■ NetApp

diskown events

ONTAP 9.11.1 EMS reference

NetApp August 29, 2024

This PDF was generated from https://docs.netapp.com/us-en/ontap-ems-9111/diskown-aashelf-events.html on August 29, 2024. Always check docs.netapp.com for the latest.

Table of Contents

II	skown events	'	1
	diskown.aashelf events		
	diskown.assign events	(3
	diskown.assignexceeded events	4	4
	diskown.autoassign events	4	4
	diskown.autoassignproblem events	!	5
	diskown.bayctrlr events	(3
	diskown.changingowner events		7
	diskown.cleaningownership events		7
	diskown.completion events	8	3
	diskown.delayed events	8	3
	diskown.disk events	(9
	diskown.diskhaswronginfo events	(9
	diskown.disknotsup events	. 10	J
	diskown.diskwasstolen events	. 10	J
	diskown.drawer events	. 10	J
	diskown.duplicatesoftentries events	. 12	2
	diskown.errorduringio events	. 12	2
	diskown.errorreadingownership events	. 13	3
	diskown.generated events	. 13	3
	diskown.hlfshlf events	. 14	4
	diskown.ilv events	. 1	5
	diskown.incorrectownername events	. 16	õ
	diskown.isbeingenabled events	. 17	7
	diskown.isenabled events	. 17	7
	diskown.mcc events	. 18	3
	diskown.mccip events	. 18	3
	diskown.ownerchangefailed events	. 19	9
	diskown.ownernameupdatefailed events	. 20	C
	diskown.ownerreservationmismatch events	. 20	C
	diskown.raid events	. 2	1
	diskown.reassignfailed events	. 2	1
	diskown.releasingmismatchedreservation events	. 22	2
	diskown.replayingownership events	. 22	2
	diskown.rescan events	. 23	3
	diskown.rescanmessagefailed events	. 24	4
	diskown.rescanwait events	. 24	4
	diskown.rewriteowner events	. 2	5
	diskown.shareddsk events	. 2	5
	diskown.shlf events	. 26	3
	diskown.split events	. 26	3
	diskown.statusreadownership events	. 2	7
	diskown.stealingdisk events	. 27	7

diskown.stealingdiskprevented events	3
diskown.uprevversion events	3
diskown.waitingforreassign events	9

diskown events

diskown.aashelf events

diskown.AAShelf.InterPools

Severity

ERROR

Description

This message occurs when the controller cannot automatically assign a disk because disks on the shelf and disks on the loop have the same owner but belong to different pools.

Corrective Action

1) Find all of the disks belonging to the same shelf, loop and owners as disk %s (S/N %s) by using the "storage disk show" command with the "-fields shelf, owner, dr-home, pool" option. 2) Assign all of the disks with the same owners on this shelf and other shelves to the same pool. Alternatively, manually assign all unowned disks belonging to this shelf.

Syslog Message

The controller could not automatically assign disk %s (S/N %s) and any other unassigned disks in the same shelf because the disks are shared across multiple pools within the same loop.

Parameters

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

diskown.AAShelf.MoreShelf

Severity

ERROR

Description

This message occurs when more than the supported number of shelves are connected to a storage stack.

Corrective Action

1) Check which adapter has more than the supported number of shelves attached by using the "run local storage show shelf" command. 2) Reconfigure the shelves so that the adapter is not connected to more than the supported number of shelves.

Syslog Message

(None).

Parameters

(None).

diskown.AAShelf.MultiOwners

Severity

ERROR

Description

This message occurs when the controller cannot automatically assign disks because the disks on the shelf are owned by multiple systems.

Corrective Action

1) Find all of the disks belonging to the same shelf as disk %s (S/N %s) by using the "storage disk show" command. 2) View the list of systems by using the "run local disk show -v" command. 3) Either assign all of the disks on this shelf to a single system, or assign all unowned disks belonging to this shelf.

Syslog Message

The controller could not automatically assign disk %s (S/N %s) because disks on the shelf are owned by multiple systems. Because of this problem, the controller also could not assign any unowned disks on this shelf.

Parameters

diskname (STRING): Name of the disk. serialno (STRING): Serial number of the disk.

diskown.AAShelf.MultiPools

Severity

ERROR

Description

This message occurs when the controller cannot automatically assign a disk because the disks on the shelf are shared across multiple pools.

