



## **monitor events**

### **ONTAP 9.12.1 EMS reference**

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# Table of Contents

- monitor events ..... 1
  - monitor.brokendisk events ..... 1
  - monitor.chassisfan events ..... 1
  - monitor.chassisfanfail events ..... 3
  - monitor.chassispower events ..... 3
  - monitor.chassispowersupplies events ..... 4
  - monitor.chassispowersupply events ..... 4
  - monitor.chassistemperature events ..... 6
  - monitor.completed events ..... 7
  - monitor.cpu events ..... 8
  - monitor.disklabelcheckfailed events ..... 9
  - monitor.downrevdisks events ..... 9
  - monitor.extcache events ..... 10
  - monitor.fan events ..... 10
  - monitor.fru events ..... 12
  - monitor.globalstatus events ..... 12
  - monitor.iocard events ..... 14
  - monitor.ioexpansionpower events ..... 15
  - monitor.ioexpansiontemperature events ..... 15
  - monitor.ioxmtemp events ..... 17
  - monitor.mismatch events ..... 17
  - monitor.nvmembattery events ..... 18
  - monitor.nvramlowbatteries events ..... 18
  - monitor.nvramlowbattery events ..... 19
  - monitor.partnercontroller events ..... 20
  - monitor.power events ..... 20
  - monitor.raid events ..... 22
  - monitor.raiddp events ..... 23
  - monitor.raidtec events ..... 24
  - monitor.rtchighpower events ..... 24
  - monitor.rtclowpower events ..... 24
  - monitor.rtcnormal events ..... 25
  - monitor.rtcwarnlowpower events ..... 25
  - monitor.shelf events ..... 26
  - monitor.shutdown events ..... 29
  - monitor.sparelabelcheckfailed events ..... 34
  - monitor.temp events ..... 35
  - monitor.unknown events ..... 35
  - monitor.vol events ..... 36
  - monitor.volume events ..... 37
  - monitor.weeklystatsasup events ..... 38

# monitor events

## monitor.brokendisk events

### monitor.brokenDisk.notice

#### Severity

NOTICE

#### Description

This message occurs when a node is in a degraded state because of a broken disk. The timeout values indicate how long the system will run after each boot before shutting down because of this condition. Shutdown is to encourage you to replace broken disks. \* The timeout[123] values are duplicated as a convenience for the Syslog message, which prints out the value three times.

#### Corrective Action

Consult other logged messages to determine the identity of broken disks, or use the "storage disk show -broken" command. Replace any broken disks. The %d hour timeout can be increased by altering the "raid.timeout" value using the "storage raid-options modify" command.

#### Syslog Message

%s, the system shuts down automatically every %d hours to encourage you to replace the disk. If you reboot the system, it will run for another %d hours before shutting down.

#### Parameters

**type** (STRING): Type of degradation.

**timeout1** (INT): Timeout value.

**timeout2** (INT): Timeout value.

**timeout3** (INT): Timeout value.

## monitor.chassisfan events

### monitor.chassisFan.degraded

#### Severity

ALERT

#### Description

This message occurs when a chassis fan is degraded.

#### Corrective Action

Replace the fan unit.

#### Syslog Message

Chassis fan is degraded: %s

#### Parameters

**fan\_name** (STRING): Name of the fan.

## **monitor.chassisFan.ok**

### **Severity**

NOTICE

### **Description**

This message occurs when the chassis fans are OK.

### **Corrective Action**

(None).

### **Syslog Message**

Chassis fan %s is ok.

### **Parameters**

**fru\_name** (STRING): Name of the field-replaceable unit (FRU) containing the fan.

## **monitor.chassisFan.removed**

### **Severity**

ALERT

### **Description**

This message occurs when a chassis fan is removed This is a warning message.

### **Corrective Action**

Reinsert the FRU.

### **Syslog Message**

Chassis fan %s is removed

### **Parameters**

**fan\_name** (STRING): Name of the field-replaceable unit (FRU) containing the fan.

## **monitor.chassisFan.stop**

### **Severity**

ERROR

### **Description**

This message occurs when a chassis fan is stopped. This is a warning message.

### **Corrective Action**

Reseat the FRU. If the FRU is an I/O module, schedule unit downtime and power off the unit before reseating the FRU. If the error persists, replace the FRU.

### **Syslog Message**

Chassis fan contains at least one stopped fan: %s

### **Parameters**

**fru\_name** (STRING): Name of the field-replaceable unit (FRU) containing the fan.

## monitor.chassisFan.warning

### Severity

ALERT

### Description

This message occurs when a chassis fan is spinning either too slowly or too fast. This is a warning message.

### Corrective Action

Replace the FRU.

### Syslog Message

Chassis fan is in warning state: %s

### Parameters

**fru\_name** (STRING): Name of the field-replaceable unit (FRU) containing the fan.

## monitor.chassisfanfail events

### monitor.chassisFanFail.xMinShutdown

### Severity

EMERGENCY

### Description

This message occurs when multiple chassis fans have failed, and the system will shut down in a few minutes unless corrected.

### Corrective Action

Reseat the chassis fans. If they do not restart, replace them.

### Syslog Message

Multiple Chassis Fan failure: System will shut down in %d minutes.

### Parameters

**num\_minutes** (INT): Number of minutes until the system will shut down.

## monitor.chassispower events

### monitor.chassisPower.degraded

### Severity

ALERT

### Description

This message occurs when a power supply is degraded.

### **Corrective Action**

Degraded power might be caused by bad power supplies, bad wall power, or bad components on the motherboard. If spare power supplies are available, try exchanging them to see if that alleviates the problem. Otherwise contact NetApp technical support for further direction.

### **Syslog Message**

Chassis power is degraded: %s

### **Parameters**

**reasonText** (STRING): Description of the degradation.

## **monitor.chassisPower.ok**

### **Severity**

NOTICE

### **Description**

This message occurs when the motherboard power is OK.

