



# Manage LDAP schemas

## ONTAP 9.13.1 REST API reference

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April 02, 2024

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# Manage LDAP schemas

## Name-services ldap-schemas endpoint overview

### Overview

ONTAP provides four default LDAP schemas. These are:

- MS-AD-BIS Based on RFC-2307bis. This is the preferred LDAP schema for most standard Windows 2012 and later LDAP deployments.
- AD-IDMU Based on Active Directory Identity Management for UNIX. This schema is appropriate for most Windows 2008, Windows 2012, and later AD servers.
- AD-SFU Based on Active Directory Services for UNIX. This schema is appropriate for most Windows 2003 and earlier AD servers.
- RFC-2307 Based on RFC-2307 (an approach that uses LDAP as a network information service). This schema is appropriate for most UNIX AD servers.

### Examples

#### Retrieving LDAP schema information

```
# The API:
GET /api/name-services/ldap-schemas

# The call:
curl -X GET "https://<mgmt-ip>/api/name-services/ldap-schemas"

# The response:
{
  "records": [
    {
      "owner": {
        "uuid": "eda950c6-0a0c-11ec-bfcf-0050568e9150",
        "name": "athiracluster-1",
        "_links": {
          "self": {
            "href": "/api/svm/svms/eda950c6-0a0c-11ec-bfcf-0050568e9150"
          }
        }
      },
      "name": "AD-IDMU",
      "_links": {
        "self": {
          "href": "/api/name-services/ldap-schemas/eda950c6-0a0c-11ec-bfcf-
```

```

0050568e9150/AD-IDMU"
  }
}
},
{
  "owner": {
    "uuid": "eda950c6-0a0c-11ec-bfcf-0050568e9150",
    "name": "athiracluster-1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/eda950c6-0a0c-11ec-bfcf-0050568e9150"
      }
    }
  },
  "name": "AD-SFU",
  "_links": {
    "self": {
      "href": "/api/name-services/ldap-schemas/eda950c6-0a0c-11ec-bfcf-
0050568e9150/AD-SFU"
    }
  }
},
{
  "owner": {
    "uuid": "eda950c6-0a0c-11ec-bfcf-0050568e9150",
    "name": "athiracluster-1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/eda950c6-0a0c-11ec-bfcf-0050568e9150"
      }
    }
  },
  "name": "MS-AD-BIS",
  "_links": {
    "self": {
      "href": "/api/name-services/ldap-schemas/eda950c6-0a0c-11ec-bfcf-
0050568e9150/MS-AD-BIS"
    }
  }
},
{
  "owner": {
    "uuid": "eda950c6-0a0c-11ec-bfcf-0050568e9150",
    "name": "athiracluster-1",
    "_links": {
      "self": {

```

```

        "href": "/api/svm/svms/eda950c6-0a0c-11ec-bfcf-0050568e9150"
    }
}
},
"name": "RFC-2307",
"_links": {
    "self": {
        "href": "/api/name-services/ldap-schemas/eda950c6-0a0c-11ec-bfcf-0050568e9150/RFC-2307"
    }
}
}
],
"num_records": 4,
"_links": {
"self": {
    "href": "/api/name-services/ldap-schemas"
}
}
}
}

```

## Retrieving LDAP schema information for a given SVM and "name"

```

# The API:
GET /api/name-services/ldap-schemas

# The call:
curl -X GET "https://<mgmt-ip>/api/name-services/ldap-schemas/eda950c6-0a0c-11ec-bfcf-0050568e9150/RFC-2307"

# The response:
{
  "owner": {
    "uuid": "eda950c6-0a0c-11ec-bfcf-0050568e9150",
    "name": "svm1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/eda950c6-0a0c-11ec-bfcf-0050568e9150"
      }
    }
  },
  "name": "RFC-2307",

```

```
"comment": "Schema based on RFC 2307 (read-only)",
"name_mapping": {
  "account": {
    "unix": "unixAccount",
    "windows": "windowsAccount"
  },
  "windows_to_unix": {
    "attribute": "windowsAccount",
    "no_domain_prefix": false,
    "object_class": "posixAccount"
  }
},
"rfc2307": {
  "attribute": {
    "gecos": "gecos",
    "gid_number": "gidNumber",
    "home_directory": "homeDirectory",
    "login_shell": "loginShell",
    "uid": "uid",
    "uid_number": "uidNumber",
    "user_password": "userPassword"
  },
  "cn": {
    "group": "cn",
    "netgroup": "cn"
  },
  "member": {
    "nis_netgroup": "memberNisNetgroup",
    "uid": "memberUid"
  },
  "nis": {
    "netgroup_triple": "nisNetgroupTriple",
    "netgroup": "nisNetgroup",
    "object": "nisObject",
    "mapname": "nisMapName",
    "mapentry": "nisMapEntry"
  },
  "posix": {
    "account": "posixAccount",
    "group": "posixGroup"
  }
},
"rfc2307bis": {
  "enabled": false,
  "group_of_unique_names": "groupOfUniqueNames",
  "maximum_groups": 256,
```

```
"unique_member": "uniqueMember"
},
"scope": "cluster",
"global_schema": true,
"_links": {
  "self": {
    "href": "/api/name-services/ldap-schemas/eda950c6-0a0c-11ec-bfcf-0050568e9150/RFC-2307"
  }
}
}
```

