NetApp

callhome events

ONTAP EMS reference

NetApp
November 22, 2024

Table of Contents

callhome events

callhome.aggr events

callhome.aggr.meta.repair

Severity

ERROR

Description

This message occurs after WAFL® Iron (wafliron) detects and repairs corruption in an aggregate metafile. Wafliron is a detection and repair process. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Wafliron might need to be run on other volumes in aggregate or complete aggregate. Check for wafl.iron.cont.corrupt messages in the node's event log to find other corrupt volumes. Run wafliron on all corrupt volumes. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for WAFLIRON AGGREGATE METAFILE REPAIRED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.aggr.offline

Severity

ALERT

Description

This message occurs when an aggregate is inconsistent and is taken offline. The inconsistency might stem from one or more sources and might be related to previous operations or to current operations. Disabling access is a protective measure to ensure that further inconsistencies are avoided. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If the operating environment for the system, storage, or associated cabling has changed in terms of temperature, humidity, vibration, unstable electrical power, or other physical factors, gracefully shut down and power off the system until the environment is restored to normal operations. If the operating environment has not changed, identify the source of the inconsistency by checking for previous errors and warnings. Also check for hardware statistics from Fibre Channel, SCSI, disk drives, other communications mechanisms, and previous administrative activities. Another approach is to consult with NetApp technical support (it is recommended that you do so before attempting this step), and then run WAFL® Iron (wafliron) on the aggregate to identify and optionally repair the inconsistency. If you need further assistance, contact NetApp technical support.

Syslog Message

Call home for AGGREGATE INCONSISTENT AND TAKEN OFFLINE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.aggr.restricted

Severity

ERROR

Description

This message occurs when a medium error is encountered during a reconstruction. Medium errors during reconstruction automatically invoke wafliron if your system's 'raid.reconstruct.wafliron.enable' option is set to "on". If the option is set to "off", the aggregate is moved offline. In this case, the option was set to "off" and the aggregate was moved offline. The failed disk drive's reconstruction continues and the aggregate stays offline until you repair it. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Run wafliron manually to bring this aggregate online. It is recommended that you contact NetApp technical support before attempting this. If you need further assistance, contact NetApp technical support.

Syslog Message

Call home for MEDIUM ERROR DURING RECONSTRUCTION (aggregate restricted)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.aggr.wafliron

Severity

ERROR

Description

This message occurs when a medium error is encountered during a reconstruction. Medium errors during reconstruction automatically invoke wafliron if your system's 'raid.reconstruct.wafliron.enable' option is set to "on". If the option is set to "off", the aggregate is moved offline. In this case, the option was set to "on" and the aggregate remains online. The failed disk drive's reconstruction continues and wafliron begins repairing the aggregate. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

The corrective process of running wafliron has already begun. Wait until you see a message indicating that the wafliron process is complete and the inconsistency status of the aggregate is cleared. If this doesn't happen, or if you see subsequent error messages, contact NetApp technical support. If you need assistance in bringing the aggregate online, contact NetApp technical support.

Syslog Message

Call home for MEDIUM ERROR DURING RECONSTRUCTION (wafliron started)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.andu events

callhome.andu.completed

Severity

NOTICE

Description

This message occurs when the automated update of the cluster has been completed. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.andu.pausederr

Severity

ALERT

Description

This message occurs when the automated update of the cluster has been paused due to an error. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

The automated update of the cluster has been paused due to an error. Determine the cause of the error by using the "cluster image show-update-progress" command. Correct the cause of the error, and then issue the "cluster image resume-update" command to continue the automated update of the cluster.

Syslog Message

(None).

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multinode AutoSupport.

callhome.appdm events

callhome.appdm.snaprest.fail

Severity

ALERT

Description

This message occurs when the Application Data Management feature encounters an error while attempting to restore an application from a Snapshot copy. If your system is configured to do so, it generates and transmits an AutoSupport (or "call home") message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the "application snapshot show -vserver <vserver> -application <app> -protection-group <pg>" command to determine if the snapshot exists. If it does, retry the operation. Contact NetApp technical support for assistance with reviewing the event log to determine the cause of the application snapshot restore failure.

Syslog Message

Call home for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.
vserver_name (STRING): Vserver name related to this event.
application_name (STRING): Application name related to this event.
protection_group_name (STRING): Protection group name related to this event.
snapshot_name (STRING): Snapshot name related to this event.

callhome.arw events

callhome.arw.activity.seen

Severity

ALERT

Description

This message occurs when ransomware activity is detected. To protect the data, a Snapshot copy has been created, which can be used to restore the original data. If your system is configured to do so, it generates and transmits an AutoSupport (or "call home") message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Refer to the anti-ransomware documentation to take remedial measures for ransomare activity. If you need assistance, contact NetApp technical support.

Syslog Message

Call-home message for %s

Parameters

> **subject** (STRING): AutoSupport subject or title for this event.
> **volName** (STRING): Name of the volume.
> **volUuid** (STRING): UUID of the volume.
> **vserverName** (STRING): Name of the Vserver.
> **vserverUuid** (STRING): UUID of the Vserver.

callhome.bad events

callhome.bad.ram

Severity

> ERROR

Description

> This message occurs when correctable ECC errors are masked off, possibly due to bad or poorly seated memory or a faulty motherboard. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

> If anyone recently installed memory, try removing and reseating it. If problems persist, replace the memory module. If problems still persist, replace the motherboard. If you need assistance, contact NetApp technical support.

Syslog Message

> Call home for POSSIBLE BAD RAM

Parameters

> **subject** (STRING): AutoSupport subject or title for this event.

callhome.battery events

callhome.battery.failure

Severity

> EMERGENCY

Description

> This message occurs when the battery is either incapable of maintaining data during a power-outage, or is experiencing a failure that poses a physical threat. To prevent data loss and/or damage, the system will shut down momentarily. If your system is configured to do so, it generates and transmits an AutoSupport(tm) (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

> Correct any environmental issues, such as a high ambient temperature. If the condition persists, replace the NVRAM card/battery. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s CRITICAL.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.battery.low

Severity

ALERT

Description

This message occurs when the NVRAM battery capacity is critically low. If your system is configured to do so, it generates and transmits an AutoSupport® (or 'call home') message to NetApp® technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the "system node environment sensors show" command to view the battery's current status, capacity, and charging state. If the battery was recently replaced or the system was nonoperational for an extended period of time, monitor the battery to verify that it is charging properly. If the battery run time continues to decrease below critical levels, the storage system will automatically shut down. Contact NetApp technical support for assistance.

Syslog Message

Call home for BATTERY_LOW.

Parameters

subject (STRING): AutoSupport subject or title for this event.
object_type (STRING): Type of resource object under notification. For this EMS, the object_type will always be NODE.
object_uuid (STRING): UUID of the resource object. For this EMS, the UUID will be of the node.

callhome.battery.notice

Severity

NOTICE

Description

This message occurs when the battery is operating near the limit of its supported environment. If your system is configured to do so, it generates and transmits an AutoSupport(tm) (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Correct any environmental issues, such as a high ambient temperature. If the condition persists, replace the NVRAM card/battery in the next three months. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s NOTICE.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.battery.overchg

Severity

ALERT

Description

This message occurs when the NVRAM card lithium battery is overcharged and is at risk of failure. The system is currently serving data but will shut down shortly. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Replace the NVRAM card/battery and start the system back up. The system will not boot with the battery in this state. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for BATTERY OVERCHARGED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.battery.overtemp

Severity

ALERT

Description

This message occurs when the sensor for the NVRAM card lithium battery over the intended temperature limit. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If the system is excessively warm, allow it to cool gradually. If the battery temperature is still too high, replace the battery pack. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for BATTERY OVERTEMP

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.battery.warning

Severity

ALERT

Description

This message occurs when the battery is operating outside the limit of its supported environment. Under these conditions, the battery might not be capable of maintaining data during a power-loss event. To prevent data loss, the system will automatically shut down in 24 hours. If your system is configured to do so, it generates and transmits an AutoSupport(tm) (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Correct any environmental issues, such as a high ambient temperature. If the condition persists, replace the NVRAM card/battery. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s WARNING.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.bcom events

callhome.bcom.vsinit.failed

Severity

ALERT

Description

This message occurs when multiple attempts to initialize the SAN Kernel Agent for a Vserver have failed. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the "cluster kernel-service show" (advanced) command to verify the cluster kernel quorum service is "in-quorum" on the source node. Contact NetApp technical support for assistance determining the root cause of the failed Vserver initialization.

Syslog Message

Call home for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.
source (STRING): The name of the node that failed to initialize.
vserver (STRING): The name of the Vserver that failed to initialize.
vserver_uuid (STRING): The UUID of the Vserver that failed to initialize.
error (STRING): The error of the last failed initialization.

callhome.bdfu events

callhome.bdfu.suspended

Severity
ALERT

Description
This message occurs when drive unlock fails for firmware download on a FIPS-certified NetApp Storage Encryption SAS drive.

Corrective Action
Contact NetApp technical support for assistance with restoring valid authentication keys on the disk.

Syslog Message
Call home for %s.

Parameters
subject (STRING): AutoSupport subject or title for this event.

callhome.bootfs events

callhome.bootfs.chkdsk

Severity
ALERT

Description
This message occurs when a consistency check of the boot media (compact flash or other type) has shown a problem and has not been corrected automatically. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action
The boot media should be reformatted and/or replaced. After corrective steps have been taken, the "bootfs chkdsk" command should be used to confirm the recovery has been successful. If you need assistance, contact NetApp technical support.

Syslog Message
Call home for BOOTFS CHKDSK

Parameters
subject (STRING): AutoSupport subject or title for this event.

callhome.bridge events

callhome.bridge.reboot.unexp

Severity
ALERT

Description

This message occurs when a bridge reboots unexpectedly. If your system is configured to do so, it generates and transmits an AutoSupport(tm) (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Analyze the bridge event log to determine the cause of the reboot. If you need further assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
bridgeName (STRING): Name of the bridge.
bridgeVendor (STRING): Vendor name of the bridge.
bridgeModel (STRING): Model name of the bridge.
bridgeRevision (STRING): Firmware revision of the bridge.
bridgeSerialNum (STRING): Serial number of the bridge.
rebootReason (STRING): Reason for the bridge reboot.

callhome.c events

callhome.c.fan

Severity

ERROR

Description

This message occurs when there is an unexpected decrease in a chassis fan's spin rate, possibly due to a slight decrease in revolutions or to a failed chassis fan. A failed chassis fan can lead to overheating and can cause damage to your equipment. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Check the chassis fan to determine whether it is spinning. Replace the chassis fan if it failed or is not operating correctly. You might need to replace the motherboard to replace the chassis fan. If a slight decrease in revolutions seems to have caused this event, and if this has not happened often, you do not need to replace the chassis fan. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.c.fan.fru.degraded

Severity

ERROR

Description

This message occurs when a chassis fan might be operating in a degraded state. This condition can lead to overheating and can cause damage to your equipment. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Check the chassis fan to determine whether it is spinning. Replace the chassis fan if it failed or is not operating correctly. You might need to replace the motherboard to replace the chassis fan. A slight decrease in revolutions might have caused this event. If this seems to be the case and has not happened often, you do not need to replace the chassis fan. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.c.fan.fru.fault

Severity

ERROR

Description

This message occurs when a chassis fan might have failed. This failure can lead to overheating and can cause damage to your equipment. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Check the chassis fan to determine whether it is spinning. Replace the chassis fan if it failed or is not operating correctly. You might need to replace the motherboard to replace the chassis fan. A slight decrease in revolutions might have caused this event. If this seems to be the case and has not happened often, you do not need to replace the chassis fan. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.c.fan.fru.rm

Severity

ERROR

Description

This message occurs when a chassis fan is removed. You have two minutes to install a replacement chassis fan or the system shuts down automatically to avoid overheating. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Install a replacement chassis fan within two minutes of removing the original to complete the hot-swap. Otherwise, install the replacement chassis fan when you are ready. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.c.fan.fru.shut

Severity

ERROR

Description

This message occurs when multiple chassis fans have failed. This failure can lead to overheating and can cause damage to your equipment. It is sent just before the system shutdown. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Check the chassis fans to determine whether they are spinning. Replace the chassis fans if any have failed or they are not operating correctly. You might need to replace the motherboard to replace the chassis fans. A slight decrease in revolutions might have caused this event. If this seems to be the case and has not happened often, you do not need to replace the chassis fan. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.carrier events

callhome.carrier.fault

Severity

ERROR

Description

This message occurs when all the disks in the carrier, that contains more than one disk in it, have failed. The carrier should be replaced. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Locate the carrier with the failed disks by looking for the carrier whose amber LED is on and the green LED does not indicate any disk activity. Replace the carrier with the failed disks. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ch events

callhome.ch.ps.degraded

Severity

ERROR

Description

This message occurs when a degraded chassis power supply unit (PSU) state exists. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

You might need to replace a chassis PSU. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ch.ps.fan.bad.xmin

Severity

EMERGENCY

Description

This message occurs when a power supply fan has been detected as no longer working and the overheating is expected shortly. If your system is configured to do so, it generates and transmits an

AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Replace the power supply unit or the power supply unit's fan. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ch.ps.fault

Severity

ERROR

Description

This message occurs when one chassis power supply unit (PSU) fails. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

You might need to replace a chassis PSU. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ch.ps.wrong.in

Severity

ERROR

Description

This message occurs when a power supply is not connected to the correct type of power source (voltage, amperage, type, etc. difference). If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Connect the power supply to the proper power source or replace the power supply with the appropriate one for the available power source. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.chassis events

callhome.chassis.hitemp

Severity

ERROR

Description

This message occurs when the chassis temperature is too warm and might cause an environmental problem, or when there is faulty hardware in the system, such as a fan failure or a malfunctioning temperature sensor. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Evaluate the environment in which your system is operating and identify whether the problem is environmental or hardware-related. Your system should be in a room with an operating temperature of 18C to 24C (65F to 75F). If faulty hardware caused the error, such as a bad temperature sensor or a broken fan, replace the faulty part as soon as possible. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for CHASSIS OVER TEMPERATURE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.chassis.overtemp

Severity

EMERGENCY

Description

This message occurs when the chassis temperature is too hot. It is sent just before system shutdown and indicates a potential environmental problem or faulty hardware in the system, such as a fan failure or a malfunctioning temperature sensor. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Evaluate the environment in which your system is operating and identify whether the problem is environmental or hardware-related. Your system should be in a room with an operating temperature of 18C to 24C (65F to 75F). If the environment is too hot, shut down and power off your system until the environmental conditions are restored to the normal operating temperature range. If faulty hardware caused the error, such as a bad temperature sensor or a broken fan, replace the faulty part as soon as possible. If

you need assistance, contact NetApp technical support.

Syslog Message

Call home for CHASSIS OVER TEMPERATURE SHUTDOWN

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.chassis.power

Severity

ERROR

Description

This message occurs when power is in a degraded state because of bad power supply units (PSUs), bad wall power, or bad components on the motherboard. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If spare PSUs are available, try exchanging them to see whether that alleviates the problem. If not, you might need to replace motherboard components or the motherboard. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.chassis.power.down

Severity

ERROR

Description

This message occurs when voltage and other power sensors for the system power show critical values. A power supply unit (PSU) might have failed or the sensors might be malfunctioning. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Replace the faulty hardware. Most likely, you need to replace a PSU. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

    subject (STRING): AutoSupport subject or title for this event.

callhome.chassis.ps.degraded

Severity

    ERROR

Description

    This message occurs when a degraded chassis power supply unit (PSU) state exists. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

    You might need to replace a chassis PSU. If you need assistance, contact NetApp technical support.

Syslog Message

    Call home for %s

Parameters

    subject (STRING): AutoSupport subject or title for this event.

callhome.chassis.ps.fault

Severity

    ERROR

Description

    This message occurs when one chassis power supply unit (PSU) fails. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

    You might need to replace a chassis PSU. If you need assistance, contact NetApp technical support.

Syslog Message

    Call home for %s

Parameters

    subject (STRING): AutoSupport subject or title for this event.

callhome.chassis.ps.off

Severity

    ERROR

Description

    This message occurs when the system detects that a chassis power supply unit (PSU) is turned off. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to

NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Turn on the chassis PSU to restore normal operations. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.chassis.ps.ok

Severity

NOTICE

Description

This message occurs when the system detects that a chassis power supply unit (PSU) was restored to normal operations. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.chassis.ps.replace

Severity

ERROR

Description

This message occurs when a chassis power supply unit (PSU) fails. The PSU's DC power output was abnormal although the AC input power was within acceptable limits. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Replace the affected chassis PSU. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.chassis.ps.rm

Severity

ERROR

Description

This message occurs when the system detects that a chassis power supply unit (PSU) was removed. You have two minutes to install a replacement chassis PSU or the system shuts down automatically to avoid overheating. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Install a replacement chassis PSU within two minutes of removing the original to complete the hot-swap. Otherwise, install the replacement chassis PSU when you are ready. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.chassis.undertemp

Severity

EMERGENCY

Description

This message occurs when the chassis temperature is too cold. It is sent just before system shutdown and indicates a potential environmental problem or faulty hardware in the system, such as a fan failure or a malfunctioning temperature sensor. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Evaluate the environment in which your system is operating and identify whether the problem is environmental or hardware-related. Your system should be in a room with an operating temperature of 18C to 24C (65F to 75F). If the environment is too cold, shut down and power off your system until the environmental conditions are restored to the normal operating temperature range. If faulty hardware caused the error, such as a bad temperature sensor or a broken fan, replace the faulty part as soon as possible. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for CHASSIS UNDER TEMPERATURE SHUTDOWN

Parameters

    subject (STRING): AutoSupport subject or title for this event.

callhome.checksum events

callhome.checksum

Severity

    ALERT

Description

    This message occurs when the system detects a RAID level checksum error. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

    If you need assistance, contact NetApp technical support.

Syslog Message

    Call home for CHECKSUM ERROR

Parameters

    subject (STRING): AutoSupport subject or title for this event.

callhome.checksum.multiple

Severity

    ALERT

Description

    This message occurs when the system detects a RAID checksum error involving multiple disk drives. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

    If you need assistance, contact NetApp technical support.

Syslog Message

    Call home for CHECKSUM ERROR (multiple disks)

Parameters

    subject (STRING): AutoSupport subject or title for this event.

callhome.clam events

callhome.clam.node.ooq

Severity

EMERGENCY

Description

This message occurs when the Kernel Cluster Services (KCS) Connectivity, Liveness, Availability Monitor (CLAM) determines that one of the nodes is out of "cluster quorum".

Corrective Action

One or more of the following actions may be needed: - Check if the node that is out of quorum is administratively down; if it is, enable it with: "cluster modify -node node_name -eligibility true"; - Check if the node that is out of quorum has panic'ed or hung; if it is, troubleshoot and resolve that problem. - Check the connectivity of the node that is out of quorum to the cluster interconnect. Fix any issues, if needed. - Check if there is a version incompatibility between the node that is out of quorum and the rest of the nodes in the cluster; if there is, upgrade nodes as needed so that they are compatible.

Syslog Message

Call home for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.client events

callhome.client.app.alert

Severity

ALERT

Description

This message occurs when a remote client accesses the node using Manage ONTAP® and triggers an event using the ems-autosupport-log API call with "auto-support" field set to "true". If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Identify and resolve the issue on the remote client that is using the Manage ONTAP API to trigger this event. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.client.app.emerg

Severity

EMERGENCY

Description

This message occurs when a remote client accesses the node using Manage ONTAP® and triggers an event using the ems-autosupport-log API call with "auto-support" field set to "true". If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Identify and resolve the issue on the remote client that is using the Manage ONTAP API to trigger this event. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.client.app.err

Severity

ERROR

Description

This message occurs when a remote client accesses the node using Manage ONTAP® and triggers an event using the ems-autosupport-log API call with "auto-support" field set to "true". If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Identify and resolve the issue on the remote client that is using the Manage ONTAP API to trigger this event. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.client.app.info

Severity

NOTICE

Description

This message occurs when a remote client accesses the node using Manage ONTAP® and triggers an event using the ems-autosupport-log API call with "auto-support" field set to "true". If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Identify and resolve the issue on the remote client that is using the Manage ONTAP API to trigger this event. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.client.app.notice

Severity

NOTICE

Description

This message occurs when a remote client accesses the node using Manage ONTAP® and triggers an event using the ems-autosupport-log API call with "auto-support" field set to "true". If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Identify and resolve the issue on the remote client that is using the Manage ONTAP API to trigger this event. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.clus events

callhome.clus.net.degraded

Severity

ALERT

Description

This message occurs when the cluster network has experienced an issue that could potentially affect connectivity, reliability, redundancy, or performance, as observed from the local node. A degraded cluster network might cause a cluster-wide outage. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

See the EMS event log for additional information related to the issue. If the event_type is "Frequent Link Flapping", check the network cables that are connected to the specified port for any loose connections. If the event_type is "Large MTU Packet Loss", verify cluster switch MTU settings and ensure that all cluster

network ports are configured with the same MTU. If the event_type is "Total Packet Loss", verify all cluster network connectivity and configuration and ensure that all cluster network ports are reachable from one another. If the event_type is "Cluster LIF Not Assigned to Any Port" and the cluster ports are link "down", check the network cables that are connected to the specified port for any loose connnections. Ensure that the cluster ports are administratively configured link "up". If the cluster ports are link "up", attempt to manually migrate the cluster LIF to another cluster port. If the event_type is "Cluster LIF Administratively Down", use the "network interface modify" command to change the status-admin state of the cluster LIF to "up". If the event_type is "Insufficient L2 Reachability", verify that the network topology is correct and the ports are correctly assigned to the right broadcast domain. If the problem persists after correcting any issues, call NetApp technical support.