### **Corrective Action**

(None).

### **Syslog Message**

Chassis power is OK.

### **Parameters**

(None).

## **monitor.chassispowersupplies events**

### **monitor.chassisPowerSupplies.ok**

### **Severity**

INFORMATIONAL

### **Description**

This message occurs when all power supplies are OK.

### **Corrective Action**

(None).

### **Syslog Message**

Chassis power supplies OK.

### **Parameters**

(None).

## **monitor.chassispowersupply events**

## **monitor.chassisPowerSupply.degraded**

### **Severity**

NOTICE

### **Description**

This message occurs when a power supply is degraded.

### **Corrective Action**

A replacement power supply might be required. Contact NetApp technical support for further direction.

### **Syslog Message**

Chassis power supply %d is degraded: %s

### **Parameters**

**ps\_number** (INT): Power supply number.

**reasonText** (STRING): Description of the degradation.

## **monitor.chassisPowerSupply.notPresent**

### **Severity**

NOTICE

### **Description**

This message occurs when an expected a power supply is not present.

### **Corrective Action**

Add a power supply to the controller chassis.

### **Syslog Message**

Chassis power supply %d is not present.

### **Parameters**

**ps\_number** (INT): Power supply number.

## **monitor.chassisPowerSupply.off**

### **Severity**

NOTICE

### **Description**

This message occurs when a power supply is off.

### **Corrective Action**

Turn on the power supply.

### **Syslog Message**

Chassis power supply %d off.

**Parameters**

**ps\_number** (INT): Power supply number.

**monitor.chassisPowerSupply.ok****Severity**

INFORMATIONAL

**Description**

This message occurs when the power supply is OK.

**Corrective Action**

(None).

**Syslog Message**

Chassis power supply %d is OK.

**Parameters**

**ps\_number** (INT): Power supply number.

**monitor.chassistemperature events****monitor.chassisTemperature.cool****Severity**

ALERT

**Description**

This message occurs when the chassis temperature is too cool. This is a warning message.

**Corrective Action**

The appliance cannot function in an environment that is too cold; find ways to warm the appliance.

**Syslog Message**

Chassis temperature is too cool: %s

**Parameters**

**describe\_toocool** (STRING): Description of the condition.

**monitor.chassisTemperature.ok****Severity**

NOTICE

**Description**

This message occurs when the chassis temperature is normal.

**Corrective Action**

(None).



## Syslog Message

Chassis temperature is ok.

## Parameters

(None).

## monitor.chassisTemperature.state.unknown

### Severity

ALERT

### Description

This message occurs when the system cannot read multiple chassis temperature sensors. The condition can be caused by software, firmware, or hardware problems.

### Corrective Action

Arrange to AC power-cycle the unit to address possible software and firmware issues. If the condition persists, contact NetApp technical support for assistance with Processor Control Module (PCM) replacement.

## Syslog Message

Chassis temperature state is unknown: %s.

## Parameters

**reasonText** (STRING): Description of the temperature sensor issue.

## monitor.chassisTemperature.warm

### Severity

ALERT

### Description

This message occurs when the chassis temperature is too warm. This is a warning message. If the condition persists, the system will shut down automatically.

### Corrective Action

Ensure that sufficient cooling air is being supplied to the chassis and that the air inlets and outlets of the unit are not blocked. If you cannot resolve the situation, shut down all clients that are attached to the storage appliance, and then shut down the system.

## Syslog Message

Chassis temperature is too warm: %s

## Parameters

**describe\_toowarm** (STRING): Description of the condition.

## monitor.completed events

## monitor.completed.iron

### Severity

ERROR

### Description

This message occurs when wafiron in the optional commit mode has finished on the aggregate but changes have not been committed or rejected. Either commit or reject the changes.

### Corrective Action

Run the "aggr wafiron commit VOL" command to commit the changes or the "aggr wafiron reject VOL" command to reject the changes.

### Syslog Message

Wafiron in the optional commit mode has completed on aggregate '%s' but the changes have not been committed or rejected. Either commit or reject the changes.

### Parameters

**volname** (STRING): Volume name

## monitor.cpu events

### monitor.cpu.ok

### Severity

INFORMATIONAL

### Description

This message occurs when the CPU busy situation is corrected.

### Corrective Action

(None).

### Syslog Message

%s

### Parameters

**report** (STRING): Description of the current CPU usage.

### monitor.cpu.tooBusy

### Severity

NOTICE

### Description

This message occurs when the CPU is too busy.

### Corrective Action

(None).

## Syslog Message

Warning: %s

## Parameters

**report** (STRING): Description of the problem.

# monitor.disklabelcheckfailed events

## monitor.diskLabelCheckFailed

### Severity

NOTICE

### Description

This message occurs when the system detects that a file system disk has an invalid or a missing RAID label. The system corrects the situation during the next label update.

### Corrective Action

No user action is required.

## Syslog Message

Periodic check of RAID %s has failed. The system will correct the problem.

## Parameters

**disk\_info** (STRING): Formatted information of the disk object.

**label\_block\_num** (INT): Label block number code.

**label\_state** (INT): Label state code.

**label\_read\_error** (INT): Label read error code.

**shelf** (STRING): Disk shelf identifier where the disk is located.

**bay** (STRING): Disk bay within the disk shelf where the disk is located.

**vendor** (STRING): Name of the vendor of the disk.

**model** (STRING): Model string of the disk.

**firmware\_revision** (STRING): Firmware revision number of the disk.

**serialno** (STRING): Serial number of the disk.

**disk\_type** (INT): Type of disk.

**disk\_rpm** (STRING): Rotational speed of the disk in RPM.

# monitor.downrevdisks events

## monitor.downRevDisks

### Severity

ERROR

### Description

This message occurs when ONTAP® detects that downrev disks are still present in the system.