---

## Creating an LDAP schema

---

```
# The API:
POST /api/name-services/ldap-schemas

# The call:
curl -X POST "https://<mgmt-ip>/api/name-services/ldap-schemas" -H
"accept: application/json" -H "authorization: Basic YWRtaW46bmV0YXBwMSE="
-H "Content-Type: application/json" -d "{ \"name\":
\"schema\", \"template\": { \"name\": \"AD-IDMU\" }, \"owner\": { \"uid\":
\"52ba8197-0a23-11ec-9622-0050568e9150\", \"name\" : \"svm1\" }}"
```

---

## Updating an LDAP schema

---

```
# The API:
PATCH /api/name-services/ldap-schemas/{owner.uuid}/{name}

# The call:
curl -X PATCH "https://<mgmt-ip>/api/name-services/ldap-schemas/52ba8197-0a23-11ec-9622-0050568e9150/schema" -H "authorization: Basic YWRtaW46bmV0YXBwMSE=" -H "Content-Type: application/json" -d "{ \"comment\": \"This is a comment for schema\""}
```

## Deleting an LDAP schema

```
# The API:
DELETE /api/name-services/ldap-schemas/{owner.uuid}/{name}

# The call:
curl -X DELETE "https://<mgmt-ip>/api/name-services/ldap-schemas/52ba8197-0a23-11ec-9622-0050568e9150/schema"
```

## Retrieve all LDAP schemas

GET /name-services/ldap-schemas

**Introduced In:** 9.11

Retrieves all the LDAP schemas.

### Related ONTAP commands

- `vserver services name-service ldap client schema show`

### Parameters

Name	Type	In	Required	Description
owner.uuid	string	query	False	Filter by owner.uuid
owner.name	string	query	False	Filter by owner.name
comment	string	query	False	Filter by comment
name	string	query	False	Filter by name <ul style="list-style-type: none"><li>• maxLength: 32</li><li>• minLength: 1</li></ul>
rfc2307.cn.netgroup	string	query	False	Filter by rfc2307.cn.netgroup
rfc2307.cn.group	string	query	False	Filter by rfc2307.cn.group



<b>Name</b>	<b>Type</b>	<b>In</b>	<b>Required</b>	<b>Description</b>
rfc2307.member.uid	string	query	False	Filter by rfc2307.member.uid
rfc2307.member.nis_netgroup	string	query	False	Filter by rfc2307.member.nis_netgroup
rfc2307.attribute.uid	string	query	False	Filter by rfc2307.attribute.uid
rfc2307.attribute.uid_number	string	query	False	Filter by rfc2307.attribute.uid_number
rfc2307.attribute.user_password	string	query	False	Filter by rfc2307.attribute.user_password
rfc2307.attribute.gid_number	string	query	False	Filter by rfc2307.attribute.gid_number
rfc2307.attribute.home_directory	string	query	False	Filter by rfc2307.attribute.home_directory
rfc2307.attribute.login_shell	string	query	False	Filter by rfc2307.attribute.login_shell
rfc2307.attribute.gecos	string	query	False	Filter by rfc2307.attribute.gecos
rfc2307.nis.mapentry	string	query	False	Filter by rfc2307.nis.mapentry
rfc2307.nis.netgroup_triple	string	query	False	Filter by rfc2307.nis.netgroup_triple
rfc2307.nis.object	string	query	False	Filter by rfc2307.nis.object

Name	Type	In	Required	Description
rfc2307.nis.mapname	string	query	False	Filter by rfc2307.nis.mapname
rfc2307.nis.netgroup	string	query	False	Filter by rfc2307.nis.netgroup
rfc2307.posix.account	string	query	False	Filter by rfc2307.posix.account
rfc2307.posix.group	string	query	False	Filter by rfc2307.posix.group
rfc2307bis.maximum_groups	integer	query	False	Filter by rfc2307bis.maximum_groups <ul style="list-style-type: none"> <li>• Max value: 1024</li> <li>• Min value: 1</li> </ul>
rfc2307bis.enabled	boolean	query	False	Filter by rfc2307bis.enabled
rfc2307bis.group_of_unique_names	string	query	False	Filter by rfc2307bis.group_of_unique_names
rfc2307bis.unique_member	string	query	False	Filter by rfc2307bis.unique_member
name_mapping.account.windows	string	query	False	Filter by name_mapping.account.windows
name_mapping.account.unix	string	query	False	Filter by name_mapping.account.unix
name_mapping.windows_to_unix.no_domain_prefix	boolean	query	False	Filter by name_mapping.windows_to_unix.no_domain_prefix

