



## **nv events**

### **ONTAP EMS reference**

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# nv events

## nv.clam events

### nv.clam.dirty.shutdown

#### Severity

ALERT

#### Description

This message occurs when a node's connectivity, liveness, availability monitor (CLAM) requests a graceful shutdown of its HA partner, but during the takeover it is determined that the partner volumes are unexpectedly dirty. The takeover occurred during an NVRAM sync, so the partner NVRAM is zeroed, resulting in potential data loss.

#### Corrective Action

Check accompanying EMS messages `waf.vol.invalidate.fh` or `waf.vol.setting.in.nvfailed.state` for possible corrective actions. Call NetApp technical support for further assistance.

#### Syslog Message

NVRAM validate: An unexpected dirty shutdown occurred during a CLAM takeover but continuing takeover; some data might be lost.

#### Parameters

(None).

## nv.data events

### nv.data.loss.possible

#### Severity

NOTICE

#### Description

This message occurs when a Cloud Volumes ONTAP node configured for high write speed unexpectedly shuts down, possibly resulting in a loss of data. This is expected because the NVRAM data does not have a chance to be flushed during the unforeseen shutdown.

#### Corrective Action

(None).

#### Syslog Message

An unexpected shutdown occurred while in high write speed mode, which possibly caused a loss of data.

#### Parameters

(None).

# nv.extension events

## nv.extension.disabled

### Severity

INFORMATIONAL

### Description

This message occurs when NVRAM segments of a nvlog client are disabled in a NVRAM section.

### Corrective Action

(None).

### Syslog Message

%s segments have been disabled in %s NVRAM section.

### Parameters

**cid** (STRING): Nvlog client ID.

**nv\_section** (STRING): The NVRAM section in which the nvlog client segments are disabled.

## nv.extension.enabled

### Severity

INFORMATIONAL

### Description

This message occurs when NVRAM segments of a nvlog client are enabled in a NVRAM section.

### Corrective Action

(None).

### Syslog Message

%s segments have been enabled in %s NVRAM section.

### Parameters

**cid** (STRING): Nvlog client ID.

**nv\_section** (STRING): The NVRAM section in which nvlog client segments are enabled.

## nv.extension.failed

### Severity

ERROR

### Description

This message occurs when nvlog client segments cannot be enabled in a partner NVRAM section following a controller failover. When this event occurs, the system continues to operate, but with diminished performance due to the increased failover load coupled with decreased NVRAM capacity for logging.

### Corrective Action

For a System ID-related failure message, verify that each member node in this configuration is assigned a valid and unique system ID by using the "system show -fields systemid" command. Do not physically move

a controller or NVRAM card in an HA or MetroCluster(tm) configuration. A failure message of "Configuration Recovery Needed" means that a reboot is needed to recover persistent MetroCluster configuration at a switchover site.

### Syslog Message

Client segments cannot be enabled in the %s NVRAM section, because of %s.

### Parameters

**nv\_section** (STRING): NVRAM section in which nvlog client segments cannot be enabled.

**failure\_reason** (STRING): Reason client segments cannot be enabled in this partner NVRAM section.

## nv.fake events

### nv.fake

#### Severity

NOTICE

#### Description

This message occurs when the nonvolatile (NV) driver detects that system memory is being used to simulate NVRAM.

#### Corrective Action

Reset the 'fake-nvram?' boot environment variable from the boot loader: 'unsetenv fake-nvram?'.

### Syslog Message

%u MB system memory being used to simulate NVRAM.

### Parameters

**memory\_size** (INT): Memory size (in MB) being used to simulate NVRAM.

## nv.fio events

### nv.fio.write.err

#### Severity

ERROR

#### Description

This message occurs when the write to VNVRAM fails and the retry count has been exhausted.

#### Corrective Action

(None).

### Syslog Message

The write to VNVRAM failed with error %u; retry limit exhausted.

### Parameters

**error** (INT): Error returned by the last write.

## **nv.fio.write.retry**

### **Severity**

NOTICE

### **Description**

This message occurs when the write to VNV RAM fails. The write will be retried.

### **Corrective Action**

(None).

### **Syslog Message**

The write to VNV RAM failed with error %u; will retry.

### **Parameters**

**error** (INT): Error returned by the write.

## **nv.flash.events**

### **nv.flash.predict.fail**

### **Severity**

ALERT

### **Description**

This message occurs when ONTAP® determines that failure is forthcoming or has occurred for the associated flash device on the nonvolatile memory (NVRAM) module.

### **Corrective Action**

Replace the device to prevent future failures.