Corrective Action

1) Find all of the disks belonging to the same shelf as disk %s (S/N %s) by using the "storage disk show" command. 2) View the list of pools by using the "run local disk show -v" command. 3) Either assign all of the disks on this shelf to a single pool, or assign all unowned disks belonging to this shelf.

Syslog Message

The controller could not automatically assign disk %s (S/N %s) and any other unassigned disks in the same shelf because the disks are shared across multiple pools.

Parameters

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

diskown.AAShelf.NoMemory

Severity

ALERT

Description

This message occurs when the node cannot allocate memory for shelf-level automatic assignment.

Initiate the automatic disk assign by running the "storage disk assign -auto true -node node-name" CLI command. If the out-of-memory condition persists, perform a manual disk assign.

Syslog Message

Memory not allocated for shelf-level automatic assignment.

Parameters

(None).

diskown.AAShelf.NoOwner

Severity

ERROR

Description

This message occurs when the controller cannot automatically assign a disk because none of the disks on the shelf are owned by any system.

Corrective Action

1) Find all of the disks belonging to the same shelf as disk %s (S/N %s) by using the "storage disk show" command. 2) View the list of systems by using the "run local disk show -v" command. 3) Either assign all of unowned disks in this shelf or assign one of the disks on this shelf by using the "storage disk assign" command.

Syslog Message

The controller could not automatically assign disk %s (S/N %s) (and other unassigned disks in the same shelf, if any) because no disks on the shelf are owned by any system.

Parameters

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

diskown.assign events

diskown.assign.splitOwner

Severity

INFORMATIONAL

Description

This message occurs when the "storage disk assign" command fail to assign a disk to a different owner from the other disks within the carrier. This is because the "storage disk assign" command with the -f option must be used in such cases.

Corrective Action

Use the "storage disk assign" command with the -f option to assign the disk to a different owner from the other disks within the carrier.

Syslog Message

Assigning ownership failed for disk %s. Use the "storage disk assign" command with the -f option to assign the disk to a different owner from the other disks within the carrier.

Parameters

diskname (STRING): Name of the disk.

diskown.assignexceeded events

diskown.AssignExceeded

Severity

ERROR

Description

This message occurs when an attempt is made to assign more disks than are supported by this node.

Corrective Action

Review the system capacity limits and the assigned disks on this system.

Syslog Message

The maximum number of disks that can be assigned to this node has been exceeded. Attempted to assign %d, maximum supported: %d.

Parameters

attempted (INT): Number of disks attempted to assign. **supported** (INT): Number of disks supported.

diskown.autoassign events

diskown.AutoAssign.MultipleOwners

Severity

ERROR

Description

This message occurs when automatic assigning of a disk fails because the disks on the loop are owned by multiple systems.

Corrective Action

Use the "storage disk show" command to view the list of systems, and then assign all of the disks on this loop to a single system. Or use the "storage disk assign" command to manually assign this disk.

Syslog Message

Automatic assigning failed for disk %s (S/N %s) because the disks on the loop are owned by multiple systems. Automatic assigning failed for all unowned disks on this loop.

Parameters

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

diskown.AutoAssign.MultiplePools

Severity

ERROR

Description

This message occurs when automatic assigning of a disk fails because the disks on the loop are shared across multiple pools.

Corrective Action

Use the "storage disk assign -pool" command to assign all of the disks on this loop to a single pool. Or use the "storage disk assign" command to manually assign this disk.

Syslog Message

Automatic assigning failed for disk %s (S/N %s) because the disks on the loop are shared across multiple pools. Automatic assigning failed for all unowned disks on this loop.

Parameters

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

diskown.AutoAssign.NoOwner

Severity

ERROR

Description

This message occurs when automatic assigning of a disk fails because none of the disks on the loop are owned by any system.

Corrective Action

Use the "run local disk show -v" command to get the list of systems and unowned disks. Manually assign one of the disks on this loop by using the "storage disk assign" command.

Syslog Message

Automatic assigning failed for disk %s (S/N %s) because none of the disks on the loop are owned by any system. Automatic assigning failed for all unowned disks on this loop.

Parameters

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

diskown.autoassignproblem events

diskown.AutoAssignProblem

Severity

ERROR

Description

This message occurs when Data ONTAP® attempts to assign a disk automatically, but the request fails. The failure could be due to a disk error or a user simultaneously assigning the disk to a storage system.

Corrective Action

Use the "disk show -v" nodeshell command to determine the status of the disk. Use the "storage disk assign" command to assign the disk.

