



monitor events

ONTAP 9.11.1 EMS reference

NetApp
February 12, 2024

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 wafliron 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 wafliron commit VOL" command to commit the changes or the "aggr wafliron 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.dblDegraded

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.rtclowpower 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 has been initiated due to a degraded RAID group that cannot be reconstructed because there are not enough appropriate spare disks. The timeout period is specified by the "raid.timeout" option, which defaults to 24 hours.

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.

rname (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).

Copyright information

Copyright © 2024 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.