Name	Type	In	Required	Description
name_mapping.windows_to_unix.attribute	string	query	False	Filter by name_mapping.windows_to_unix.attribute
name_mapping.windows_to_unix.object_class	string	query	False	Filter by name_mapping.windows_to_unix.object_class
scope	string	query	False	Filter by scope
global_schema	boolean	query	False	Filter by global_schema
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"> <li>• Default value: 1</li> </ul>
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"> <li>• Max value: 120</li> <li>• Min value: 0</li> <li>• Default value: 1</li> </ul>

Name	Type	In	Required	Description
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 LDAP schema records.
records	array[ <a href="#">ldap_schema</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "comment": "Schema based on Active Directory Services for UNIX
(read-only).",
    "global_schema": 1,
    "name": "AD-SFU-v1",
    "name_mapping": {
      "account": {
        "unix": "windowsAccount",
        "windows": "windowsAccount"
      },
      "windows_to_unix": {
        "attribute": "windowsAccount",
        "no_domain_prefix": "",
        "object_class": "User"
      }
    },
    "owner": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svml",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "rfc2307": {
      "attribute": {
        "gecos": "name",
        "gid_number": "msSFU30GidNumber",
```

```

    "home_directory": "msSFU30HomeDirectory",
    "login_shell": "msSFU30LoginShell",
    "uid": "sAMAccountName",
    "uid_number": "msSFU30UidNumber",
    "user_password": "msSFU30Password"
  },
  "cn": {
    "group": "cn",
    "netgroup": "name"
  },
  "member": {
    "nis_netgroup": "msSFU30MemberNisNetgroup",
    "uid": "msSFU30MemberUid"
  },
  "nis": {
    "mapentry": "msSFU30NisMapEntry",
    "mapname": "msSFU30NisMapName",
    "netgroup": "msSFU30NisNetGroup",
    "netgroup_triple": "msSFU30MemberOfNisNetgroup",
    "object": "msSFU30NisObject"
  },
  "posix": {
    "account": "User",
    "group": "Group"
  }
},
"rfc2307bis": {
  "enabled": "",
  "group_of_unique_names": "groupOfUniqueNames",
  "maximum_groups": 256,
  "unique_member": "uniqueMember"
},
"scope": "cluster",
"template": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "AD-SFU-v1"
}
}
}

```

## 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>	

ldap\_schema\_account

Name	Type	Description
unix	string	Attribute name used to retrieve UNIX account information.
windows	string	Attribute name used to retrieve Windows account information for a UNIX user account.

windows\_to\_unix

Name	Type	Description
attribute	string	Attribute name used to retrieve the UNIX account information for a Windows user account.
no_domain_prefix	boolean	Indicates whether or not the name for Windows to UNIX name mapping should have a domain prefix.
object_class	string	Name used to represent the windowsToUnix object class.

ldap\_schema\_name\_mapping



Name	Type	Description
account	<a href="#">ldap_schema_account</a>	
windows_to_unix	<a href="#">windows_to_unix</a>	

owner

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

attribute

Name	Type	Description
gecos	string	RFC 2307 gecos attribute.
gid_number	string	RFC 2307 gidNumber attribute.
home_directory	string	RFC 2307 homeDirectory attribute.
login_shell	string	RFC 2307 loginShell attribute.
uid	string	RFC 1274 userid attribute used by RFC 2307 as UID.
uid_number	string	RFC 2307 uidNumber attribute.
user_password	string	RFC 2256 userPassword attribute used by RFC 2307.

cn

Name	Type	Description
group	string	RFC 2256 cn attribute used by RFC 2307 when working with groups.
netgroup	string	RFC 2256 cn attribute used by RFC 2307 when working with netgroups.

## member

Name	Type	Description
nis_netgroup	string	RFC 2307 memberNisNetgroup attribute.
uid	string	RFC 2307 memberUid attribute.

## nis

Name	Type	Description
mapentry	string	RFC 2307 nisMapEntry attribute.
mapname	string	RFC 2307 nisMapName attribute.
netgroup	string	RFC 2307 nisNetgroup object class.
netgroup_triple	string	RFC 2307 nisNetgroupTriple attribute.
object	string	RFC 2307 nisObject object class.

## posix

Name	Type	Description