Syslog Message

Automatic assigning failed for disk %s (S/N %s). Reason: %s

Parameters

diskname (STRING): Name of the disk. serialno (STRING): Serial number of the disk. reason (STRING): Reason for the failure.

diskown.bayctrlr events

diskown.bayctrlr

Severity

NOTICE

Description

This message occurs if the controller address is determined when the bay policy override option has been set. The controller address "A/B" is used to automatically assign the disks in odd/even bays.

Corrective Action

(None).

Syslog Message

Determined controller address %s based on shelf ID %d and slot number %d.

Parameters

ctrlr (STRING): Controller address.shelfId (INT): ID of the shelf chosen to determine the controller address.slot (INT): Slot number of the shelf chosen to determine the controller address.

diskown.bayctrlr.unknown

Severity

NOTICE

Description

This message occurs when disks in a shelf are not assigned to the current node.

Corrective Action

(None).

Syslog Message

Cannot make determination of controller address.

Parameters

(None).

diskown.changingowner events

diskown.changingOwner

Severity

NOTICE

Description

This message occurs when the ownership of a disk is being changed.

Corrective Action

(None).

Syslog Message

The ownership of disk %s (S/N %s) is being changed from node "%s" (ID: %u, home ID: %u, DR home ID: %u) to node "%s" (ID: %u, home ID: %u, DR home ID: %u).

Parameters

diskname (STRING): Name of the disk.

serialno (STRING): Serial number of the disk.

oldownername (STRING): Name of the former owner node.

oldownerid (LONGINT): System ID of the former owner node.

oldhomeownerid (LONGINT): System ID of the former home node.

olddrhomeownerid (LONGINT): System ID of the former disaster recovery home node.

newownername (STRING): Name of the new owner node.

newownerid (LONGINT): System ID of the new owner node.

newhomeownerid (LONGINT): System ID of the new home node.

newdrhomeownerid (LONGINT): System ID of the new disaster recovery home node.

thread (STRING): Name of the thread that issued the ownership change request.

APIname (STRING): Name of the API that issued the ownership change request.

diskown.cleaningownership events

diskown.cleaningOwnership

Severity

INFORMATIONAL

Description

This message occurs when a "storage disk assign -f" command is run for an SES drive and the system discovers that the newly assigned owner already owns an SES drive on the same loop and shelf as the supplied drive. The assign is completed because it is a forced assign, but the error message is generated as an alert.

(None).

Syslog Message

Disk %s (S/N %s) contains software-based disk ownership information that indicates it was previously in use by system ID %u. The ownership information is being cleared.

Parameters

diskname (STRING): Name of the disk. serialno (STRING): Serial number of the disk. ownerid (INT): System ID of the system that owned the disk.

diskown.completion events

diskown.completion.timer.reEnabled

Severity

INFORMATIONAL

Description

This message occurs when the COMPLETION events from sanown layer remain after an aggregate is migrated form a source to a destination. Typically the events are enabled automatically, and if that doesn't happen with in a certain amount of time, the system reenables the COMPLETION events and logs this message.

Corrective Action

(None).

Syslog Message

Sanown completion event timer reenabled after a giveback.

Parameters

(None).

diskown.delayed events

diskown.delayed.completionEvent

Severity

INFORMATIONAL

Description

This message occurs when the software disk ownership module completes the process of updating its view of the disks attached to the system but delays notifying other layers of the completion of this process. Typically, this happens when an SFO aggregate giveback is in progress on the HA partner.

Corrective Action

(None).

Syslog Message

Software disk ownership module temporarily delayed notification that it has completed updating its view of the disks.

Parameters

(None).

diskown.disk events

diskown.disk.already.deleted

Severity

ERROR

Description

This message occurs during an attempt to assign a disk that is being deleted. This can happen if the disk is deleted at the storage layer while disk assignment is in progress.

Corrective Action

Run the "run local disk show -v" command to see the list of available disks, and then retry the operation using one of the listed disks.

Syslog Message

Assign request failed for disk %s because it is being deleted.

Parameters

disk_name (STRING): Name of the disk that is being deleted.

diskown.diskhaswronginfo events

diskown.diskHasWrongInfo

Severity

ERROR

Description

This message occurs when the disk ownership information on a disk does not belong to the disk that it was read from. This could be a result of a read going to the wrong disk or a prior write intended for some other disk getting written to the disk.