### Corrective Action

Download the latest disk firmware on each node and ensure that automatic background firmware update is enabled. If necessary, use the (advanced privilege) "storage disk firmware update" command to manually

update disk firmware. Consult the man page for cautions.

### **Syslog Message**

Downrev disks still present!!

### **Parameters**

(None).

## **monitor.extcache events**

### **monitor.extCache.failed**

#### **Severity**

NOTICE

#### **Description**

This message occurs when the monitor detects the WAFL® external cache subsystem (FlexScale) has failed and is no longer available for use.

#### **Corrective Action**

Consult the system logs to determine the original cause of the error.

#### **Syslog Message**

FlexScale WAFL external cache is unavailable due to an earlier fatal error.

#### **Parameters**

(None).

## **monitor.fan events**

### **monitor.fan.critical**

#### **Severity**

EMERGENCY

#### **Description**

This message occurs when one or more main unit fans have failed. The system cannot continue to operate.

#### **Corrective Action**

Replace the failed fans.

#### **Syslog Message**

%s

#### **Parameters**

**report** (STRING): Report indicating the critical state.

### **monitor.fan.failed**

**Severity**

ALERT

**Description**

This message occurs when one or more main unit fans have failed. The system remains operational. If the condition persists too long, an automatic shutdown for overtemperature might occur.

**Corrective Action**

Reseat the failed fans. If the error persists, replace them.

**Syslog Message**

%s

**Parameters**

**report** (STRING): Report indicating the failed fans.

**monitor.fan.ok****Severity**

NOTICE

**Description**

This message occurs when a previously failed main unit fan has been restarted.

**Corrective Action**

(None).

**Syslog Message**

%s

**Parameters**

**report** (STRING): Report indicating that the failed fans have restarted.

**monitor.fan.warning****Severity**

NOTICE

**Description**

This message occurs when one or more fans are in a warning state.

**Corrective Action**

Replace the indicated fans to avoid overheating.

**Syslog Message**

%s

**Parameters**

**report** (STRING): Report indicating the warning level.

# monitor.fru events

## monitor.fru.info.readable

### Severity

INFORMATIONAL

### Description

This message occurs when the inventory information about a field-replaceable unit (FRU) that was previously unreadable becomes readable.

### Corrective Action

(None).

### Syslog Message

The inventory information of FRU %s is readable.

### Parameters

**fru\_name** (STRING): FRU name.

## monitor.fru.info.unreadable

### Severity

ERROR

### Description

This message occurs when the inventory information of a field-replaceable unit (FRU) is not readable.

### Corrective Action

See the system hardware guide for the replacement of the FRU. At the earliest convenient time, remove and reinsert the FRU to reseal it, and then resume normal system operation. If the error persists, replace the FRU according to the hardware guide directions.

### Syslog Message

The inventory information of FRU %s is not readable.

### Parameters

**fru\_name** (STRING): FRU name.

# monitor.globalstatus events

## monitor.globalStatus.critical

### Severity

EMERGENCY

### Description

This message occurs when the system's global health is critical; for example, if a fan failed.

### **Corrective Action**

Check the event log for other conditions that can cause this global status message. Follow the corrective actions in those messages.

### **Syslog Message**

%s

### **Parameters**

**problem** (STRING): System problem description.

## **monitor.globalStatus.nonCritical**

### **Severity**

ERROR

### **Description**

This message occurs when the system's global health is degraded; for example, if a file system is nearly full.

### **Corrective Action**

Check the event log for other conditions that can cause this global status message. Follow the corrective actions in those messages.

### **Syslog Message**

%s

### **Parameters**

**problem** (STRING): System problem description.

## **monitor.globalStatus.nonRecoverable**

### **Severity**

EMERGENCY

### **Description**

This message occurs when the system's global health is non-recoverable, and the system is shutting down. There are currently no examples of this failure.

### **Corrective Action**

Check the event log for other conditions that can cause this global status message. Follow the corrective actions in those messages.

### **Syslog Message**

%s

### **Parameters**

**problem** (STRING): System problem description.

## **monitor.globalStatus.ok**

**Severity**

NOTICE

**Description**

This message occurs when the system's global health returns to normal.

**Corrective Action**

(None).

**Syslog Message**

%s

**Parameters**

**problem** (STRING): Description of the system's normal condition.

## monitor.iocard events

### monitor.ioCard.degraded

**Severity**

ALERT

**Description**

This message indicates that an I/O card is degraded.

**Corrective Action**

Exchange or replace the card with a known good card in the same I/O slot. If the problem persists, contact NetApp technical support for replacement assistance.

**Syslog Message**

IO card is degraded: %s

**Parameters**

**reasonText** (STRING): Slot number of the card and the reason the card is degraded.

### monitor.ioCard.ok

**Severity**

NOTICE

**Description**

This message indicates that an I/O card is operating properly.

**Corrective Action**

None.

**Syslog Message**

IO card on slot %d is OK



## Parameters

**slot\_number** (INT): Slot number of the card.

# monitor.ioexpansionpower events

## monitor.ioexpansionPower.degraded

### Severity

NOTICE

### Description

This message indicates that power on the I/O expansion module is degraded.

### Corrective Action

Degraded power might be caused by bad power supplies, bad wall power, or bad components on the motherboard. If spare power supplies are available, try exchanging them to see whether the problem is resolved. Otherwise, contact NetApp technical support.

### Syslog Message

Power on I/O expansion module is degraded: %s

### Parameters

**reasonText** (STRING): Reading and state of voltage sensors on the I/O expansion module.

## monitor.ioexpansionPower.ok

### Severity

NOTICE

### Description

This messages indicates that power on the I/O expansion module is OK.

### Corrective Action

No corrective action is needed.

### Syslog Message

Power on the I/O expansion module is OK.

### Parameters

(None).

# monitor.ioexpansiontemperature events

## monitor.ioexpansionTemperature.cool

### Severity

EMERGENCY

**Description**

This warning message occurs when the I/O expansion module is too cold.