account	string	RFC 2307 posixAccount object class.
group	string	RFC 2307 posixGroup object class.

## rfc2307

Name	Type	Description
attribute	<a href="#">attribute</a>	
cn	<a href="#">cn</a>	
member	<a href="#">member</a>	
nis	<a href="#">nis</a>	
posix	<a href="#">posix</a>	

## rfc2307bis

Name	Type	Description
enabled	boolean	Indicates whether RFC 2307bis is enabled for the client schema.
group_of_unique_names	string	RFC 2307bis groupOfUniqueNames object class.
maximum_groups	integer	Maximum number of groups supported when RFC 2307bis is enabled.
unique_member	string	RFC 2307bis uniqueMember attribute.

template

The existing schema template you want to copy.

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	The name of the schema.

ldap\_schema

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
comment	string	Comment to associate with the schema.
global_schema	boolean	A global schema that can be used by all the SVMs.
name	string	The name of the schema being created, modified or deleted.
name_mapping	<a href="#">ldap_schema_name_mapping</a>	
owner	<a href="#">owner</a>	
rfc2307	<a href="#">rfc2307</a>	
rfc2307bis	<a href="#">rfc2307bis</a>	

Name	Type	Description
scope	string	Scope of the entity. Set to "cluster" for cluster owned objects and to "svm" for SVM owned objects.
template	<a href="#">template</a>	The existing schema template you want to copy.

#### 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 an LDAP schema

POST /name-services/ldap-schemas

**Introduced In:** 9.11

Creates an LDAP schema.

### Important notes

- To create a new schema, first create a copy of the default schemas provided by ONTAP and then modify the copy accordingly.
- If no value is specified for the owner.uuid or owner.name fields, the cserver UUID and name are used by default.

## Related ONTAP commands

- `vserver services name-service ldap client schema copy`

## 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	<a href="#">_links</a>	
comment	string	Comment to associate with the schema.
global_schema	boolean	A global schema that can be used by all the SVMs.
name	string	The name of the schema being created, modified or deleted.
name_mapping	<a href="#">ldap_schema_name_mapping</a>	
owner	<a href="#">owner</a>	
rfc2307	<a href="#">rfc2307</a>	
rfc2307bis	<a href="#">rfc2307bis</a>	
scope	string	Scope of the entity. Set to "cluster" for cluster owned objects and to "svm" for SVM owned objects.
template	<a href="#">template</a>	The existing schema template you want to copy.

## Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "comment": "Schema based on Active Directory Services for UNIX (read-only).",
  "global_schema": 1,
  "name": "AD-SFU-v1",
  "name_mapping": {
    "account": {
      "unix": "windowsAccount",
      "windows": "windowsAccount"
    },
    "windows_to_unix": {
      "attribute": "windowsAccount",
      "no_domain_prefix": "",
      "object_class": "User"
    }
  },
  "owner": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svml",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "rfc2307": {
    "attribute": {
      "gecos": "name",
      "gid_number": "msSFU30GidNumber",
      "home_directory": "msSFU30HomeDirectory",
      "login_shell": "msSFU30LoginShell",
      "uid": "sAMAccountName",
      "uid_number": "msSFU30UidNumber",
      "user_password": "msSFU30Password"
    },
    "cn": {
      "group": "cn",
      "netgroup": "name"
    }
  },
}
```

```

"member": {
  "nis_netgroup": "msSFU30MemberNisNetgroup",
  "uid": "msSFU30MemberUid"
},
"nis": {
  "mapentry": "msSFU30NisMapEntry",
  "mapname": "msSFU30NisMapName",
  "netgroup": "msSFU30NisNetGroup",
  "netgroup_triple": "msSFU30MemberOfNisNetgroup",
  "object": "msSFU30NisObject"
},
"posix": {
  "account": "User",
  "group": "Group"
}
},
"rfc2307bis": {
  "enabled": "",
  "group_of_unique_names": "groupOfUniqueNames",
  "maximum_groups": 256,
  "unique_member": "uniqueMember"
},
"scope": "cluster",
"template": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  }
},
"name": "AD-SFU-v1"
}
}

```

## Response

Status: 201, Created

Name	Type	Description
_links	<a href="#">_links</a>	
comment	string	Comment to associate with the schema.

