Manage Kerberos realms

REST API reference

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Manage Kerberos realms

Protocols NFS Kerberos realms endpoint overview

Examples

Retrieving the Kerberos realm details

```
# The API:
GET /api/protocols/nfs/kerberos/realms

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/nfs/kerberos/realms"
```

Creating the Kerberos realm for an SVM

```
# The API:
POST /api/protocols/nfs/kerberos/realms

# The call:
curl -d "@test_post_kerb_realm.txt" -X POST "https://<mgmt-
ip>/api/protocols/nfs/kerberos/realms"
test_post_kerb_realm.txt(body):
{
"svm.uuid": "05c90dc2-7343-11e8-9eb4-0050568be2b7",
"name": "NFS-NSR-W02.RTP.NETAPP.COM",
  "kdc": {
    "vendor": "microsoft",
    "ip": "10.225.185.112",
    "port": 88
  },
  "comment": "realm",
  "ad_server": {
    "name": "nfs-nsr-w02.rtp.netapp.com",
    "address": "10.225.185.112"
  }
}
```

Updating the Kerberos realm for an SVM

```
# The API:
PATCH /api/protocols/nfs/kerberos/realms/{svm.uuid}/{name}

# The call:
curl -d "@test_patch_kerb_realm.txt" -X PATCH "https://<mgmt-
ip>/api/protocols/nfs/kerberos/realms/05c90dc2-7343-11e8-9eb4-
0050568be2b7/NFS-NSR-W02.RTP.NETAPP.COM"
test_patch_kerb_realm.txt(body):
{
"kdc": {
  "vendor": "Microsoft",
  "ip": "100.225.185.112",
  "port": 88
},
"comment": "realm modify",
"ad_server": {
  "name": "nfs.netapp.com",
  "address": "192.2.18.112"
}
}
```

Deleting the Kerberos realm for an SVM

```
# The API:
DELETE /api/protocols/nfs/kerberos/realms/{svm.uuid}/{name}

# The call:
curl -X DELETE "https://<mgmt-
ip>/api/protocols/nfs/kerberos/realms/05c90dc2-7343-11e8-9eb4-
0050568be2b7/NFS-NSR-W02.RTP.NETAPP.COM"
```

Retrieve Kerberos realms

GET `/protocols/nfs/kerberos/realms`

Introduced In: 9.6

Retrieves Kerberos realms.

Related ONTAP commands

- `vserver nfs kerberos realm show`

Learn more

- DOC /protocols/nfs/kerberos/realms

Parameters

Name	Type	In	Required	Description
kdc.vendor	string	query	False	Filter by kdc.vendor
kdc.ip	string	query	False	Filter by kdc.ip
kdc.port	integer	query	False	Filter by kdc.port • Max value: 65535 • Min value: 1
encryption_types	string	query	False	Filter by encryption_types
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name
ad_server.name	string	query	False	Filter by ad_server.name
ad_server.address	string	query	False	Filter by ad_server.address
comment	string	query	False	Filter by comment
name	string	query	False	Filter by name
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

Name	Type	In	Required	Description
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. • Max value: 120 • Min value: 0 • Default value: 1
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[kerberos_realm]	

Example response


```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "ad_server": {
        "address": "1.2.3.4",
        "name": "string"
      },
      "comment": "string",
      "encryption_types": [
        "string"
      ],
      "kdc": {
        "ip": "1.2.3.4",
        "port": 88,
        "vendor": "string"
      },
      "name": "string",
      "svm": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      }
    }
  ]
}
```

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	

ad_server

Name	Type	Description
address	string	Active Directory server IP address
name	string	Active Directory server name

kdc

Name	Type	Description
ip	string	KDC IP address
port	integer	KDC port
vendor	string	Key Distribution Center (KDC) vendor. Following values are suported: • microsoft - Microsoft Active Directory KDC • other - MIT Kerberos KDC or other KDC

svm

Name	Type	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

kerberos_realm

Name	Type	Description
_links	_links	
ad_server	ad_server	
comment	string	Comment
encryption_types	array[string]	
kdc	kdc	
name	string	Kerberos realm
svm	svm	

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 a Kerberos realm

POST `/protocols/nfs/kerberos/realms`

Introduced In: 9.6

Creates a Kerberos realm.

