



## **NDMP**

### **ONTAP 9.9.1 REST API reference**

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# NDMP

## NDMP overview

NDMP (Network Data Management Protocol) provides an open standard for network-based backup of network-attached storage (NAS). NDMP minimizes the coding required for different applications by providing standard commands for backing up and restoring file servers. NDMP increases the speed and efficiency of NAS data protection, as data can bypass backup servers and be written directly to tape storage. Starting from ONTAP 8.2, the software supports SVM aware NDMP backups. This helps in optimizing NDMP backup performance by choosing efficient data transfer paths and is fully compatible with integrated non-disruptive operations and volume mobility capabilities of ONTAP software. In order to support this feature, a CAB extension must be implemented by backup vendors. These APIs allow you to manage the following endpoints:

- ndmp
- ndmp nodes
- ndmp svms
- ndmp sessions

## APIs

### NDMP

These APIs are used to manage NDMP mode, SVM-scope or node-scope.

### NDMP nodes

These APIs are used to manage node configurations.

### NDMP SVMs

These APIs are used to manage NDMP configurations of SVMs.

### NDMP sessions

These APIs are used to manage diagnostic information on NDMP sessions belonging to a specific SVM in the case of SVM-scope or to a specific node in the case of node-scope.

## Manage NDMP mode

### Protocols NDMP endpoint overview

You can use this API to manage NDMP mode: SVM-scope or node-scope.

#### Examples

Updates NDMP mode to SVM:

```
PATCH "/api/protocols/ndmp" '{"mode":"svm"}'
```

Updates NDMP mode to node:

```
PATCH "/api/protocols/ndmp" '{"mode":"node"}'
```

## Retrieve current NDMP mode

GET /protocols/ndmp

**Introduced In:** 9.7

Retrieves the current NDMP mode.

### Related ONTAP commands

- `system services ndmp node-scope-mode status`

### Learn more

- [DOC /protocols/ndmp](#)

### Parameters

Name	Type	In	Required	Description
mode	string	query	False	Filter by mode
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>

Name	Type	In	Required	Description
return_timeout	integer	query	False	<p>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.</p> <ul style="list-style-type: none"> <li>• Default value: 1</li> <li>• Max value: 120</li> <li>• Min value: 0</li> </ul>
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>	
mode	string	Indicates whether NDMP is in node-scoped or SVM-scoped mode.

## Example response

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

## 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>	

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 NDMP mode

PATCH /protocols/ndmp

**Introduced In:** 9.7

Updates the NDMP mode.

### Related ONTAP commands

- `system services ndmp node-scope-mode`

## Learn more

- [DOC /protocols/ndmp](#)

## 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>	
mode	string	Indicates whether NDMP is in node-scoped or SVM-scoped mode.

## Example request

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

## Response

Status: 200, Ok

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



Name	Type	Description
mode	string	Indicates whether NDMP is in node-scoped or SVM-scoped mode.

### Example response

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

### 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>	

cluster\_ndmp\_properties

Name	Type	Description
_links	<a href="#">_links</a>	
mode	string	Indicates whether NDMP is in node-scoped or SVM-scoped mode.

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.

# Manage NDMP node configurations

## Protocols NDMP nodes endpoint overview

You can use this API to manage node configurations. The authentication types "plaintext" and "plaintext\_sso" are used to show that the password uses clear text. Also, they contain no differences for NDMP node scope.

### Examples

Updates "enabled" and "authentication\_types" fields:

```
PATCH "/api/protocols/ndmp/nodes/13bb2092-458b-11e9-9c06-0050568ea64e"
'{"enabled":"false","authentication_types":["plaintext"]}'
```

Updates the "user" field:

```
PATCH "/api/protocols/ndmp/nodes/13bb2092-458b-11e9-9c06-0050568ea64e"
'{"user":"user22"}'
```

## Retrieve the NDMP node configurations for all nodes

GET /protocols/ndmp/nodes

**Introduced In:** 9.7

Retrieves NDMP node configurations for all of the nodes.