Syslog Message

Call home for %s: %s - %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
event_type (STRING): The type of the event that signaled that the cluster network might be operating in a degraded state from the perspective of the local node.
event_details (STRING): Details of the event that signaled that the cluster network might be operating in a degraded state from the perspective of the local node.

callhome.clus.vol.cre.fail

Severity

ERROR

Description

This message occurs when the active volume required to store the system data needed for cluster-wide storage cannot be created. This is typically due to not finding an aggregate with the specified size or mirrored attribute to create the volume. The specified feature cannot function without this volume. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Study the error message and take steps to rectify the problem. For example, if the error message indicates that the volume create failed because the aggregate is offline, use the 'aggr online -aggregate' command to bring it back online. If the error message does not indicate an obvious problem, run the 'aggregate show' command to find the state of the aggregate and 'metrocluster check config-replication show-aggregate-eligibility' command to find the eligibility of aggregates for configuration replication. If the aggregate is full, try to create space on it. Otherwise, if possible, create an aggregate with the specified mirror attribute and size by using the 'aggregate create -aggregate name -diskcount diskcount -disksize size -mirror mirrorattribute' command. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s. Could not create volume after %d attempts for feature %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.
AttemptsMade (INT): Count of failed attempts to create the volume.
Feature (STRING): Feature using the cluster-wide storage.
ErrorMessage (STRING): Error message on create failure at time of event generation
Size (STRING): Size of the volume to be created.

Mirror (STRING): Mirrored attribute of the aggregate.

callhome.clus.vol.del.fail

Severity

ERROR

Description

This message occurs when the volumes that were used for cluster-wide storage cannot be deleted. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Study the error message and take steps to rectify the problem. For example, if the error message indicates that the volume delete failed because the aggregate is offline, use the 'aggr online -aggregate aggregate_name' command to bring it back online. If the error message does not indicate an obvious problem, contact NetApp technical support

Syslog Message

Call home for %s. Could not delete volumes "%s" and "%s" for feature %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.
ActiveVolume (STRING): Active volume name.
StandbyVolume (STRING): Standby volume name.
Feature (STRING): Feature using the cluster-wide storage.

callhome.config events

callhome.config

Severity

ALERT

Description

This message occurs when the system detects a disk shelf configuration error for one or more disk shelves. The system continues to report this error until you resolve the problem. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the command "storage errors show" to display outstanding storage errors in the system. Use the "event log show" command to identify earlier EMS messages related to shelf configuration errors. Correct the cause of the configuration error. Common causes of configuration errors are as follows: - A previously attached disk shelf was removed - A loss of disk shelf enclosure services occurred - A disk shelf fan module failed - An invalid disk shelf drive configuration was created - An operating environment temperature was 50C (122F) degrees or higher - A disk shelf environment module failure occurred If you need assistance, contact NetApp technical support.

Syslog Message

Call home for CONFIGURATION_ERROR

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.coredump events

callhome.coredump.save.done

Severity

NOTICE

Description

This message occurs when all the core segments belonging to a coredump have been saved. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the "system node coredump show" command to obtain coredump file details.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
file (STRING): Primary core segment file that was created.
node (STRING): Name of the node whose core was saved.
size (LONGINT): Size of primary core segment in bytes.
chksum (STRING): Checksum of primary core segment file's data.
ancillary_segment_directory (STRING): Directory which holds ancillary core segments.
ancillary_segments (STRING): List of ancillary segments.

callhome.corefile events

callhome.corefile.upload

Severity

NOTICE

Description

This message occurs when you invoke an AutoSupport for corefile upload. This Autosupport collects and sends only the corefile specified as part of the payload. This autosupport is sent only when the transport is set to http or https. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

corefile upload callhome for %s

Parameters

subject (STRING): AutoSupport message subject or title for this event.
URI (STRING): Alternate destination for this AutoSupport message. If this is set, this AutoSupport message is delivered to this alternate destination.
force (INT): This flag indicates this AutoSupport message should be generated and delivered even if the AutoSupport configuration is disabled. If "0" then obey the normal "state" and "support" flags. If this is "1", then ignore the "state" and "support" configuration and deliver as if both "state" and "support" are enabled.
case_number (STRING): Case number to be associated with this coredump AutoSupport message.
core_filename (STRING): Coredump filename to be included in the coredump AutoSupport message.
aod_initiated (INT): This flag indicates that NetApp technical support has remotely requested for this AutoSupport message via AutoSupport OnDemand.
sequence (LONGINT): Sequence number to use to generate this Autosupport. Use value zero to auto-generate or a value higher than last used ASUP sequence number.
aod_req_id (STRING): AOD request ID

callhome.cpu events

callhome.cpu.fan

Severity

ERROR

Description

This message occurs when a CPU fan failed or the fan is spinning too slowly or too fast. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Analyze whether you need to replace the CPU fan. CPU fan replacement might require that you replace the motherboard as well. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.cpu.fan.fault

Severity

ERROR

Description

This message occurs when a CPU fan failed or the fan is spinning too slowly or too fast. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Analyze whether you need to replace the CPU fan. CPU fan replacement might require that you replace the motherboard as well. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.css events

callhome.css.toc.repair

Severity

ALERT

Description

This message occurs when an inconsistency is discovered in a metadata record of the Cloud Storage Service (CSS). The inconsistency is automatically repaired immediately upon detection. But it can leave behind lost objects that are no longer pointed to by the namespace. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

The (privilege: diag) "object-store-server lost-object-recovery start" command can be used to add lost objects back into the namespace. The progress of this operation can be monitored with the "object-store-server lost-object-recovery show" command. If you need further assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ctran events

callhome.ctran.gcror.timeout

Severity

ALERT

Description

This message occurs when the Kernel Cluster Services (KCS) / Cluster Transaction Manager (CTRAN) detects that one or more newly selected Group Coordinators (GCs) are taking too long to successfully complete the GC Ready on Reselect procedure. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Call NetApp technical support immediately for further assistance.

Syslog Message

Call home for GROUP COORDINATOR ROR TIMEOUT.

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi node ASUP.

callhome.ctran.jpc.splitbrain

Severity

ALERT

Description

This message occurs when the Kernel Cluster Services (KCS) / Cluster Transaction Manager (CTRAN) detects that there is a disagreement in the cluster - a split brain - about which node has the Join Proposal Coordinator (JPC). If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Call NetApp technical support immediately for further assistance.

Syslog Message

Call home for CTRAN JPC SPLIT BRAIN DETECTED.

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi node ASUP.

callhome.dafs events

callhome.dafs.nic.stop

Severity

ALERT

Description

This message occurs when the DAFS (Direct Acess File System) NIC (Network Interface Controller) has stopped while DAFS was running. This is caused by a failure of the NIC processor firmware during heavy and complex workloads. DAFS can usually recover and continue. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Reboot the system to recover the NIC. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DAFS VI NIC HALTED - DAFS SERVICE MAY BE INACCESSIBLE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dbs events

callhome.dbs.assign.error

Severity

EMERGENCY

Description

This message occurs when the Distributed Block Store (DBS) assignments reports a validation error. An assignment validation error may indicate that data is inaccessible or data loss has occurred. The DBS is responsible for managing the data that backs the FlexVols®. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact NetApp technical support for assistance.

Syslog Message

Call home for %s, event %s, type %s, service %u, node %u/%s, drive %u/%s, eventID %u.

Parameters

subject (STRING): AutoSupport subject or title for this event.
evtMessage (STRING): Description of the data event, including context details.
evtType (STRING): Type of the original DBS event.
serviceID (INT): Service ID that identifies the associated DBS service. It will be "0" if there is no associated service.
nodeID (INT): Node ID number of the associated node. It will be 0 if there is no associated node.
nodeUuid (STRING): Node UUID of the associated node. It will be zeroes if there is no associated node.
driveID (INT): Drive ID number of the associated drive. It will be 0 if there is no associated drive.
driveUuid (STRING): Drive UUID of the associated drive. It will be zeroes if there is no associated drive.
evtID (INT): DBS event ID number.
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
evtDetails (STRING): Specific details of the DBS data event. It may be a string, in JSON format, or empty.

callhome.dbs.block.repair

Severity

EMERGENCY

Description

This message occurs when the Distributed Block Store (DBS) attempts a new block repair or fails to repair block in maximum number of repair attempts allowed. See event details for more information. The DBS is responsible for managing the data that backs the FlexVols®. Multiple DBS events that indicate inconsistent

data are mapped to this one event. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact NetApp technical support for help immediately.

Syslog Message

Call home for %s, event %s, type %s, service %u, node %u/%s, drive %u/%s, eventID %u.

Parameters

subject (STRING): AutoSupport subject or title for this event.
evtMessage (STRING): Description of the data event, including context details.
evtType (STRING): Type of the original DBS event.
serviceID (INT): Service ID that identifies the associated DBS service. It will be "0" if there is no associated service.
nodeID (INT): Node ID number of the associated node. It will be 0 if there is no associated node.
nodeUuid (STRING): Node UUID of the associated node. It will be zeroes if there is no associated node.
driveID (INT): Drive ID number of the associated drive. It will be 0 if there is no associated drive.
driveUuid (STRING): Drive UUID of the associated drive. It will be zeroes if there is no associated drive.
evtID (INT): DBS event ID number.
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
evtDetails (STRING): Specific details of the DBS data event. It may be a string, in JSON format, or empty.

callhome.dbs.cannot.sync.blk

Severity

EMERGENCY

Description

This message occurs when the Distributed Block Store (DBS) detects the cluster Block data is in a degraded state, and the auto-heal process to restore full Block data redundancy cannot proceed. Block resources need to be added or restored to the cluster. Too many nodes, Block services, FireStorm services or aggregates may be offline; or possibly the cluster Block services are full. The DBS is responsible for managing the data that backs the FlexVols®. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Evaluate the storage capacity of the cluster. If some capacity is currently unavailable due to drives or nodes being offline, attempt the repairs needed to bring them online. Free storage used by FlexVols by deleting unneeded volumes.

Syslog Message

The DBS cluster Block data cannot be made fully redundant.

Parameters

subject (STRING): AutoSupport subject or title for this event.
cfType (STRING): DBS cluster fault type of the associated object.
cfID (INT): DBS cluster fault ID number associated with the fault.

cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).

collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.

cfDetails (STRING): Description of the cluster fault, including context details.

cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.

skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.clcap.full

Severity

EMERGENCY

Description

This message occurs when the Distributed Block Store (DBS) detects the cluster (or node in the cluster) has completely consumed its capacity. The DBS is responsible for managing the data that backs the FlexVols®. The cluster data is now read-only. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Evaluate the available capacity of this cluster relative to its usage. If some capacity is currently unavailable due to drives or nodes being offline, attempt the repairs needed to bring them online. Free storage used by FlexVols by deleting unneeded volumes. If the cluster's available capacity appears inconsistent with the calculated expected capacity, then contact NetApp technical support.

Syslog Message

The DBS cluster capacity is 100%% full.

Parameters

subject (STRING): AutoSupport subject or title for this event.

cfType (STRING): DBS cluster fault type of the associated object.

cfID (INT): DBS cluster fault ID number associated with the fault.

cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).

collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.

cfDetails (STRING): Description of the cluster fault, including context details.

cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.

skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.clcap.near.full

Severity

ALERT

Description

This message occurs when the Distributed Block Store (DBS) detects the cluster (or node in the cluster) has consumed nearly all of its capacity. The DBS is responsible for managing the data that backs the FlexVols®. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Evaluate the available capacity of this cluster relative to its usage. If some capacity is currently unavailable due to drives or nodes being offline, attempt the repairs needed to bring them online. Free storage used by FlexVols by deleting unneeded volumes.

Syslog Message

The DBS cluster capacity is nearly full.

Parameters

subject (STRING): AutoSupport subject or title for this event.
cfType (STRING): DBS cluster fault type of the associated object.
cfID (INT): DBS cluster fault ID number associated with the fault.
cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
cfDetails (STRING): Description of the cluster fault, including context details.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.
skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.clst.ekm.server

Severity

EMERGENCY

Description

This message occurs when the Distributed Block Store (DBS) detects one or more of the following: 1. An External Key Management server cannot be reached by any node and is considered down. 2. A fatal communication error has occured with an External Key Management server. Seek corrective-action immediately.

Corrective Action

Verify that the External Key Management server is running and can be reached by the management network. Verify that the correct root CA certificate and client certificate are configured for the Key Server (use openssl s_client to assist with troubleshooting). Check the logs on the External Key Management server for additional troubleshooting help. Contact NetApp technical support for assistance.

Syslog Message

Callhome for %s. Fault type %s, fault ID %u, status %u, nodes %s. %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
cfType (STRING): DBS cluster fault type of the associated object.

cfID (INT): DBS cluster fault ID number associated with the fault.

cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).

collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.

cfDetails (STRING): Description of the cluster fault, including context details.

cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.

skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.data.unavail

Severity

EMERGENCY

Description

This message occurs when some portion of the Distributed Block Store (DBS) data cannot be accessed. The DBS is responsible for managing the data that backs the FlexVols®. Multiple DBS events that indicate data is unavailable are mapped to this one event. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact NetApp technical support for help immediately.

Syslog Message

Call home for %s, event %s, type %s, service %u, node %u/%s, drive %u/%s, eventID %u.

Parameters

subject (STRING): AutoSupport subject or title for this event.

evtMessage (STRING): Description of the data event, including context details.

evtType (STRING): Type of the original DBS event.

serviceID (INT): Service ID that identifies the associated DBS service. It will be "0" if there is no associated service.

nodeID (INT): Node ID number of the associated node. It will be 0 if there is no associated node.

nodeUuid (STRING): Node UUID of the associated node. It will be zeroes if there is no associated node.

driveID (INT): Drive ID number of the associated drive. It will be 0 if there is no associated drive.

driveUuid (STRING): Drive UUID of the associated drive. It will be zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.

evtDetails (STRING): Specific details of the DBS data event. It may be a string, in JSON format, or empty.

callhome.dbs.dup.master

Severity

EMERGENCY

Description

This message occurs when the Distributed Block Store (DBS) detects an internal database inconsistency. Master services have multiple entries for cluster master candidacy. Manual intervention is required.

Corrective Action

Contact NetApp technical support immediately.

Syslog Message

Callhome for %s. DBS has detected a critical issue. Cluster fault type %s, fault ID %u, status %u, nodes %s. %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
cfType (STRING): DBS cluster fault type of the associated object.
cfID (INT): DBS cluster fault ID number associated with the fault.
cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
cfDetails (STRING): Details of the duplicate master candidates.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.
skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.ekm.cert.emer

Severity

EMERGENCY

Description

This message occurs when the Distributed Block Store (DBS) detects that an External Key Management server configuration contains a certificate that is invalid, is expired, or will expire in less than 3 days. Seek corrective-action immediately.

Corrective Action

Renew or correct each listed certificate and update the associated Key Server configuration. Contact NetApp technical support for assistance.

Syslog Message

Callhome for %s. Fault type %s, fault ID %u, status %u, nodes %s. %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
cfType (STRING): DBS cluster fault type of the associated object.
cfID (INT): DBS cluster fault ID number associated with the fault.
cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
cfDetails (STRING): Description of the cluster fault, including context details.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.
skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.ensemble.emer

Severity

ERROR

Description

This message occurs when the Distributed Block Store (DBS) loses the database connection to over half of the ensemble nodes (of 3 or 5 total). DB quorum has been lost and the DB is down. The cluster cannot operate without access to the DB.

Corrective Action

Bring offline nodes back online and/or restore node network connectivity. If that does not resolve the fault, contact NetApp technical support.

Syslog Message

Callhome for %s. DBS has lost network connectivity or power on ensemble node. Cluster fault type %s, fault ID %u, status %u, nodes %s. %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
cfType (STRING): DBS cluster fault type of the associated object.
cfID (INT): DBS cluster fault ID number associated with the fault.
cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
cfDetails (STRING): Description of the degraded ensemble.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.
skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.ffmAggrFlagSet

Severity

EMERGENCY

Description

This message occurs when the Distributed Block Store (DBS) detects one or more aggrs have a don't attach, don't mount or don't detach flag set.

Corrective Action

Resolve the issue that required the flag to be set, then remove the flag using the SetAggrFlags API command.

Syslog Message

Callhome for %s. Fault type %s, fault ID %u, status %u, nodes %s. %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
cfType (STRING): DBS cluster fault type of the associated object.
cfID (INT): DBS cluster fault ID number associated with the fault.

cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
cfDetails (STRING): Description of the cluster fault, including context details.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.
skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.ffmFlexvolsOffl

Severity
EMERGENCY

Description
This message occurs when the Distributed Block Store (DBS) detects one or more FlexVols are offline.

Corrective Action
Solve any issue contributing to the FlexVols being taken offline.

Syslog Message
Callhome for %s. Fault type %s, fault ID %u, status %u, nodes %s. %s

Parameters
subject (STRING): AutoSupport subject or title for this event.
cfType (STRING): DBS cluster fault type of the associated object.
cfID (INT): DBS cluster fault ID number associated with the fault.
cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
cfDetails (STRING): Description of the cluster fault, including context details.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.
skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.generic.cfault

Severity
EMERGENCY

Description
This message occurs when a Distributed Block Store (DBS) emergency cluster fault is reported as a generic fault. The DBS is responsible for managing the data that backs the FlexVols®. Multiple faults are mapped to this one event. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action
Contact NetApp technical support for interpretation of this event.

Syslog Message

Call home for %s, fault %s (%u), sev %u, service %u, node %u/%s, drives %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.
cfCodeName (STRING): Name of the original DBS cluster fault code.
cfCode (INT): DBS cluster fault code number.
cfSeverity (INT): Severity of the original DBS cluster fault. This is different than the EMS severity.
serviceID (INT): Service ID that identifies the associated cluster service. It will be "0" if there is no associated service.
nodeID (INT): Node ID number of the associated node. It will be "0" if there is no associated node.
nodeUuid (STRING): Node UUID of the associated node. It will be zeroes if there is no associated node.
cfDriveIDs (STRING): List of the drive IDs associated with the fault. The list might be empty.
cfDriveUuids (STRING): List of the drive UUIDs associated with the fault. The list might be empty.
cfType (STRING): DBS cluster fault type of the associated object.
cfID (INT): DBS cluster fault ID number associated with the fault.
cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
cfDetails (STRING): Description of the cluster fault, including context details.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.
skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.inv.block.data

Severity

EMERGENCY

Description

This message occurs when a block stored in the Distributed Block Store (DBS) has inconsistent data. The cluster is checking the compression, block ID and checksum of the block against expected values. The DBS is responsible for managing the data that backs the FlexVols®. Multiple DBS events that indicate inconsistent data are mapped to this one event. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact NetApp technical support for help immediately.

Syslog Message

Call home for %s, event %s, type %s, service %u, node %u/%s, drive %u/%s, eventID %u.

Parameters

subject (STRING): AutoSupport subject or title for this event.
evtMessage (STRING): Description of the data event, including context details.
evtType (STRING): Type of the original DBS event.
serviceID (INT): Service ID that identifies the associated DBS service. It will be "0" if there is no associated service.
nodeID (INT): Node ID number of the associated node. It will be 0 if there is no associated node.

nodeUuid (STRING): Node UUID of the associated node. It will be zeroes if there is no associated node.
driveID (INT): Drive ID number of the associated drive. It will be 0 if there is no associated drive.
driveUuid (STRING): Drive UUID of the associated drive. It will be zeroes if there is no associated drive.
evtID (INT): DBS event ID number.
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
evtDetails (STRING): Specific details of the DBS data event. It may be a string, in JSON format, or empty.

callhome.dbs.mem.thresh.emer

Severity

EMERGENCY

Description

This message occurs when the Distributed Block Store (DBS) detects container memory 100 percent consumed.

Corrective Action

Add additional nodes, or purge deleted volumes and run GC

Syslog Message

Callhome for %s. DBS has detected free memory is completely consumed on a node's container. Cluster fault node %u, node UUID %s, type %s, fault ID %u, status %u, nodes %s. %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
nodeID (INT): Node ID number of the associated node.
nodeUUID (STRING): Node UUID string of the associated node.
cfType (STRING): DBS cluster fault type of the associated object.
cfID (INT): DBS cluster fault ID number associated with the fault.
cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
cfDetails (STRING): Details of the memory usage threshold.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.
skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.multSliceSvcDn

Severity

EMERGENCY

Description

This message occurs when the Distributed Block Store (DBS) detects multiple unhealthy slice services. This may cause some data to be unavailable.