Required properties

- `svm.uuid` or `svm.name` - Existing SVM on which to create the Kerberos realm.
- `name` - Base name for the Kerberos realm.
- `kdc.vendor` - Vendor of the Key Distribution Center (KDC) server for this Kerberos realm. If the configuration uses a Microsoft Active Directory domain for authentication, this field nust be `microsoft`.
- `kdc.ip` - IP address of the KDC server for this Kerberos realm.

Recommended optional properties

- `ad_server.name` - Host name of the Active Directory Domain Controller (DC). This is a mandatory parameter if the kdc-vendor is `microsoft`.
- `ad_server.address` - IP address of the Active Directory Domain Controller (DC). This is a mandatory parameter if the kdc-vendor is `microsoft`.

Default property values

If not specified in POST, the following default property value is assigned:

- `kdc.port` - *88*

Related ONTAP commands

- `vserver nfs kerberos realm create`

Learn more

- DOC /protocols/nfs/kerberos/realms

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
ad_server	ad_server	
comment	string	Comment
encryption_types	array[string]	
kdc	kdc	
name	string	Kerberos realm
svm	svm	

Example request

```
{
  "ad_server": {
    "address": "1.2.3.4",
    "name": "string"
  },
  "comment": "string",
  "encryption_types": [
    "string"
  ],
  "kdc": {
    "ip": "1.2.3.4",
    "port": 88,
    "vendor": "string"
  },
  "name": "string",
  "svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```

Response

```
Status: 201, Created
```

Error

```
Status: Default
```

ONTAP Error Response codes

Error codes	Description
2949121	Active Directory server name required.
2949122	Active Directory server address required
2949123	Failed to create Kerberos realm.
2949124	Failed to create hosts file entry.
3276949	Kerberos realm creation failed. Reason: The parameters "ad_server.name" and "ad_server.address" are only valid when "kdc.vendor" is Microsoft
3276976	"realm" is a required input
3276998	Only the data Vservers can own NFS Kerberos realms.

Definitions

See Definitions

href

Name	Type	Description
href	string	

_links

ad_server

Name	Type	Description
address	string	Active Directory server IP address
name	string	Active Directory server name

kdc

Name	Type	Description
ip	string	KDC IP address
port	integer	KDC port
vendor	string	Key Distribution Center (KDC) vendor. Following values are suported: • microsoft - Microsoft Active Directory KDC • other - MIT Kerberos KDC or other KDC

svm

Name	Type	Description
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

kerberos_realm

Name	Type	Description
ad_server	ad_server	

Name	Type	Description
comment	string	Comment
encryption_types	array[string]	
kdc	kdc	
name	string	Kerberos realm
svm	svm	

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.

Delete a Kerberos realm

DELETE `/protocols/nfs/kerberos/realms/{svm.uuid}/{name}`

Introduced In: 9.6

Deletes a Kerberos realm.

- `vserver nfs kerberos realm delete`

Learn more

- DOC /protocols/nfs/kerberos/realms

Parameters

Name	Type	In	Required	Description
svm.uuid	string	path	True	SVM UUID
name	string	path	True	Kerberos realm

Response