### Related ONTAP commands

- `system services ndmp show`

### Learn more

- [DOC /protocols/ndmp/nodes](#)

### Parameters

Name	Type	In	Required	Description
node.name	string	query	False	Filter by node.name
node.uuid	string	query	False	Filter by node.uuid
authentication_types	string	query	False	Filter by authentication_types
user	string	query	False	Filter by user

Name	Type	In	Required	Description
enabled	boolean	query	False	Filter by enabled
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>• Default value: 1</li> <li>• Max value: 120</li> <li>• Min value: 0</li> </ul>
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>	

Name	Type	Description
num_records	integer	Number of Records
records	array[ndmp_node]	

### Example response

```

{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "authentication_types": [
        "plaintext",
        "challenge"
      ],
      "enabled": 1,
      "node": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "node1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "password": "string",
      "user": "ndmp_user"
    }
  ]
}

```

## Error

Status: Default

### ONTAP Error Response codes

Error code	Description
68812801	Node-scoped operations are not allowed in an SVM-scope.
68812804	Failed to get the node name from the specified node UUID.

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

\_links

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

node

Storage system node

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	
uuid	string	

ndmp\_node

Name	Type	Description
_links	<a href="#">_links</a>	
authentication_types	array[string]	NDMP authentication types.
enabled	boolean	Is the NDMP service enabled?
node	<a href="#">node</a>	Storage system node
password	string	NDMP password. This can only be set and cannot be read back.
user	string	NDMP user ID

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 NDMP node configuration for a node

GET /protocols/ndmp/nodes/{node.uuid}

**Introduced In:** 9.7

Retrieves an NDMP node configuration for a specific node.

### Related ONTAP commands

- `system services ndmp show`

### Learn more

- [DOC /protocols/ndmp/nodes](#)

### Parameters

Name	Type	In	Required	Description
node.uuid	string	path	True	Node UUID
fields	array[string]	query	False	Specify the fields to return.

### Response



Status: 200, Ok

Name	Type	Description
_links	<a href="#">_links</a>	
authentication_types	array[string]	NDMP authentication types.
enabled	boolean	Is the NDMP service enabled?
node	<a href="#">node</a>	Storage system node
password	string	NDMP password. This can only be set and cannot be read back.
user	string	NDMP user ID

### Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "authentication_types": [
    "plaintext",
    "challenge"
  ],
  "enabled": 1,
  "node": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "password": "string",
  "user": "ndmp_user"
}
```

## Error

Status: Default

### ONTAP Error Response codes

Error code	Description
68812801	Node-scoped operations are not allowed in an SVM-scope.
68812802	The UUID is not valid.
68812804	Failed to get the node name from the specified node UUID.

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>	

node

Storage system node

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	
uuid	string	

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 NDMP node configuration for a node

PATCH /protocols/ndmp/nodes/{node.uuid}

## Introduced In: 9.7

Updates the NDMP node configuration for a specific node.

### Related ONTAP commands

- `system services ndmp modify`

### Learn more

- [DOC /protocols/ndmp/nodes](#)

### Parameters

Name	Type	In	Required	Description
node.uuid	string	path	True	Node UUID

### Request Body

Name	Type	Description
_links	<a href="#">_links</a>	
authentication_types	array[string]	NDMP authentication types.
enabled	boolean	Is the NDMP service enabled?
node	<a href="#">node</a>	Storage system node
password	string	NDMP password. This can only be set and cannot be read back.
user	string	NDMP user ID

## Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "authentication_types": [
    "plaintext",
    "challenge"
  ],
  "enabled": 1,
  "node": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "password": "string",
  "user": "ndmp_user"
}
```

## Response

Status: 200, Ok

Name	Type	Description
_links	<a href="#">_links</a>	
authentication_types	array[string]	NDMP authentication types.
enabled	boolean	Is the NDMP service enabled?
node	<a href="#">node</a>	Storage system node
password	string	NDMP password. This can only be set and cannot be read back.

Name	Type	Description
user	string	NDMP user ID

### Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "authentication_types": [
    "plaintext",
    "challenge"
  ],
  "enabled": 1,
  "node": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "password": "string",
  "user": "ndmp_user"
}
```

### Error

Status: Default

### ONTAP Error Response codes

Error code	Description
68812800	The user is required to enable NDMP on a node.
68812801	Node-scoped operations are not allowed in an SVM-scope.
68812802	The UUID is not valid.

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>	

node

Storage system node

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	
uuid	string	

ndmp\_node

Name	Type	Description
_links	<a href="#">_links</a>	
authentication_types	array[string]	NDMP authentication types.
enabled	boolean	Is the NDMP service enabled?
node	<a href="#">node</a>	Storage system node
password	string	NDMP password. This can only be set and cannot be read back.
user	string	NDMP user ID

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.

## Manage NDMP session configurations

### Protocols NDMP sessions endpoint overview

You can use this API to manage diagnostic information on NDMP sessions belonging to a specific SVM in the case of SVM-scope or to a specific node in the case of node-scope.

#### Examples

Retrieves NDMP session details under node-scope:

```
GET "/api/protocols/ndmp/sessions/9b372ce7-3a4b-11e9-a7f8-0050568e3d73/2000"
```

Retrieves NDMP session details under SVM-scope:

```
GET "/api/protocols/ndmp/sessions/13bb2092-458b-11e9-9c06-0050568ea604/2000:4000"
```

Deletes NDMP session details under node-scope:

```
DELETE "/api/protocols/ndmp/sessions/9b372ce7-3a4b-11e9-a7f8-0050568e3d73/2000"
```

Deletes NDMP session details under SVM-scope:

```
DELETE "/api/protocols/ndmp/sessions/13bb2092-458b-11e9-9c06-0050568ea604/2000:4000"
```

## Retrieve NDMP sessions

GET /protocols/ndmp/sessions

Introduced In: 9.7

Retrieves a collection of NDMP sessions. In the case of SVM-scope, if this API is executed on a data IP, it displays the list of NDMP sessions under the specified SVM; otherwise it displays the list of NDMP sessions for all the SVMs under the cluster. In the case of node-scope, it displays the list of NDMP sessions for all nodes.

### Related ONTAP commands

- `vserver services ndmp probe`
- `system services ndmp probe`

### Learn more

- [DOC /protocols/ndmp/sessions](#)

### Parameters

Name	Type	In	Required	Description
data_path	string	query	False	Filter by data_path
data.bytes_processed	integer	query	False	Filter by data.bytes_processed
data.operation	string	query	False	Filter by data.operation
data.state	string	query	False	Filter by data.state
data.connection.address	string	query	False	Filter by data.connection.address
data.connection.type	string	query	False	Filter by data.connection.type
data.connection.port	integer	query	False	Filter by data.connection.port
data.reason	string	query	False	Filter by data.reason

Name	Type	In	Required	Description
uuid	string	query	False	Filter by uuid  • Introduced in: 9.9
tape_mode	string	query	False	Filter by tape_mode
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name
tape_device	string	query	False	Filter by tape_device
node.name	string	query	False	Filter by node.name
node.uuid	string	query	False	Filter by node.uuid
source_address	string	query	False	Filter by source_address
client_port	integer	query	False	Filter by client_port
mover.bytes_moved	integer	query	False	Filter by mover.bytes_moved
mover.mode	string	query	False	Filter by mover.mode
mover.connection.address	string	query	False	Filter by mover.connection.a ddress
mover.connection.type	string	query	False	Filter by mover.connection.ty pe
mover.connection.port	integer	query	False	Filter by mover.connection.p ort
mover.state	string	query	False	Filter by mover.state
mover.reason	string	query	False	Filter by mover.reason

Name	Type	In	Required	Description
scsi.host_adapter	integer	query	False	Filter by scsi.host_adapter
scsi.device_id	string	query	False	Filter by scsi.device_id
scsi.lun_id	integer	query	False	Filter by scsi.lun_id
scsi.target_id	integer	query	False	Filter by scsi.target_id
backup_engine	string	query	False	Filter by backup_engine
client_address	string	query	False	Filter by client_address
id	string	query	False	Filter by id
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	<p>The default is true for GET calls. When set to false, only the number of records is returned.</p> <ul style="list-style-type: none"> <li>• Default value: 1</li> </ul>

Name	Type	In	Required	Description
return_timeout	integer	query	False	<p>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.</p> <ul style="list-style-type: none"> <li>• Default value: 1</li> <li>• Max value: 120</li> <li>• Min value: 0</li> </ul>
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="#">ndmp_session</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "backup_engine": "string",
      "client_address": "string",
      "data": {
        "bytes_processed": "5000",
        "connection": {
          "address": "string",
          "port": "18600",
          "type": "local"
        },
        "operation": "backup",
        "reason": "aborted",
        "state": "halted"
      },
      "data_path": "/vserver1/vol1",
      "id": "string",
      "mover": {
        "bytes_moved": "645120",
        "connection": {
          "address": "string",
          "port": "18600",
          "type": "local"
        },
        "mode": "read",
        "reason": "end_of_media",
        "state": "connected"
      },
      "node": {
        "_links": {
```

```

        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-aelc-123478563412"
},
"scsi": {
    "device_id": "string"
},
"source_address": "string",
"svm": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"tape_device": "nrst0a",
"tape_mode": "write",
"uuid": "string"
}
]
}

```

## Error

Status: Default

### ONTAP Error Response codes

Error code	Description
68812805	Failed to obtain the NDMP mode of the operation.