Corrective Action

If multiple slice services are unhealthy, repair offline nodes and drives to bring slice services back online. Contact NetApp technical support.

Syslog Message

Call home for %s. Fault type %s, fault id %u, status %u, nodes %s. %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.
cfType (STRING): DBS cluster fault type of the associated object.
cfID (INT): DBS cluster fault ID number associated with the fault.
cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
cfDetails (STRING): Description of the cluster fault, including context details.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.
skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.node.ekm.server

Severity

EMERGENCY

Description

This message occurs when the Distributed Block Store (DBS) detects that a node is unable to reach an External Key Management server that is not considered down (other nodes are able to reach it). Seek corrective-action immediately.

Corrective Action

Perform troubleshooting at the network or node-specific level to determine why the listed node is unable to reach the External Key Management server. Contact NetApp technical support for assistance.

Syslog Message

Callhome for %s. Cluster fault node %u, node UUID %s, type %s, fault ID %u, status %u, nodes %s. %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
nodeID (INT): Node ID number of the associated node.
nodeUUID (STRING): Node UUID string of the associated node.
cfType (STRING): DBS cluster fault type of the associated object.
cfID (INT): DBS cluster fault ID number associated with the fault.
cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
cfDetails (STRING): Description of the cluster fault, including context details.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.
skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.sec.cache.full

Severity

EMERGENCY

Description

This message occurs when the Distributed Block Store (DBS) detects that Slice volume secondary write cache is full. This is caused when Slice service write requests to the Block service (and by extension the FireStorm service) are not receiving replies. Client write performance may be reduced while this condition exists. The DBS is responsible for managing the data that backs the FlexVols®. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Verify that all nodes are online. Verify that all Block and FireStorm services, and associated aggregates, are online. Attempt repairs needed to bring nodes and aggregates online. If the reason for this condition cannot be found, contact NetApp technical support.

Syslog Message

Call home for %s, service %u, node %u/%s, drives %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.
serviceID (INT): Service ID that identifies the associated cluster service.
nodeID (INT): Node ID number of the associated node.
nodeUuid (STRING): Node UUID of the associated node. It will be zeroes if there is no associated node.
cfDriveIDs (STRING): List of the drive IDs associated with the fault. The list might be empty.
cfDriveUuids (STRING): List of the drive UUIDs associated with the fault. The list might be empty.
cfType (STRING): DBS cluster fault type of the associated object.
cfID (INT): DBS cluster fault ID number associated with the fault.
cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
cfDetails (STRING): Description of the cluster fault, including context details.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.
skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.ssl.ndcert.exc

Severity

EMERGENCY

Description

This message occurs when the Distributed Block Store (DBS) detects that a node has a missing or corrupted certificate.

Corrective Action

Contact NetApp technical support for assistance.

Syslog Message

Callhome for %s. Cluster fault node %u, node UUID %s, type %s, fault ID %u, status %u, nodes %s. %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
nodeID (INT): Node ID number of the associated node.
nodeUUID (STRING): Node UUID string of the associated node.
cfType (STRING): DBS cluster fault type of the associated object.
cfID (INT): DBS cluster fault ID number associated with the fault.
cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
cfDetails (STRING): Description of the cluster fault, including context details.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.
skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.ssl.ndcert.exp

Severity

EMERGENCY

Description

This message occurs when the Distributed Block Store (DBS) detects that a node contains an SSL certificate that has expired or will expire imminently.

Corrective Action

Contact NetApp technical support for assistance.

Syslog Message

Callhome for %s. Cluster fault node %u, node UUID %s, fault type %s, fault ID %u, status %u, nodes %s. %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
nodeID (INT): Node ID number of the associated node.
nodeUUID (STRING): Node UUID string of the associated node.
cfType (STRING): DBS cluster fault type of the associated object.
cfID (INT): DBS cluster fault ID number associated with the fault.
cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
cfDetails (STRING): Description of the cluster fault, including context details.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.
skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.svcap.full

Severity

EMERGENCY

Description

This message occurs when the Distributed Block Store (DBS) detects a service (Slice or Block) that has completely consumed its capacity. The DBS is responsible for managing the data that backs the FlexVols®. The data for this service is now read-only. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Evaluate the available capacity of this service relative to its usage. If some capacity is currently unavailable due to drives or nodes being offline, attempt the repairs needed to bring them online. Free storage used by FlexVols by deleting unneeded volumes. If the services's available capacity appears inconsistent with the calculated expected capacity, then contact NetApp technical support.

Syslog Message

Call home for %s, service %u, node %u/%s, drives %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.
serviceID (INT): Service ID that identifies the associated cluster service.
nodeID (INT): Node ID number of the associated node.
nodeUuid (STRING): Node UUID of the associated node. It will be zeroes if there is no associated node.
cfDriveIDs (STRING): List of the drive IDs associated with the fault. The list might be empty.
cfDriveUuids (STRING): List of the drive UUIDs associated with the fault. The list might be empty.
cfType (STRING): DBS cluster fault type of the associated object.
cfID (INT): DBS cluster fault ID number associated with the fault.
cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
cfDetails (STRING): Description of the cluster fault, including context details.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.
skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.svcap.near.full

Severity

ALERT

Description

This message occurs when the Distributed Block Store (DBS) detects a service (Slice or Block) that has consumed nearly all of its capacity. The DBS is responsible for managing the data that backs the FlexVols®. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Evaluate the available capacity of this service relative to its usage. If some capacity is currently unavailable due to drives or nodes being offline, attempt the repairs needed to bring them online. Free storage used by FlexVols by deleting unneeded volumes.

Syslog Message

Call home for %s, service %u, node %u/%s, drives %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.
serviceID (INT): Service ID that identifies the associated cluster service.
nodeID (INT): Node ID number of the associated node.
nodeUuid (STRING): Node UUID of the associated node. It will be zeroes if there is no associated node.
cfDriveIDs (STRING): List of the drive IDs associated with the fault. The list might be empty.
cfDriveUuids (STRING): List of the drive UUIDs associated with the fault. The list might be empty.
cfType (STRING): DBS cluster fault type of the associated object.
cfID (INT): DBS cluster fault ID number associated with the fault.
cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).
collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.
cfDetails (STRING): Description of the cluster fault, including context details.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.
skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.dbs.volumes.offline

Severity

EMERGENCY

Description

This message occurs when the Distributed Block Store (DBS) detects that one or more volumes in the storage cluster are offline. For the volumes listed, both copies of volume slice data are unavailable. The volumes are degraded and the primary slice service becomes unresponsive, as detected by the Cluster Master. The VolumesDegraded fault will also be present. The DBS is responsible for managing the data that backs the FlexVols®. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Check for network connectivity issues and hardware errors. There should be other faults if specific hardware components have failed. Attempt to resolve these issues. The fault will clear when the primary slice service is responsive. Contact Support if there are no associated hardware faults and this fault persists long enough to affect client applications.

Syslog Message

Call home for %s. One or more DBS volumes offline.

Parameters

subject (STRING): AutoSupport subject or title for this event.

cfType (STRING): DBS cluster fault type of the associated object.

cfID (INT): DBS cluster fault ID number associated with the fault.

cfStatus (INT): Current status of the cluster fault. 1 = New (just reported), 2 = Existing (updated), 3 = Resolved (closed).

collectAsupNodes (STRING): List of the node universal unique identifiers (UUIDs) from which AutoSupport messages should be collected.

cfDetails (STRING): Description of the cluster fault, including context details.

cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.

skip_callhome (INT): If 1, then the ASUP call home was not executed for this event. Call home is only done for newly reported faults (see cfStatus).

callhome.device events

callhome.device.qual

Severity

ALERT

Description

This message occurs when the system detected a disk drive device that did not receive qualification from NetApp. Unqualified disk drives can cause serious damage to the system, and the system shuts down within 72 hours to prevent this potential damage. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

To correct this situation, complete one of the following steps: 1. Download and install the latest Drive Qualification Package (DPQ) from NetApp technical support. This automatically qualifies any disk drives that were provided by NetApp. Search the support site knowledge base for the "DQP" keyword for further information. 2. Remove the unqualified disk drives from the system. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DEVICE_QUALIFICATION_FAILED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.disk events

callhome.disk.carrier.evacuation.notpossible

Severity

ALERT

Description

This message occurs when a system does not contain enough spares to correct existing disk failures. This message is seen only on systems containing disk carriers capable of holding more than one disk. When this message occurs, manual intervention is required because ONTAP® cannot automatically correct the

existing issues with the system's disk configuration. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

To correct this issue on systems that contain carriers with multiple disks, try the following (in the specified order): (1) Assign any unassigned disks that are contained within a multidisk carrier. (2) Add multidisk carriers. (3) If a replacement carrier is available, do the following: a) Fail ALL disks within the carrier. Do not remove a multidisk carrier that contains non-failed disks; doing so results in system degradation and might result in system failure. b) Wait until the disk's amber Attention LEDs stop flashing and are lit continuously. Do not remove a carrier while the shelf OPS panel is alternating between the shelf ID and the Attention Code H1, or while the disks within the carrier are flashing their amber Attention LEDs. c) Replace the carrier. (4) Reassign partner spare disks in the HA configuration. (5) If the problem persists, call NetApp technical support.

Syslog Message

Call home for DISK_CARRIER_EVACUATION_NOTPOSSIBLE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.disk.low.io

Severity

NOTICE

Description

This message occurs when the storage health monitor detected low disk drive throughput. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for DISK_LOW_THRUPUT

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.disk.orphan

Severity

NOTICE

Description

This message occurs when RAID subsystem detects an orphan or broken drive and is processing it. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.diskown events

callhome.diskown.AssignExceeded

Severity

ERROR

Description

This message occurs when too many disks have been installed. An attempt is made to assign more disks than the maximum that can be supported on this node. This problem must be resolved before the system is rebooted. If your system is configured to do so, it generates and transmits an AutoSupport(tm) (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Review the system capacity limits and the assigned disks on this system. If possible, unassign the unused array LUNs. If you need further assistance, contact NetApp technical support.

Syslog Message

Call home for ATTEMPTED TO ASSIGN MORE DISKS THAN MAXIMUM SUPPORTED.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.disks events

callhome.disks.missing

Severity

ERROR

Description

This message occurs when the system detected simultaneously that multiple disk drives were missing from the system. It generated a single "MULTIPLE DISKS MISSING" message rather than multiple "DISK MISSING" messages. The problem might be due to a Fibre Channel loop (connection) or a disk shelf or disk drive operating incorrectly. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If you need assistance, contact NetApp technical support.

Syslog Message

Call home for MULTIPLE DISKS MISSING

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dr events

callhome.dr.apply.failed

Severity

ERROR

Description

This message occurs when all attempts to replicate the configuration fails. If your system is configured to do so, it generates and transmits an AutoSupport(tm) (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

To troubleshoot further, search the event management system (EMS) logs on the destination cluster for events starting with "vsdr". Perform any provided corrective actions. For further assistance, contact NetApp technical support.

Syslog Message

Call home for DR CONFIG REPLICATION FAILED

Parameters

subject (STRING): AutoSupport subject or title for this event.
DestinationVserver (STRING): Destination Vserver of the DR relationship.
FailedReason (STRING): Failed reason.

callhome.dsk events

callhome.dsk.bypass

Severity

ERROR

Description

This message occurs when a disk drive failure occurred and the Embedded Switched Hub (ESH) removed the disk drive from the loop electronically—bypassing the disk drive on one or possibly both ports. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Depending on your system configuration, you might need to place the disk drive software into a failed state to match what the ESH module did. Then locate and replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK_FAIL - Bypassed by ESH

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.config

Severity

ERROR

Description

This message occurs when the system detects a configuration problem with a disk drive, Fibre Channel switch, or host bus adapter (HBA). A cabling issue might be causing the problem. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Review and repair the cabling and SAN configuration. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK CONFIGURATION ERROR

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.disable

Severity

ERROR

Description

This message occurs when a disk drive failure occurred and the I/O Module (IOM) removed the disk drive from the system by disabling the PHY on one or possibly both ports. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Depending on your system configuration, you might need to place the disk drive software into a failed state to match what the IOM did. Then locate and replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK_FAIL - Disabled by IOM

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.fault

Severity

ERROR

Description

This message occurs when a disk drive fails. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the "storage disk show -broken" command to locate the failed drive. Confirm the location by looking for a drive whose red and amber LED fault lights are lit. Replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.fw.needed

Severity

ERROR

Description

This message occurs when the system detects one or more disk drives with out of date or "downrev" disk firmware. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Check and update all the disk drive firmware levels to the current the disk drive firmware level. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK_FIRMWARE_NEEDED_UPDATE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.init

Severity

ERROR

Description

This message occurs when a disk drive failed to initialize. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the "storage disk show -broken" command to locate the failed drive. Confirm the location by looking for a drive whose red and amber LED fault lights are lit. Replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK INIT FAILED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.io.degraded

Severity

ERROR

Description

This message occurs when the storage health monitor detects degraded disk I/O (taking too long) that indicates a problem with a disk drive. A disk drive might not be using the most recent disk drive firmware. If the disk drive is using the most recent firmware, it might be at a higher risk of failing. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Identify the disk drive that caused this event and verify that it is running the most recent firmware. If the firmware is not up to date, update it to ensure that problems do not continue. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK_IO_DEGRADED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.label

Severity

ALERT

Description

This message occurs when a disk drive failed due to unexpected RAID metadata. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the "storage disk show -broken" command to locate the failed drive. Confirm the location by looking for a drive whose red and amber LED fault lights are lit. Replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK BAD LABEL

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.label.broken

Severity

ERROR

Description

This message occurs when a disk drive fails. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the "storage disk show -broken" command to locate the failed drive. Confirm the location by looking for a drive whose red and amber LED fault lights are lit. Replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK LABELED BROKEN

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.label.v

Severity

ERROR

Description

This message occurs when a disk drive failed due to a version number in its RAID metadata that is inconsistent with the operating system version installed. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the "storage disk show -broken" command to locate the failed drive. Confirm the location by looking for a drive whose red and amber LED fault lights are lit. Replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK BAD LABEL VERSION

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.missing

Severity

ERROR

Description

This message occurs when the system cannot detect a disk drive in the Fibre Channel network (or loop) that it previously discovered. The error might be caused by a failed disk drive in the chassis still awaiting replacement or a broken connection to the disk drive. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Locate and replace the defective disk drive. If you already replaced it, check the Fibre Channel network for network connectivity from the appliance to the disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK MISSING

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.no.spin

Severity

ERROR

Description

This message occurs when a disk drive fails to start. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Logged message 'disk.init.failure.spinup' identifies the failed disk drive. Locate and replace the disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK NOT SPINNING

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.noio

Severity

ERROR

Description

This message occurs when disk drive device commands to a disk drive are failing with link errors, adapter errors, or timeouts. With this type of problem, the disk drives's red or amber LED fault light may not be lit. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the "storage disk show -broken" command to locate the failed drive. Confirm the location by looking for a drive whose red and amber LED fault lights are lit. Replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK NOT RESPONDING

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.predict

Deprecated

Deprecated as of ONTAP 9.2. Last used in DOT 7.1.1.

Severity

ALERT

Description

This message occurs when the storage health monitor PFA (predictive failure analysis) determines that disk drive failure is forthcoming. A disk drive might not be using the most recent disk drive firmware. If the disk drive is using the most recent firmware, it might be at higher risk of failing. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Identify the disk drive that caused this event and check whether the firmware is up-to-date. If the firmware is not up-to-date, update it to ensure that problems do not continue. If the firmware is up-to-date, manually fail the faulty disk drive and remove it from the system to ensure the integrity of data. At the earliest opportunity, install a replacement disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK_FAILURE_PREDICTED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.redun.fault

Severity

ERROR

Description

This message occurs when redundant access to disk storage is lost. This message and associated Autosupport are issued at most once per day. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Locate disks which have lost redundancy by using the following command: "storage disk show -fields disk,primary-port,secondary-name,secondary-port,shelf,bay" Note all channels with single path connectivity. Check for failures using these commands: "system health node-connectivity shelf show" and "system health system-connectivity shelf show". If a module or cable failure is identified, replace the failed module or cable. Confirm redundancy has been restored with the following command: "storage disk show -fields disk,primary-port,secondary-name,secondary-port,shelf,bay" If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK REDUNDANCY FAILED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.scrub

Severity

ALERT

Description

This message occurs when the weekly scheduled disk scrub detects checksum errors. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Review the results of the disk scrub. Your next steps depend on the result of your review, and might include replacing the disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK SCRUB CHECKSUM ERROR

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.scrub.done

Severity

ERROR

Description

This message occurs when a disk scrub finishes bypassing media errors and places the aggregate in a normal state. This type of disk scrub is started automatically after walfiron when disk reconstruction is bypassing media errors. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Review the results of the disk reconstruction, wafliron, and disk scrub. Your next steps depend on the result of your review, and might include replacing the disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK SCRUB COMPLETED (bypassing media errors)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.scrub.parity

Severity

ALERT

Description

This message occurs when the scheduled disk scrub detects parity inconsistencies. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Review the results of the disk scrub. Your next steps depend on the result of your review, and might include replacing the disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK SCRUB PARITY INCONSISTENCY

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.sense

Severity

ERROR

Description

This message occurs when storage health monitor detects a SCSI sense error that indicates a problem with a disk drive. A disk drive might not be using the most recent disk drive firmware. If the disk drive is using the most recent firmware, it might be at a higher risk of failing. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Identify the disk drive that caused this event and verify that it is running the most recent firmware. If the firmware is not up-to- date, update it to ensure that problems do not continue. If the firmware is up-to-date, manually fail the faulty disk drive and remove it from the system to ensure the integrity of data. At the earliest opportunity, install a replacement disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK_RECOVERED_ERRORS

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dsk.shrank

Severity

ALERT

Description

This message occurs when either an aggregate or hot spare disk drive fails because its raw capacity was downsized due to a firmware change. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the "storage disk show -broken" command to locate the failed drive. Confirm the location by looking for a drive whose red and amber LED fault lights are lit. Replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for DISK RAWSIZE SHRANK

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.dumptriage events

callhome.dumptriage

Severity

NOTICE

Description

This message occurs when kernel dumptriage files are collected for a coredump event. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
core_filename (STRING): Coredump filename used to find the correct set of dumptriage files.

callhome.encl events

callhome.encl.access

Severity

ERROR

Description

This message occurs when contact to one or more disk shelf enclosure services (environmental monitoring) is lost, possibly due to storage cabling, adapter, or configuration problems. The system uses the enclosure services to monitor the environment continuously to ensure that conditions remain at safe operating levels. If the system cannot contact the enclosure services, it cannot detect when operating conditions move into unsafe ranges and cannot minimize any damage that might result. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the "storage errors show" command to display the current outstanding shelf error conditions. Use the "event log show" command to identify earlier EMS messages related to shelf connectivity errors. Restore connectivity to the disk shelf enclosure services. Check cabling for loose connections. Swap out adapters, if possible. Double-check the configuration. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for ENCLOSURE SERVICES ACCESS ERROR

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ext events

callhome.ext.cache.bad

Severity

ALERT

Description

This message occurs when a check of the external memory cache used for increasing system performance has failed and this cache has been disabled. System operations will continue with possibly reduced performance. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

The external memory cache should checked and possibly repaired to restore its service to the system. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for EXTERNAL CACHE FAILURE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.fans events

callhome.fans.failed

Severity

EMERGENCY

Description

This message occurs when multiple fans inside the appliance case fail. This failure can lead to overheating and cause damage to your equipment. The system shuts down within 10 minutes unless you resolve the fan problems. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Replace the fans within 10 minutes. If that is not possible, perform a graceful shutdown of the system and power it off. Then replace the fans when you can, power on the system, and restore it to normal operation. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for MULTIPLE FAN FAILURE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.fc events

callhome.fc.al.link

Severity

ALERT

Description

This message occurs when a Fibre Channel arbitrated loop (FC-AL) has link failures. You need to resolve this issue promptly. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Check the FC-AL itself and the connections to the FC-AL for poor or broken connections and misconfigurations. Examine the event log for messages related to FC or disk I/O errors and take the corrective actions found there. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.fc.al.poor

Deprecated

Deprecated as of ONTAP 9.2. Last used in DOT 7.1.0.