Name	Type	Description
global_schema	boolean	A global schema that can be used by all the SVMs.
name	string	The name of the schema being created, modified or deleted.
name_mapping	<a href="#">ldap_schema_name_mapping</a>	
owner	<a href="#">owner</a>	
rfc2307	<a href="#">rfc2307</a>	
rfc2307bis	<a href="#">rfc2307bis</a>	
scope	string	Scope of the entity. Set to "cluster" for cluster owned objects and to "svm" for SVM owned objects.
template	<a href="#">template</a>	The existing schema template you want to copy.



## Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "comment": "Schema based on Active Directory Services for UNIX (read-only).",
  "global_schema": 1,
  "name": "AD-SFU-v1",
  "name_mapping": {
    "account": {
      "unix": "windowsAccount",
      "windows": "windowsAccount"
    },
    "windows_to_unix": {
      "attribute": "windowsAccount",
      "no_domain_prefix": "",
      "object_class": "User"
    }
  },
  "owner": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "rfc2307": {
    "attribute": {
      "gecos": "name",
      "gid_number": "msSFU30GidNumber",
      "home_directory": "msSFU30HomeDirectory",
      "login_shell": "msSFU30LoginShell",
      "uid": "sAMAccountName",
      "uid_number": "msSFU30UidNumber",
      "user_password": "msSFU30Password"
    },
    "cn": {
      "group": "cn",
      "netgroup": "name"
    }
  },
}
```

```

"member": {
  "nis_netgroup": "msSFU30MemberNisNetgroup",
  "uid": "msSFU30MemberUid"
},
"nis": {
  "mapentry": "msSFU30NisMapEntry",
  "mapname": "msSFU30NisMapName",
  "netgroup": "msSFU30NisNetGroup",
  "netgroup_triple": "msSFU30MemberOfNisNetgroup",
  "object": "msSFU30NisObject"
},
"posix": {
  "account": "User",
  "group": "Group"
}
},
"rfc2307bis": {
  "enabled": "",
  "group_of_unique_names": "groupOfUniqueNames",
  "maximum_groups": 256,
  "unique_member": "uniqueMember"
},
"scope": "cluster",
"template": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  }
},
"name": "AD-SFU-v1"
}
}

```

## Headers

Name	Description	Type
Location	Useful for tracking the resource location	string

## Error

Status: Default

## ONTAP Error Response Codes

Error Code	Description
2621706	The specified SVM UUID is incorrect for the specified SVM name.
4915221	LDAP schema name in use in data SVM.
4915222	LDAP schema name in use in admin SVM.

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>	

ldap\_schema\_account

Name	Type	Description
unix	string	Attribute name used to retrieve UNIX account information.
windows	string	Attribute name used to retrieve Windows account information for a UNIX user account.

windows\_to\_unix

Name	Type	Description
attribute	string	Attribute name used to retrieve the UNIX account information for a Windows user account.
no_domain_prefix	boolean	Indicates whether or not the name for Windows to UNIX name mapping should have a domain prefix.
object_class	string	Name used to represent the windowsToUnix object class.

ldap\_schema\_name\_mapping

Name	Type	Description
account	<a href="#">ldap_schema_account</a>	
windows_to_unix	<a href="#">windows_to_unix</a>	

owner

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

#### attribute

Name	Type	Description
gecos	string	RFC 2307 gecos attribute.
gid_number	string	RFC 2307 gidNumber attribute.
home_directory	string	RFC 2307 homeDirectory attribute.
login_shell	string	RFC 2307 loginShell attribute.
uid	string	RFC 1274 userid attribute used by RFC 2307 as UID.
uid_number	string	RFC 2307 uidNumber attribute.
user_password	string	RFC 2256 userPassword attribute used by RFC 2307.

#### cn

Name	Type	Description
group	string	RFC 2256 cn attribute used by RFC 2307 when working with groups.
netgroup	string	RFC 2256 cn attribute used by RFC 2307 when working with netgroups.

#### member

Name	Type	Description
nis_netgroup	string	RFC 2307 memberNisNetgroup attribute.

Name	Type	Description
uid	string	RFC 2307 memberUid attribute.

nis

Name	Type	Description
mapentry	string	RFC 2307 nisMapEntry attribute.
mapname	string	RFC 2307 nisMapName attribute.
netgroup	string	RFC 2307 nisNetgroup object class.
netgroup_triple	string	RFC 2307 nisNetgroupTriple attribute.
object	string	RFC 2307 nisObject object class.

posix

Name	Type	Description
account	string	RFC 2307 posixAccount object class.
group	string	RFC 2307 posixGroup object class.

rfc2307

Name	Type	Description
attribute	<a href="#">attribute</a>	
cn	<a href="#">cn</a>	
member	<a href="#">member</a>	
nis	<a href="#">nis</a>	
posix	<a href="#">posix</a>	

rfc2307bis

Name	Type	Description
enabled	boolean	Indicates whether RFC 2307bis is enabled for the client schema.

Name	Type	Description
group_of_unique_names	string	RFC 2307bis groupOfUniqueNames object class.
maximum_groups	integer	Maximum number of groups supported when RFC 2307bis is enabled.
unique_member	string	RFC 2307bis uniqueMember attribute.

#### template

The existing schema template you want to copy.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the schema.

#### ldap\_schema

Name	Type	Description
_links	<a href="#">_links</a>	
comment	string	Comment to associate with the schema.
global_schema	boolean	A global schema that can be used by all the SVMs.
name	string	The name of the schema being created, modified or deleted.
name_mapping	<a href="#">ldap_schema_name_mapping</a>	
owner	<a href="#">owner</a>	
rfc2307	<a href="#">rfc2307</a>	
rfc2307bis	<a href="#">rfc2307bis</a>	
scope	string	Scope of the entity. Set to "cluster" for cluster owned objects and to "svm" for SVM owned objects.

Name	Type	Description
template	<a href="#">template</a>	The existing schema template you want to copy.

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.

## Delete an existing schema