Corrective Action

On the controller that owns the disk, use the "storage disk assign" command to rewrite the ownership information to the disk.

Syslog Message

Disk %s (S/N %s) has ownership information for disk %s (S/N %s) on it.

Parameters

diskname (STRING): Name of the disk from which the ownership information was read. **serialno** (STRING): Serial number of the disk from which the ownership information was read.

infoForDiskname (STRING): Name of the disk that the ownership information is for. **infoForSerialno** (STRING): Serial number of the disk that the ownership information is for.

diskown.disknotsup events

diskown.diskNotSup

Severity

INFORMATIONAL

Description

This message occurs when newly inserted disks are only supported with software disk ownership enabled, but it is not enabled.

Corrective Action

Halt the system by using the "halt" command, and then turn on software disk ownership by using the "storage disk assign" command. After you assign the disks, the system can recognize them.

Syslog Message

Newly added disk %s (and others) is only supported with software disk ownership enabled.

Parameters

disk (STRING): Name of the disk.

diskown.diskwasstolen events

diskown.diskWasStolen

Severity

NOTICE

Description

This event is issued when the ownership of a disk owned by the system is changed such that the disk is no longer owned by the system.

Corrective Action

(None).

Syslog Message

Disk %s (S/N %s) has had its ownership changed so that it is no longer owned by this system. This can lead to a system panic if the disk is a filesytem disk.

Parameters

diskname (STRING): The name of the disk **serialno** (STRING): The serial number of the disk

diskown.drawer events

diskown.drawer.assignStatus

Severity

NOTICE

Description

This message occurs when drawer-based drive assignment for shelves with drawers is enabled or disabled.

Corrective Action

(None).

Syslog Message

Drawer-based automatic drive assignment for shelf "%d" is "%s".

Parameters

shelf_id (INT): Shelf identifier.

state (STRING): Drawer-based automatic drive assignment state...

diskown.drawer.invalidShlf

Severity

ERROR

Description

This message occurs when the controller cannot automatically assign disks because the shelf is either offline, or temporarily unavailable, and therefore cannot be queried for the information that is required to properly assign the disks to the controller. This can also occur when multiple shelves in a cluster have the same shelf ID. Automatic disk assignment fails for the disks in this shelf until the shelf is back online or any shelf ID conflicts within a cluster are resolved.

Corrective Action

Use the "storage shelf show" command to verify that the specified shelf is online and to verify connectivity from the controller to all of the paths to the shelf. If multiple shelves in a cluster have the same shelf ID, resolve that and ensure that shelves in that cluster have different shelf IDs.

Syslog Message

The system cannot automatically assign disks for shelf "%d" because the shelf is in an invalid state.

Parameters

shelf_id (INT): Shelf identifier.

diskown.drawer.MultiOwners

Severity

ERROR

Description

This message occurs when the system cannot automatically assign disks because some of the disks are assigned to multiple systems in a conflicting manner.

1) Find all of the disks belonging to the specified shelf by using the "storage disk show" command. 2) View the list of systems by using the "disk show -v" command. 3) Ensure that disks assigned on lower half bays of each drawer are owned by a single owner, and ensure that disks assigned on higher half bays of each drawer are owned by a different single owner. Disks assigned on lower half bays of each drawer must have a different owner than disks assigned on higher half bays.

Syslog Message

The system cannot automatically assign disks because the disks in shelf "%d" are assigned to multiple systems in a conflicting manner.

Parameters

shelf_id (INT): Shelf identifier.

diskown.duplicatesoftentries events

diskown.duplicateSoftEntries

Severity

NOTICE

Description

This event is issued when we find duplicate entries in the sanown filer table.

Corrective Action

(None).

Syslog Message

%s

Parameters

ems_txt (STRING): The warning message

diskown.errorduringio events

diskown.errorDuringIO

Severity

ERROR

Description

This event is issued when an I/O error occurs during a sanown disk operation.

Corrective Action

(None).

Syslog Message

error %d (%s) on disk %s (S/N %s) while %s

Parameters

errorno (INT): The error number that occurred errortext (STRING): The error description as text diskname (STRING): The name of the disk serialno (STRING): The serial number of the disk details (STRING): The operation that was going on

diskown.errorreadingownership events

diskown.errorReadingOwnership

Severity

NOTICE

Description

This event is issued when we get an error while reading all the DOWNs at once. The recovery is to read them individually.

Corrective Action

(None).