Severity

ALERT

Description

This message occurs when the system detects that a Fibre Channel arbitrated loop (FC-AL) is unreliable or is too poor in quality for data exchange. You need to resolve this issue promptly. The link errors are recoverable in the sense that the system is up and running. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Check the FC-AL itself and the connections to the FC-AL for poor or broken connections and misconfigurations. Examine the event log for messages related to FC or disk I/O errors and take the corrective actions found there. Restore normal, error-free communication for the FC-AL as quickly as possible. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for FC-AL RECOVERABLE ERRORS

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.fcp events

callhome.fcp.adapter.failed

Severity

ERROR

Description

This message occurs when a Fibre Channel Protocol (FCP) HBA Host Bus Adapter (HBA) in this node has failed to read a critical setting from the adapter's internal configuration. The adapter should be replaced. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Locate the FCP adapter in the slot specified in this message. Replace the adapter. If the adapter name starts with 0, the motherboard may need to be replaced. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.fcp.sram.dump

Severity

ERROR

Description

This message occurs when a Fibre Channel Protocol (FCP) HBA Host Bus Adapter (HBA) in this node has recorded to disk a memory image from its Static Random Access Memory (SRAM). The SRAM dump has been performed as the result of several possible reasons, including a command directive and HBA firmware restart. Note that performing a dump of a HBA can disrupt data access operations. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If this event happens as a result of a command directive such as "fcp dump", the dump operation is expected. If this event happens as a result of HBA reset, the collected dump files can be used by technical support for subsequent analysis. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for FCP SRAM DUMP.

Parameters

subject (STRING): AutoSupport subject or title for this event.
portInstance (INT): Instance number of the target port where the dump occurs.
dumpDirName (STRING): Directory location where the FC dumps are stored.
portName (STRING): FC HBA's name.

callhome.fdsk events

callhome.fdsk.admin

Severity

NOTICE

Description

This message occurs when you fail a file system disk drive. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for FILESYSTEM DISK ADMIN FAILED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.fdsk.fault

Severity

ERROR

Description

This message occurs when a disk drive fails. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Locate the failed disk drive by looking for a disk drive whose red and amber LED fault lights are NOT lit. Replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.fdsk.label

Severity

ERROR

Description

This message occurs when a disk drive fails due to unexpected RAID metadata. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp

technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Locate the failed disk drive by looking for a disk drive whose red and amber LED fault lights are NOT lit. Replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for FILESYSTEM DISK BAD LABEL

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.fdsk.label.v

Severity

ERROR

Description

This message occurs when a disk drive fails due to a version number in its RAID metadata that is inconsistent with the operating system version installed. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Locate the failed disk drive by looking for a disk drive whose red and amber LED fault lights are NOT lit. Replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for FILESYSTEM DISK BAD LABEL VERSION

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.fdsk.missing

Severity

ERROR

Description

This message occurs when the system detects that a disk drive is not in a loop or is missing. This might also occur when a failed disk drive is still in the chassis awaiting replacement. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Locate and replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for FILESYSTEM DISK MISSING

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.fdsk.noio

Severity

ERROR

Description

This message occurs when disk drive device commands to a file system disk drive are failing with link errors, adapter errors, or timeouts. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Locate the failed disk drive by looking for a disk drive whose red and amber LED fault lights are NOT lit. Replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for FILESYSTEM DISK NOT RESPONDING

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.fdsk.shrank

Severity

ERROR

Description

This message occurs when an aggregate disk drive fails because its raw capacity was downsized due to a firmware change. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Locate the failed disk drive by looking for a disk drive whose red and amber LED fault lights are NOT lit. Replace the failed disk drive. After the automated e-mail is sent to you with the case# and instructions, the case is closed. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for FILESYSTEM DISK RAWSIZE SHRANK

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.flash events

callhome.flash.cache.degraded

Severity

ERROR

Description

This message occurs when Flash Management Module (FMM) detects that a percentage of a Flash Cache is offline that is above a warning threshold. FMM monitors all flash devices in the system that attach with it. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

A Flash Cache has degraded. This is an indication or the cause of a performance degradation. Exact impact cannot be estimated. This Flash Cache needs to be repaired or replaced. Contact customer support for more details.

Syslog Message

Call home for Flash Cache DEGRADED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.flash.cache.failed

Severity

ALERT

Description

This message occurs when Flash Management Module (FMM) detects that a Flash Cache has suffered a failure. Typically, this is the result of a hardware failure on the Flash Cache itself. FMM monitors all flash devices in the system that attach with it. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

The Flash Cache can fail due to many reasons. If you see "iomem.dma.internal" in EMS log, reboot the system. If the state of the Flash Cache in system configuration shows 'Failed firmware', update the device (follow the corrective action of the "iomem.card.fail.fpga.rev" EMS message). For all other reasons, replace the Flash Cache. For further assistance, contact technical support.

Syslog Message

Call home for Flash Cache FAILED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.flash.cache.offlined

Severity

ALERT

Description

This message occurs when Flash Management Module (FMM) detects that a critical percentage of a Flash Cache is offline, beyond which the device cannot operate. FMM turned off this device. FMM monitors all flash devices in the system that attach with it. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

A Flash Cache was offlined. This is an indication or the cause of a performance degradation. Exact impact cannot be estimated. This Flash Cache needs to be repaired or replaced. Contact customer support for more details.

Syslog Message

Call home for Flash Cache OFFLINED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.fs events

callhome.fs.lun.resized

Severity

ALERT

Description

This message occurs when the system has detected that a filesystem logical disk array or LUN (Logical Unit Number) stored raw size no longer matches the reported physical size of the LUN. Resizing of a filesystem gateway LUN is not supported. Only gateway LUNs that are spare (not used in a filesystem) may be resized. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Restore the logical disk array or LUN raw size to the expected file system size that system expects. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for FILESYSTEM LUN RESIZED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.hainterconnect events

callhome.hainterconnect.down

Severity

ALERT

Description

This message occurs when the high-availability (HA) interconnect is down. If your system is configured to do so, it generates and transmits an AutoSupport (or "call home") message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Corrective action depends on the number and type of HA interconnect links supported by the platform,as well as the reason for which the interconnect is down. EMS event "ic.HAInterconnectDown" provides the reason information. a. If links are down: Verify that both controllers in the HA pair are operational. For externally connected links, make sure that the interconnect cables are connected properly and that the small form-factor pluggables (SFPs), if applicable, are seated properly on both controllers. For internally connected links, disable and reenable the links one at a time by using the "ic link off" and "ic link on" commands. b. If links are disabled: Enable the links by using the "ic link on" command. c. If a peer is not connected: Disable and reenable the links one at a time by using the "ic link off" and "ic link on" commands. Contact NetApp technical support if the problem persists.

Syslog Message

Call home for %s due to %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.
reason (STRING): Reason for interconnect down.

callhome.hba events

callhome.hba.failed

Severity

EMERGENCY

Description

This message occurs when a HBA port is taken offline due to read-after-write verification errors. This AutoSupport message and associated EMS messages are issued once for a given port. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Hardware components might need to be replaced. Contact NetApp technical support for assistance.

Syslog Message

Call home for %s. Keep the adapter offline and contact NetApp technical support for assistance.

Parameters

> **subject** (STRING): AutoSupport subject or title for this event.
> **adapterName** (STRING): Name of the adapter.

callhome.hm events

callhome.hm.alert.critical

Severity

> ALERT

Description

> This message occurs when an error is detected during the periodic health health monitoring of system health monitors. System health monitors create alerts for potential problems detected while monitoring the subsystem. The alerts contain information about probable cause along with recommended actions to rectify the problem. This message is generated after every polling interval if new alerts are detected during this interval. Polling interval is configurable. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

> Run the "system health alert show" command to view details about new alerts in the system. Details of the alerts can be found in the AutoSupport. To correct the alert conditions, refer to the corrective actions described in the alert. Contact NetApp technical support for additional information.

Syslog Message

> Call home for %s.

Parameters

> **subject** (STRING): AutoSupport subject or title for this event.

callhome.hm.alert.major

Severity

> ALERT

Description

> This message occurs when an error is detected during the periodic health health monitoring of system health monitors. System health monitors create alerts for potential problems detected while monitoring the subsystem. The alerts contain information about probable cause along with recommended actions to rectify the problem. This message is generated after every polling interval if new alerts are detected during this interval. Polling interval is configurable. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

> Run the "system health alert show" command to view details about new alerts in the system. Details of the alerts can be found in the AutoSupport. To correct the alert conditions, refer to the corrective actions described in the alert. Contact NetApp technical support for additional information.

Syslog Message

Call home for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.hm.alert.minor

Severity

ERROR

Description

This message occurs when an error is detected during the periodic health health monitoring of system health monitors. System health monitors create alerts for potential problems detected while monitoring the subsystem. The alerts contain information about probable cause along with recommended actions to rectify the problem. This message is generated after every polling interval if new alerts are detected during this interval. Polling interval is configurable. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Run the "system health alert show" command to view details about new alerts in the system. Details of the alerts can be found in the AutoSupport. To correct the alert conditions, refer to the corrective actions described in the alert. Contact NetApp technical support for additional information.

Syslog Message

Call home for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.hostport events

callhome.hostport.bypass

Severity

ALERT

Description

This message occurs when an Embedded Switched Hub (ESH) bypasses a host port due to excessive errors on the port. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Depending on your system configuration, you might need to replace the ESH Module or replace the Fibre Channel cable to the host port. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for HOST_PORT_FAIL - Bypassed by ESH

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.hostport.disable

Severity

ALERT

Description

This message occurs when an I/O Module (IOM) disables a host port due to excessive errors on the port. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Depending on your system configuration, you might need to replace the IOM or ensure that a good cable is attached to the host port. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for HOST_PORT_FAIL - Disabled by IOM

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.hwaccel events

callhome.hwaccel.qat.dump

Severity

NOTICE

Description

This message occurs when the hardware accelerator gets certain threshold number of errors and collects related diagnostic data concerning the device. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.hwaccel.reset

Severity

NOTICE

Description

This message occurs when the hardware accelerator is being reset and collects related diagnostic data concerning the device. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ibretimerprog events

callhome.ibretimerprog.fail

Severity

EMERGENCY

Description

This message occurs when InfiniBand (IB) retimer programming of the high- availability (HA) interconnect link failed after multiple retry attempts. The affected InfiniBand HA interconnect link is down. The failure can be due to any of the following reasons: InfiniBand device not found, GPIO read failure, QSFP register dump failure, QSFP parse failure, or retimer failure. If your system is configured to do so, it generates and transmits an AutoSupport (or "call home") message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

This failure can be due to defective hardware or cabling. Contact NetApp technical support for further assistance.

Syslog Message

Call home for INFINIBAND RETIMER PROGRAMMING FAILURE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.invoke events

callhome.invoke

Severity

NOTICE

Description

This message occurs when you invoke an AutoSupport® message, and the "type" of that message is set to "test". This message contains very little content and is intended for testing AutoSupport® end-to-end. When this message arrives at NetApp technical support, a confirmation email is sent to email destinations specified by the -to parameter. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
URI (STRING): Alternate destination for this ASUP. If this is set, this ASUP is delivered to this alternate destination.
force (INT): This flag indicates this AutoSupport should be generated and delivered even if the AutoSupport configuration is disabled. If zero then obey the normal "state" and "support" flags. If this is "one", then ignore the "state" and "support" configuration and deliver as if both "state" and "support" are enabled.
sequence (LONGINT): Sequence number to use to generate this Autosupport. Use value zero to auto-generate or a value higher than last used ASUP sequence number.

callhome.invoke.all

Severity

NOTICE

Description

This message occurs when you invoke an AutoSupport® message, and the "type" of that message is set to "all". For the benefit of technical support, the message also contains troubleshooting content, which might lengthen the collection time required. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

User triggered complete call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
URI (STRING): Alternate destination for this ASUP. If this is set, this ASUP is delivered to this alternate

destination.

force (INT): This flag indicates this AutoSupport should be generated and delivered even if the AutoSupport configuration is disabled. If zero then obey the normal "state" and "support" flags. If this is "one", then ignore the "state" and "support" configuration and deliver as if both "state" and "support" are enabled.

sequence (LONGINT): Sequence number to use to generate this Autosupport. Use value zero to auto-generate or a value higher than last used ASUP sequence number.

callhome.invoke.remotesplog

Severity
NOTICE

Description
This message occurs when an administrator invokes an AutoSupport message on a node to collect the logs from the service processor of another node in the cluster. If the system is configured to do so, it generates and transmits an AutoSupport message (or 'call home' message) to NetApp technical support and to the configured destinations.

Corrective Action
(None).

Syslog Message
Call home (Remote SP LOG) for %s

Parameters
subject (STRING): AutoSupport subject or title for this event.
URI (STRING): Alternate destination for this ASUP. If this is set, this ASUP is delivered to this alternate destination.
force (INT): This flag indicates this AutoSupport should be generated and delivered even if the AutoSupport configuration is disabled. If zero then obey the normal "state" and "support" flags. If this is "one", then ignore the "state" and "support" configuration and deliver as if both "state" and "support" are enabled.
sequence (LONGINT): Sequence number to use to generate this Autosupport. Use value zero to auto-generate or a value higher than last used ASUP sequence number.

callhome.invoke.splog

Severity
NOTICE

Description
This message occurs when an administrator invokes an AutoSupport message for Service Processor (SP) log collection from ONTAP® CLI. If your system is configured to do so, it generates and transmits an AutoSupport message (or 'call home' message) to NetApp technical support and to the configured destinations.

Corrective Action
(None).

Syslog Message
Call home (SP LOG %s)

Parameters

subject (STRING): AutoSupport subject or title for this event.
URI (STRING): Alternate destination for this ASUP. If this is set, this ASUP is delivered to this alternate destination.
force (INT): This flag indicates this AutoSupport should be generated and delivered even if the AutoSupport configuration is disabled. If zero then obey the normal "state" and "support" flags. If this is "one", then ignore the "state" and "support" configuration and deliver as if both "state" and "support" are enabled.
sequence (LONGINT): Sequence number to use to generate this Autosupport. Use value zero to auto-generate or a value higher than last used ASUP sequence number.
for_node_id (STRING): Node where the log is being collected (local or partner node).

callhome.invoke.splog.full

Severity

NOTICE

Description

This message occurs when an administrator invokes an AutoSupport message for full Service Processor (SP) or baseboard management controller (BMC) log collection from ONTAP® CLI. If your system is configured to do so, it generates and transmits an AutoSupport message (or 'call home' message) to NetApp technical support and to the configured destinations.

Corrective Action

(None).

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.iscsi events

callhome.iscsi.hba.crash

Severity

ALERT

Description

This message occurs when the iSCSI host bus adapter (HBA crashes. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If the HBA is in use, reboot your system to reset the HBA and retrieve the crash-dump file. Contact NetApp technical support and provide the crash-dump file for support purposes.

Syslog Message

Call home for ISCSI HBA CRASH

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.isp events

callhome.isp.adapter.bad

Deprecated

Deprecated as of ONTAP 9.2. Last used in R8.2.x.

Severity

ERROR

Description

This message occurs when the system detects multiple Static Random Access Memory (SRAM) parity errors within a 30 day period. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Replace the Fibre Channel adapter that is exhibiting subsequent parity errors to insure continued operations. Look for the "fci.adapter.parity:info" EMS message in the event log to identify the adapter that is encountering the SRAM parity error and needs to be replaced. You can also check the output of the "FC-STATS" section in AutoSupport and look for the value of link state counter "adap_sram_parity_error_cnt" which will be more than one for the concerned adapter. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for SRAM PARITY ERRORS ON FIBRE CHANNEL ADAPTER - replace adapter

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.jpc events

callhome.jpc.selection.fail

Severity

ALERT

Description

This message occurs when the Kernel Cluster Services (KCS) / Cluster Transaction Manager (CTRAN) detects that the algorithm to reselect the Join Proposal Coordinator (JPC) is failing repeatedly. The JPC is reselected when the node that hosted the JPC goes out of quorum. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Call NetApp technical support immediately for further assistance.

Syslog Message

Call home for JOIN PROPOSAL COORDINATOR SELECTION FAILING.

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi node ASUP.

callhome.kernel events

callhome.kernel.core

Deprecated

Deprecated as of ONTAP 9.3. This event is replaced by the callhome.kernel.coreinfo event.

Severity

NOTICE

Description

This message occurs when you invoke an AutoSupport for kernel coredump files. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Kernel coredump callhome for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
URI (STRING): Alternate destination for this AutoSupport message. If this is set, this AutoSupport message is delivered to this alternate destination.
force (INT): This flag indicates this AutoSupport should be generated and delivered even if the AutoSupport configuration is disabled. If "0" then obey the normal "state" and "support" flags. If this is "1", then ignore the "state" and "support" configuration and deliver as if both "state" and "support" are enabled.
case_number (STRING): Case number to be associated with this coredump AutoSupport message.
core_filename (STRING): Coredump filename to be included in the coredump AutoSupport message.
aod_initiated (INT): This flag indicates that NetApp technical support has remotely requested for this AutoSupport via AutoSupport OnDemand.
sequence (LONGINT): Sequence number to use to generate this Autosupport. Use value zero to auto-generate or a value higher than last used ASUP sequence number.

callhome.kernel.coreinfo

Severity

NOTICE

Description

This message occurs when you invoke an AutoSupport for kernel coredump files. It contains content relevant to userspace cores. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Kernel coredump callhome for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
URI (STRING): Alternate destination for this AutoSupport message. If this is set, this AutoSupport message is delivered to this alternate destination.
force (INT): This flag indicates this AutoSupport should be generated and delivered even if the AutoSupport configuration is disabled. If "0" then obey the normal "state" and "support" flags. If this is "1", then ignore the "state" and "support" configuration and deliver as if both "state" and "support" are enabled.
case_number (STRING): Case number to be associated with this coredump AutoSupport message.
core_filename (STRING): Coredump filename to be included in the coredump AutoSupport message.
aod_initiated (INT): This flag indicates that NetApp technical support has remotely requested for this AutoSupport via AutoSupport OnDemand.
sequence (LONGINT): Sequence number to use to generate this Autosupport. Use value zero to auto-generate or a value higher than last used ASUP sequence number.
aod_req_id (STRING): AOD request ID

callhome.link events

callhome.link.change.stuck

Severity

ALERT

Description

This message occurs when a network port link state change cannot be confirmed for more than 5 minutes because another configuration task is still in progress. Network port states can change when the node reboots or is administratively changed by a system administrator. The affected port might still be operating in the state before the attempted change. While this condition exists, additional configuration changes or status queries will not be possible. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

The link state change request will keep retrying until it succeeds. If the request does not succeed, it indicates that there is a configuration task that has not correctly completed and the node should be rebooted. For further assistance, contact NetApp technical support.

Syslog Message

Call home for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.management events

callhome.management.log

Severity

NOTICE

Description

This message occurs when the MANAGEMENT_LOG AutoSupport or 'call home' event is sent. This message occurs on a daily basis and is sent from from clustered nodes only. Information is sent to NetApp technical support to ensure that subsequent communications work and to enable operations analysis. Some results of these analysis might include recommendations on upgrades, firmware changes, and configuration changes to improve the reliability and performance of the node. If your node is configured to do so it generates and transmits an AutoSupport (or 'call home') to NetApp technical support and to the configured destinations on a daily basis. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for MANAGEMENT_LOG

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.management.log.rotate

Severity

NOTICE

Description

This message occurs when the (MANAGEMENT_LOG ROTATE) AutoSupport or 'call home' event is sent. This callhome message is a supplement to the daily callhome.management.log message. The callhome.management.log.rotate message occurs whenever a log file rotates due to size. This message avoids log information gaps when log files rotate. Information is sent to NetApp technical support to ensure that subsequent communications work and to enable operations analysis. Some results of these analysis might include recommendations on upgrades, firmware changes, and configuration changes to improve the reliability and performance of the node. If your node is configured to do so it generates and transmits an AutoSupport (or 'call home') to NetApp technical support and to the configured destinations on a daily basis. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home %s for filename: %s.

Parameters

> **subject** (STRING): AutoSupport subject or title for this event.
> **filename** (STRING): The name of the log file that rotated.

callhome.mcc events

callhome.mcc.auso.2min

Severity

> ALERT

Description

> This message occurs when a MetroCluster(tm) automatic unplanned switchover operation has completed and the outage window was longer than 120 sec. If your system is configured to do so, it generates and transmits an AutoSupport(tm) (or "call home") message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

> Check why switchover was triggered by using the "event log show" command and search for event "mcc.auso.triggered". Use the "metrocluster operation show" command to view the details of the switchover operation. If you need assistance, contact NetApp technical support.

Syslog Message

> Call home for %s

Parameters

> **subject** (STRING): AutoSupport subject or title for this event.
> **epoch** (STRING): Identifying tag for multinode ASUP.

callhome.mcc.auso.complete

Severity

> ALERT

Description

> This message occurs when a MetroCluster(tm) automatic unplanned switchover operation has completed. If your system is configured to do so, it generates and transmits an AutoSupport(tm) (or "call home") message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

> Check why switchover was triggered by using the "event log show" command and search for event "mcc.auso.triggered". Use the "metrocluster operation show" command to view the details of the switchover operation. If you need assistance, contact NetApp technical support.