```
DELETE /name-services/ldap-schemas/{owner.uuid}/{name}
```

**Introduced In:** 9.11

Deletes an existing schema.

### Related ONTAP commands

- `vserver services name-service ldap client schema delete`

### Parameters

Name	Type	In	Required	Description
owner.uuid	string	path	True	UUID of the owner to which this object belongs.



Name	Type	In	Required	Description
name	string	path	True	LDAP schema name.

## Response

Status: 200, Ok

## Error

Status: Default

### ONTAP Error Response Codes

Error Code	Description
4915204	Failed to delete. The LDAP schema is being used by at least one LDAP client configuration.
4915205	The LDAP schema is a default schema and cannot be modified or deleted.
4915217	LDAP schema is owned by the admin SVM.

Name	Type	Description
error	error	

### Example error

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

## 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 LDAP schema details for an owner and schema

GET /name-services/ldap-schemas/{owner.uuid}/{name}

**Introduced In:** 9.11

Retrieves LDAP schema details for a given owner and schema.

### Related ONTAP commands

- `vserver services name-service ldap client schema show`

### Parameters

Name	Type	In	Required	Description
owner.uuid	string	path	True	UUID of the owner to which this object belongs.
name	string	path	True	LDAP schema name.

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

## Response

Status: 200, Ok

Name	Type	Description
_links	<a href="#">_links</a>	
comment	string	Comment to associate with the schema.
global_schema	boolean	A global schema that can be used by all the SVMs.
name	string	The name of the schema being created, modified or deleted.
name_mapping	<a href="#">ldap_schema_name_mapping</a>	
owner	<a href="#">owner</a>	
rfc2307	<a href="#">rfc2307</a>	
rfc2307bis	<a href="#">rfc2307bis</a>	
scope	string	Scope of the entity. Set to "cluster" for cluster owned objects and to "svm" for SVM owned objects.
template	<a href="#">template</a>	The existing schema template you want to copy.

## Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "comment": "Schema based on Active Directory Services for UNIX (read-only).",
  "global_schema": 1,
  "name": "AD-SFU-v1",
  "name_mapping": {
    "account": {
      "unix": "windowsAccount",
      "windows": "windowsAccount"
    },
    "windows_to_unix": {
      "attribute": "windowsAccount",
      "no_domain_prefix": "",
      "object_class": "User"
    }
  },
  "owner": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "rfc2307": {
    "attribute": {
      "gecos": "name",
      "gid_number": "msSFU30GidNumber",
      "home_directory": "msSFU30HomeDirectory",
      "login_shell": "msSFU30LoginShell",
      "uid": "sAMAccountName",
      "uid_number": "msSFU30UidNumber",
      "user_password": "msSFU30Password"
    },
    "cn": {
      "group": "cn",
      "netgroup": "name"
    }
  },
}
```

```

"member": {
  "nis_netgroup": "msSFU30MemberNisNetgroup",
  "uid": "msSFU30MemberUid"
},
"nis": {
  "mapentry": "msSFU30NisMapEntry",
  "mapname": "msSFU30NisMapName",
  "netgroup": "msSFU30NisNetGroup",
  "netgroup_triple": "msSFU30MemberOfNisNetgroup",
  "object": "msSFU30NisObject"
},
"posix": {
  "account": "User",
  "group": "Group"
}
},
"rfc2307bis": {
  "enabled": "",
  "group_of_unique_names": "groupOfUniqueNames",
  "maximum_groups": 256,
  "unique_member": "uniqueMember"
},
"scope": "cluster",
"template": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  }
},
"name": "AD-SFU-v1"
}
}

