NIS endpoint overview

### Overview

NIS servers are used to authenticate user and client computers. NIS domain name and NIS server information is required to configure NIS. This API retrieves and manages NIS server configurations.

### Examples

#### Retrieving cluster NIS information

The cluster NIS GET request retrieves the NIS configuration of the cluster.

The following example shows how a GET request is used to retrieve the cluster NIS configuration:

```
# The API:
/security/authentication/cluster/nis

# The call:
curl -X GET "https://<mgmt-ip>/api/security/authentication/cluster/nis" -H
"accept: application/hal+json"

# The response:
{
  "domain": "domainA.example.com",
  "servers": [
    "10.10.10.10",
    "example.com"
  ],
  "bound_servers": [
    "10.10.10.10"
  ]
}
```

#### Creating the cluster NIS configuration

The cluster NIS POST request creates a NIS configuration for the cluster.

The following example shows how a POST request is used to create a cluster NIS configuration:

```
# The API:
/security/authentication/cluster/nis

# The call:
curl -X POST "https://<mgmt-ip>/api/security/authentication/cluster/nis"
-H "accept: application/json" -H "Content-Type: application/json" -d "{
 \"domain\": \"domainA.example.com\", \"servers\": [
 \"10.10.10.10\", \"example.com\" ]}"
```

## Updating the cluster NIS configuration

The cluster NIS PATCH request updates the NIS configuration of the cluster.

The following example shows how to update the domain:

```
# The API:
/security/authentication/cluster/nis

# The call:
curl -X PATCH "https://<mgmt-ip>/api/security/authentication/cluster/nis"
-H "accept: application/json" -H "Content-Type: application/json" -d "{
 \"domain\": \"domainC.example.com\", \"servers\": [ \"13.13.13.13\" ]}"
```

The following example shows how to update the server:

```
# The API:
/security/authentication/cluster/nis

# The call:
curl -X PATCH "https://<mgmt-ip>/api/security/authentication/cluster/nis"
-H "accept: application/json" -H "Content-Type: application/json" -d "{
 \"servers\": [ \"14.14.14.14\" ]}"
```

## Deleting the cluster NIS configuration

The cluster NIS DELETE request deletes the NIS configuration of the cluster.

The following example shows how a DELETE request is used to delete the cluster NIS configuration:

```
# The API:
/security/authentication/cluster/nis

# The call:
curl -X DELETE "https://<mgmt-ip>/api/security/authentication/cluster/nis"
-H "accept: application/hal+json"
```

## Delete the NIS configuration for the cluster

DELETE /security/authentication/cluster/nis

**Introduced In:** 9.6

Deletes the NIS configuration of the cluster. NIS can be removed as a source from ns-switch if NIS is not used for lookups.

### Response

Status: 200, Ok

### Error

Status: Default, Error

| Name  | Type                  | Description |
|-------|-----------------------|-------------|
| error | <a href="#">error</a> |             |

## 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 |

#### 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. |

## Retrieve the NIS configuration for the cluster

GET /security/authentication/cluster/nis

Introduced In: 9.6

Retrieves the NIS configuration of the cluster. Both NIS domain and servers are displayed by default. The `bound_servers` property indicates the successfully bound NIS servers.

## Parameters

| Name   | Type          | In            | Required | Description   |
|--|---------------|---------------|----------|---|
| <code>max_records</code>                                   | integer       | query         | False    | Limit the number of records returned.   |
| <code>return_records</code>                                | 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"><li>• Default value: 1</li></ul>  |
| <code>return_timeout</code>                                | 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"><li>• Default value: 1</li><li>• Max value: 120</li><li>• Min value: 0</li></ul> |
| <code>order_by</code>                                      | 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        | <a href="#">_links</a> |  |
| bound_servers | array[string]          |  |
| domain        | string                 | The NIS domain to which this configuration belongs.                                      |
| servers       | array[string]          | A list of hostnames or IP addresses of NIS servers used by the NIS domain configuration. |

### Example response

```

{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "bound_servers": {
  },
  "servers": {
  }
}

```

### Error

Status: Default, Error

| Name  | Type                  | Description |
|-------|-----------------------|-------------|
| error | <a href="#">error</a> |             |



## 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> |             |

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. |

## Update the NIS configuration for the cluster

```
PATCH /security/authentication/cluster/nis
```

**Introduced In:** 9.6

Both NIS domain and servers can be updated. Domains and servers cannot be empty. Both FQDNs and IP addresses are supported for the 'servers' field. If the domain is updated, NIS servers must also be specified. IPv6 must be enabled if IPv6 family addresses are specified for the `servers` property.