**Corrective Action**

The system cannot function in an environment that is too cold; find ways to warm the system.

**Syslog Message**

I/O expansion module is too cold: %s

**Parameters**

**describe\_toocool** (STRING): Reading and state of the temperature sensors on the I/O expansion module.

**monitor.ioexpansionTemperature.ok****Severity**

NOTICE

**Description**

This message occurs when the temperature of the I/O expansion module is normal. It can occur for the following two cases: 1) LOG\_NOTICE to show that a bad condition has reverted to normal. 2) LOG\_INFO for hourly to indicate that the temperature is OK.

**Corrective Action**

No corrective action is needed.

**Syslog Message**

Temperature of the I/O expansion module is OK.

**Parameters**

(None).

**monitor.ioexpansionTemperature.warm****Deprecated**

Deprecated as of version 9.2.0 to address the EMS ID length violation.

**Severity**

ALERT

**Description**

This warning message occurs when the I/O expansion module is too warm.

**Corrective Action**

Evaluate the environment in which the system is functioning: are air conditioning units needed or is the current air conditioning not functioning properly?

**Syslog Message**

I/O expansion module is too warm: %s

**Parameters**

**describe\_toowarm** (STRING): Reading and state of the temperature sensors on the I/O expansion

module.

## monitor.ioxmtemp events

### monitor.ioxmTemp.warm

#### Severity

ALERT

#### Description

This message occurs when the I/O module is above the recommended operating temperature.

#### Corrective Action

Evaluate the environment in which the system is functioning for proper air flow and temperature control.

#### Syslog Message

I/O expansion module is too warm: %s

#### Parameters

**describe\_toowarm** (STRING): Reading and state of the temperature sensors on the I/O expansion module.

## monitor.mismatch events

### monitor.mismatch.hourly

#### Severity

ALERT

#### Description

This message occurs when the version of ONTAP® is not supported on this hardware. You cannot run a version of ONTAP produced by one vendor on hardware supplied by another. The system will shut down if you do not install a correctly branded version of ONTAP.

#### Corrective Action

Install a correctly branded version of ONTAP before the timer expires.

#### Syslog Message

ONTAP detected a branding mismatch. The hardware is branded by %s and ONTAP is branded by %s. There are %d hour(s) left before shutdown. Install a version of ONTAP branded by your hardware vendor.

#### Parameters

**hardware** (STRING): Vendor brand associated with the hardware.  
**software** (STRING): Vendor brand associated with the version of ONTAP.  
**hours** (INT): Number of hours before shutdown.

### monitor.mismatch.shutdown

#### Severity

EMERGENCY

## Description

This message occurs when the system shuts down because the hardware brand does not match the ONTAP® version brand.

## Corrective Action

Install a correctly branded version of ONTAP to prevent subsequent shutdowns for brand mismatch. Monitor the EMS\_monitor\_mismatch\_hourly message to determine when the next shutdown will occur because of the brand mismatch.

## Syslog Message

Shutting down because of a software branding mismatch. The hardware is branded by %s and ONTAP is branded by %s.

## Parameters

**hardware** (STRING): Vendor brand associated with the hardware.

**software** (STRING): Vendor brand associated with the version. of ONTAP.

# monitor.nvmembattery events

## monitor.nvmembattery.warninglow

### Severity

ALERT

### Description

This message occurs when the nonvolatile memory (NVMEM) battery charge is low.

### Corrective Action

Replace the NVMEM battery as soon as possible.

### Syslog Message

NVMEM battery is low on power and should be replaced as soon as possible.

### Parameters

(None).

# monitor.nvramlowbatteries events

## monitor.nvramLowBatteries

### Severity

EMERGENCY

### Description

This message occurs when the NVRAM batteries are at a dangerously low power level.

### Corrective Action

Replace the NVRAM batteries.

### **Syslog Message**

NVRAM batteries are dangerously low.

### **Parameters**

(None).

## **monitor.nvramLowBatteries.notice**

### **Severity**

NOTICE

### **Description**

This message occurs when a low batteries situation exists. The timeout[123] values are duplicated as a convenience for the Syslog message, which prints out the value three times.

### **Corrective Action**

Replace the NVRAM batteries.

### **Syslog Message**

If the NVRAM batteries are dangerously low, the system shuts down automatically every %d hours to encourage you to replace them. If you reboot the system it will run for another %d hours before shutting down.

### **Parameters**

**timeout1** (INT): Timeout value.

**timeout2** (INT): Timeout value.

**timeout3** (INT): Timeout value.

## **monitor.nvramlowbattery events**

### **monitor.nvramLowBattery**

### **Severity**

EMERGENCY

### **Description**

This message occurs when the NVRAM battery is at a dangerously low power level.

### **Corrective Action**

Replace the NVRAM battery.

### **Syslog Message**

NVRAM battery is dangerously low.

### **Parameters**

(None).

## **monitor.nvramLowBattery.notice**

**Severity**

NOTICE

**Description**

This message occurs when a low battery situation exists. The timeout[123] values are duplicated as a convenience for the Syslog message, which prints out the value three times.

**Corrective Action**

Replace the NVRAM battery.

**Syslog Message**

If the NVRAM battery is dangerously low, the system shuts down automatically every %d hours to encourage you to replace it. If you reboot the system it will run for another %d hours before shutting down.

**Parameters**

**timeout1** (INT): Timeout value.

**timeout2** (INT): Timeout value.

**timeout3** (INT): Timeout value.

## monitor.partnercontroller events

### monitor.partnerController.notPresent

**Severity**

ALERT

**Description**

This message occurs when both controllers are configured as an HA (high-availability) pair, but the partner controller is not present. The system fan will run at a higher speed to prevent overheating due to the non-optimum air flow with only one controller in place.

**Corrective Action**

Put the partner controller back into the HA configuration; otherwise, the system fan will run at a higher speed to prevent overheating due to the non-optimum air flow with only one controller in place.