```

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

ldap\_schema\_account

Name	Type	Description
unix	string	Attribute name used to retrieve UNIX account information.
windows	string	Attribute name used to retrieve Windows account information for a UNIX user account.

windows\_to\_unix

Name	Type	Description
attribute	string	Attribute name used to retrieve the UNIX account information for a Windows user account.
no_domain_prefix	boolean	Indicates whether or not the name for Windows to UNIX name mapping should have a domain prefix.
object_class	string	Name used to represent the windowsToUnix object class.

ldap\_schema\_name\_mapping

Name	Type	Description
account	<a href="#">ldap_schema_account</a>	
windows_to_unix	<a href="#">windows_to_unix</a>	

owner

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

#### attribute

Name	Type	Description
gecos	string	RFC 2307 gecos attribute.
gid_number	string	RFC 2307 gidNumber attribute.
home_directory	string	RFC 2307 homeDirectory attribute.
login_shell	string	RFC 2307 loginShell attribute.
uid	string	RFC 1274 userid attribute used by RFC 2307 as UID.
uid_number	string	RFC 2307 uidNumber attribute.
user_password	string	RFC 2256 userPassword attribute used by RFC 2307.

#### cn

Name	Type	Description
group	string	RFC 2256 cn attribute used by RFC 2307 when working with groups.
netgroup	string	RFC 2256 cn attribute used by RFC 2307 when working with netgroups.

#### member

Name	Type	Description
nis_netgroup	string	RFC 2307 memberNisNetgroup attribute.



Name	Type	Description
uid	string	RFC 2307 memberUid attribute.

nis

Name	Type	Description
mapentry	string	RFC 2307 nisMapEntry attribute.
mapname	string	RFC 2307 nisMapName attribute.
netgroup	string	RFC 2307 nisNetgroup object class.
netgroup_triple	string	RFC 2307 nisNetgroupTriple attribute.
object	string	RFC 2307 nisObject object class.

posix

Name	Type	Description
account	string	RFC 2307 posixAccount object class.
group	string	RFC 2307 posixGroup object class.

rfc2307

Name	Type	Description
attribute	<a href="#">attribute</a>	
cn	<a href="#">cn</a>	
member	<a href="#">member</a>	
nis	<a href="#">nis</a>	
posix	<a href="#">posix</a>	

rfc2307bis

Name	Type	Description
enabled	boolean	Indicates whether RFC 2307bis is enabled for the client schema.

Name	Type	Description
group_of_unique_names	string	RFC 2307bis groupOfUniqueNames object class.
maximum_groups	integer	Maximum number of groups supported when RFC 2307bis is enabled.
unique_member	string	RFC 2307bis uniqueMember attribute.

#### template

The existing schema template you want to copy.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the schema.

#### 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 LDAP schema details for an owner and schema

PATCH /name-services/ldap-schemas/{owner.uid}/{name}

**Introduced In:** 9.11

Updates LDAP schema details for a given owner and schema.

## Important notes

- The default LDAP schemas provided by ONTAP cannot be modified.
- LDAP schemas can only be modified by the owner of the schema.

## Related ONTAP commands

- `vserver services name-service ldap client schema modify`

## Parameters

Name	Type	In	Required	Description
owner.uuid	string	path	True	UUID of the owner to which this object belongs.
name	string	path	True	LDAP schema name.

## Request Body

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
comment	string	Comment to associate with the schema.
global_schema	boolean	A global schema that can be used by all the SVMs.
name	string	The name of the schema being created, modified or deleted.
name_mapping	<a href="#">ldap_schema_name_mapping</a>	
owner	<a href="#">owner</a>	
rfc2307	<a href="#">rfc2307</a>	
rfc2307bis	<a href="#">rfc2307bis</a>	
scope	string	Scope of the entity. Set to "cluster" for cluster owned objects and to "svm" for SVM owned objects.

Name	Type	Description
template	<a href="#">template</a>	The existing schema template you want to copy.

## Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "comment": "Schema based on Active Directory Services for UNIX (read-only).",
  "global_schema": 1,
  "name": "AD-SFU-v1",
  "name_mapping": {
    "account": {
      "unix": "windowsAccount",
      "windows": "windowsAccount"
    },
    "windows_to_unix": {
      "attribute": "windowsAccount",
      "no_domain_prefix": "",
      "object_class": "User"
    }
  },
  "owner": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "rfc2307": {
    "attribute": {
      "gecos": "name",
      "gid_number": "msSFU30GidNumber",
      "home_directory": "msSFU30HomeDirectory",
      "login_shell": "msSFU30LoginShell",
      "uid": "sAMAccountName",
      "uid_number": "msSFU30UidNumber",
      "user_password": "msSFU30Password"
    },
    "cn": {
      "group": "cn",
      "netgroup": "name"
    }
  },
}
```