Syslog Message

> Call home for %s

Parameters

    subject (STRING): AutoSupport subject or title for this event.
    epoch (STRING): Identifying tag for multinode ASUP.

callhome.mcc.auso.trig.fail

Severity

    EMERGENCY

Description

    This message occurs when a MetroCluster(tm) automatic unplanned switchover trigger failed to initiate a switchover operation. If your system is configured to do so, it generates and transmits an AutoSupport(tm) (or "call home") message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

    Verify the health of each node and that automatic unplanned switchover is enabled on both by using the "metrocluster node show" command. Use the "metrocluster switchover -forced-on-disaster true" command to switch over the DR-site storage manually. For further assistance, contact NetApp technical support.

Syslog Message

    Call home for %s

Parameters

    subject (STRING): AutoSupport subject or title for this event.

callhome.mcc.auso.trig.shut

Severity

    ALERT

Description

    This message occurs when automatic unplanned switchover (AUSO) in a MetroCluster(tm) IP configuration is triggered due to remote site shutdown.

Corrective Action

    Check the hardware conditions at the remote site for the cause of the environmental shutdown. Use the "metrocluster operation show" command to view the details the switchover operation. If you need assistance, contact NetApp technical support.

Syslog Message

    Callhome for %s.

Parameters

    subject (STRING): AutoSupport subject or title for this event.

callhome.mcc.clst.dm.wd.gvup

Severity

    ALERT

Description

This message occurs when the Cluster DM Watchdog thread has given up after retrying for over an hour. Cluster configuration replication services are affected and configuration updates might be lost. If your system is configured to do so, it generates and transmits an AutoSupport(tm) (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Examine the event management system (EMS) logs for any related issues. Perform any provided corrective actions. For further assistance, contact NetApp technical support.

Syslog Message

Call home for METROCLUSTER CLUSTER DM WATCHDOG GAVE UP

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.mcc.cluster_dm.stream_in_error

Severity

ALERT

Description

This message occurs when cluster-domain sender/receiver stream has an error. The stream type is indicated through the flag. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for METROCLUSTER CLUSTER_DM SENDER/RECEIVER STREAM_IN_ERROR

Parameters

subject (STRING): AutoSupport subject or title for this event.
stream (STRING): Stream is sender or receiver.

callhome.mcc.config.complete

Severity

NOTICE

Description

This message occurs when the "metrocluster configure" operation is successful. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for METROCLUSTER CONFIGURE COMPLETE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.mcc.encryption.enabled

Severity

NOTICE

Description

This message occurs when encryption for NVLog and storage replication is enabled in a MetroCluster(tm) IP configuration.

Corrective Action

(None).

Syslog Message

Callhome for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.mcc.fcvi.reset

Severity

NOTICE

Description

This message occurs when fcvi adapter has been reset. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for METROCLUSTER FCVI RESET

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.mcc.heal_aggr.failed

Severity

ALERT

Description

This message occurs when metrocluster heal aggregates operation has failed. The failure could be partial or complete. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Run 'metrocluster operation show' to determine the failure reason and take appropriate corrective measure. Retry the operation following the corrective measure. If the failures persists or need assistance, contact NetApp technical support

Syslog Message

Call home for METROCLUSTER HEAL_AGGR FAILED

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi node ASUP.

callhome.mcc.heal_root.failed

Severity

ALERT

Description

This message occurs when metrocluster heal root-aggregates operation has failed. The failure could be partial or complete. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Run 'metrocluster operation show' to determine the failure reason and take appropriate corrective measure. Retry the operation following the corrective measure. If the failures persists or need assistance, contact NetApp technical support

Syslog Message

Call home for METROCLUSTER HEAL_ROOT FAILED

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi node ASUP.

callhome.mcc.network.stats

Severity

NOTICE

Description

This message occurs when a MetroCluster over IP configuration detects network behavior change over the inter-cluster links (ISL) that connect sites. Diagnostic information is collected as part of this event. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for %s. Number of times network changed since last callhome: %d.

Parameters

subject (STRING): AutoSupport subject or title for this event.
event_count (INT): Number of times network behavior change was flagged by the analysis engine since the last callhome message was sent.

callhome.mcc.okm.sync.needed

Severity

ALERT

Description

This message occurs when clusters in a MetroCluster(tm) configuration have inconsistent Onboard Key Manager (OKM) data, including differing cluster passphrases or differing OKM hierarchies. The "security key-manager onboard sync" command should be run to prevent any failures in future switchover or switchback events. This message will be generated on both the local cluster and the peer cluster. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for METROCLUSTER OKM SYNC NEEDED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.mcc.personality

Severity

ALERT

Description

This message occurs when the All-Flash Optimized node in a MetroCluster configuration detects that it has a different personality setting. This error can occur when a node loses its All-Flash Optimized setting. When this happens, the node may not function properly. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

A node configured with All-Flash Optimized personality recognizes only SSD disks and ignores hard disk drives(HDD). The personality is determined at boot time by checking the bootarg value "bootarg.init.flash_optimized". If the intended configuration of the node is All-Flash Optimized, any HDDs need to be removed and the bootarg needs to be set to true using the "setenv bootarg.init.flash_optimized

true" command in maintenance mode. Otherwise, use the "unsetenv bootarg.init.flash_optimized" command to support HDDs on the system.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.mcc.sb.vetoed

Severity

NOTICE

Description

This message occurs when the system detects that a MetroCluster (tm) switchback operation has been vetoed, and creates an AutoSupport message for delivery to NetApp technical support for further analysis.

Corrective Action

Enter "metrocluster operation show" to determine the failure reason and take appropriate corrective measures as indicated by the output of this command. Retry the operation following the corrective measure. If the failures persist, or you need further assistance, contact NetApp technical support

Syslog Message

Call home for METROCLUSTER SWITCHBACK VETOED

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Correlating tag value used in the AutoSupport message. Other cluster nodes that have detected related events may also have sent AutoSupport messages with this value to NetApp technical support.

callhome.mcc.sbca

Severity

NOTICE

Description

This message occurs when metrocluster switchback continuation agent (SBCA) is run on the disaster site. This happens as part of the metrocluster switchback operation run on the surviving site. This ASUP provides troubleshooting information from the site which is being recovered (disaster hit). If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for METROCLUSTER SWITCHBACK CONTINUATION AGENT

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi node ASUP.

callhome.mcc.so.vetoed

Severity

NOTICE

Description

This message occurs when the system detects that a MetroCluster (tm) switchover operation has been vetoed, and creates an AutoSupport message for delivery to NetApp technical support for further analysis.

Corrective Action

Enter "metrocluster operation show" to determine the failure reason and take appropriate corrective measures as indicated by the output of this command. Retry the operation following the corrective measure. If the failures persist, or you need further assistance, contact NetApp technical support

Syslog Message

Call home for METROCLUSTER SWITCHOVER VETOED

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Correlating tag value used in the AutoSupport message. Other cluster nodes that have detected related events may also have sent AutoSupport messages with this value to NetApp technical support.

callhome.mcc.switchback.complete

Severity

NOTICE

Description

This message occurs when metrocluster switchback operation is complete. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for METROCLUSTER SWITCHBACK COMPLETE

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi node ASUP.

callhome.mcc.switchback.failed

Severity

EMERGENCY

Description

This message occurs when metrocluster switchback operation has failed. The failure could be partial or complete. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Run 'metrocluster operation show' to determine the failure reason and take appropriate corrective measure. Retry the operation following the corrective measure. If the failures persists or need assistance, contact NetApp technical support

Syslog Message

Call home for METROCLUSTER SWITCHBACK FAILED

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi node ASUP.

callhome.mcc.switchover.2min

Severity

NOTICE

Description

This message occurs when MetroCluster(tm) switchover operation is complete and the client outage window has exceeded two minutes. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi node ASUP.

callhome.mcc.switchover.complete

Severity

NOTICE

Description

This message occurs when metrocluster switchover operation is complete. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves

problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for METROCLUSTER SWITCHOVER COMPLETE

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi node ASUP.

callhome.mcc.switchover.failed

Severity

EMERGENCY

Description

This message occurs when metrocluster switchover operation has failed. The failure could be partial or complete. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Run 'metrocluster operation show' to determine the failure reason and take appropriate corrective measure. Retry the operation following the corrective measure. If the failures persists or need assistance, contact NetApp technical support

Syslog Message

Call home for METROCLUSTER SWITCHOVER FAILED

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi node ASUP.

callhome.mccip events

callhome.mccip.auso.disabled

Severity

ALERT

Description

This message occurs when automatic unplanned switchover (AUSO) in a MetroCluster(tm) IP configuration is disabled because the mediator mailbox disk is not healthy. If a site failure occurs, a manual switchover will be required to restore data access.

Corrective Action

Use the "storage failover show -fields local-mailbox-disks" command to verify that all nodes in the cluster can access their respective mailbox disks. Use the (privilege: advanced) "storage iscsi-initiator show" command to verify that iSCSI connections to the mediator are up and healthy.

Syslog Message

Callhome for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.mccip.collectstats

Severity

NOTICE

Description

This message occurs when MetroCluster IP statistics are collected daily. TCP/IP networking statistics for diagnostic purposes are collected.

Corrective Action

(None).

Syslog Message

Call home for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.mdb events

callhome.mdb.recovery.unsuccessful

Severity

EMERGENCY

Description

This message occurs after an unsuccessful recovery of an inconsistent management database. The message is from the management processes identified by name in the auto-support subject line. The unsuccessful recovery results in the loss of all records contained in the 'job history' and 'rdb statistics' databases. Also, no additional records will be collected until the problem is resolved by NetApp technical support. The affected management process will function normally without these databases.

Corrective Action

Contact NetApp technical support.

Syslog Message

Call home for %s WARNING.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.mhost events

callhome.mhost.core

Deprecated

Deprecated as of ONTAP 9.3. This event is replaced by the callhome.mhost.coreinfo event.

Severity

NOTICE

Description

This message occurs when you invoke an AutoSupport for userspace coredump files. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

User space coredump callhome for %s

Parameters

subject (STRING): AutoSupport message subject or title for this event.
URI (STRING): Alternate destination for this AutoSupport message. If this is set, this AutoSupport message is delivered to this alternate destination.
force (INT): This flag indicates this AutoSupport message should be generated and delivered even if the AutoSupport configuration is disabled. If "0" then obey the normal "state" and "support" flags. If this is "1", then ignore the "state" and "support" configuration and deliver as if both "state" and "support" are enabled.
case_number (STRING): Case number to be associated with this coredump AutoSupport message.
core_filename (STRING): Coredump filename to be included in the coredump AutoSupport message.
aod_initiated (INT): This flag indicates that NetApp technical support has remotely requested for this AutoSupport message via AutoSupport OnDemand.
sequence (LONGINT): Sequence number to use to generate this Autosupport. Use value zero to auto-generate or a value higher than last used ASUP sequence number.

callhome.mhost.coreinfo

Severity

NOTICE

Description

This message occurs when you invoke an AutoSupport for userspace coredump files. It contains content relevant to userspace cores. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

User space coredump callhome for %s

Parameters

> **subject** (STRING): AutoSupport message subject or title for this event.
> **URI** (STRING): Alternate destination for this AutoSupport message. If this is set, this AutoSupport message is delivered to this alternate destination.
> **force** (INT): This flag indicates this AutoSupport message should be generated and delivered even if the AutoSupport configuration is disabled. If "0" then obey the normal "state" and "support" flags. If this is "1", then ignore the "state" and "support" configuration and deliver as if both "state" and "support" are enabled.
> **case_number** (STRING): Case number to be associated with this coredump AutoSupport message.
> **core_filename** (STRING): Coredump filename to be included in the coredump AutoSupport message.
> **aod_initiated** (INT): This flag indicates that NetApp technical support has remotely requested for this AutoSupport message via AutoSupport OnDemand.
> **sequence** (LONGINT): Sequence number to use to generate this Autosupport. Use value zero to auto-generate or a value higher than last used ASUP sequence number.
> **aod_req_id** (STRING): AOD request ID

callhome.micro events

callhome.micro.core

Severity

> NOTICE

Description

> This message occurs when a "micro-core" file is available. A "micro-core" file is a very small and simple binary image representing some state of ONTAP® and can be collected and reported to support. Transmission of a normal core file which can be several gigabytes or larger can take a significant time so isn't done. The subject line provides the filename of the micro- core file which is included as part of a special AutoSupport normally only sent to support. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

> Contact NetApp technical support.

Syslog Message

> Call home for MICRO-CORE: %s

Parameters

> **subject** (STRING): AutoSupport subject or title for this event.

callhome.mlm events

callhome.mlm.array.portOneController

Severity

> ALERT

Description

> This message occurs when all paths for an array LUN are connected to the same controller on the array. This configuration results in a single point of failure at the array. If an active-passive array is connected at

the back end, then all the partner controller's paths go to the alternate controller, which results in a tug of war on mailbox I/O or other events that talk to the partner's array LUNs. If the system is running in Cluster-Mode, use the 'storage errors show' command to detect this error. If your system is configured to do so, it generates and transmits an AutoSupport(tm) (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Reconfigure your back-end SAN so that array LUNs are presented from controllers in different fault domains on the target array. If you need further assistance, contact NetApp technical support.

Syslog Message

Call home for ALL PATHS FOR THE ARRAY LUN ARE CONNECTED TO THE SAME CONTROLLER.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.mlm.lun.OnePath

Severity

ALERT

Description

This message occurs when the logical devices (LDEVs) on an array LUN or group of array LUNs are connected using only one path. A proper configuration requires the LDEVs to be connected to at least two paths; otherwise, there is the potential for data loss caused by a single path failure. If an array LUN is assigned, an EMS message is logged to the console at least once a day indicating that it is a single-path assigned array LUN. If the system is running in Cluster-Mode, use the 'storage errors show' command to identify the error. If your system is configured to do so, it generates and transmits an AutoSupport(tm) (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Verify the configuration and identify the LDEVs that are connected to only one path. After you identify the LDEVs, change the system configuration to ensure that there are at least two paths to all these LDEVs. If you need further assistance, contact NetApp technical support.

Syslog Message

Call home for ARRAY LUN CONNECTED USING ONLY ONE PATH.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.multi events

callhome.multi.dsk.cksum.err

Severity

EMERGENCY

Description

This message occurs when checksum verification errors are seen on two or more disks connected to the same HBA port, and the port is not taken offline or the "disk.offline_adapter.enable" option is disabled. This AutoSupport® message and associated EMS messages are issued once for a given port. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact NetApp technical support for assistance with troubleshooting the reason for the write verification errors. Hardware components might need to be replaced.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
adapterName (STRING): Name of the adapter.

callhome.ndo events

callhome.ndo.cr.canceled

Severity

NOTICE

Description

This message occurs when the controller replacement operation has been canceled by the administrator. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

The controller replacement operation on the cluster has been canceled. Issue the commands "system controller replace show" and "system controller replace show-details" to see the status of the operation."

Syslog Message

(None).

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ndo.cr.complete

Severity

NOTICE

Description

This message occurs when the controller replacement operation has been completed successfully in the HA group. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an

AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for CONTROLLER REPLACEMENT COMPLETE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ndo.cr.dryrun.done

Severity

NOTICE

Description

This message occurs when the dry run of the controller replacement operation has completed for the HA pair. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for CONTROLLER REPLACEMENT DRY RUN COMPLETE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ndo.cr.nso.canceled

Severity

NOTICE

Description

This message occurs when a controller replacement operation using negotiated switchover (NSO) in a MetroCluster FC configuration has been canceled. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

The controller replacement NSO operation on the cluster has been canceled. Issue the commands "system controller replace show" and "system controller replace show-details" to see the status of the operation."

Syslog Message

(None).

callhome.ndo.cr.nso.complete

Severity

NOTICE

Description

This message occurs when a controller replacement operation using negotiated switchover (NSO) in a MetroCluster FC configuration has been completed successfully. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for CONTROLLER REPLACEMENT NSO COMPLETE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ndo.cr.nso.mccip.canceled

Severity

NOTICE

Description

This message occurs when a controller replacement operation using negotiated switchover (NSO) in a MetroCluster IP configuration has been canceled. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

The controller replacement NSO-MCCIP operation on the cluster has been canceled. Issue the commands "system controller replace show" and "system controller replace show-details" to see the status of the operation."

Syslog Message

(None).

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ndo.cr.nso.mccip.complete

Severity

NOTICE

Description

This message occurs when a controller replacement operation using negotiated switchover (NSO) in a MetroCluster IP configuration has been completed successfully. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for CONTROLLER REPLACEMENT NSO-MCCIP COMPLETE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ndo.cr.nso.mccip.paused.err

Severity

ALERT

Description

This message occurs when a controller replacement operation using negotiated switchover (NSO) in a MetroCluster IP configuration has been paused due to an error. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

The controller replacement (NSO-MCCIP) operation of the cluster has been paused due to an error. Determine the cause of the error by using the "system controller replace show" command. Correct the cause of the error, and then issue the "system controller replace resume" command to continue the controller replacement of the cluster.

Syslog Message

(None).

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ndo.cr.nso.mccip.started

Severity

NOTICE

Description

This message occurs when a controller replacement operation using negotiated switchover (NSO) in a MetroCluster IP configuration has been started. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

The controller replacement NSO-MCCIP operation of the cluster has started. Issue the commands "system controller replace show" and "system controller replace show-details" to see the status of the operation."

Syslog Message

(None).

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ndo.cr.nso.paused.err

Severity

ALERT

Description

This message occurs when a controller replacement operation using negotiated switchover (NSO) in a MetroCluster FC configuration has been paused due to an error. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

The controller replacement (NSO) operation of the cluster has been paused due to an error. Determine the cause of the error by using the "system controller replace show" command. Correct the cause of the error, and then issue the "system controller replace resume" command to continue the controller replacement of the cluster.

Syslog Message

(None).

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ndo.cr.nso.started

Severity

NOTICE

Description

This message occurs when a controller replacement operation using negotiated switchover (NSO) in a MetroCluster FC configuration has been started. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

The controller replacement NSO operation of the cluster has started. Issue the commands "system controller replace show" and "system controller replace show-details" to see the status of the operation."

Syslog Message

(None).

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ndo.cr.paused.err

Severity

ALERT

Description

This message occurs when the controller replacement operation has been paused due to an error in the HA group. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

The controller replacement operation of the cluster has been paused due to an error. Determine the cause of the error by using the "system controller replace show" command. Correct the cause of the error, and then issue the "system controller replace resume" command to continue the controller replacement of the cluster.

Syslog Message

(None).

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ndo.cr.started

Severity

NOTICE

Description

This message occurs when the controller replacement operation has started in the HA group. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

The controller replacement operation of the cluster has started. Issue the commands "system controller replace show" and "system controller replace show-details" to see the status of the operation."

Syslog Message

(None).

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.netif events

callhome.netif.fatal.error

Severity

ERROR

Description

This message occurs when Network Interface Card encountered a fatal error. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Check for the following EMS message in the EMS log that has the EMS event name "netif.fatal.err". For example: "…netif.fatal.err:crit]: The network device in slot 1 Encountered Fatal Error" The netif.fatal.err EMS message provides the slot number of the NIC device which encountered fatal error. If you need assistance, contact NetApp technical support

Syslog Message

Call home for NETWORK INTERFACE CARD FATAL ERROR.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.netif.init.failed

Severity

ALERT

Description

This message occurs when initialization of a network interface failed due to an unexpected software error. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Review the cabling and network configuration. Collect faulty NIC statistics. If you need assistance, contact NetApp technical support

Syslog Message

Call home for NETWORK INTERFACE INITIALIZATION FAILURE, port %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.netif.uncorEccError

Severity

ALERT

Description

This message occurs when a network interface controller encountered an unrecoverable ECC error. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Review the cabling and network configuration. Replace the faulty NIC device. If you need assistance, contact NetApp technical support

Syslog Message

Call home for NETWORK INTERFACE UNRECOVERABLE ECC ERROR, port %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.netinet events

callhome.netinet.dup.clustIP

Severity

EMERGENCY

Description

This message occurs when a new node that is trying to join the cluster is using the same IP address that is configured on this node's cluster interface. This can prevent data from being served to clients and potentially bring down the entire cluster. This event generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the Ethernet (MAC) address with the "network port show -mac <mac>" command to find network port. Use "network interface show -curr-port <port>" command to identify the cluster interface that is configured with the duplicate IP address. Remove the LIF on the cluster interface of the new node in the cluster network by using the **net int delete -vserver <vserver_name › -lif <lif_name** command. After removing the LIF, assign a new, unique IP address to the cluster interface.

Syslog Message

Call home for DUPLICATE CLUSTER IP.

