



# **Monitor tape backup and restore operations for FlexVol volumes**

**ONTAP 9**

NetApp  
June 28, 2022

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# Monitor tape backup and restore operations for FlexVol volumes

## Monitor tape backup and restore operations for FlexVol volumes overview

You can view the event log files to monitor the tape backup and restore operations. ONTAP automatically logs significant backup and restore events and the time at which they occur in a log file named `backup` in the controller's `/etc/log/` directory. By default, event logging is set to `on`.

You might want to view event log files for the following reasons:

- Checking whether a nightly backup was successful
- Gathering statistics on backup operations
- For using the information in past event log files to help diagnose problems with backup and restore operations

Once every week, the event log files are rotated. The `/etc/log/backup` file is renamed to `/etc/log/backup.0`, the `/etc/log/backup.0` file is renamed to `/etc/log/backup.1`, and so on. The system saves the log files for up to six weeks; therefore, you can have up to seven message files (`/etc/log/backup.[0-5]` and the current `/etc/log/backup` file).

## Access the event log files

You can access the event log files for tape backup and restore operations in the `/etc/log/` directory by using the `rdfile` command at the nodeshell. You can view these event log files to monitor tape backup and restore operations.

### About this task

With additional configurations, such as an access-control role with access to the `spi` web service or a user account set up with the `http` access method, you can also use a web browser to access these log files.

### Steps

1. To access the nodeshell, enter the following command:

```
node run -node node_name
```

`node_name` is the name of the node.

2. To access the event log files for tape backup and restore operations, enter the following command:

```
rdfile /etc/log/backup
```

### Related information

[System administration](#)

# What the dump and restore event log message format is

## Dump and restore event log message format overview

For each dump and restore event, a message is written to the backup log file.

The format of the dump and restore event log message is as follows:

```
type timestamp identifier event (event_info)
```

The following list describes the fields in the event log message format:

- Each log message begins with one of the type indicators described in the following table:

| Type | Description   |
|------|---------------|
| log  | Logging event |
| dmp  | Dump event    |
| rst  | Restore event |

- `timestamp` shows the date and time of the event.
- The `identifier` field for a dump event includes the dump path and the unique ID for the dump. The `identifier` field for a restore event uses only the restore destination path name as a unique identifier. Logging-related event messages do not include an `identifier` field.

## What logging events are

The event field of a message that begins with a log specifies the beginning of a logging or the end of a logging.

It contains one of the events shown in the following table:

| Event         | Description  |
|---------------|--|
| Start_Logging | Indicates the beginning of logging or that logging has been turned back on after being disabled. |
| Stop_Logging  | Indicates that logging has been turned off.  |

## What dump events are

The event field for a dump event contains an event type followed by event-specific information within parentheses.

The following table describes the events, their descriptions, and the related event information that might be recorded for a dump operation:

| Event        | Description   | Event information  |
|--------------|---|--|
| Start        | NDMP dump is started  | Dump level and the type of dump                                  |
| End          | Dumps completed successfully                                | Amount of data processed   |
| Abort        | The operation is cancelled                                  | Amount of data processed   |
| Options      | Specified options are listed                                | All options and their associated values, including NDMP options  |
| Tape_open    | The tape is open for read/write                             | The new tape device name   |
| Tape_close   | The tape is closed for read/write                           | The tape device name   |
| Phase-change | A dump is entering a new processing phase                   | The new phase name   |
| Error        | A dump has encountered an unexpected event                  | Error message  |
| Snapshot     | A Snapshot copy is created or located                       | The name and time of the Snapshot copy                           |
| Base_dump    | A base dump entry in the internal metafile has been located | The level and time of the base dump (for incremental dumps only) |

## What restore events are

The event field for a restore event contains an event type followed by event-specific information in parentheses.

The following table provides information about the events, their descriptions, and the related event information that can be recorded for a restore operation:

| Event | Description                     | Event information                            |
|-------|---------------------------------|--|
| Start | NDMP restore is started         | Restore level and the type of restore        |
| End   | Restores completed successfully | Number of files and amount of data processed |
| Abort | The operation is cancelled      | Number of files and amount of data processed |

| Event        | Description                                | Event information   |
|--------------|--|---|
| Options      | Specified options are listed               | All options and their associated values, including NDMP options |
| Tape_open    | The tape is open for read/write            | The new tape device name  |
| Tape_close   | The tape is closed for read/write          | The tape device name  |
| Phase-change | Restore is entering a new processing phase | The new phase name  |
| Error        | Restore encounters an unexpected event     | Error message   |

## Enabling or disabling event logging

You can turn the event logging on or off.

### Steps

1. To enable or disable event logging, enter the following command at the clustershell:

```
options -option_name backup.log.enable -option-value {on | off}
```

`on` turns event logging on.

`off` turns event logging off.



Event logging is turned on by default.

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