**Syslog Message**

Both controllers are configured as an HA (high-availability) pair, but the partner controller is not present. The system fan will run at a higher speed to prevent possible overheating.

**Parameters**

(None).

## monitor.power events

### monitor.power.degraded

**Deprecated**

Deprecated as of version 9.2. Last used in 7.3.6 on Tin and Dell one-PSU systems. It is the last user of snmp trap 43.

**Severity**

EMERGENCY

**Description**

This message occurs when the main unit power supply is in a degraded mode.

**Corrective Action**

(Call support).

**Syslog Message**

Power supply is in degraded mode: %s

**Parameters**

**report** (STRING): Description of the problem.

**monitor.power.normal****Severity**

INFORMATIONAL

**Description**

This message occurs when the system has sufficient power (220V) to power up both controllers.

**Corrective Action**

(None).

**Syslog Message**

The power provided to the system is sufficient.

**Parameters**

(None).

**monitor.power.not.sufficient****Severity**

ALERT

**Description**

This message occurs when a storage system in a low-line (110V) power configuration does not have sufficient power to support both controllers. The built-in hardware logic prevents the controller in the bottom slot from powering up.

**Corrective Action**

A high-line (220V) power configuration is needed to power up both controllers. Power off the system, connect the power supply unit (PSU) with 220V power, and then power up the system.

**Syslog Message**

The bottom controller is not powered up due to insufficient power.

**Parameters**

(None).

## monitor.power.unreadable

### Severity

ERROR

### Description

This message occurs when a power sensor in the controller module is not readable.

### Corrective Action

Shut down the system and power-cycle the controller module. If the sensor is still not readable, replace the controller module.

### Syslog Message

A power sensor %s in the controller module is not readable.

### Parameters

**sensor\_name** (STRING): Sensor name.

## monitor.raid.events

### monitor.raid.brokenDisk

### Severity

ERROR

### Description

This message occurs when the monitor detects a broken disk.

### Corrective Action

Replace the disk.

### Syslog Message

%s in RAID group "%s" %s broken.

### Parameters

**type** (STRING): Type of disk.

**rgname** (STRING): Name of the RAID group.

**verb** (STRING): Description of the broken state.

### monitor.raid.reconstruct

### Severity

NOTICE

### Description

This message occurs when a RAID reconstruct is initiated.

### Corrective Action

No user action is required for the reconstruct operation to succeed. Refrain from removing disks from the affected RAID group until reconstruction is completed.



## Syslog Message

Reconstructing broken %s in RAID group "%s".

## Parameters

**type** (STRING): Type of disk.

**rgname** (STRING): RAID group name.

## monitor.raid.reconstruct.susp

### Severity

ERROR

### Description

This message occurs when a RAID reconstruction needs to be performed on a RAID group, but reconstruction is suspended or disabled.

### Corrective Action

Contact NetApp technical support for assistance with reenabling RAID reconstruction.

## Syslog Message

Reconstruction needs to be performed on RAID group "%s", but RAID reconstruction is suspended or disabled.

## Parameters

**rgname** (STRING): RAID group name.

## monitor.raiddp events

### monitor.raiddp.vol.singleDegraded

### Severity

ERROR

### Description

This message occurs as part of an hourly system check when a double parity volume is in single degraded mode. This happens when there is a disk failure in the double parity volume and the RAID subsystem cannot find a suitable replacement disk to start reconstruction.

### Corrective Action

Add a spare disk suitable to reconstruction.

## Syslog Message

%s in RAID group "%s" is broken.

## Parameters

**type** (STRING): Type of disk: data, parity or dparity disk.

**rgname** (STRING): RAID group name.

## monitor.raidtec events

### monitor.raidtec.dbIDegraded

#### Severity

ERROR

#### Description

This message occurs as part of an hourly system check, when a RAID-TEC aggregate is in double degraded mode. This happens when there are two disk failures in any RAID group in the RAID-TEC aggregate and the RAID subsystem cannot find suitable replacement disks to start reconstruction. One more disk failure in the same RAID group leads to the aggregate being in its worst degraded state.

#### Corrective Action

Replace the failed disks, which are identifiable by lighted fault LED lights, to start reconstruction. After reconstruction is complete, the output of the "aggr show" command shows that the aggregate is back to normal state.

#### Syslog Message

%s in RAID group "%s" are broken.

#### Parameters

**type** (STRING): Type of disks: data, parity, dparity, or tparity disk.

**rgname** (STRING): RAID group name.

## monitor.rtchighpower events

### monitor.rtchHighPower

#### Severity

ERROR

#### Description

This message occurs when the real-time clock (RTC) battery voltage is above normal level.

#### Corrective Action

Correct any environmental problems, such as chassis over-temperature. If the real-time clock battery voltage is still above normal 60 minutes after environmental problems have been corrected, replace it at the next available maintenance window.

#### Syslog Message

Real-time clock battery voltage is above normal (%s).

#### Parameters

**reading** (STRING): Battery voltage reading (mV).

## monitor.rtclopower events

## monitor.rtcLowPower

### Severity

ERROR

### Description

This message occurs when the real-time clock (RTC) battery is at a dangerously low power level.

### Corrective Action

Replace the real-time clock battery.

### Syslog Message

Real-time clock battery is dangerously low. Replace it at the next available maintenance window.

### Parameters

(None).

## monitor.rtcnormal events

### monitor.rtcNormal

### Severity

NOTICE

### Description

This message occurs when the real-time clock (RTC) battery voltage is normal. Previously occurred fault is now cleared.

### Corrective Action

(None).

### Syslog Message

Real-time clock battery voltage is normal.

### Parameters

(None).

## monitor.rtcwarnlowpower events

### monitor.rtcWarnLowPower

### Severity

ERROR

### Description

This message occurs when the real-time clock (RTC) battery is at a "warning low" voltage level.