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>	

ndmp\_connect

Indicates the NDMP connection attributes.

Name	Type	Description
address	string	Indicates the NDMP data connection address.
port	integer	Indicates the NDMP data connection port.
type	string	The different NDMP connection types.

ndmp\_data

Information about the NDMP data server.

Name	Type	Description
bytes_processed	integer	Indicates the NDMP data bytes processed.
connection	<a href="#">ndmp_connect</a>	Indicates the NDMP connection attributes.
operation	string	Indicates the NDMP data server operation.

Name	Type	Description
reason	string	If the NDMP mover or data server is in the paused or halted state, then this property provides additional information for the state.
state	string	The various states of the NDMP state machine during a backup or restore workflow.

#### ndmp\_mover

Information about the NDMP mover.

Name	Type	Description
bytes_moved	integer	Indicates the NDMP mover bytes moved.
connection	<a href="#">ndmp_connect</a>	Indicates the NDMP connection attributes.
mode	string	The modes of a NDMP mover instance.
reason	string	If the NDMP mover or data server is in the paused or halted state, then this property provides additional information for the state.
state	string	The various states of the NDMP state machine during a backup or restore workflow.

#### node

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	
uuid	string	

#### ndmp\_scsi

Information about the NDMP SCSI server.

Name	Type	Description
device_id	string	Indicates the NDMP SCSI device ID.
host_adapter	integer	Indicates the NDMP SCSI host adapter.
lun_id	integer	Indicates the NDMP SCSI LUN ID.
target_id	integer	Indicates the NDMP SCSI target ID.

svm

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

ndmp\_session

Name	Type	Description
_links	<a href="#">_links</a>	
backup_engine	string	Indicates the NDMP backup engine.
client_address	string	Indicates the NDMP client address.
client_port	integer	Indicates the NDMP client port.
data	<a href="#">ndmp_data</a>	Information about the NDMP data server.
data_path	string	Indicates the NDMP backup or restore path.
id	string	NDMP session identifier.
mover	<a href="#">ndmp_mover</a>	Information about the NDMP mover.

Name	Type	Description
node	<a href="#">node</a>	
scsi	<a href="#">ndmp_scsi</a>	Information about the NDMP SCSI server.
source_address	string	Indicates the NDMP local address on which connection was established.
svm	<a href="#">svm</a>	
tape_device	string	Indicates the NDMP tape device.
tape_mode	string	The modes of a NDMP mover instance.
uuid	string	The NDMP node or SVM UUID based on whether NDMP is operating in node-scope or SVM-scope mode.

#### 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 NDMP session

DELETE /protocols/ndmp/sessions/{owner.uuid}/{session.id}

## Introduced In: 9.7

Deletes a specific NDMP session.

### Related ONTAP commands

- `vserver services ndmp kill`
- `system services ndmp kill`

### Learn more

- [DOC /protocols/ndmp/sessions](#)

### Parameters

Name	Type	In	Required	Description
owner.uuid	string	path	True	NDMP node UUID
session.id	string	path	True	Session identifier

### Response

```
Status: 200, Ok
```

### Error

```
Status: Default
```

### ONTAP Error Response codes

Error code	Description
68812802	The UUID is not valid.
68812803	Failed to get the SVM name from the specified SVM UUID.
68812804	Failed to get the node name from the specified node UUID.
68812805	Failed to obtain the NDMP mode of operation.
68812806	UUID and Session ID are required.

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 NDMP session details

GET /protocols/ndmp/sessions/{owner.uuid}/{session.id}

## Introduced In: 9.7

Retrieves the details of a specific NDMP session.

### Related ONTAP commands

- `vserver services ndmp probe`
- `system services ndmp probe`

### Learn more

- [DOC /protocols/ndmp/sessions](#)

### Parameters

Name	Type	In	Required	Description
owner.uuid	string	path	True	The NDMP node or SVM UUID based on whether NDMP is operating in node-scope or SVM-scope mode.
session.id	string	path	True	NDMP session identifier
fields	array[string]	query	False	Specify the fields to return.