Parameters

subject (STRING): AutoSupport subject or title for this event.
ipaddr (STRING): Duplicate IP address that was detected on the cluster network.
ethaddr (STRING): Ethernet (MAC) address that uniquely identifies the node configured with the duplicate IP address.

callhome.nht events

callhome.nht.data

Severity

NOTICE

Description

This message occurs when the weekly AutoSupport or 'call home' event is sent for any drive NHT data. Information is sent to NetApp technical support to ensure that subsequent communications work and to enable operations analysis. Some results of these analysis might include recommendations on upgrades, firmware changes, and configuration changes to improve the reliability and performance of the system. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for DRIVE NHT DATA

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.no events

callhome.no.inodes

Severity

ERROR

Description

This message occurs when a volume is out of inodes, which refer to individual files, other types of files, and directories. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Modify the volume's maxfiles (maximum number of files) to increase the inodes on the affected volume. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for OUT OF INODES

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.nse events

callhome.nse.ak.check.failed

Severity

EMERGENCY

Description

This message occurs when the node's key-management database lacks authentication keys (AKs) needed by self-encrypting drives that are owned by the node. The affected drives can be FIPS-certified drives (variously called FIPS drives, NetApp Storage Encryption drives, and NSE drives) or non-FIPS-certified self-encrypting drives (SEDs). A FIPS drive or SED is at risk of permanent data loss if authentication fails repeatedly after it is power-cycled. When FIPS keys are missing, operations such as encrypting sanitize and firmware download might also not succeed. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Display the available keyIDs for encrypting drives using the "security key-manager key query -key-type NSE-AK" command; ONTAP uses these values for all its encrypting drives, whether FIPS/NSE drives or SEDs. Display keyIDs that the drives need using the command "storage encryption disk show", and for FIPS drives, "storage encryption disk show -fips". Each keyID in the disk lists must be present in the key-manager output, except for the default "0x0" (MSID) and "" (null) keyIDs that are not maintained by the key management system. Contact NetApp technical support for assistance. Avoid drive power-cycles and AK modifications until the issue is corrected.

Syslog Message

Call home for %s, disk "%s".

Parameters

subject (STRING): AutoSupport subject or title for this event.
disk (STRING): Name of the first affected drive detected.

callhome.nvdimm events

callhome.nvdimm.cecc

Severity

ERROR

Description

This event occurs when excessive correctable error-correcting code (ECC) memory errors are reported by the NVDIMM. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the "system environment sensors show -hidden true" clustershell command to view the NVDIMM sensors values. Contact NetApp technical support for further assistance.

Syslog Message

Call home for %s.

Parameters

> **subject** (STRING): AutoSupport subject or title for this event.

callhome.nvdimm.failure

Severity

> EMERGENCY

Description

> This event occurs when the NVDIMM card has experienced a critical hardware failure. The system may shut down to avoid potential data loss. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

> Use the following clustershell commands to get more information about the failure: 1. "event log show -node localhost -event nvdimm*" 2. "system fru-check show -node localhost -ftype nvdimm -instance" Contact NetApp technical support to replace the NVDIMM module.

Syslog Message

> Call home for %s.

Parameters

> **subject** (STRING): AutoSupport subject or title for this event.

callhome.nve events

callhome.nve.digest.mismatch

Severity

> EMERGENCY

Description

> This message occurs when the digest of an NetApp Volume Encryption (NVE) or NetApp Aggregate Encryption (NAE) key being restored does not match the expected key digest. Because the key being restored is not the same key expected by the system, the volume associated with the NVE or NAE key will not be able to be onlined, resulting in data loss. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

> Contact NetApp technical support.

Syslog Message

> Call home for %s. key ID: %s, Key Server: %s.

Parameters

> **subject** (STRING): AutoSupport subject or title for this event.
> **keyId** (STRING): Key ID of the key being restored that had the digest mismatch.

keyServer (STRING): Address or name of the key server from which the key is being restored.

callhome.nvme events

callhome.nvme.exhausted

Severity

ALERT

Description

This message occurs when a directly attached NVMe module has worn out and is at the end of its write life. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact technical support for assistance with possible replacement of the module.

Syslog Message

Callhome for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.
serial (STRING): Serial number of the NVMe device.
model (STRING): Model number of the NVMe device.
slot_subslot (STRING): PCI slot/subslot of the NVMe device.

callhome.nvme.offline

Severity

ALERT

Description

This message occurs when a directly attached NVMe module goes offline. When a module goes offline, it has either had a critical failure or is no longer reliable. In either case, the card is no longer functioning properly and was taken offline. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact technical support for assistance with possible replacement of the module.

Syslog Message

Callhome for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.
serial (STRING): Serial number of the NVMe device.
model (STRING): Model number of the NVMe device.
slot_subslot (STRING): PCI slot/subslot of the NVMe device.

code (LONGINTHEX): Bit-encoded error that caused the event.

callhome.nvmem events

callhome.nvmem.volt.hi

Severity

ALERT

Description

This message occurs when the sensor for the Non-Volatile memory (NVMEM) card lithium battery has an excessively high voltage. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

First, correct any environmental or battery problems. If the problem continues, replace the controller module. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for NVMEM VOLTAGE HIGH

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.nvmem.volt.lo

Severity

ALERT

Description

This message occurs when the sensor for the Non-Volatile memory (NVMEM) card lithium battery has an excessively low voltage. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

First, correct any environmental or battery problems. If the problem continues, replace the controller module. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for NVMEM VOLTAGE LOW

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.nvram events

callhome.nvram.cecc

Severity

ERROR

Description

This message occurs when excessive correctable error-correcting code (ECC) memory errors are reported by the NVRAM complex. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the "system environment sensors show -hidden true" cluster shell command to view the current "NV Correctable ECC count" and "NV Correctable ECC rate" values. Contact NetApp technical support for further assistance.

Syslog Message

Call home for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.nvram.failure

Severity

EMERGENCY

Description

This message occurs when the NVRAM card has experienced a critical hardware failure. The system will shut down to avoid potential data loss. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact NetApp technical support to replace the NVRAM card.

Syslog Message

Call home for NVRAM FAILURE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.nvram.iofs.fail

Severity

ERROR

Description

This message occurs in a FireStorm instance when a read or write to its nonvolatile memory (NVRAM) device fails. The instance will panic. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations.

Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Restart the FireStorm instance. If the issue persists, contact NetApp technical support.

Syslog Message

Call home for NVRAM failure at %s, I/O type %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.
io_type (STRING): Type of failed operation (read or write).
tag (STRING): Supplemental event identifier.
error (LONGINT): I/O error code.

callhome.nvram.openfs.fail

Severity

ERROR

Description

This message occurs when a FireStorm instance is unable to open its nonvolatile memory (NVRAM) device. The instance will panic.

Corrective Action

Restart the instance. If the issue persists, contact NetApp technical support.

Syslog Message

Call home for open failure at %s on NVRAM file %s, error %d.

Parameters

subject (STRING): AutoSupport subject or title for this event.
nvram_backing (STRING): Name of the NVRAM backing file.
fileio_error (LONGINT): Open error code.

callhome.okm events

callhome.okm.sync.needed

Severity

ALERT

Description

This message occurs when the cluster has reached an inconsistent state with respect to the onboard key hierarchy. This is an alert that the "security key-manager onboard sync" command should be run on the local cluster to prevent any future usage failures with onboard key management. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to Netapp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for CLUSTER OKM SYNC NEEDED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ondemand events

callhome.ondemand.invoke

Severity

NOTICE

Description

This message normally occurs when NetApp technical support has remotely requested an AutoSupport or 'call home' message of type TEST. This request is accomplished by use of the AutoSupport OnDemand Server (AODS) service. The intent of this AutoSupport is to collect only the information necessary to understand the configuration of the system and quickly deliver it. For this reason, the data collection is bounded by time taken to collect data and quantity of data collected. With less data collected, delivery over the internet is expected to be faster. The overall process from remote activation to delivery should be measurable in minutes. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

(None).

Parameters

subject (STRING): AutoSupport subject or title for this event.
URI (STRING): Alternate destination for this AutoSupport. If set, this AutoSupport is delivered to this alternate destination.
sequence (LONGINT): Sequence number to use to generate this Autosupport. Use value zero to auto-generate or a value higher than last used ASUP sequence number.
aod_req_id (STRING): AOD request ID

callhome.ondemand.invoke.all

Severity

NOTICE

Description

This message normally occurs when NetApp technical support has remotely requested an AutoSupport or 'call home' message of type ALL. This request is accomplished by use of the AutoSupport OnDemand Server (AODS) service. The intent of this AutoSupport is to collect more data to aid in problem resolution. The collection is bounded by time and size limits but these are much larger as compared to most other

AutoSupport messages. Collecting a larger amount of AutoSupport data can help support personnel diagnose difficult problems. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

(None).

Parameters

subject (STRING): AutoSupport subject or title for this event.
URI (STRING): Alternate destination for this AutoSupport. If set, this AutoSupport is delivered to this alternate destination.
sequence (LONGINT): Sequence number to use to generate this Autosupport. Use value zero to auto-generate or a value higher than last used ASUP sequence number.
aod_req_id (STRING): AOD request ID

callhome.ondemand.perf.snap

Severity

NOTICE

Description

This message normally occurs when NetApp technical support has remotely requested an AutoSupport or 'call home' message of type PERFORMANCE. This request is accomplished by use of the AutoSupport OnDemand Server (AODS) service. The intent of this AutoSupport is to collect statistics and other information to aid in understanding operations and other usage analysis related to networking, storage, memory and processor. This analysis might result in recommendations on upgrades, firmware changes, and configuration changes to improve the reliability and performance of the system. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

(None).

Parameters

subject (STRING): AutoSupport subject or title for this event.
URI (STRING): Alternate destination for this AutoSupport. If set, this AutoSupport is delivered to this alternate destination.
sequence (LONGINT): Sequence number to use to generate this Autosupport. Use value zero to auto-generate or a value higher than last used ASUP sequence number.
aod_req_id (STRING): AOD request ID

callhome.partner events

callhome.partner.down

Severity

EMERGENCY

Description

This message occurs when the storage failover partner is down and takeover cannot begin. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact NetApp technical support.

Syslog Message

Call home for PARTNER DOWN, TAKEOVER IMPOSSIBLE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.performance events

callhome.performance.archive

Severity

NOTICE

Description

This message occurs when you invoke an AutoSupport for performance archives. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Performance archive callhome for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
URI (STRING): Alternate destination for this AutoSupport message. If this is set, this AutoSupport message is delivered to this alternate destination.
force (INT): This flag indicates this AutoSupport should be generated and delivered even if the AutoSupport configuration is disabled. If 0 then obey the normal "state" and "support" flags. If this is "1", then ignore the "state" and "support" configuration and deliver as if both "state" and "support" are enabled.
case_number (STRING): Case number to be associated with this performance archive AutoSupport message.
temp_tar_path (STRING): Tarred performance archives to be included in this performance archive AutoSupport message.
aod_initiated (INT): This flag indicates that NetApp technical support has remotely requested for this AutoSupport via AutoSupport OnDemand.

sequence (LONGINT): Sequence number to use to generate this Autosupport. Use value zero to auto-generate or a value higher than last used ASUP sequence number.
aod_req_id (STRING): AOD request ID

callhome.performance.data

Severity

NOTICE

Description

This message occurs when the weekly AutoSupport or 'call home' event is sent for performance data. Information is sent to NetApp technical support to ensure that subsequent communications work and to enable operations analysis. Some results of these analysis might include recommendations on upgrades, firmware changes, and configuration changes to improve the reliability and performance of the system. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for PERFORMANCE DATA

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.performance.snap

Severity

NOTICE

Description

This message occurs some minutes after a reboot or storage takeover operation occurs so that performance information can be sent. Information is sent to NetApp technical support to ensure that subsequent communications work and to enable operations analysis. Some results of these analysis might include recommendations on upgrades, firmware changes, and configuration changes to improve the reliability and performance of the system. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for PERFORMANCE SNAPSHOT

Parameters

subject (STRING): AutoSupport subject or title for this event.
URI (STRING): Alternate destination for this ASUP. If this is set, this ASUP is delivered to this alternate destination.

force (INT): This flag indicates this AutoSupport should be generated and delivered even if the AutoSupport configuration is disabled. If zero then obey the normal "state" and "support" flags. If this is "one", then ignore the "state" and "support" configuration and deliver as if both "state" and "support" are enabled. **sequence** (LONGINT): Sequence number to use to generate this Autosupport. Use value zero to auto-generate or a value higher than last used ASUP sequence number.

callhome.pool events

callhome.pool.aggr.noncomp

Severity

ALERT

Description

This message occurs when an aggregate does not comply with the current Capacity Pool entitlement, as determined by the Licensing Manager. In an HA configuration, noncompliant aggregates are prevented from being sent home during an HA takeover/giveback situation. In a non-HA configuration, these aggregates cannot be brought online if they are already offline. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the "system license license-manager check" command to determine whether the License Manager is accessible. Use the "system license show-aggregates -compliant false" command to find all aggregates that do not comply. From the web interface of the ONTAP® Select Deploy® instance, check the Capacity Pool licensing status, and ensure that sufficient capacity remains within the capacity pool used by this instance of ONTAP. If the capacity is insufficient, reduce the usage by instances of ONTAP that use the pool (for example, by deleting aggregates). If no reduction is possible, Contact NetApp technical support..

Syslog Message

Call home for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.raid events

callhome.raid.adp.disabled

Severity

NOTICE

Description

This message occurs when auto-partitioning for root aggregate creation is disabled on a system. When auto-partitioning is disabled, the root aggregate is created on whole disks. Systems with a root aggregate on partitioned disks can devote more space to non-root aggregates than systems with a root aggregate on whole disks. If this message occurs after root aggregate creation, then further partitioning of the disks is disabled.

Corrective Action

If the system is already initialized with root aggregate on partitioned disks, ONTAP will try to re-enable auto-partitioning after the system boots up and the root aggregate is online. The event raid.autoPart.enabled will be logged when auto-partitioning is re-enabled. To create a root aggregate on partitioned disks: 1. Halt the controller. 2. Replace any failed internal disks (see the "reason" field in the EMS message). 3. Reboot the controller. 4. Re-initialize the system. If this message is seen after the system initialization and the root aggregate is already created on partitioned disks, then the system will continue to function, as follows: 1. Expansion of existing aggregates created from partitioned disks may not work. 2. If a disk fails in a RAID group created out of partitioned disks, then a spare will fail to be partitioned and disk reconstruction will not start. 3. If a disk is marked for predictive failure in a RAID group created out of partition disks, then a spare will fail to be partitioned and the sick disk copy will not start. 4. If disks are available, then manually partition the disks and keep them as spares. 5. If you were previously directed to disable ADP by NetApp technical support, reach out to NetApp technical support to re-enable ADP.

Syslog Message

Disk auto-partitioning is disabled on this system: %s.

Parameters

subject (STRING): Reason that auto-partitioning was disabled.

callhome.raid.no.recover

Severity

EMERGENCY

Description

This message occurs when too many errors have been detected by the RAID (Redundant Array of Inexpensive Disks) software protection and recovery is not possible. The detected errors could be related to checksum calculations, lost write detection and on disk medium errors in combinations with disk and NVRAM failures. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Immediately contact NetApp technical support for assistance to help diagnose the failures. If the diagnosis points to malfunctioning hardware components, these should be replaced.

Syslog Message

Call home for RAID DETECTED UNRECOVERABLE ERRORS

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.raid.over.max

Severity

ALERT

Description

This message occurs when the maximum raw capacity of the file system (aggregate or RAID file system) is reached for this software release. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations.

Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact NetApp technical support.

Syslog Message

Call home for Exceeded maximum raw capacity

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.raidtree events

callhome.raidtree.assim

Severity

EMERGENCY

Description

This message occurs when an aggregate experiences a configuration corruption error during assimilation of aggregate structures. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact NetApp technical support.

Syslog Message

Call home for RAIDTREE ASSIMILATION FAILED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.reboot events

callhome.reboot

Severity

NOTICE

Description

This message occurs after an appliance reboot—the appliance reports this event after the reboot is complete. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If reboots continue to occur, contact NetApp technical support.

Syslog Message

Call home for REBOOT

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.reboot.agentwatchdog

Severity

ALERT

Description

This message occurs when the system experiences an internal hardware watchdog timer reset. The system reports this event after the reboot is complete. If your system is configured to do so, it generates and transmits an AutoSupport(tm) (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If you continue to experience watchdog timer resets, contact NetApp technical support.

Syslog Message

Call home for REBOOT (agent watchdog reset).

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.reboot.fw

Severity

NOTICE

Description

This message occurs when the appliance reboots after loading firmware—the appliance reports this event after the reboot is complete. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for REBOOT (after entering firmware)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.reboot.giveback

Severity

NOTICE

Description

This message occurs when the node boots to normal operations because of a successful storage giveback from the partner. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for REBOOT (after giveback)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.reboot.glitch

Severity

NOTICE

Description

This message occurs when the appliance halts and reboots due to problems with inconsistent power. The appliance reports this event after the reboot is complete. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If you continue to experience 'power glitch' reboots, contact NetApp technical support.

Syslog Message

Call home for REBOOT (power glitch)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.reboot.halt

Severity

NOTICE

Description

This message occurs when the appliance reboots after you use the 'halt' command to shut it down. The appliance reports this event after the reboot is complete. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for REBOOT (halt command)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.reboot.ioxm.removal

Severity

NOTICE

Description

This message occurs when the appliance halts and reboots due to the removal of the IOXM without powering down the appliance first. The appliance reports this event after the reboot is complete. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Do not remove the IOXM without powering down the appliance first.

Syslog Message

Call home for REBOOT (IOXM removal)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.reboot.panic

Severity

ALERT

Description

This message occurs when the appliance reboots after a panic (also known as a 'system crash'). The appliance reports this event after the reboot is complete. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact NetApp technical support.

Syslog Message

Call home for REBOOT (panic)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.reboot.poweron

Severity

NOTICE

Description

This message occurs when the appliance reboots when it is powered on. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If you continue to experience 'power on' reboots, contact NetApp technical support.

Syslog Message

Call home for REBOOT (power on)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.reboot.reboot

Severity

NOTICE

Description

This message occurs when you reboot the appliance with the 'reboot' command. The appliance reports this event after the reboot is complete. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for REBOOT (reboot command)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.reboot.sk.halt

Severity

NOTICE

Description

This message occurs when the system is halted automatically to prevent damage or possible loss of data. The system reports this event after the reboot is complete. An internal halt might be caused by one of the following reasons: 1. If a disk drive fails and there are no available spares, the system enters degraded mode. The appliance halts automatically to prevent a double disk drive failure, and possible loss of data, if it runs in degraded mode for the time interval given by the following command: "storage raid-options show

-name raid.timeout -node local" The default timeout is usually 24 hours. If a spare disk drive becomes available while the system is running in degraded mode, the system immediately begins rebuilding the failed disk drive. 2. The system also halts automatically if the environmental conditions, such as temperature or power, are not within the safe operating limits or are inadequate to prevent possible damage. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If you continue to experience 'internal halt' reboots, contact NetApp technical support.

Syslog Message

Call home for REBOOT (internal halt)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.reboot.sk.reboot

Severity

NOTICE

Description

This message occurs when you halt, reset, or turn off power to the appliance without completing an orderly halt or shutdown sequence before rebooting. The appliance reports this event after the reboot is complete. To keep your data safe, always use the 'halt' command to halt the appliance, and then wait for an orderly halt or shutdown to be complete before you power down the appliance or perform any hardware maintenance. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If you continue to experience 'internal reboot' reboots, contact NetApp technical support.

Syslog Message

Call home for REBOOT (internal reboot)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.reboot.sp.rst

Severity

NOTICE

Description

This message occurs when the appliance reboots when it has been reset through the Service Processor (SP) 'system reset' command. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for REBOOT (sp system reset)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.reboot.takeover

Severity

NOTICE

Description

This message occurs when the partner appliance storage is taken over successfully by this appliance. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If you need assistance, contact NetApp technical support.

Syslog Message

Call home for PARTNER REBOOT (CONTROLLER TAKEOVER)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.reboot.takeover.p

Severity

NOTICE

Description

This message occurs when the partner appliance storage is taken over successfully by this appliance. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If you need assistance, contact NetApp technical support.

Syslog Message

Call home for PARTNER REBOOT (CONTROLLER TAKEOVER ON PANIC)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.reboot.unknown

Severity

NOTICE

Description

This message occurs after an appliance reboot—the appliance reports this event after the reboot is complete. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If reboots continue to occur, contact NetApp technical support.

Syslog Message

Call home for REBOOT

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.reboot.watchdog

Severity

ALERT

Description

This message occurs when the appliance experiences an internal hardware watchdog timer reset. The appliance reports this event after the reboot is complete. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If you continue to experience watchdog timer resets, contact NetApp technical support.