### Corrective Action

Correct any environmental problems, such as chassis over-temperature. If the real-time clock battery voltage is still below normal 60 minutes after environmental problems have been corrected, replace it at the

next available maintenance window.

### **Syslog Message**

Real-time clock battery voltage is below normal (%s).

### **Parameters**

**reading** (STRING): Battery voltage reading (mV).

## **monitor.shelf events**

### **monitor.shelf.accessError**

#### **Severity**

ALERT

#### **Description**

This message occurs when the monitor detects that a disk shelf access error has occurred. The message is also an hourly reminder that the error has not been corrected. Enclosure Services is unable to monitor or control one or more disk shelves on a particular Fibre Channel loop or Serial SCSI Attach (SAS) domain because it cannot communicate with the enclosure services processes in those shelves.

#### **Corrective Action**

Check the corrective actions of enclosure services error messages that might precede this error in the log. Ensure that all loop or domain connections are latched and secured properly. Correct any error conditions indicated by LEDs on any of the shelves or shelf I/O modules. This might require power-cycling of shelves or replacement of modules, as is appropriate to the particular shelf type.

### **Syslog Message**

Enclosure services has detected an error in access to shelves on channel %s.

### **Parameters**

**channel** (STRING): Adapter slot or switch port that has detected the fault; for example, "7a" or "myswitch:5".

### **monitor.shelf.accessError.ok**

#### **Severity**

NOTICE

#### **Description**

This message occurs when the monitor detects that a previously detected shelf access error has been corrected.

#### **Corrective Action**

(None).

### **Syslog Message**

Enclosure services-detected shelf access error has been corrected on channel %s.

### **Parameters**

**channel** (STRING): Adapter slot or switch port where the error was corrected.

## monitor.shelf.configError

### Severity

ALERT

### Description

This message occurs when the Enclosure Services process notifies the monitor of a disk shelf configuration error. The message is also an hourly reminder that the error has not been corrected. Configuration errors might cause Enclosure Services to be unable to monitor a disk shelf, or might indicate shelf configuration or interconnect problems; for example, too few power supplies in a disk shelf, or improper mixing of modules in a shelf or on a loop.

### Corrective Action

See the EMS message concerning disk shelf configuration errors that preceded the first instance of this message, and follow the corrective actions therein.

### Syslog Message

Enclosure services has detected an error in access to shelves or shelf configuration on channel %s.

### Parameters

**channel** (STRING): Adapter slot or switch port that has detected the fault; for example, "7a" or "myswitch:5".

## monitor.shelf.configError.ok

### Severity

NOTICE

### Description

This message occurs when the monitor detects that a previously detected shelf configuration error has been corrected.

### Corrective Action

(None).

### Syslog Message

Enclosure services-detected configuration error has been corrected on channel %s.

### Parameters

**channel** (STRING): Adapter slot or switch port where the fault existed.

## monitor.shelf.fault

### Severity

ALERT

### Description

This message occurs when the system detects a critical disk shelf fault. It is also an hourly reminder that the condition has not been corrected.

## Corrective Action

Check the event log for more specific shelf error messages, and follow the corrective actions there. Use the "storage shelf show" and "storage shelf show -errors" commands to display the current shelf status.

## Syslog Message

Critical fault reported on disk storage shelf attached to channel %s. Check fans, power supplies, disks, and temperature sensors.

## Parameters

**channel** (STRING): Adapter slot or switch port that has detected the fault; for example, "7a" or "myswitch:5".

## monitor.shelf.fault.ok

### Severity

NOTICE

### Description

This message occurs when the monitor detects that a previously detected shelf fault has been corrected.

### Corrective Action

(None).

### Syslog Message

Fault previously reported on disk storage shelf attached to channel %s has been corrected.

### Parameters

**channel** (STRING): Adapter slot or switch port where the error has been corrected; for example, "7a" or "myswitch:5".

## monitor.shelf.warning

### Severity

ERROR

### Description

This message occurs when the system detects a disk shelf warning. It is also an hourly reminder that the condition has not been corrected.

### Corrective Action

Check the messages log for more specific shelf error messages, and follow the corrective actions there.

### Syslog Message

Fault reported on disk storage shelf attached to channel %s. Check fans, power supplies, disks, and temperature sensors.

### Parameters

**channel** (STRING): Adapter slot or switch port that has detected the fault; for example, "7a" or "myswitch:5".

# monitor.shutdown.events

## monitor.shutdown.brokenDisk

### Severity

EMERGENCY

### Description

This message occurs when an automatic shutdown sequence is initiated due to a degraded RAID group that cannot be reconstructed because there are insufficient appropriate spare disks. The timeout period is specified by the "raid.timeout" option, which must be set by user to a nonzero value in order for the system to shutdown on expiry of the timeout period. If the option is not set or is set to zero, then system will not shut down due to a degraded RAID group.

### Corrective Action

To recover from the shutdown, boot the system. Ensure that there are sufficient spare disks of the appropriate type so that the degraded RAID group can be reconstructed.

### Syslog Message

%s in RAID group "%s" %s broken. Halting system now.

### Parameters

**type** (STRING): Type of disk.  
**rgname** (STRING): RAID group name.  
**verb** (STRING): Description of the broken state.

## monitor.shutdown.brokenDisk.pending

### Severity

NOTICE

### Description

This message occurs when an automatic shutdown sequence has been postponed due to RAID reconstruction.

### Corrective Action

(None).

### Syslog Message

%s in RAID group "%s" %s broken. Halting system in %d hour%s.

### Parameters

**type** (STRING): Type of disk.  
**rgname** (STRING): RAID group name.  
**verb** (STRING): Description of the broken state.  
**countdown** (INT): Number of hours remaining to shutdown.  
**plural** (STRING): Plural character.

## monitor.shutdown.cancel

**Severity**

NOTICE

**Description**

This message occurs when an automatic shutdown sequence is canceled.

**Corrective Action**

(None).

**Syslog Message**

Automatic shutdown sequence canceled.