### Parameters

| Name           | Type    | In    | Required | Description  |
|----------------|---------|-------|----------|--|
| return_records | boolean | query | False    | The default is false. If set to true, the records are returned. <ul style="list-style-type: none"> <li>• Default value:</li> </ul> |

## Request Body

| Name          | Type                   | Description  |
|---------------|------------------------|--|
| _links        | <a href="#">_links</a> |  |
| bound_servers | array[string]          |  |
| domain        | string                 | The NIS domain to which this configuration belongs.                                      |
| servers       | array[string]          | A list of hostnames or IP addresses of NIS servers used by the NIS domain configuration. |

## Example request

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

## Response

Status: 200, Ok

## Error

Status: Default

## ONTAP Error Response Codes

| Error Code | Description   |
|------------|---|
| 1966253    | IPv6 is not enabled in the cluster .  |
| 3276964    | The NIS domain name or NIS server domain is too long. The maximum supported for domain name is 64 characters and the maximum supported for NIS server domain is 255 characters. |
| 3276933    | A maximum of 10 NIS servers can be configured per SVM.  |
| 23724109   | DNS resolution failed for one or more specified servers.  |
| 23724112   | DNS resolution failed due to an internal error. Contact technical support if this issue persists.   |
| 23724132   | DNS resolution failed for all the specified servers.  |
| 23724130   | Cannot use an IPv6 name server address because there are no IPv6 interfaces   |

| Name  | Type                  | Description |
|-------|-----------------------|-------------|
| error | <a href="#">error</a> |             |

## 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> |             |

cluster\_nis\_service

| Name          | Type                   | Description  |
|---------------|------------------------|--|
| _links        | <a href="#">_links</a> |  |
| bound_servers | array[string]          |  |
| domain        | string                 | The NIS domain to which this configuration belongs.                                      |
| servers       | array[string]          | A list of hostnames or IP addresses of NIS servers used by the NIS domain configuration. |

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 the NIS configuration for the cluster

POST /security/authentication/cluster/nis

**Introduced In:** 9.6

The cluster can have one NIS server configuration. Specify the NIS domain and NIS servers as input. Domain name and servers fields cannot be empty. Both FQDNs and IP addresses are supported for the `server` property. IPv6 must be enabled if IPv6 family addresses are specified in the `server` property. A maximum of ten NIS servers are supported.

## Required properties

- `domain` - NIS domain to which this configuration belongs.
- `servers` - List of hostnames or IP addresses of NIS servers used by the NIS domain configuration.

## 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        | <a href="#">_links</a> |  |
| bound_servers | array[string]          |  |
| domain        | string                 | The NIS domain to which this configuration belongs.                                      |
| servers       | array[string]          | A list of hostnames or IP addresses of NIS servers used by the NIS domain configuration. |

## Example request

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

## Response

Status: 201, Created

| Name        | Type   | Description                   |
|-------------|--|-------------------------------|
| _links      | <a href="#">_links</a>                       |                               |
| num_records | integer                                      | Number of NIS domain records. |
| records     | array[ <a href="#">cluster_nis_service</a> ] |                               |

## Example response

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

## Error

Status: Default

### ONTAP Error Response Codes

| Error Code | Description   |
|------------|---|
| 1966253    | IPv6 is not enabled in the cluster.   |
| 3276964    | The NIS domain name or NIS server domain is too long. The maximum supported for domain name is 64 characters and the maximum supported for NIS server domain is 255 characters. |
| 3276933    | A maximum of 10 NIS servers can be configured per SVM.  |
| 13434916   | The SVM is in the process of being created. Wait a few minutes, and then try the command again.   |
| 23724109   | DNS resolution failed for one or more specified servers.  |



| Error Code | Description   |
|------------|---|
| 23724112   | DNS resolution failed due to an internal error. Contact technical support if this issue persists. |
| 23724132   | DNS resolution failed for all the specified servers.  |
| 23724130   | Cannot use an IPv6 name server address because there are no IPv6 interfaces.                      |

| 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> |             |

cluster\_nis\_service

| Name          | Type                   | Description  |
|---------------|------------------------|--|
| _links        | <a href="#">_links</a> |  |
| bound_servers | array[string]          |  |
| domain        | string                 | The NIS domain to which this configuration belongs.                                      |
| servers       | array[string]          | A list of hostnames or IP addresses of NIS servers used by the NIS domain configuration. |

\_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        |

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

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