Syslog Message

Call home for REBOOT (watchdog reset)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.rnode events

callhome.rnode.splog

Severity

NOTICE

Description

This messages occurs when a new set of log files has been collected from a Service Processor (SP) of one or more non-operational nodes in the cluster. When an abnormal node reboot is detected by its SP, log files

are created. When this node is operational again, the SP log files are collected and included in subsequent AutoSupport messages sent by the node. In cases where nodes cannot return to operation immediately, the SP's log files are collected by another node in the cluster and sent via this AutoSupport message. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for REMOTE NODE SP LOG %s %s %s %s %s %s %s %s %s %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
node1_down_fn (STRING): Node-specific filename for the downfiler splog from the first node. If NULL is specified, this downfiler splog is not available.
node1_latest_fn (STRING): Node-specific filename for the latest splog from the first node.
node2_down_fn (STRING): Node-specific filename for the downfiler splog from the second node. If NULL is specified, this downfiler splog is not available.
node2_latest_fn (STRING): Node-specific filename for the latest splog from the second node.
node3_down_fn (STRING): Node-specific filename for the downfiler splog from the third node. If NULL is specified, this downfiler splog is not available.
node3_latest_fn (STRING): Node-specific filename for the latest splog from the third node.
node4_down_fn (STRING): Node-specific filename for the downfiler splog from the fourth node. If NULL is specified, this downfiler splog is not available.
node4_latest_fn (STRING): Node-specific filename for the latest splog from the fourth node.
node5_down_fn (STRING): Node-specific filename for the downfiler splog from the fifth node. If NULL is specified, this downfiler splog is not available.
node5_latest_fn (STRING): Node-specific filename for the latest splog from the fifth node.

callhome.root events

callhome.root.vol.recovery.reqd

Severity

EMERGENCY

Description

This message occurs when the root volume is not working properly and its recovery is required. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact NetApp technical support to obtain the root volume recovery procedures and further assistance.

Syslog Message

Call home for ROOT VOLUME NOT WORKING PROPERLY: RECOVERY REQUIRED.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.rtc events

callhome.rtc.battery.low

Severity

ERROR

Description

This message occurs when the voltage for the Real-Time Clock (RTC) battery is low. The message is repeated once every hour until you replace the battery. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Replace the RTC battery as soon as possible. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for RTC BATTERY LOW

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sas events

callhome.sas.init.failed

Severity

ERROR

Description

This message occurs when the SAS adapter fails to initialize the link. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp Global Services and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If the adapter is in use, check cabling and connected equipment. If the adapter is connected to storage shelves, check connected I/O modules (IOM).

Syslog Message

Callhome for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.
adapterName (STRING): Name of the associated SAS host bus adapter.

callhome.sb events

callhome.sb.pp.fcp.failo.err

Severity

ERROR

Description

This message occurs when the persistent port feature is not working during non-disruptive operations (NDO) such as takeover or giveback due to configuration errors. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sb.pp.fcp.init.err

Severity

ERROR

Description

This message occurs when persistent port object for a SAN FCP LIF fails to be configured during a LIF create operation. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sblade events

callhome.sblade.import.susp

Severity

ERROR

Description

This message occurs when LUN import cannot resume after takeover/giveback. All LUN import sessions have been suspended. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact NetApp technical support.

Syslog Message

Call home for LUN IMPORT SESSIONS SUSPENDED

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multinode AutoSupport.

callhome.sblade.lif.init

Severity

NOTICE

Description

This message occurs during Vserver initialization when partially initialized volumes do not complete initialization within the specified maximum timeout value. On timer expiration the Vserver data LIFs are brought online regardless of the volume initialization status. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for SCSIBLADE LIF INIT TIMEOUT

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sblade.lu.resync.to

Severity

EMERGENCY

Description

This message occurs when the SCSI target internal resynchronization of a LUN times out. This LUN is unavailable until one or more nodes that could not complete the internal resynchronization are taken over and given back or rebooted. If your system is configured to do so, it generates and transmits an AutoSupport® (or "call home") message. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Call NetApp technical support for further assistance.

Syslog Message

Call home for SCSIBLADE LU RESYNC TIMEOUT

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sblade.lu.rst.hung

Severity

EMERGENCY

Description

This message occurs when the SCSI target cannot complete an internal reset of a LUN. This LUN is unavailable until one or more nodes that could not complete the internal reset are taken over and given back or rebooted. If your system is configured to do so, it generates and transmits an AutoSupport® (or "call home") message. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Call NetApp technical support for further assistance.

Syslog Message

Call home for SCSIBLADE LU INTERNAL RESET HUNG

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sblade.mgmt.wedged

Severity

EMERGENCY

Description

This message occurs when the SAN management plane encounters an error that prevents further SAN management commands from being processed. This usually means that all the threads of one (or more) of the SAN management plane modules are stuck. SAN configuration changes on this node and other nodes in the cluster will fail with timeout errors until corrected. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Call NetApp technical support immediately for further assistance.

Syslog Message

Call home for SCSIBLADE MGMT WEDGED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sblade.prop.fail

Severity

EMERGENCY

Description

This message occurs when an internal SAN management command fails. SAN management commands is not able to be completed for the Vserver which fails until the node is rebooted. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Refer to Knowledgebase article: 2017459 for recovery instructions.

Syslog Message

Call home for SCSIBLADE PROPOSAL FAIL

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sblade.unavailable

Severity

ERROR

Description

This message occurs when the node has lost connectivity with the majority of the cluster and is unable to recover automatically. When this occurs both FCP and iSCSI traffic have been disabled on this node. Manual recovery is required to come back into service. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Reboot the node, and if the node is waiting for giveback then perform a giveback.

Syslog Message

Call home for SCSIBLADE SERVICE UNAVAILABLE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sblade.vol.ev.lost

Severity

ERROR

Description

This message occurs when LUNs (Logical Unit Numbers) in a volume are not accessible on all paths. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Call NetApp technical support for further assistance.

Syslog Message

Call home for SCSIBLADE VOLUME EVENT LOST

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi node ASUP.

callhome.sblade.vs.op.tt

Severity

ERROR

Description

This message occurs when a mangement command or other internal operation takes too long for a LUN (Logical Unit Number). When this situation occurs, the corresponding Vserver cannot handle any other management changes for the LUN until this condition no longer persists. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Call NetApp technical support immediately for further assistance.

Syslog Message

Call home for SCSIBLADE VSERVER OPERATION TIMEOUT

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi node ASUP.

callhome.scsi events

callhome.scsi.tgt.misconfig

Severity

ERROR

Description

This message occurs when a LUN (Logical Unit Number) mapping or igroup type misconfiguration has been detected when the cluster interconnect has transitioned from down to up. The detected misconfiguration problems will typically include cases of having a LUN on each storage controller mapped to the same LUN for the same initiator. When the cluster interconnect is down, LUN mapping changes are prevented unless

overridden. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Run the "lun config_check" command which will list out the problems that caused this event and resolve this problem list. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for FILER SCSI TARGET MISCONFIGURED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sdsk events

callhome.sdsk.admin

Severity

NOTICE

Description

This message occurs when you fail a hot spare disk drive.

Corrective Action

(None).

Syslog Message

Call home for SPARE DISK ADMIN REMOVED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sdsk.fault

Severity

ERROR

Description

This message occurs when a spare disk drive fails. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Locate the failed disk drive by looking for a disk drive whose red and amber LED fault lights are NOT lit. Replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

    subject (STRING): AutoSupport subject or title for this event.

callhome.sdsk.label

Severity

    ERROR

Description

    This message occurs when a disk drive fails due to unexpected RAID metadata. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

    Locate the failed disk drive by looking for a disk drive whose red and amber LED fault lights are NOT lit. Replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

    Call home for SPARE DISK BAD LABEL

Parameters

    subject (STRING): AutoSupport subject or title for this event.

callhome.sdsk.label.v

Severity

    ERROR

Description

    This message occurs when a disk drive fails due to a version number in its RAID metadata that is inconsistent with the operating system version installed. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

    Locate the failed disk drive by looking for a disk drive whose red and amber LED fault lights are NOT lit. Replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

    Call home for SPARE DISK BAD LABEL VERSION

Parameters

    subject (STRING): AutoSupport subject or title for this event.

callhome.sdsk.missing

Severity

    ERROR

Description

This message occurs when the system detects that a spare disk drive is not in a loop or is missing. This might also be due to a failed disk drive that is still in the chassis awaiting replacement. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Locate and replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for SPARE DISK MISSING

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sdsk.noio

Severity

ERROR

Description

This message occurs when disk drive device commands to a hot spare disk drive are failing with link errors, adapter errors, or timeouts. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Locate the failed disk drive by looking for a disk drive whose red and amber LED fault lights are NOT lit. Replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for SPARE DISK NOT RESPONDING

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sdsk.shrank

Severity

ERROR

Description

This message occurs when a hot spare disk drive fails because its raw capacity was downsized due to a firmware change. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Locate the failed disk drive by looking for a disk drive whose red and amber LED fault lights are NOT lit. Replace the failed disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for SPARE DISK RAWSIZE SHRANK

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ses events

callhome.ses.drive.missing

Severity

ERROR

Description

This message occurs when the storage adapter detects a disk on the Fibre Channel loop or the SCSI bus, but enclosure services in the disk shelf does not report a disk with that address. This error indicates that the disk took an address other than what the disk shelf should have provided, or that enclosure services in the disk shelf cannot be contacted for address information. (Note: If the message "ses.drive.possShelfAddr" subsequently appears, follow the corrective actions in that message.) In this condition, the SCSI Enclosure Services (SES) process in the system might be unable to perform certain operations on the disk, such as setting failure LEDs or detecting disk swaps. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If the disk is not part of an active aggregate or volume, pull out the disk and push it back into the slot to ensure that the disk is in place. If the problem persists, insert a spare disk into the slot. If the problem is then gone, replace the original disk with the spare one. If the problem occurs to multiple disks on the same loop, check the I/O modules at the back of the disk shelves on that loop for errors.

Syslog Message

Call home for SES: DRIVE MISSING

Parameters

subject (STRING): AutoSupport subject or title for this event.
ChannelName (STRING): Channel the disk shelf is on.
LoopIds (STRING): Loop or SCSI IDs of the missing disks.

callhome.sfo events

callhome.sfo.downrev

Severity

ERROR

Description

This message occurs when the appliance software boots and detects out-of-date motherboard firmware, which can cause serious issues. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and

resolution.

Corrective Action

Upgrade the motherboard open firmware (OFW) version to the recommended version for this software and appliance as soon as possible. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for HA GROUP DOWNREV BOOT FIRMWARE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sfo.giveback

Severity

NOTICE

Description

This message occurs when this appliance successfully completed a giveback of the storage to its partner appliance. The partner appliance is expected to be performing normal operations. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for CONTROLLER GIVEBACK COMPLETE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sfo.miscount

Severity

ERROR

Description

This message occurs when each partner in the High Availability (HA) storage configuration detects a different number of disk drives than its partner. This error is typically transient, and can occur for the following reasons: 1) A disk drive failed. 2) A disk drive was replaced. 3) One or more disk drives were added. The problem is usually corrected automatically within 60 seconds, requiring no action from you. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If the problem persists, check the cabling on or reseat any replaced or added disk drives, and check for failed disk drives. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for HA GROUP ERROR: DISK/SHELF COUNT MISMATCH

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sfo.personality

Severity

ALERT

Description

This message occurs when an All Flash Optimized node in a high-availability (HA) configuration detects its partner having a different personality setting. This mismatch might be due to either one node not being configured as All Flash Optimized, or the nodes being configured for different personalities (performance optimized or capacity optimized). Storage failover might be at risk of not functioning properly. HDDs taken over during failover events might not be able to serve data. If your system is configured to do so, it generates and transmits an AutoSupport® (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

An All-Flash Optimized node only recognizes SSDs and ignores HDDs. For the HA pair to be considered All-Flash Optimized, both nodes must be configured with the same personality (performance optimized or capacity optimized). Use the "system node show -instance" command to display each node's personality and optimization settings. If both nodes are configured with the same personality, all HDDs should be removed from the HA pair, because they will not be able to serve data. Contact NetApp technical support for assistance.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sfo.takeover

Severity

ALERT

Description

This message occurs when automatic takeover of the cluster partner is successful. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Address the issue that caused the takeover, then restore the cluster partner to normal operations. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sfo.takeover.failed

Severity

ALERT

Description

This message occurs when automatic takeover of the cluster partner is not successful. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Determine why the takeover did not succeed. Restore the cluster partner to normal operations. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for CONTROLLER TAKEOVER FAILED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sfo.takeover.halt

Severity

NOTICE

Description

This message occurs when takeover of the HA partner is successful. The takeover occurred because of an administrative halt on the HA partner. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Address the issue that caused you to halt the HA partner and then restore it to normal operations. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for CONTROLLER TAKEOVER COMPLETE HALT

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sfo.takeover.m

Severity

NOTICE

Description

This message occurs when manual takeover of the cluster partner is successful.

Corrective Action

Address the issue that caused you to take over the cluster partner manually, then restore the cluster partner to normal operations. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for CONTROLLER TAKEOVER COMPLETE MANUAL

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sfo.takeover.m.dr

Severity

ERROR

Description

This message occurs when manual takeover of the High Availability (HA) partner for disaster recovery (DR) is successful. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Address the issue that required you to perform a DR takeover of the HA partner. After the issue is resolved, restore the HA partner to normal operations. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for CONTROLLER TAKEOVER COMPLETE MANUAL(DR)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sfo.takeover.panic

Severity

EMERGENCY

Description

This message occurs when automatic takeover of the HA partner is successful. The controller takeover occurred because of a HA partner software failure or panic.

Corrective Action

Address the cause of the cluster partner software failure or panic, then restore the cluster partner to normal operations. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for CONTROLLER TAKEOVER COMPLETE PANIC

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sfo.takeover.reboot

Severity

NOTICE

Description

This message occurs when takeover of the HA partner is successful. The takeover occurred because of an administrative reboot on the HA partner. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Address the issue that caused you to reboot the HA partner and then restore it to normal operations. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for CONTROLLER TAKEOVER COMPLETE REBOOT

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sfo.to.comm.loss

Severity

EMERGENCY

Description

This message occurs when automatic takeover of the HA partner is successful. The controller takeover occurred because of a HA partner lost communication. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Address the cause of the cluster partner lost communication, then restore the cluster partner to normal operations. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.shlf events

callhome.shlf.fan

Severity

EMERGENCY

Description

This message occurs when the system detects faulty hardware on the disk shelf, such as a fan, power
supply unit (PSU), or failing temperature sensor. The problem might be environmental (temperature or faulty
power) or hardware-related. If your system is configured to do so, it generates and transmits an
AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations.
Successful delivery of an AutoSupport message significantly improves problem determination and
resolution.

Corrective Action

Evaluate the environment in which your system is operating and identify whether the problem is
environmental or hardware-related. Your system should be in a room with an operating temperature of 18C
to 24C (65F to 75F). If faulty hardware caused the error, such as a bad temperature sensor or a broken fan,
replace the faulty part as soon as possible. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for SHELF COOLING UNIT FAILED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.shlf.fan.warn

Severity

ERROR

Description

This message occurs when the system detects faulty hardware on the disk shelf, such as a fan, power
supply unit (PSU), or failing temperature sensor. The problem might be environmental (temperature or faulty
power) or hardware-related. If your system is configured to do so, it generates and transmits an
AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations.
Successful delivery of an AutoSupport message significantly improves problem determination and
resolution.

Corrective Action

Evaluate the environment in which your system is operating and identify whether the problem is
environmental or hardware-related. Your system should be in a room with an operating temperature of 18C
to 24C (65F to 75F). If faulty hardware caused the error, such as a bad temperature sensor or a broken fan,
replace the faulty part as soon as possible. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for SHELF COOLING UNIT FAILED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.shlf.fault

Severity

ERROR

Description

This message occurs when the system detects faulty hardware on the disk shelf, such as a fan, power supply, or failing temperature sensor. The problem might be environmental (temperature or faulty power) or hardware-related. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Evaluate the environment in which your system is operating and identify whether the problem is environmental or hardware-related. Your system should be in a room with an operating temperature of 18C to 24C (65F to 75F). If faulty hardware caused the error, such as a bad temperature sensor or a broken fan, replace the faulty part as soon as possible. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for SHELF_FAULT

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.shlf.overtemp

Severity

ERROR

Description

This message occurs when the system detects a disk shelf problem. The problem might be due to environmental issues, such as temperature or faulty power, or by faulty hardware, such as a fan, power supply, or failing temperature sensor. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Evaluate the environment in which your system is operating and identify whether the problem is environmental or hardware-related. Your system should be in a room with an operating temperature of 18C to 24C (65F to 75F). If faulty hardware caused the error, such as a bad temperature sensor or a broken fan, replace the faulty part as soon as possible. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.shlf.power.intr

Severity

ERROR

Description

This message occurs when your system detects that a disk shelf power supply reported either a sustained loss of DC voltage output for about 20 seconds or a failure condition. This issue can occur for a number of reasons: 1. The power supply was turned off or unplugged. 2. The power to the server room failed or fluctuated. 3. The disk shelf power supply malfunctioned and should be replaced. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If necessary, replace the disk shelf power supply. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for SHELF POWER INTERRUPTED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.shlf.ps.fault

Severity

ERROR

Description

This message occurs when your system detects that a disk shelf power supply reported a loss of DC voltage. This might be a transient issue. This issue can occur for a number of reasons: 1. The power supply was turned off or unplugged. 2. The power to the server room failed or fluctuated. 3. The shelf power supply malfunctioned and should be replaced. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If necessary, replace the shelf power supply. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for SHELF POWER SUPPLY WARNING

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.shutdown events

callhome.shutdown.pending

Severity

ALERT

Description

This message occurs when a disk drive fails but there are no suitable spares available for reconstruction. To protect your data, the system enters degraded mode. The system halts automatically to prevent a double disk drive failure, and possible loss of data, if it runs in degraded mode for the time interval given by the following command: "storage raid-options show -name raid.timeout -node local" The default timeout is usually 24 hours. If a spare drive becomes available while the system is running in degraded mode, the system immediately begins rebuilding the failed drive. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

To prevent the system from shutting down in 24 hours, perform either of the following actions: 1. Add a spare disk drive suitable for reconstructing the failed disk drive. 2. Change the timeout period with the following command: "storage raid-options modify -name raid.timeout -node local -value X" where X equals the number of hours for the new timeout value. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for SHUTDOWN PENDING (degraded mode)

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sm events

callhome.sm.vsdr.break.fail

Severity

ERROR

Description

This message occurs when a break operation on a SnapMirror® relationship that is a part of VserverDR fails. If your system is configured to do so, it generates and transmits an AutoSupport (or "call home") message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact NetApp technical support for additional information.

Syslog Message

Call home for SNAPMIRROR BREAK FAILURE.

Parameters

subject (STRING): AutoSupport subject or title for this event.
SourceVserver (STRING): Source Vserver of the SnapMirror relationship.
DestVserver (STRING): Destination Vserver of the SnapMirror relationship.

callhome.snapmirror events

callhome.snapmirror.oos

Severity

NOTICE

Description

This message occurs when a sync-granular consistency group (CG) transitions from in-sync status to out-of-sync status. If your system is configured to do so, it generates and transmits an AutoSupport (or "call home") message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Look for the sm.syncmirror.out.of.sync event concerning this relationship in the EMS log file. The event provides the reason why the relationship has been transitioned to out-of-sync and an appropriate corrective action, if applicable.

Syslog Message

Call home for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.snapmirror.oos.pers

Severity

ALERT

Description

This message occurs when a sync-granular consistency group (CG) relationship transitions from in-sync status to out-of-sync status and remains out-of-sync for longer than expected. If your system is configured to do so, it generates and transmits an AutoSupport (or "call home") message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Look for the sm.syncmirror.out.of.sync event concerning this relationship in the EMS log file on source node of SnapMirror relationship. The event provides the reason why the relationship has been transitioned to out-of-sync. Verify network connections between the primary cluster and the secondary cluster. Check for error information in the "snapmirror show" command output for the relationship. Quiesce the relationship if the condition cannot be addressed immediately.

Syslog Message

Call home for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sp events

callhome.sp.hbt.missed

Severity

NOTICE

Description

This message occurs when ONTAP® does not receive an expected "heartbeat" signal from the Service Processor (SP). Along with this message, log files from SP will be sent out for debugging. ONTAP will reset the SP to attempt to restore communication. The SP will be unavailable for up to two minutes while it reboots.

Corrective Action

Contact NetApp technical support.

Syslog Message

Call home for SP HBT MISSED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sp.hbt.stopped

Severity

ALERT

Description

This message occurs when ONTAP® is no longer receiving heartbeats from the Service Processor (SP). Depending on the hardware design, the system may continue to serve data or may determine to shut down to prevent data loss or hardware damage. The system continues to serve data, but because the SP might not be working, the system cannot send notifications of down appliances, boot errors, or Open Firmware (OFW) Power-On Self-Test (POST) errors. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If the system has shut down, attempt a hard power cycle: Pull the controller out from the chassis, push it back in then power on the system. Contact NetApp technical support if the problem persists after the power cycle, or for any other condition that may warrant attention.