**Parameters**

(None).

**monitor.shutdown.cancel.brokenDisk****Severity**

NOTICE

**Description**

This message occurs when an automatic shutdown sequence has been postponed due to RAID reconstruction

**Corrective Action**

(None).

**Syslog Message**

%s in RAID group "%s" %s broken. Halt delayed until %s finishes.

**Parameters**

**type** (STRING): Type of disk.

**rgname** (STRING): RAID group name.

**verb** (STRING): Description of the broken state.

**reason** (STRING): Reason that the shutdown was postponed. Possible reasons are "RAID reconstruction" and "parity recomputation".

**monitor.shutdown.cancel.nvramLowBatteries****Severity**

NOTICE

**Description**

This message occurs when an automatic shutdown sequence has been postponed due to RAID reconstruction.

**Corrective Action**

(None).

**Syslog Message**

NVRAM batteries are dangerously low. Halt delayed until %s finishes.



## Parameters

**reason** (STRING): Reason that the shutdown was postponed. Possible reasons are "RAID reconstruct" and "parity recomputation".

## monitor.shutdown.cancel.nvramLowBattery

### Severity

NOTICE

### Description

This message occurs when an automatic shutdown sequence has been postponed due to RAID reconstruction

### Corrective Action

(None).

### Syslog Message

NVRAM battery is dangerously low. Halt delayed until %s finishes.

## Parameters

**reason** (STRING): Reason that the shutdown was postponed. Possible reasons are "RAID reconstruct" and "parity recomputation".

## monitor.shutdown.chassisOverTemp

### Severity

EMERGENCY

### Description

This message occurs when the chassis temperature is too hot. This is sent just before shutdown.

### Corrective Action

Ensure that sufficient cooling air is being supplied to the chassis and that the air inlets and outlets of the unit are not blocked.

### Syslog Message

Chassis temperature is too hot: %s

## Parameters

**describe\_toohot** (STRING): Description of the condition.

## monitor.shutdown.chassisUnderTemp

### Severity

ERROR

### Description

This message occurs when the system is shutting down because chassis temperature is too cold.

**Corrective Action**

The appliance is in an environment that is too cold. Find a way to warm the environment around the appliance.

**Syslog Message**

Chassis temperature is too cold: %s

**Parameters**

**describe\_toocold** (STRING): Description of the condition.

**monitor.shutdown.emergency****Severity**

EMERGENCY

**Description**

This message occurs when ONTAP® initiates an emergency shutdown.

**Corrective Action**

Correct the condition noted in the reason field.

**Syslog Message**

Emergency shutdown: %s

**Parameters**

**reason** (STRING): Reason for the shutdown.

**monitor.shutdown.ioexpansionOverTemp****Severity**

EMERGENCY

**Description**

This message occurs when the I/O expansion module is too hot. This message is sent just before shutdown.

**Corrective Action**

The system environment is too hot; cool the environment.

**Syslog Message**

I/O expansion module is too hot: %s

**Parameters**

**describe\_toohot** (STRING): Reading and state of the temperature sensors on the I/O expansion module.

**monitor.shutdown.ioexpansionUnderTemp****Severity**

EMERGENCY

## Description

This message occurs when the I/O expansion module is too cold. This message is sent just before shutdown.

## Corrective Action

The system environment is too cold; warm the environment.

## Syslog Message

I/O expansion module is too cold: %s

## Parameters

**describe\_toocold** (STRING): Reading and state of the temperature sensors on the I/O expansion module.

## monitor.shutdown.nvramLowBatteries

### Severity

EMERGENCY

### Description

This message occurs when the NVRAM power in a controller with multiple NVRAM batteries is dangerously low, and ONTAP® initiates a shutdown to protect user data.

### Corrective Action

Replace the controller NVRAM batteries.

### Syslog Message

Emergency shutdown: NVRAM batteries dangerously low in degraded mode. Replace the batteries immediately!

### Parameters

(None).

## monitor.shutdown.nvramLowBatteries.pending

### Severity

ALERT

### Description

This message occurs when an automatic shutdown sequence is pending because of low NVRAM batteries voltage.

### Corrective Action

Replace the controller NVRAM batteries.

### Syslog Message

NVRAM batteries are dangerously low. Halting system in %d hour%s. Replace the batteries immediately!

### Parameters

**countdown** (INT): Hours remaining until shutdown.

**plural** (STRING): Grammatical number.

## monitor.shutdown.nvramLowBattery

### Severity

EMERGENCY

### Description

This message occurs when the controller NVRAM voltage is dangerously low, and ONTAP® initiates a shutdown to protect user data.

### Corrective Action

Replace the controller NVRAM battery.

### Syslog Message

Emergency shutdown: NVRAM battery dangerously low in degraded mode. Replace the battery immediately!

### Parameters

(None).

## monitor.shutdown.nvramLowBattery.pending

### Severity

ALERT

### Description

This message occurs when an automatic shutdown sequence is pending because of low NVRAM battery voltage.

### Corrective Action

Replace the controller NVRAM battery.

### Syslog Message

NVRAM battery is dangerously low. Halting system in %d hour%s. Replace the battery immediately!

### Parameters

**countdown** (INT): Hours remaining until shutdown.

**plural** (STRING): Grammatical number.

## monitor.sparelabelcheckfailed events

### monitor.spareLabelCheckFailed

### Severity

NOTICE

### Description

This message occurs when the system detects that a hot spare disk has an invalid or a missing label. The system corrects the situation by rewriting the label.

## Corrective Action

No user action is required.

## Syslog Message

Periodic check of hot spare %s has failed. The system will correct the problem.