Syslog Message

error %d (%s) while reading ownership on disk %s (S/N %s)

Parameters

errorno (INT): The error that occurred errortext (STRING): The error description as text diskname (STRING): The name of the disk serialno (STRING): The serial number of the disk

diskown.generated events

diskown.generated.completionEvent

Severity

INFORMATIONAL

Description

This message occurs when the software disk ownership module notifies other layers that it has completed the process of updating its view of the disks attached to the system. These notifications were previously disabled for a short time.

Corrective Action

(None).

Syslog Message

Software disk ownership module notified other layers that it has completed updating its view of the disks.

Parameters

(None).

diskown.hlfshlf events

diskown.hlfShlf.assignStatus

Severity

NOTICE

Description

This message occurs when half-shelf based drive assignment is enabled or disabled.

Corrective Action

(None).

Syslog Message

Half-shelf based automatic drive assignment for shelf "%d" is "%s".

Parameters

shelf_id (INT): Shelf identifier.
state (STRING): Half-shelf based automatic drive assignment state.

diskown.hlfShlf.invalidShlf

Severity

NOTICE

Description

This message occurs when the controller cannot automatically assign disks to a shelf using half shelf-based disk assignment, either because the shelf is offline, or is temporarily unavailable and therefore cannot be queried for the information required to properly divide the disks for assignment to the controller. This can also occur when multiple shelves in a cluster have the same shelf ID. Automatic half shelf-based disk assignment is bypassed for disks in this shelf until the shelf is back online or any shelf ID conflicts within a cluster are resolved.

Corrective Action

Use the "storage shelf show" command to ensure that the specified shelf is online and to ensure connectivity from the controller to all paths to the shelf. If there are multiple shelves in a cluster with the same same shelf ID, resolve that and ensure that shelves in that cluster have different shelf IDs.

Syslog Message

Half shelf based disk assignment will be skipped for shelf "%d" because the shelf is in invalid state.

Parameters

shelf_id (INT): Shelf identifier.

diskown.hlfShlf.MultiOwners

Severity

NOTICE

Description

This message occurs when the controller cannot automatically assign disks using half shelf based disk assignment because disks in a shelf are assigned to multiple systems in a conflicting manner.

Corrective Action

1) Find all of the disks belonging to the shelf specified by using the "storage disk show" command. 2) View the list of systems by using the "run local disk show -v" command. 3) Ensure that disks assigned on lower half bays of the shelf are owned by a single owner. Similarly, ensure that disks assigned on higher half bays of that shelf are owned by a single owner. Ensure that disks assigned on lower half bays have a different owner than disks assigned on higher half bays.

Syslog Message

The controller cannot automatically assign disks using half shelf based disk assignment because disks in shelf "%d" are assigned to multiple systems in a conflicting manner.

Parameters

shelf_id (INT): Shelf identifier.

diskown.ilv events

diskown.ilv.hShlf.invShlf

Severity

ERROR

Description

This message occurs when the controller cannot automatically assign drives to a shelf using interleaved-half-shelf-based drive assignment, either because the shelf is offline, or is temporarily unavailable and therefore cannot be queried for the information required to properly divide the drives for assignment to the controller. This can also occur when multiple shelves in a cluster have the same shelf ID. Automatic interleaved-half-shelf-based drive assignment is bypassed for drives in this shelf until the shelf is back online or any shelf ID conflicts within a cluster are resolved.

Corrective Action

Use the "storage shelf show" command to ensure that the specified shelf is online and to ensure connectivity from the controller to all paths to the shelf. Ensure that each shelf within the cluster has a unique shelfID.

Syslog Message

Interleaved-half-shelf-based drive assignment will be skipped for shelf "%d" because the shelf is in invalid state.

Parameters

shelf_id (INT): Shelf identifier.

diskown.ilv.hShlf.mOwners

Severity

ERROR

Description

This message occurs when the controller cannot automatically assign drives using interleaved-half-shelf based drive assignment because drives in a shelf are assigned to multiple systems in a conflicting manner.

Corrective Action

1) Find all of the drives belonging to the shelf specified by using the "storage disk show" command. 2) View the list of systems by using the "run local disk show -v" command. 3) Ensure that drives assigned on first and third quarter bays of the shelf are owned by a single owner. Similarly, ensure that drives assigned on second and fourth quarter bays of that shelf are owned by a single owner. Ensure that drives assigned on first and third quarter bays have a different owner than drives assigned on second and fourth quarter bays.

