NetApp

cluster events

ONTAP 9.13.1 EMS reference

NetApp
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cluster.epsilon events

cluster.epsilon.assign.fail

Severity

ERROR

Description

This message occurs when automatic assignment of epsilon to a node fails, alerting the customer that there is no epsilon on their system. Attempts to assign epsilon continue until automatic assignment succeeds or epsilon is assigned manually.

Corrective Action

Try to manually assign epsilon to a healthy node using the command 'cluster modify -node node-name -epsilon true'. Contact NetApp technical support if epsilon cannot be assigned.

Syslog Message

Epsilon could not be automatically assigned to node %s with error %s.

Parameters

node (STRING): Name of the node that epsilon was being assigned to.
error (STRING): Error string detailing why epsilon assignment failed.

cluster.epsilon.assigned

Severity

INFORMATIONAL

Description

This message occurs when epsilon is assigned to a node either manually by a user-initiated command or automatically by the system.

Corrective Action

(None).

Syslog Message

Epsilon was assigned to node %s by %s.

Parameters

node (STRING): Name of the node epsilon was assigned to.
actor (STRING): Whether the change was made manually by a user command or automatically by the system.

cluster.epsilon.removed

Severity

INFORMATIONAL

Description

This message occurs when epsilon is removed from a node either manually by a user-initiated command or automatically by the system.

Corrective Action

(None).

Syslog Message

Epsilon was removed from node %s by %s.

Parameters

node (STRING): Name of the node that epsilon was removed from.
actor (STRING): Whether the change was made manually by a user command or automatically by the system.

cluster.ha events

cluster.ha.not.configured

Severity

ERROR

Description

This message occurs when cluster HA has not been configured on a 2-node cluster with HA mode enabled.

Corrective Action

Use the 'cluster ha modify -configured true' command to configure cluster HA.

Syslog Message

Cluster HA has not been configured. Cluster HA must be configured on a 2-node cluster to ensure data access availability in the event of storage failover.

Parameters

(None).

cluster.image events

cluster.image.update.aborted

Severity

INFORMATIONAL

Description

This message occurs when a non-disruptive data ONTAP upgrade of the cluster was aborted by the user.

Corrective Action

(None).

Syslog Message

A non-disruptive data ONTAP upgrade of the cluster was aborted by the user

Parameters

(None).

cluster.network events

cluster.network.config

Severity

NOTICE

Description

This message occurs when a two node cluster transitions between a switched and switchless configuration.

Corrective Action

(None).

Syslog Message

The cluster network configuration transitioned to %s.

Parameters

current_configuration (STRING): Displays if the current configuration is switched or switchless.

cluster.op events

cluster.op.fail

Severity

ERROR

Description

This message occurs when a "cluster create" or a "cluster join" or a "cluster unjoin" operation is attempted but does not succeed.

Corrective Action

Run the command specified to complete the cluster operation. Resolve the issue, and then try the command again.

Syslog Message

(None).

Parameters

operation_type (STRING): Type of cluster operation.
node (STRING): Name of the node that attempted the cluster operation.
serial (STRING): System serial number of the node that attempted the cluster operation.

cluster.op.not.complete

Severity

ERROR

Description

This message occurs when a cluster create or cluster join operation fails to complete. The node is not fully operational and many commands will not work properly until this is resolved.

Corrective Action

Run the command specified to complete the cluster operation. Resolve the issue, and then try the command again.

Syslog Message

Cluster operation (%s) failed to complete for node %s. The node is not fully operational.

Parameters

command (STRING): Command for the cluster operation.
node (STRING): Name of the node.

cluster.op.rerun.fail

Severity

ERROR

Description

This message occurs when a previously failed cluster create or cluster join operation that is automatically rerun in background fails. The operation is automatically retried a maximum of 'max_retry_count' times at an interval of 'retry_interval' seconds.

Corrective Action

To view the reason for failure, run the operation manually. Alternatively, allow the automatic reruns to execute in case the issue is temporary or fixed. To view the progress of these background attempts, use the command 'event log show -event cluster.op.rerun*'. You may rerun the operation manually at any time, without waiting for these background runs to complete.

Syslog Message

Attempt to %s cluster named '%s' in the background failed. This was retry attempt %d of %d.