### Response

Status: 200, Ok

Name	Type	Description
<code>_links</code>	<a href="#">_links</a>	
<code>backup_engine</code>	string	Indicates the NDMP backup engine.
<code>client_address</code>	string	Indicates the NDMP client address.
<code>client_port</code>	integer	Indicates the NDMP client port.
<code>data</code>	<a href="#">ndmp_data</a>	Information about the NDMP data server.

Name	Type	Description
data_path	string	Indicates the NDMP backup or restore path.
id	string	NDMP session identifier.
mover	<a href="#">ndmp_mover</a>	Information about the NDMP mover.
node	<a href="#">node</a>	
scsi	<a href="#">ndmp_scsi</a>	Information about the NDMP SCSI server.
source_address	string	Indicates the NDMP local address on which connection was established.
svm	<a href="#">svm</a>	
tape_device	string	Indicates the NDMP tape device.
tape_mode	string	The modes of a NDMP mover instance.
uuid	string	The NDMP node or SVM UUID based on whether NDMP is operating in node-scope or SVM-scope mode.



## Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "backup_engine": "string",
  "client_address": "string",
  "data": {
    "bytes_processed": "5000",
    "connection": {
      "address": "string",
      "port": "18600",
      "type": "local"
    },
    "operation": "backup",
    "reason": "aborted",
    "state": "halted"
  },
  "data_path": "/vserver1/vol1",
  "id": "string",
  "mover": {
    "bytes_moved": "645120",
    "connection": {
      "address": "string",
      "port": "18600",
      "type": "local"
    },
    "mode": "read",
    "reason": "end_of_media",
    "state": "connected"
  },
  "node": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "scsi": {
    "device_id": "string"
  },
}
```

```

"source_address": "string",
"svm": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "svm1",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"tape_device": "nrst0a",
"tape_mode": "write",
"uuid": "string"
}

```

## Error

Status: Default

## ONTAP Error Response codes

Error code	Description
68812802	The UUID is not valid.

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>	

ndmp\_connect

Indicates the NDMP connection attributes.

Name	Type	Description
address	string	Indicates the NDMP data connection address.
port	integer	Indicates the NDMP data connection port.
type	string	The different NDMP connection types.

ndmp\_data

Information about the NDMP data server.

Name	Type	Description
bytes_processed	integer	Indicates the NDMP data bytes processed.
connection	<a href="#">ndmp_connect</a>	Indicates the NDMP connection attributes.
operation	string	Indicates the NDMP data server operation.
reason	string	If the NDMP mover or data server is in the paused or halted state, then this property provides additional information for the state.

Name	Type	Description
state	string	The various states of the NDMP state machine during a backup or restore workflow.

#### ndmp\_mover

Information about the NDMP mover.

Name	Type	Description
bytes_moved	integer	Indicates the NDMP mover bytes moved.
connection	<a href="#">ndmp_connect</a>	Indicates the NDMP connection attributes.
mode	string	The modes of a NDMP mover instance.
reason	string	If the NDMP mover or data server is in the paused or halted state, then this property provides additional information for the state.
state	string	The various states of the NDMP state machine during a backup or restore workflow.

#### node

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	
uuid	string	

#### ndmp\_scsi

Information about the NDMP SCSI server.

Name	Type	Description
device_id	string	Indicates the NDMP SCSI device ID.

Name	Type	Description
host_adapter	integer	Indicates the NDMP SCSI host adapter.
lun_id	integer	Indicates the NDMP SCSI LUN ID.
target_id	integer	Indicates the NDMP SCSI target ID.

svm

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

## Manage NDMP configuration of SVM

## Protocols NDMP svms endpoint overview

You can use this API to manage NDMP configurations of SVMs.

### Examples

Updates the "enabled" field:

```
PATCH "/api/protocols/ndmp/svms/9b372ce7-3a4b-11e9-a7f8-0050568e3d73"
 '{"enabled":"false"}'
```

Updates the "authentication\_types" field:

```
PATCH "/api/protocols/ndmp/svms/9b372ce7-3a4b-11e9-a7f8-0050568e3d73"
 '{"authentication_types":["challenge"]}'
```

## Retrieve NDMP configurations for all SVMs

GET /protocols/ndmp/svms

**Introduced In:** 9.7

Retrieves NDMP configurations for all SVMs.

### Related ONTAP commands

- `vserver services ndmp show`

### Learn more

- [DOC /protocols/ndmp/svms](#)

### Parameters

Name	Type	In	Required	Description
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name
enabled	boolean	query	False	Filter by enabled
authentication_types	string	query	False	Filter by authentication_types
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. <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>• Default value: 1</li> <li>• Max value: 120</li> <li>• Min value: 0</li> </ul>
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="#">ndmp_svm</a> ]	



## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "authentication_types": [
        "plaintext",
        "challenge"
      ],
      "enabled": 1,
      "svm": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      }
    }
  ]
}
```

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

\_links

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

svm

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

ndmp\_svm

Name	Type	Description
_links	<a href="#">_links</a>	
authentication_types	array[string]	NDMP authentication types.
enabled	boolean	Is the NDMP service enabled on the SVM?
svm	<a href="#">svm</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.

## Retrieve the NDMP configuration for an SVM

GET /protocols/ndmp/svms/{svm.uuid}

**Introduced In:** 9.7

Retrieves an NDMP configuration for a specific SVM.

### Related ONTAP commands

- `vserver services ndmp show`

### Learn more

- [DOC /protocols/ndmp/svms](#)

### Parameters

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

### Response

Status: 200, Ok

Name	Type	Description
_links	<a href="#">_links</a>	
authentication_types	array[string]	NDMP authentication types.

Name	Type	Description
enabled	boolean	Is the NDMP service enabled on the SVM?
svm	<a href="#">svm</a>	

### Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "authentication_types": [
    "plaintext",
    "challenge"
  ],
  "enabled": 1,
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```

### 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>	

svm

Name	Type	Description
_links	<a href="#">_links</a>	
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[ <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 NDMP configuration for an SVM

```
PATCH /protocols/ndmp/svms/{svm.uuid}
```

## Introduced In: 9.7

Updates the NDMP configuration for a specific SVM.

## Related ONTAP commands

- `vserver services ndmp modify`

## Learn more

- [DOC /protocols/ndmp/svms](#)

## Parameters

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

## Request Body

Name	Type	Description
_links	<a href="#">_links</a>	
authentication_types	array[string]	NDMP authentication types.
enabled	boolean	Is the NDMP service enabled on the SVM?
svm	<a href="#">svm</a>	



## Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "authentication_types": [
    "plaintext",
    "challenge"
  ],
  "enabled": 1,
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```

## Response

Status: 200, Ok

Name	Type	Description
_links	<a href="#">_links</a>	
authentication_types	array[string]	NDMP authentication types.
enabled	boolean	Is the NDMP service enabled on the SVM?
svm	<a href="#">svm</a>	

## Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "authentication_types": [
    "plaintext",
    "challenge"
  ],
  "enabled": 1,
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```

## Error

Status: Default, Error

## Definitions

## See Definitions

href

Name	Type	Description
href	string	

\_links

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

svm

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

ndmp\_svm

Name	Type	Description
_links	<a href="#">_links</a>	
authentication_types	array[string]	NDMP authentication types.
enabled	boolean	Is the NDMP service enabled on the SVM?
svm	<a href="#">svm</a>	

## Generate NDMP user password

### Protocols NDMP svms svm.uuid passwords user endpoint overview

Generates and retrieves the password for a given NDMP user in the SVM context.

#### Examples

```
GET "/api/protocols/ndmp/svms/ca8e29e0-e116-11ea-876c-0050568ea754/passwords/ndmpuser"
```

## Generate and retrieve the password for an NDMP user

GET /protocols/ndmp/svms/{svm.uuid}/passwords/{user}

Introduced In: 9.9

Generates and retrieves the password for the specified NDMP user.

### Related ONTAP commands

- `vserver services ndmp generate-password`

### Learn more

- [DOC /protocols/ndmp/svms/{svm.uuid}/passwords/{user}](#)

### Parameters

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

### Response

Status: 200, Ok

Name	Type	Description
_links	<a href="#">_links</a>	
password	string	NDMP Password
svm	<a href="#">svm</a>	
user	string	NDMP user

## Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "password": "string",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "user": "string"
}
```

## 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>	

svm

Name	Type	Description
_links	<a href="#">_links</a>	
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[ <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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