Syslog Message

The controller cannot automatically assign drives using interleaved-half-shelf based drive assignment because drives in shelf "%d" are assigned to multiple systems in a conflicting manner.

Parameters

shelf_id (INT): Shelf identifier.

diskown.ilv.hShlf.status

Severity

NOTICE

Description

This message occurs when interleaved-half-shelf based drive assignment is either enabled or disabled.

Corrective Action

(None).

Syslog Message

Interleaved-half-shelf based automatic drive assignment for shelf %d is "%s".

Parameters

```
shelf_id (INT): Shelf identifier.
state (STRING): Interleaved-half-shelf based automatic drive assignment state.
```

diskown.incorrectownername events

diskown.IncorrectOwnerName

Severity

INFORMATIONAL

Description

This event is issued when we find a system finds a disk that it owns, but which has a different owner name than the system name.

(None).

Syslog Message

Disk %s has incorrect owner name information (%s). It will be changed to match the system name (%s).

Parameters

diskname (STRING): The name of the disk for which this was observed wrong_ownername (STRING): The owner name, which is incorrect, that the disk currently has system_name (STRING): The system name that should be the owner name for the disk

diskown.isbeingenabled events

diskown.isBeingEnabled

Severity

INFORMATIONAL

Description

This event is issued when the system is being converted from non-software based disk ownership to software based disk ownership

Corrective Action

(None).

Syslog Message

System is being changed to use software based disk ownership

Parameters

(None).

diskown.isenabled events

diskown.isEnabled

Severity

INFORMATIONAL

Description

This event is issued when enable sanown.

Corrective Action

(None).

Syslog Message

software ownership has been enabled for this system

Parameters

(None).

diskown.mcc events

diskown.mcc.AssignExceeded

Severity

ERROR

Description

This message occurs when the number of drives assigned in the MetroCluster(tm) configuration exceeds the supported limit.

Corrective Action

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

Syslog Message

The maximum number of drives that can be assigned in the configuration has exceeded. Total physical drive count: %d, maximum supported: %d.

Parameters

total_disk_count (INT): Total number of drives assigned in the configuration. **supported** (INT): Number of drives supported.

diskown.mccip events

diskown.mccip.assignStatus

Severity

NOTICE

Description

This message occurs when MetroCluster(tm) quarter-shelf based drive assignment is enabled or disabled. It is enabled when the system is a member of an AFF HA pair in a 4-node MetroCluster IP configuration.

Corrective Action

(None).

Syslog Message

MetroCluster quarter-shelf based automatic drive assignment for shelf "%d" is "%s".

Parameters

```
shelf_id (INT): Shelf identifier.
state (STRING): MetroCluster guarter-shelf based automatic drive assignment state.
```

diskown.mccip.invalidShlf

Severity

ERROR

Description

This message occurs when the controller cannot automatically assign disks because the shelf is either offline, or temporarily unavailable and therefore cannot be queried for the information that is required to properly assign the disks to the controller. This can also occur when multiple shelves in a cluster have the same shelf ID. Automatic disk assignment fails for the disks in this shelf until the shelf is back online or any shelf ID conflicts within a cluster are resolved.

Corrective Action

Use the "storage shelf show" command to verify that the specified shelf is online and to verify connectivity from the controller to all of the paths to the shelf. If multiple shelves in a cluster have the same shelf ID, resolve that and ensure that shelves in that cluster have different shelf IDs.

Syslog Message

The system cannot automatically assign disks for shelf "%d" because the shelf is in an invalid state.

Parameters

shelf_id (INT): Shelf identifier.

diskown.mccip.MultiOwners

Severity

ERROR

Description

This message occurs when the system cannot automatically assign disks because some of the disks are assigned to multiple systems in a conflicting manner.

Corrective Action

1) Find all of the disks belonging to the specified shelf by using the "storage disk show" command. 2) View the list of systems by using the "disk show -v" command. 3) Ensure that the disks on each shelf are assigned such that lower half bays are assigned to the local high-availability (HA) pair and the higher half bays are assigned to the remote HA pair. Additionally within each half shelf, ensure that the disks are assigned equally to the HA pair such that the lower quarter bays are assigned to one node and the higher quarter bays are assigned to the node's HA partner.

Syslog Message

The system cannot automatically assign disks because the disks in shelf "%d" are assigned to multiple systems in a conflicting manner.

