



nv events

ONTAP EMS reference

NetApp
November 18, 2025

Table of Contents

- nv events 1
 - nv.clam events 1
 - nv.clam.dirty.shutdown 1
 - nv.data events 1
 - nv.data.loss.possible 1
 - nv.extension events 2
 - nv.extension.disabled 2
 - nv.extension.enabled 2
 - nv.extension.failed 2
 - nv.fake events 3
 - nv.fake 3
 - nv.fio events 3
 - nv.fio.write.err 3
 - nv.fio.write.retry 4
 - nv.flash events 4
 - nv.flash.predict.fail 4
 - nv.flash.unable.to.monitor 4
 - nv.none events 5
 - nv.none 5
 - nv.partner events 5
 - nv.partner.disabled 5
 - nv.partner.nvcheck.failure 5
 - nv.partner.size.mismatch 6
 - nv.partner.takeover.continued 6
 - nv.rename events 7
 - nv.rename.err 7
 - nv.rename.files 7
 - nv.rename.longName 7
 - nv.switchover events 8
 - nv.switchover.continued 8

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 VNVRAM fails. The write will be retried.

Corrective Action

(None).

Syslog Message

The write to VNVRAM 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.

Copyright information

Copyright © 2025 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.