```
"member": {
  "nis_netgroup": "msSFU30MemberNisNetgroup",
  "uid": "msSFU30MemberUid"
},
"nis": {
  "mapentry": "msSFU30NisMapEntry",
  "mapname": "msSFU30NisMapName",
  "netgroup": "msSFU30NisNetGroup",
  "netgroup_triple": "msSFU30MemberOfNisNetgroup",
  "object": "msSFU30NisObject"
},
"posix": {
  "account": "User",
  "group": "Group"
}
},
"rfc2307bis": {
  "enabled": "",
  "group_of_unique_names": "groupOfUniqueNames",
  "maximum_groups": 256,
  "unique_member": "uniqueMember"
},
"scope": "cluster",
"template": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  }
},
"name": "AD-SFU-v1"
}
}
```

## Response

Status: 200, Ok

## Error

Status: Default

## ONTAP Error Response Codes

Error Code	Description
4915205	The LDAP schema is a default schema and cannot be modified or deleted.
4915217	LDAP schema is owned by the admin SVM.
4915223	LDAP schema does not belong to the admin SVM.

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>	

ldap\_schema\_account

Name	Type	Description
unix	string	Attribute name used to retrieve UNIX account information.
windows	string	Attribute name used to retrieve Windows account information for a UNIX user account.

windows\_to\_unix

Name	Type	Description
attribute	string	Attribute name used to retrieve the UNIX account information for a Windows user account.
no_domain_prefix	boolean	Indicates whether or not the name for Windows to UNIX name mapping should have a domain prefix.
object_class	string	Name used to represent the windowsToUnix object class.

ldap\_schema\_name\_mapping

Name	Type	Description
account	<a href="#">ldap_schema_account</a>	
windows_to_unix	<a href="#">windows_to_unix</a>	

owner



Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

#### attribute

Name	Type	Description
gecos	string	RFC 2307 gecos attribute.
gid_number	string	RFC 2307 gidNumber attribute.
home_directory	string	RFC 2307 homeDirectory attribute.
login_shell	string	RFC 2307 loginShell attribute.
uid	string	RFC 1274 userid attribute used by RFC 2307 as UID.
uid_number	string	RFC 2307 uidNumber attribute.
user_password	string	RFC 2256 userPassword attribute used by RFC 2307.

#### cn

Name	Type	Description
group	string	RFC 2256 cn attribute used by RFC 2307 when working with groups.
netgroup	string	RFC 2256 cn attribute used by RFC 2307 when working with netgroups.

#### member

Name	Type	Description
nis_netgroup	string	RFC 2307 memberNisNetgroup attribute.

Name	Type	Description
uid	string	RFC 2307 memberUid attribute.

nis

Name	Type	Description
mapentry	string	RFC 2307 nisMapEntry attribute.
mapname	string	RFC 2307 nisMapName attribute.
netgroup	string	RFC 2307 nisNetgroup object class.
netgroup_triple	string	RFC 2307 nisNetgroupTriple attribute.
object	string	RFC 2307 nisObject object class.

posix

Name	Type	Description
account	string	RFC 2307 posixAccount object class.
group	string	RFC 2307 posixGroup object class.

rfc2307

Name	Type	Description
attribute	<a href="#">attribute</a>	
cn	<a href="#">cn</a>	
member	<a href="#">member</a>	
nis	<a href="#">nis</a>	
posix	<a href="#">posix</a>	

rfc2307bis

Name	Type	Description
enabled	boolean	Indicates whether RFC 2307bis is enabled for the client schema.

Name	Type	Description
group_of_unique_names	string	RFC 2307bis groupOfUniqueNames object class.
maximum_groups	integer	Maximum number of groups supported when RFC 2307bis is enabled.
unique_member	string	RFC 2307bis uniqueMember attribute.

#### template

The existing schema template you want to copy.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the schema.

#### ldap\_schema

Name	Type	Description
_links	<a href="#">_links</a>	
comment	string	Comment to associate with the schema.
global_schema	boolean	A global schema that can be used by all the SVMs.
name	string	The name of the schema being created, modified or deleted.
name_mapping	<a href="#">ldap_schema_name_mapping</a>	
owner	<a href="#">owner</a>	
rfc2307	<a href="#">rfc2307</a>	
rfc2307bis	<a href="#">rfc2307bis</a>	
scope	string	Scope of the entity. Set to "cluster" for cluster owned objects and to "svm" for SVM owned objects.

Name	Type	Description
template	<a href="#">template</a>	The existing schema template you want to copy.

#### 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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