Parameters

shelf_id (INT): Shelf identifier.

diskown.ownerchangefailed events

diskown.ownerChangeFailed

Severity

ERROR

Description

This message occurs when a disk ownership change request fails.

Corrective Action

Verify that there are no disk connectivity issues, that disks are not in a failed state, and that the procedures for executing the "storage disk assign" command are being followed.

Syslog Message

Disk ownership change request failed on disk %s (S/N %s). Reason: %s.

Parameters

diskname (STRING): Name of the disk.

serialno (STRING): Serial number of the disk.

status (STRING): Description of the error in the ownership change request.

thread (STRING): Name of the thread that issued the ownership change request.

APIname (STRING): Name of the API that issued the ownership change request.

diskown.ownernameupdatefailed events

diskown.OwnerNameUpdateFailed

Severity

NOTICE

Description

This event is issued when we have to rewrite a DOWN because it is out of date wrt the other DOWNs.

Corrective Action

(None).

Syslog Message

owner name update failed for disk %s (S/N %s)

Parameters

diskname (STRING): The name of the disk **serialno** (STRING): The serial number of the disk

diskown.ownerreservationmismatch events

diskown.ownerReservationMismatch

Severity

ERROR

Description

This message occurs when the system discovers a disk that is supposed to be owned by one node, but the persistent reservation is owned by another node.

1) Find the disk causing the conflict from EMS messages. 2) If the disk is in the spare pool, go to step 5. 3) Run the "storage aggr status -r" command to find the aggregate containing the disk. 4) If the aggregate is online, bring it offline by using the "storage aggr modify -aggr aggr_name -state offline" command. 5) Run the "storage disk show -fields owner-id,reserver-id" command to identify the reservation owner of the disk. 6) Run the "storage disk assign disk name -s partner sys id -f" command to perform the disk assignment

Syslog Message

disk %s (S/N %s) is supposed to be owned by this node but has a persistent reservation placed by node %s (ID %u).

Parameters

diskname (STRING): Name of the disk. serialno (STRING): Serial number of the disk.

resvownername (STRING): Name of the system owning the reservation.

resvowner (INT): System ID of the node owning the reservation.

change from the node that owns the reservation for the disk.

diskown.raid events

diskown.RAID.Ownershipchange

Severity

ERROR

Description

This message occurs when a disk assign or disk remove ownership request is rejected at the RAID layer.

Corrective Action

Review the error message and verify that the request was not for a file system disk.

Syslog Message

%s

Parameters

err_msg (STRING): Reason the request failed.

diskown.reassignfailed events

diskown.ReassignFailed

Severity

ERROR

Description

This message occurs when a disk reassign request fails.

Corrective Action

Verify that there are no disk connectivity issues and that the procedures for executing the 'storage disk reassign' command are being followed.

Syslog Message

Disk reassign request failed. Reason: %s.

Parameters

reason (STRING): Reason for failure.

diskown.releasingmismatchedreservation events

diskown.releasingMismatchedReservation

Severity

NOTICE

Description

This event is issued when we release the reservation because the DOWN says the disk is owned by someone else.

Corrective Action

(None).

Syslog Message

%s is releasing reservation on disk %s (S/N %s) as it is owned by %s (ID %u)

Parameters

originator (STRING): The internal component of diskown issuing the event

diskname (STRING): The name of the disk

serialno (STRING): The serial number of the disk

filername (STRING): The name of the filer that owns the disk **systemid** (INT): The system id of the filer that owns the disk

diskown.replayingownership events

diskown.replayingOwnership

Severity

INFORMATIONAL

Description

This event occurs during a boot or takeover when a disk ownership request is replayed from NVRAM.

Corrective Action

(None).

Syslog Message

Replaying ownership request for %d disks

Parameters

diskcount (INT): The number of disks in the ownership request

diskown.replayingOwnership.Nv

Severity

ERROR

Description

This message occurs during takeover, when a disk ownership request is replayed from NVRAM but NVRAM corruption is detected.

Corrective Action

1) If you changed the ownership of disks on the partner in the last five minutes prior to takeover, verify their ownerships were stored by using the "storage disk show" command. 2) If you see this message often or in other modules, the partner's NVRAM card might be faulty and might need to be replaced.

Syslog Message

Failed to replay disk ownership because NVRAM corruption was detected.

Parameters

(None).

diskown.rescan events

diskown.rescan.notConnected

Severity

ERROR

Description

This message occurs when the high-availability (HA) messaging layer fails to connect to the specified node for disk ownership updates.