Syslog Message

Call home for SP HBT STOPPED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.spares events

callhome.spares.low

Severity

ERROR

Description

This message occurs when one or more RAID groups do not have an eligible spare disk drive available in case of a disk drive failure. An eligible spare disk drive must be the correct size and capacity, and must be in the appropriate pool. If a disk drive fails without a spare to reconstruct on, the system enters degraded mode. The system halts automatically to prevent a double disk drive failure, and possible loss of data, if it runs in degraded mode for the time interval given by the following command: "storage raid-options show -name raid.timeout -node local" The default timeout is usually 24 hours. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Add suitable spare disk drives for all RAID groups to ensure that you have at least one spare disk drive. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for %s: %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
rg (STRING): RAID groups on which spares low is identified.

callhome.spm events

callhome.spm.process.maxexit

Severity

ERROR

Description

This message occurs when a subsystem is not fully operational after one or more restarts and a restart threshold has been reached by the Service Process Manager (SPM). The inconsistency might be caused by external events such network data, previous configuration changes, software changes, firmware changes, or hardware changes. The message should not occur more then once per day. The underlying subsystem might be related to one or more operational systems such as management, authentication, network access, and so on. Performance issues and operational difficulties might have been exhibited before this event. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If necessary, undo recent changes to the system and to external services that the system uses to stabilize operations, and then contact NetApp technical support. They will help to identify the underlying issue and whether a software upgrade has been made available to resolve the issue. You might need to isolate the system from any suspect network traffic.

Syslog Message

Call home for MAXIMUM EXITS THRESHOLD OF A PROCESS MANAGED BY SPM IS REACHED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.stackmon events

callhome.stackmon.recon.failed

Severity

ALERT

Description

This message occurs when the system fails to assign the correct stack-id to one or more disk shelves. The shelf and disk names might not correctly reflect the storage topology. Shelf and disk operations might fail if multiple disks share the same name. If your system is configured to do so, it generates and transmits an AutoSupport(tm) (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Verify that the storage topology is correct. The (privilege: advanced) "storage stackmon repair" command can be used to diagnose and repair the issue. If you need further assistance, contact NetApp technical support.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.svm events

callhome.svm.mig.abort.fail

Severity

ERROR

Description

This message occurs when a Vserver migration failed to be aborted. If the system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Run the "vserver migrate show" command to view the description of the error and the corrective action.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.

epoch (STRING): Identifying tag for multi-node AutoSupport.

callhome.svm.mig.aborted

Severity

NOTICE

Description

This message occurs when a Vserver migration is successfully aborted. If the system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi-node AutoSupport.

callhome.svm.mig.clean.fail

Severity

ERROR

Description

This message occurs when the cleanup phase of a Vserver migration has failed. If the system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Run the "vserver migrate show" command to view the description of the error and the corrective action.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi-node AutoSupport.

callhome.svm.mig.complete

Severity

NOTICE

Description

This message occurs when a Vserver migration has completed. If the system is configured to do so, it

generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi-node AutoSupport.

callhome.svm.mig.fail

Severity

ERROR

Description

This message occurs when a Vserver migration fails. If the system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Run the "vserver migrate show" command to view the description of the error and the corrective action.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi-node AutoSupport.

callhome.svm.mig.pause.fail

Severity

ERROR

Description

This message occurs when a Vserver migration failed to be paused. If the system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Run the "vserver migrate show" command to view the description of the error and the corrective action.

Syslog Message

Call home for %s

Parameters

> **subject** (STRING): AutoSupport subject or title for this event.
> **epoch** (STRING): Identifying tag for multi-node AutoSupport.

callhome.svm.mig.paused

Severity

> NOTICE

Description

> This message occurs when a Vserver migration is paused. If the system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

> (None).

Syslog Message

> Call home for %s

Parameters

> **subject** (STRING): AutoSupport subject or title for this event.
> **epoch** (STRING): Identifying tag for multi-node AutoSupport.

callhome.svm.mig.pstCut.fail

Severity

> ERROR

Description

> This message occurs when the post-cutover phase of a Vserver migration has failed. If the system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

> Run the "vserver migrate show" command to view the description of the error and the corrective action.

Syslog Message

> Call home for %s

Parameters

> **subject** (STRING): AutoSupport subject or title for this event.
> **epoch** (STRING): Identifying tag for multi-node AutoSupport.

callhome.svm.mig.setCfg.fail

Severity

> ERROR

Description

This message occurs when the setup configuration phase of a Vserver migration has failed. If the system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Run the "vserver migrate show" command to view the description of the error and the corrective action.

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi-node AutoSupport.

callhome.svm.mig.started

Severity

NOTICE

Description

This message occurs when a Vserver migration has started successfully. If the system is configured to do so, it generates and transmits an AutoSupport (or "call home") message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for %s

Parameters

subject (STRING): AutoSupport subject or title for this event.
epoch (STRING): Identifying tag for multi-node AutoSupport.

callhome.svo events

callhome.svo.prevented

Severity

ERROR

Description

This message occurs when a write to a SnapValidator enabled volume failed to be validated and was rejected by the server. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Check the configuration of the server to insure correct 'svf_offset' setting on the lun (if applicable) and correct use of svo_options. This includes making sure that RMAN data is not being stored on a volume that does not have the svo_allow_rman option set. If the server appears to be correctly configured, the problem may exist at any point between Oracle client and the server. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for SNAPVALIDATOR ERROR PREVENTED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sync events

callhome.sync.mirror.nospc

Severity

ALERT

Description

This message occurs when ONTAP® cannot create a new base Snapshot copy in a SyncMirror aggregate after multiple attempts. Systems using RAID SyncMirror require aggregate Snapshot copies for normal operation. Periodically, ONTAP creates a new base Snapshot copy with a name similar to "mirror_resync.1201023128(filer_name)." Once created, ONTAP deletes the old base Snapshot copy. The base Snapshot copy is used to optimize resynchronization when one plex goes offline. Short-lived circumstances when a new aggregate Snapshot copy cannot be created are not unusual. ONTAP initiates background processes to reclaim space and allow creation of new aggregate Snapshot copies. This message is issued when ONTAP cannot create a new base Snapshot copy after waiting a reasonable time. If the aggregate lacks an existing SyncMirror base Snapshot copy, then if one plex goes offline, subsequent resynchronization must copy all data in the aggregate - this can be a very long process. ONTAP issues this message when there is no SyncMirror base Snapshot copy and a new one cannot be created in repeated attempts in the last ten minutes (by default). If an old base Snapshot copy is present, this condition is less urgent. However, since space reclamation is likely to be slower, ONTAP waits up to two hours (by default) before issuing this message. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

ONTAP continually retries to create a new SyncMirror Snapshot copy. This condition might autocorrect, even after issuing this message. If it does not, contact NetApp technical support.

Syslog Message

Call home for SYNCMIRROR SNAPSHOTS NOT ROTATING PROPERLY

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.syncm events

callhome.syncm.isolation

Severity

ALERT

Description

This message occurs when both plexes of a SyncMirror® configuration have disk drives in the same hardware-based disk pool; that is, the plexes are not hardware-fault isolated. Therefore, a single hardware failure can cause both plexes to fail. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

To resolve this issue, complete the following steps: 1. Identify the problem aggregate from the system logs. 2. Determine which mirror plexes have disk drives in mixed pools. 3. Determine how this occurred: possible causes include a wiring problem, a reconstruction forced mixed pools, or the mirror was created explicitly so that the plexes have disk drives in mixed pools. 4. Based on the information you gather, determine how to correct the issue. For example, recable the disk drives to restore hardware-fault isolation. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for SYNCMIRROR FAULT ISOLATION

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.syncm.plex

Severity

ALERT

Description

This message occurs when a SyncMirror® plex fails. Therefore, the SyncMirror plex is in a degraded mode. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

To resolve this problem, complete the following steps: 1. Identify the problem aggregate and failed plex from the system logs. 2. Determine the reason for the plex failure, such as disk drive, disk shelf, or loop failure. 3. Replace any faulty components that you discover. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for SYNCMIRROR PLEX FAILED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.syncm.plex.offlined

Severity

ALERT

Description

This message occurs when a SyncMirror® plex is offlined. Therefore, the Syncmirror aggregate is in a degraded mode. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

To resolve this problem, complete the following steps: 1. Identify the problem aggregate and offlined plex from the system logs. 2. Determine the reason for the plex being offlined: a. Issue with backend array or adapter b. IO timeout errors on multiple disks c. SCSI errors 3. Replace any faulty components that you discover. 4. Online the plex manually. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for SYNCMIRROR PLEX OFFLINED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.syncm.verify

Severity

ERROR

Description

This message occurs when the system finds one or more block inconsistencies between plexes of a SyncMirror® configuration. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

To resolve this issue, complete the following steps: 1. Determine the problem aggregate and failed plex from the system logs. 2. Take the aggregate offline. 3. Split the plexes into two aggregates. 4. Contact NetApp technical support for assistance, and then run WAFL® Iron (wafliron) on both aggregates. 5. Determine which is the 'good' aggregate by inspection. 6. Take offline and then destroy the 'bad' aggregate. 7. Re-mirror the 'good' aggregate. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for SYNCMIRROR VERIFY FAILED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.syncsm events

callhome.syncsm.exception

Severity

ERROR

Description

This message occurs when critical thresholds are breached for a SnapMirror® Synchronous relationship. If your system is configured to do so, it generates and transmits an AutoSupport (or "call home") message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Use the "snapmirror show" command to check for current status. Contact support personnel if this problem occurs repeatedly and prevents the relationship from moving to the InSync status.

Syslog Message

Call home for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.syncsm.oos.fatal

Severity

ALERT

Description

This message occurs when a resynchronize operation between the source volume and destination volume fails for a SnapMirror® Sync relationship. If your system is configured to do so, it generates and transmits an AutoSupport (or "call home") message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Look for the sms.resync.attempt.failed event concerning this relationship in the EMS log file. The event provides the reason why the relationship has been transitioned to out-of-sync and an appropriate corrective action, if applicable.

Syslog Message

Call home for %s.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sys events

callhome.sys.config

Severity

ERROR

Description

This message occurs when the appliance has an unsupported PCI slot configuration. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Examine the command-line interface and System Configuration Guide for more information about slot assignments and hardware configuration, and then correct the unsupported configuration. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for SYSTEM CONFIGURATION WARNING

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.sys.config.crit

Severity

ERROR

Description

This message occurs when the appliance has an unsupported PCI slot configuration. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Examine the command-line interface and System Configuration Guide for more information about slot assignments and hardware configuration, and then correct the unsupported configuration. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for SYSTEM CONFIGURATION ERROR

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.tgt events

callhome.tgt.lun.nospc

Severity

ERROR

Description

This message occurs when the SCSI Target subsystem begins failing SCSI Write commands due to to an out of space (ENOSPC) condition on the appliance. This event is seen only when thin provisioning is used together with FCP or iSCSI. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations.

Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

When this event occurs the customer should verify that all volumes containing luns on the appliance are properly configured for thin provisioning. Under some conditions additional disks may need to be added to the volume/aggragate. Contact NetApp support for more information. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for LUN OUT OF SPACE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.unsupported events

callhome.unsupported.snaplock

Severity

ALERT

Description

This message occurs when the system generates an AutoSupport event to notify you that a SnapLock® disk is attached to a system running a release of ONTAP® that does not support SnapLock.

Corrective Action

Remove the SnapLock disks from this system and attach them to a system that supports SnapLock. You can also revert or upgrade this system to a release that supports SnapLock.

Syslog Message

Call home for SNAPLOCK DISKS IN UNSUPPORTED RELEASE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ups events

callhome.ups.line

Severity

NOTICE

Description

This message occurs when line power for an Uninterruptible Power Supply (UPS) system is restored and the battery power is normal.

Corrective Action

Maintain the environment and ensure that the line power to the UPS continues to be normal. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for UPS LINE POWER RESTORED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ups.low.battery

Severity

ALERT

Description

This message occurs when battery power for an Uninterruptible Power Supply (UPS) system has under 5 minutes of charge left. The system is currently serving data but will eventually shut down if the UPS continues to run without line power. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Check the environment and restore the line power to the UPS as soon as possible to avoid system shutdown. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for UPS LOW BATTERY

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ups.ok.low.battery

Severity

NOTICE

Description

This message occurs when line power for an Uninterruptible Power Supply (UPS) system is restored but the battery power is low. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Maintain the environment and ensure that the line power to the UPS continues to be normal. As line power continues to be normal, the battery is recharged. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for UPS PWR GOOD LOW BATTERY

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ups.ok.no.battery

Severity

NOTICE

Description

This message occurs when line power for an Uninterruptible Power Supply (UPS) system is restored but the battery power is very low. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Maintain the environment and ensure that the line power to the UPS continues to be normal. As line power continues to be normal, the battery is recharged. If line power is disrupted or leaves the normal range, the system might shut down immediately to protect your data. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for UPS PWR GOOD CRITICAL BATTERY

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ups.on.battery

Severity

ALERT

Description

This message occurs when line power for an Uninterruptible Power Supply (UPS) system fails and the system is running on battery power. The server is currently serving data but will eventually shut down if the UPS continues to run without line power. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Check the environment and restore line power to the UPS as soon as possible to avoid system shutdown. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for UPS ON BATTERY

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.ups.shutting.down

Severity

ALERT

Description

This message occurs when battery power for an Uninterruptible Power Supply (UPS) system is almost depleted and the system is shutting down to protect your data. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Restore the line power to the UPS immediately to prevent system shutdown. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for UPS SHUTTING DOWN

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.user events

callhome.user.snmp.trap

Severity

NOTICE

Description

This message occurs when a SNMP (Simple Network Management Protocol) has been configured to cause an SNMP trap. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for SNMP USER DEFINED TRAP

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.vdom events

callhome.vdom.reconcile

Severity

ERROR

Description

This message occurs when the virtual disk infrastructure (vdom) unsuccessfully reconciles the Out Of Volume Container (OOVC) and the Vdisk Table Of Contents (VTOC). The Out Of Volume Container or OOVC is an area of storage that resides in a per-vvol aggregate metadir and provides storage for LUN

configuration (override) and metadata (PR, mode page, log page). OOVC will have a LUN inventory that is identical to the LUN inventory in the AFS. Therefore the VTOC and OOVC must contain the same set of LUNs. As a result of data management operations like volume snaprestore, the LUN inventory can differ between VTOC and OOVC. For these operations that affect LUN inventory, VDOM will need to reconcile the OOVC with the VTOC as part of the operation. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for %s Could not reconcile vtoc and oovc for volume associated with DSID: %llu, due to VDOM error: %u.

Parameters

subject (STRING): AutoSupport subject or title for this event.
volume_dsid (LONGINT): Data set ID (DSID) of the containing volume.
vdom_error (INT): The vdom error code associated with the reconcile.

callhome.vfiler events

callhome.vfiler.move.to.dst

Severity

ALERT

Description

This message occurs on the destination controller during the final phase of migrating a vfiler when the 120 second time limit has been reached . During the final phase of migrating a vfiler from a source controller to a destination controller, input/output data access is stalled until the destination is ready. The amount of time spent with I/O data access stalled within 120 seconds, since many pre-checks have be done to ensure this can be achieved. With the time limit reached, operations will resume to using the vfiler on the source controller. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Check that service has been restored to the vfiler on the source controller. If not, contact NetApp technical support. Many pre-checks have been done to ensure timely migration of the vfiler from one controller to another. It is unclear whether network or other conditions have changed, such as changes in controller loads have prevented successful vfiler migration. Check the network connectivity, network bandwidth, load on the source controller and load on the destination controller. If they are not within normal expecations, resolve the issue. If they are within normal expectations, consult with NetApp technical support. If you need further assistance, contact NetApp technical support.

Syslog Message

Call home for VFILER MIGRATION EXCEEDED 120 SECONDS ON DESTINATION

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.vfiler.move.to.src

Severity

NOTICE

Description

This message occurs on the source controller at the request of the destination controller. The destination controller has exceeded a 120 second time limit during the final phase of migrating a vfiler. During the final phase of migrating a vfiler from a source controller to a destination controller, input/output data access is stalled until the destination is ready. The amount of time spent with I/O data access stalled within 120 seconds, since many pre-checks have be done to ensure this can be achieved. With the time limit reached, operations will resume to using the vfiler on the source controller. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Check that service has been restored to the vfiler on this controller. If not, contact NetApp technical support. Many pre-checks have been done to ensure timely migration of the vfiler from one controller to another. It is unclear whether network or other conditions have changed, such as changes in controller loads have prevented successful vfiler migration. Check the network connectivity, network bandwidth, load on the source controller and load on the destination controller. If they are not within normal expectations, please resolve. If they are within normal expectations, consult with NetApp technical support. If you need further assistance, contact NetApp technical support.

Syslog Message

Call home for VFILER MIGRATION TIME OUT EXCEEDED BY DESTINATION

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.vol events

callhome.vol.offline

Severity

ALERT

Description

This message occurs when the system detects an inconsistent volume and takes it offline. The file system inconsistency could be from one or more sources. The inconsistency might be related to previous operations or to current operations. Disabling access is a protective measure to ensure that further inconsistencies are avoided. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

If the operating environment for the system, storage, or associated cabling has changed in terms of temperature, humidity, vibration, unstable electrical power, or other physical factors, gracefully shut down and power off the system until the environment is restored to normal operations. If the operating environment has not changed, identify the source of the inconsistency by checking for previous errors and

warnings. Also check for hardware statistics from Fibre Channel, SCSI, disk drives, other communications mechanisms, and previous administrative activities. Another approach is to consult with NetApp technical support (it is recommended that you do so before attempting this step), and then run WAFL® Iron (wafliron) on the volume to identify and optionally repair the inconsistency. If you need further assistance, contact NetApp technical support.

Syslog Message

Call home for VOLUME INCONSISTENT AND TAKEN OFFLINE

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.vol.space.crit

Severity

EMERGENCY

Description

This message occurs when a volume has overallocated space. It will be taken offline soon and the node will reboot. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Create space by increasing volume/aggregate size or deleting data. While changing the provisioning from thick to thin will prevent further utilization of space, it is no longer sufficient to prevent the volume/aggregate from being offlined. In a volume, size can be increased with the "volume size" command. To change provisioning in a volume, reserved files can be unreserved using the "volume file reservation" command. In an aggregate, size can be increased by adding disks. To change provisioning in an aggregate, volume guarantees can be changed from "volume" to "none" using the space-guarantee parameter in the "volume modify" command. The nodeshell "vol status -S" and "aggr status -S" commands display "Total Used" and "Total Physical Used" values greater than 100% when the reserve is being used. The "vol.log.overalloc" and "volume.phys.overalloc" EMS events and their associated SNMP traps of "volumeLogicalOverallocated" and "volumePhysicalOverallocated" are issued when the volume or aggregate is consuming more than the recommended amount of reserve.

Syslog Message

Call home for VOLUME CRITICALLY OUT OF SPACE ERROR.

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.wafl events

callhome.wafl.check

Severity

ALERT

Description

This message occurs after a WAFL® check (wack) operation runs. WAFL check is a detection and repair process. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home')

message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Check the appliance's log for valuable information that WAFL check might have reported. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for WAFL_check

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.wafl.inconsistent

Severity

ALERT

Description

This message occurs when the system detects that a volume is inconsistent. The file system inconsistency can be from one or more sources. The inconsistency can be related to previous operations or to current operations. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Consult with NetApp technical support (it is recommended that you do so before attempting this step), and then run WAFL® Iron (wafliron) on the volume to identify and optionally repair the inconsistency. If you need further assistance, contact NetApp technical support.

Syslog Message

Call home for WAFL INCONSISTENT

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.wafl.inconsistent.block

Severity

ALERT

Description

This message occurs when the system detects a volume that contains an inconsistent block. The file system inconsistency can be from one or more sources. The inconsistency can be related to previous data operations or to current data operations. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact NetApp technical support for further assistance.

Syslog Message

Call home for WAFL INCONSISTENT BLOCK

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.wafl.inconsistent.user.block

Severity

ALERT

Description

This message occurs when the system detects inconsistent user data within a volume. The file system inconsistency can be from one or more sources. The inconsistency can be related to previous data operations or to current data operations. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Contact NetApp technical support for further assistance.

Syslog Message

Call home for WAFL INCONSISTENT USER BLOCK

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.wafl.iron.done

Severity

NOTICE

Description

This message occurs after a WAFL® Iron (wafliron) operation runs. WAFL® Iron is a detection and repair process. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Check the appliance's log for valuable information that WAFL Iron might have reported. If you need assistance, contact NetApp technical support.

Syslog Message

Call home for WAFL IRON COMPLETED

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.wafliron events

callhome.wafliron.chg.pending

Severity

NOTICE

Description

This message occurs when WAFL® Iron (wafliron) Optional Commit changes are pending. WAFL® Iron is a detection and repair process. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

Work with NetApp technical support on this issue. If you decide against this, it is recommended that the pending changes be committed.

Syslog Message

Call home for WAFLIRON CHANGES PENDING

Parameters

subject (STRING): AutoSupport subject or title for this event.

callhome.weekly events

callhome.weekly

Severity

NOTICE

Description

This message occurs when the weekly AutoSupport or 'call home' event is sent. Information is sent to NetApp technical support to ensure that subsequent communications work and to enable operations analysis. Some results of these analysis might include recommendations on upgrades, firmware changes, and configuration changes to improve the reliability and performance of the system. If your system is configured to do so, it generates and transmits an AutoSupport (or 'call home') message to NetApp technical support and to the configured destinations. Successful delivery of an AutoSupport message significantly improves problem determination and resolution.

Corrective Action

(None).

Syslog Message

Call home for WEEKLY_LOG

Parameters

subject (STRING): AutoSupport subject or title for this event.