Parameters

operation_type (STRING): Type of cluster operation.
cluster_name (STRING): Name of the cluster that is being created or joined.
retry_count (INT): Number of attempts made to rerun the cluster create or join operations in the background.
max_retry_count (INT): Maximum number of retry attempts allowed to rerun the cluster create or join operation in the background.
retry_interval (INT): Interval of time, in seconds, between each rerun attempt.

cluster.op.rerun.start

Severity

INFORMATIONAL

Description

This message occurs when a previously failed cluster create or cluster join operation is rerun in the background in an attempt to successfully complete the operation. The operation is automatically retried a maximum of 'max_retry_count' times at an interval of 'retry_interval' seconds.

Corrective Action

To view the reason for failure, run the operation manually. Alternatively, allow the automatic reruns to execute in case the issue is temporary or fixed. To view the progress of these background attempts, use the command 'event log show -event cluster.op.rerun*' You may rerun the operation manually at any time, without waiting for these background runs to complete.

Syslog Message

Attempt to %s cluster named '%s' in the background. This is retry attempt %d of %d.

Parameters

operation_type (STRING): Type of cluster operation.
cluster_name (STRING): Name of the cluster that is being created or joined.
retry_count (INT): Number of attempts to retry the cluster create or join operation in the background.
max_retry_count (INT): Maximum number of rerun attempts allowed.
retry_interval (INT): Interval of time, in seconds, between each rerun attempt.

cluster.op.rerun.success

Severity

INFORMATIONAL

Description

This message occurs when a previously failed cluster create or cluster join operation automatically rerun in the background is successful.

Corrective Action

(None).

Syslog Message

Cluster %s operation run in the background completed successfully for cluster name '%s'.

Parameters

operation_type (STRING): Type of cluster operation.
cluster_name (STRING): Name of the cluster that is being created or joined.

cluster.op.start

Severity

INFORMATIONAL

Description

This message occurs when a "cluster create" or a "cluster join" or a "cluster unjoin" operation is run.

Corrective Action

    (None).

Syslog Message

    (None).

Parameters

    operation_type (STRING): Type of cluster operation.
    node (STRING): Name of the node being operated on or empty if the name is not yet set.
    serial (STRING): System serial number of the node being operated on or empty if the serial number is not set.

cluster.op.success

Severity

    INFORMATIONAL

Description

    This message occurs when a cluster has been successfully created or a node has successfully joined or unjoined the cluster.

Corrective Action

    (None).

Syslog Message

    (None).

Parameters

    operation_type (STRING): Type of cluster operation.
    node (STRING): Name of the node that successfully performed the cluster operation.
    serial (STRING): System serial number of the node that successfully performed the cluster operation.

cluster.port events

cluster.port.unsupport.speed

Severity

    ERROR

Description

    This message occurs when the cluster ports are operating at an unsupported speed.

Corrective Action

    Ensure that the cluster port has a supported network interface card installed, and that it is operating at the supported speed.

Syslog Message

    %s node %s cluster ports are not operating at a supported speed. Ensure that ports %s have supported network interface card installed, and are operating at a supported speed: %s.

Parameters

> **model_name** (STRING): Model on which the misconfigured ports reside.
> **node** (STRING): Node on which the misconfigured ports reside.
> **portlist** (STRING): List of misconfigured ports.
> **supported_speed** (STRING): Speed at which the port is supported.

cluster.repl events

cluster.repl.localNW.unreachable

Severity

> NOTICE

Description

> This message occurs when the cluster replication heartbeat to a peer cluster cannot reach the local management gateway process for a minimum of 300 seconds. This potentially affects MetroCluster(tm) and Vserver disaster recovery (DR) applications.

Corrective Action

> (None).

Syslog Message

> The cluster replication heartbeat could not reach the local management gateway process for at least %d seconds.

Parameters

> **durationSinceLastSuccess** (INT): Number of seconds since the problem first occurred.

cluster.repl.peer.reachable

Severity

> NOTICE

Description

> This message occurs when the cluster replication heartbeat can now reach the peer cluster, after previous failures resulted in raising one of the following events: cluster.repl.localNW.unreachable, cluster.repl.peerNW.unreachable, or cluster.repl.remoteApp.unreachable.

Corrective Action

> (None).

Syslog Message

> The cluster replication heartbeat can now reach peer cluster %s.