## Parameters

**disk\_info** (STRING): Formatted information of the disk object.  
**label\_block\_num** (INT): Label block number code.  
**label\_state** (INT): Label state code.  
**label\_read\_error** (INT): Label read error code.  
**shelf** (STRING): Disk shelf identifier where the disk is located.  
**bay** (STRING): Disk bay within the disk shelf where the disk is located.  
**vendor** (STRING): Name of the vendor of the disk.  
**model** (STRING): Model string of the disk.  
**firmware\_revision** (STRING): Firmware revision number of the disk.  
**serialno** (STRING): Serial number of the disk.  
**disk\_type** (INT): Type of disk.  
**disk\_rpm** (STRING): Rotational speed of the disk in RPM.

# monitor.temp events

## monitor.temp.unreadable

### Severity

ERROR

### Description

This message occurs when the controller module temperature is not readable. In this condition, the system does not automatically shut down if it becomes too hot for reliable operation.

### Corrective Action

Shut down the system and power-cycle the controller module. If the temperature is still not readable, replace the controller module.

### Syslog Message

The controller temperature (%s) is not readable.

### Parameters

**sensor\_name** (STRING): Sensor name.

# monitor.unknown events

## monitor.unknown.message

### Severity

ERROR

### Description

This message occurs when the status monitor receives an unexpected message type. This is an internal

error.

### Corrective Action

(None).

### Syslog Message

Internal error: status monitor received message type %d, expected type %d

### Parameters

**msgType** (INT): (None).

**expectedType** (INT): (None).

## monitor.vol events

### monitor.vol.full.inc.sav

#### Severity

ALERT

#### Description

This message occurs when one or more file systems are full, typically indicating at least 98% full. This event is accompanied by global health monitoring messages. Space usage is computed based on the active file system size as well as all of the space saved by storage efficiency features. This value is computed by subtracting the value of the "Snapshot Reserve" field, and is equivalent to the "logical-used" field of the "volume show-space" command. The volume can be over 100% full due to space used or including savings by storage efficiency features or reserved by metadata. A value greater than 100% can cause the volume to become logically overallocated. See the "vol.log.overalloc.inc.sav" event message for more information.

#### Corrective Action

Create space by increasing the volume size, deleting data, or deleting Snapshot copies. To increase volume size, use the "volume size" command. To delete Snapshot copies, use the "volume snapshot delete" command.

#### Syslog Message

%s %s%s%s (UUID %s) is full (reserved or using %d%% of space including savings and %d%% of inodes).

#### Parameters

**object\_type** (STRING): Identifier for the type of object to which this event applies. This event should be applicable only to volumes with logical space enforcement enabled.

**name** (STRING): Name of this object.

**app** (STRING): Application Universally Unique ID (UUID).

**vserver\_uuid** (STRING): UUID of the object's or volume's Vserver.

**object\_uuid** (STRING): UUID of the object or volume.

**percent\_full\_blocks** (INT): Used capacity of the space of the object, as a percentage.

**percent\_full\_inodes** (INT): Used capacity of inodes of the object, as a percent.

### monitor.vol.nearFull.inc.sav

#### Severity

ALERT

## Description

This message occurs when one or more file systems are nearly full, typically indicating at least 95% full. This event is accompanied by global health monitoring messages. Space usage is based on the active file system size as well as all of the space saved by storage efficiency features. This value is computed by subtracting the value of the "Snapshot Reserve" field, and is equivalent to the "logical-used" field of the "volume show-space" command.

## Corrective Action

Create space by increasing the volume size, deleting data, or deleting Snapshot copies. To increase volume size, use the "volume size" command. To delete Snapshot copies, use the "volume snapshot delete" command.

## Syslog Message

%s %s%s%s (UUID %s) is nearly full (reserved or using %d%% of space including savings and %d%% of inodes).

## Parameters

**object\_type** (STRING): Identifier for the type of object to which this event applies. This event should be applicable only to volumes with logical space enforcement enabled.

**name** (STRING): Name of this object.

**app** (STRING): Application Universally Unique ID (UUID).

**vserver\_uuid** (STRING): UUID of the object's or volume's Vserver.

**object\_uuid** (STRING): UUID of the object or volume.

**percent\_full\_blocks** (INT): Used capacity of the space of the object, including space saved by the storage efficiency features, as a percentage.

**percent\_full\_inodes** (INT): Used capacity of inodes of the object, as a percentage.

# monitor.volume events

## monitor.volume.nearlyFull

### Severity

ERROR

### Description

This message occurs when one or more file systems are nearly full, typically indicating at least 95% full. This event is accompanied by global health monitoring messages for the customer. The space usage is computed based on the active file system size and is computed by subtracting the value of the "Snapshot Reserve" field from the value of the "Used" field of the "volume show-space" command.

### Corrective Action

Create space by increasing the volume or aggregate sizes, or by deleting data or deleting Snapshot® copies. To increase a volume's size, use the "volume size" command. To delete a volume's Snapshot® copies, use the "volume snapshot delete" command. To increase an aggregate's size, add disks by using the "storage aggregate add-disks" command. Aggregate Snapshot® copies are deleted automatically when the aggregate is full.

### Syslog Message

%s %s%s%s is nearly full (using or reserving %s%% of space and %s%% of inodes).

## Parameters

**object\_type** (STRING): Identifier for the type of object to which this event applies (aggregate or volume).

**name** (STRING): Name of this object.

**app** (STRING): Application UUID.

**vserver\_uuid** (STRING): Universal Unique ID (UUID) of the object's Vserver, if the object is a volume.

Otherwise, this string is empty.

**percent\_full\_blocks** (STRING): Used capacity of the space of the object, as a percent.

**percent\_full\_inodes** (STRING): Used capacity of inodes of the object, as a percent.

# monitor.weeklystatsasup events

## monitor.weeklyStatsASUP.off

### Severity

ERROR

### Description

This message occurs when weekly performance AutoSupport(tm) is disabled.

### Corrective Action

Enable the weekly performance AutoSupport by entering the "options stats.autosupport.weekly.enable on" command. You must have the correct privilege to run this command.

### Syslog Message

Weekly performance AutoSupport has been disabled.

### Parameters

(None).



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