### **Syslog Message**

%s

### **Parameters**

**reason** (STRING): Reason for failure.

### **nv.flash.unable.to.monitor**

### **Severity**

ALERT

### **Description**

This message occurs when the ONTAP® module that is responsible for monitoring the health of the NVRAM device cannot extract health information. This failure might indicate the NVRAM device is not operating properly.

### **Corrective Action**

Use the "system environment sensors show" command to verify the device's status. If the failure still exists, contact technical support for assistance.

### **Syslog Message**

Unable to monitor NVRAM device "%s".

### **Parameters**

**device** (STRING): Name of the device.

## **nv.none events**

### **nv.none**

#### **Severity**

EMERGENCY

#### **Description**

This message occurs when the system cannot detect a nonvolatile (NV) device.

#### **Corrective Action**

Contact NetApp technical support.

### **Syslog Message**

No NV device has been detected.

### **Parameters**

(None).

## **nv.partner events**

### **nv.partner.disabled**

#### **Severity**

INFORMATIONAL

#### **Description**

This message occurs when checking the partner nonvolatile RAM (NVRAM) and the partner NVRAM is disabled. This event most commonly occurs during the takeover or switchover process after the partner has gone down.

#### **Corrective Action**

(None).

### **Syslog Message**

NVRAM validate: %s NVRAM was disabled.

### **Parameters**

**host** (STRING): Name of the partner host.

### **nv.partner.nvcheck.failure**

**Severity**

ALERT

**Description**

This message occurs when nonvolatile RAM (NVRAM) inconsistencies are detected during takeover. Takeover is continued only if the option for consistent NVRAM mirroring is disabled or if the takeover is forced.

**Corrective Action**

When the partner node recovers, NVRAM will be reinitialized to a consistent state. The error string provides additional information to assist NetApp technical support in identifying the inconsistency and subsystem that caused the failure.

**Syslog Message**

NVRAM validate: %s

**Parameters**

**error** (STRING): Error string describing which subsystem caused the failure and what the mismatching values are.

**nv.partner.size.mismatch****Severity**

ALERT

**Description**

This message occurs when the HA pair nonvolatile RAM (NVRAM) sizes do not match. In this case, an HA pair cannot be formed.

**Corrective Action**

Check to make sure that the local NVRAM hardware size matches the partner NVRAM hardware size. Verify that the same bootargs are in use on both nodes. One or both nodes might need to be rebooted. Contact NetApp technical support if the problem persists.

**Syslog Message**

CF monitor: NVRAM size mismatch between nodes detected; node requires %llu bytes, partner exported %llu bytes.

**Parameters**

**localNVSize** (LONGINT): Size of the local NVRAM.  
**partnerNVSize** (LONGINT): Size of the partner NVRAM.

**nv.partner.takeover.continued****Severity**

ALERT

**Description**

This message occurs when takeover proceeds even when nonvolatile RAM (NVRAM) inconsistencies are detected in the HA pair. This most commonly occurs when the NVRAM mirror consistency has been disabled or if the takeover is forced.



**Corrective Action**

(None).

**Syslog Message**

NVRAM validate: Error encountered (%s), but continuing takeover; some data might be lost.

**Parameters**

**error** (STRING): Error string.

## **nv.rename events**

**nv.rename.err****Severity**

INFORMATIONAL

**Description**

This message occurs when there is an error while renaming the files specified in /etc/nvfail\_rename.

**Corrective Action**

(None).

**Syslog Message**

nvfail\_rename: %s: %s.

**Parameters**

**fileName** (STRING): File name.

**error** (STRING): Error string.

**nv.rename.files****Severity**

INFORMATIONAL

**Description**

This message occurs while renaming the files specified in /etc/nvfail\_rename.

**Corrective Action**

(None).

**Syslog Message**

Renaming files specified in /etc/nvfail\_rename.

**Parameters**

(None).

**nv.rename.longName****Severity**

INFORMATIONAL

**Description**

This message occurs while renaming the files specified in `/etc/nvfail_rename`, when the file name is too long.

**Corrective Action**

(None).

**Syslog Message**

`nvfail_rename: %s: File name too long.`

**Parameters**

**fileName** (STRING): File name.

## **nv.switchover events**

### **nv.switchover.continued**

**Severity**

ALERT

**Description**

This message occurs when switchover proceeds even when nonvolatile RAM (NVRAM) inconsistencies are detected in the DR partner sections.

**Corrective Action**

(None).

**Syslog Message**

`NVRAM validate: Error encountered (%s), but continuing switchover; some data might be lost.`

**Parameters**

**error** (STRING): Error string.

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