Parameters

> **peerIPaddress** (STRING): Peer cluster IP address that can now be reached.

cluster.repl.peerNW.unreachable

Severity

ALERT

Description

This message occurs when the cluster replication heartbeat to the peer cluster fails for a minimum of 300 seconds. This potentially affects MetroCluster(tm) and Vserver disaster recovery (DR) applications.

Corrective Action

Verify network connectivity between the local cluster and the peer cluster. Check the cluster peer EMS messages for more information.

Syslog Message

The cluster replication heartbeat to peer cluster %s failed for at least %d seconds.

Parameters

peerIPaddress (STRING): Cluster peer IP address that could not be reached.
durationSinceLastSuccess (INT): Number of seconds since the problem first occurred.

cluster.repl.remoteApp.unreachable

Severity

ALERT

Description

This message occurs when the cluster replication heartbeat to the remote cluster replication application fails for a minimum of 300 seconds. This potentially affects MetroCluster(tm) and Vserver disaster recovery (DR) applications.

Corrective Action

Check the state of the replication application process running on the peer cluster by issuing the 'cluster ring show -unitname crs' command.

Syslog Message

The cluster replication heartbeat to the remote application running on peer cluster %s failed for at least %d seconds.

Parameters

peerIPaddress (STRING): Remote application cluster IP address that could not be reached.
durationSinceLastSuccess (INT): Number of seconds since the problem first occurred.

cluster.switch events

cluster.switch.count

Severity

INFORMATIONAL

Description

Redundant configuration is missing for cluster switches. If the remaining cluster switch fails, you can no longer access the cluster.

Corrective Action

1) Ensure that a redundant pair of cluster switches exists in the network. 2) Ensure that cluster ports are connected to both switches. 3) Enable the Cisco Discovery Protocol (CDP)/Industy Standard Discovery Protocol(ISDP) on the switches, if you previously disabled it. CDP/ISDP is enabled by default. Refer to your switch documentation for instructions. 4) If Data ONTAP cannot automatically discover a switch, use the "system cluster-switch create" command to configure discovery and monitoring of the switch.

Syslog Message

Cluster switch count: %d but requires %d.

Parameters

count (INT): Number of cluster switches discovered.
required (INT): Number of cluster switches required.

cluster.switch.pwr.count

Severity

INFORMATIONAL

Description

The power supply on the switch is missing. The remaining power supply is a single point of failure. The switch might shut down with the next PSU failure.

Corrective Action

1) Check whether the switch's power supply unit is properly inserted into the chassis of the switch.

Syslog Message

Cluster switch: %s has: %d power supplys and requires %d.

Parameters

switch_name (STRING): Cluster switch name
count (INT): The switch power supply count found.
required (INT): The switch power supply count required.

cluster.switch.pwr.fail

Severity

INFORMATIONAL

Description

The power supply on the switch is missing or is not operational.

Corrective Action

1) Ensure that the power supply mains supplying power to the switch is turned on. 2) Ensure that the power cord is connected to the power supply of the switch. 3) Contact technical support if the alert persists.

Syslog Message

Cluster switch: %s power supply: %s status: %s.

Parameters

switch_name (STRING): Cluster switch name

pwr_supply_name (STRING): The power supply name that is failing.
status (STRING): The power supply status.

cluster.switch.pwr.non.operational

Severity

INFORMATIONAL

Description

The power supply on the switch is not operational.

Corrective Action

1) Ensure that the power supply unit is turned on through switch CLI. 2) Run diagnostics on the switch to check the operational status of the power supply unit (PSU). For instructions about how to run switch diagnostics, see the switch's configuration guide. 3) Contact technical support if the alert persists.

Syslog Message

Cluster switch: %s power supply: %s status: %s.

Parameters

switch_name (STRING): Cluster switch name
pwr_supply_name (STRING): The power supply name that is failing.
status (STRING): The power supply status.

cluster.switch.reboot

Severity

INFORMATIONAL

Description

The cluster switch has recently rebooted. Communication problems and cluster connectivity issues might occur.

Corrective Action

1) If the cluster switch was not rebooted on purpose, then check the switch to ensure that it is operating normally. 2) If errors persist, contact technical support for further assistance.

Syslog Message

Cluster switch: %s rebooted at: %ld

Parameters

switch_name (STRING): Cluster switch name
time (INT): Last reported time before reboot.

cluster.switch.unsupported

Severity

INFORMATIONAL

Description

Unsupported cluster switch is detected. Communication problems and cluster connectivity issues occur.