```
Status: 200, Ok
```

Error

```
Status: Default
```

ONTAP Error Response codes

Error codes	Description
1966125	Failed to remove hosts entry.
1966126	Failed to lookup hosts entry.
2949141	Failed to lookup Kerberos realm.
2949142	Failed to remove Kerberos realm.
3276942	Service principal name is invalid. It must of the format:"nfs/<LIF-FQDN>@REALM\\\"</LIF-FQDN>
3276976	"realm" is a required input
3276998	Only the data Vservers can own NFS Kerberos realms.

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

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.

Retrieve a Kerberos realm

GET `/protocols/nfs/kerberos/realms/{svm.uuid}/{name}`

Introduced In: 9.6

Retrieves a Kerberos realm.

- `vserver nfs kerberos realm show`

Learn more

- DOC /protocols/nfs/kerberos/realms

Parameters

Name	Type	In	Required	Description
svm.uuid	string	path	True	SVM UUID
name	string	path	True	Kerberos realm
fields	array[string]	query	False	Specify the fields to return.

Response

```
Status: 200, Ok
```

Name	Type	Description
_links	_links	
ad_server	ad_server	
comment	string	Comment
encryption_types	array[string]	
kdc	kdc	
name	string	Kerberos realm
svm	svm	

Example response


```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "ad_server": {
    "address": "1.2.3.4",
    "name": "string"
  },
  "comment": "string",
  "encryption_types": [
    "string"
  ],
  "kdc": {
    "ip": "1.2.3.4",
    "port": 88,
    "vendor": "string"
  },
  "name": "string",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```


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	href	

ad_server

Name	Type	Description
address	string	Active Directory server IP address
name	string	Active Directory server name

kdc

Name	Type	Description
ip	string	KDC IP address
port	integer	KDC port
vendor	string	Key Distribution Center (KDC) vendor. Following values are suported: • microsoft - Microsoft Active Directory KDC • other - MIT Kerberos KDC or other KDC

svm

Name	Type	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

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.

Update Kerberos realm properties

PATCH `/protocols/nfs/kerberos/realms/{svm.uuid}/{name}`

Introduced In: 9.6

Updates the properties of a Kerberos realm.

- `vserver nfs kerberos realm modify`

Learn more

- DOC /protocols/nfs/kerberos/realms

Parameters

Name	Type	In	Required	Description
svm.uuid	string	path	True	SVM UUID
name	string	path	True	Kerberos realm

Request Body

Name	Type	Description
ad_server	ad_server	
comment	string	Comment
encryption_types	array[string]	
kdc	kdc	
name	string	Kerberos realm
svm	svm	

Example request


```
{
  "ad_server": {
    "address": "1.2.3.4",
    "name": "string"
  },
  "comment": "string",
  "encryption_types": [
    "string"
  ],
  "kdc": {
    "ip": "1.2.3.4",
    "port": 88,
    "vendor": "string"
  },
  "name": "string",
  "svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```


Response

```
Status: 200, Ok
```

Error

```
Status: Default
```

ONTAP Error Response codes

Error codes	Description
1966125	Failed to remove hosts entry.
1966126	Failed to lookup hosts entry.
1966131	Failed to create hosts entry.
1966132	Failed to modify hosts entry.
2949121	Active Directory server name required.
2949122	Active Directory server address required
2949123	Failed to create Kerberos realm.
2949124	Failed to create hosts file entry.
2949141	Failed to lookup Kerberos realm.
2949148	Failed to modify Kerberos realm.
3276976	"realm" is a required input
3276998	Only the data Vservers can own NFS Kerberos realms.

Definitions

See Definitions

href

Name	Type	Description
href	string	

_links

ad_server

Name	Type	Description
address	string	Active Directory server IP address
name	string	Active Directory server name

kdc

Name	Type	Description
ip	string	KDC IP address
port	integer	KDC port
vendor	string	Key Distribution Center (KDC) vendor. Following values are suported: • microsoft - Microsoft Active Directory KDC • other - MIT Kerberos KDC or other KDC

svm

Name	Type	Description
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

kerberos_realm

Name	Type	Description
ad_server	ad_server	

Name	Type	Description
comment	string	Comment
encryption_types	array[string]	
kdc	kdc	
name	string	Kerberos realm
svm	svm	

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.

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