Corrective Action

Unsupported cluster switch found. Connect a supported cluster switch to cluster network.

Syslog Message

Cluster switch: %s model: %s not supported.

Parameters

switch_name (STRING): Cluster switch name
model (STRING): The switch model.

cluster.vol events

cluster.vol.create.success

Severity

NOTICE

Description

This message occurs when the volume required to store the system data needed for cluster-wide storage is created successfully after one or more attempts to create it failed. An event was previously raised for the failures.

Corrective Action

(None).

Syslog Message

Successfully created the volume for feature %s, after earlier attempts to create it failed.

Parameters

Feature (STRING): Feature using the cluster-wide storage.

cluster.vol.delete.failed

Severity

ALERT

Description

This message occurs when the volume that was used for cluster-wide storage cannot be deleted.

Corrective Action

Study the error message and take steps to rectify the problem. For example, if the error message indicates that the volume delete operation 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

Could not delete volume %s %d times on aggregate %s for feature %s. Most recent delete before this EMS failed with error message: "%s".

Parameters

> **Volume** (STRING): Volume name.
> **AttemptsMade** (INT): Count of failed attempts to delete the volume.
> **Aggregate** (STRING): Aggregate name.
> **Feature** (STRING): Feature using the cluster-wide storage.
> **ErrorMessage** (STRING): Error message resulting from the delete failure at the time of EMS generation.

cluster.vol.delete.success

Severity

> NOTICE

Description

> This message occurs when the volume that was used for cluster-wide storage is deleted successfully after one or more attempts to delete it failed. An event was previously raised for the failures.

Corrective Action

> (None).

Syslog Message

> Successfully deleted volume %s on aggregate %s for feature %s, after earlier attempts to delete it failed.

Parameters

> **Volume** (STRING): Volume name.
> **Aggregate** (STRING): Aggregate name.
> **Feature** (STRING): Feature using the cluster-wide storage.

cluster.vol.feature.inoper

Severity

> ALERT

Description

> This message occurs when it is detected that a feature relying on cluster-wide storage has been unable to create its storage. This condition leaves the feature inoperative.

Corrective Action

> Look for any instances of the callhome.clus.vol.cre.fail event and follow any corrective action suggested there. For more information or assistance, contact NetApp technical support.

Syslog Message

> Feature %s is inoperative due to failures creating the cluster-wide storage that it requires.

Parameters

> **Feature** (STRING): Feature using the cluster-wide storage.

cluster.vol.feature.ok

Severity

> INFORMATIONAL

Description

This message occurs when it is detected that a feature relying on cluster-wide storage has been able to create its storage after previously not being able to.

Corrective Action

(None).

Syslog Message

Feature %s degraded state has been cleared.

Parameters

Feature (STRING): Feature using the cluster-wide storage.

cluster.vol.on.same.aggr

Severity

ALERT

Description

This message occurs when both active and standby volumes used for cluster-wide storage are hosted on the same aggregate. This is typically due to there not being a suitable second aggregate to host the standby volume. In this configuration, the loss of the single aggregate would remove all cluster-wide storage for the feature, which would severely affect its functionality.

Corrective Action

Use the "volume show" command to identify the size of the specified volumes and on which aggregate they are hosted. Use the "storage aggregate show -fields mirror" command to identify if the aggregate that currently hosts the volumes is mirrored. Use the "storage aggregate show -fields mirror,size,usedsize,state" command to find an online aggregate with the same mirror attribute and with enough free space to host the standby volume. If a suitable aggregate cannot be found, then bring an offline aggregate back online using the "storage aggregate online" command or create a new aggregate using the "storage aggregate create" command. If creating a new aggregate, ensure that it is large enough to host the volume and that it has the same mirror attribute as the current aggregate. After a suitable aggregate has been identified or created, move the standby volume to this aggregate using the "volume move start" command. For more information or assistance, contact NetApp technical support.

Syslog Message

Both active and standby cluster-wide storage volumes (%s, %s) for %s feature are on the same aggregate.

Parameters

ActiveVolume (STRING): Active volume name.
StandbyVolume (STRING): Standby volume name.
Feature (STRING): Feature using the cluster-wide storage.