Corrective Action

Run the command "run local disk show -v" from the node specified in the node parameter to correct disk ownership.

Syslog Message

HA messaging layer on the local node failed to connect to node %s for disk ownership updates.

Parameters

node (STRING): Name of the node where disk ownership might be outdated.

status (INT): Error number returned by the HA messaging layer from the HA message error space.

scope (INT): Internal scope identifier for the module that returned the error.

scope_err (INT): Internal error number returned by the module.

diskown.rescan.notSent

Severity

ERROR

Description

This message occurs when the high-availability (HA) messaging layer fails to send a disk ownership update message.

Corrective Action

Run the command "run local disk show -v" from the node specified in the node parameter to correct disk ownership.

Syslog Message

HA messaging layer on the local node failed to send a disk ownership update message to node %s.

Parameters

node (STRING): Name of the node where disk ownership might be outdated.

status (INT): Error number returned by the HA messaging layer from the HA message error space.

scope (INT): Internal scope identifier for the module that returned the error.

scope_err (INT): Internal error number returned by the module.

diskown.rescanmessagefailed events

diskown.RescanMessageFailed

Severity

ERROR

Description

This message occurs while transferring the ownership of a disk to another node, when a rescan message is sent but does not go through.

Corrective Action

Use the "disk show" command on the nodeshell of %s for the node to rescan the disks which changed ownership.

Syslog Message

Could not send rescan message to %s.

Parameters

hostname (STRING): Name of the host that the message was sent to.

diskown.rescanwait events

diskown.rescanWait

Severity

INFORMATIONAL

Description

This message occurs when the disk ownership rescan code waits.

(None).

Syslog Message

(None).

Parameters

status (STRING): Description on the type of wait.

diskown.rewriteowner events

diskown.rewriteOwner

Severity

NOTICE

Description

This event is issued when we have to rewrite a DOWN because it is out of date wrt the other DOWNs.

Corrective Action

(None).

Syslog Message

rewriting ownership information for disk %s (S/N %s)

Parameters

diskname (STRING): The name of the disk **serialno** (STRING): The serial number of the disk

diskown.shareddsk events

diskown.sharedDsk.nonHACfg

Severity

ERROR

Description

This message occurs when a disk is shared by multiple nodes in a non-HA or stand-alone configuration. If the procedure to convert an HA configuration to a non-HA configuration is not followed properly, the system may end up either having disks whose partitions are owned by another node, or owning partitions on non-local disks.

Corrective Action

Refer to the High-Availability Configuration Guide.

Syslog Message

Either some local disks have partitions that are not owned by the local node, or the local node owns partitions on non-local disks.

Parameters

(None).

diskown.shlf events

diskown.Shlf.assignStatus

Severity

NOTICE

Description

This message occurs when shelf granular-based drive assignment is enabled or disabled. This is currently applicable for an MetroCluster(tm) IP configurations.

Corrective Action

(None).

Syslog Message

Shelf-based automatic drive assignment for shelf "%d" is "%s".

Parameters

shelf_id (INT): Shelf identifier.

state (STRING): Shelf-based automatic drive assignment state.

diskown.Shlf.MultiOwners

Severity

ERROR

Description

This message occurs when the system cannot automatically assign disks because some of the disks are assigned to multiple nodes in a conflicting manner. Until the disk assignments are corrected, the specified shelf will be excluded during auto assignment, and unowned disks on the shelf will be skipped.

Corrective Action

1) Find all of the disks belonging to the specified shelf by using the "storage disk show -fields owner, shelf" command. 2) Ensure that the disks on the shelf are assigned to a single system by manually assigning disks in the shelf to a single owner.

Syslog Message

The system cannot automatically assign disks because the disks in shelf %d are assigned to multiple nodes in a conflicting manner.

Parameters

shelf_id (INT): Shelf identifier.

diskown.split events

diskown.split.shelf.assignStatus

Severity

NOTICE

Description

This message occurs when any type of split-shelf automatic drive assignment is disabled.

Corrective Action

(None).

Syslog Message

Split-shelf based automatic drive assignment is "%s".

Parameters

state (STRING): All split-shelf based drive assignment states.

diskown.statusreadownership events

diskown.statusReadOwnership

Severity

INFORMATIONAL

Description

This message occurs when an event is logged to track that an error was encountered while reading all data ownership blocks at once. Data ONTAP® will attempt to recover by reading each disk ownership block individually.

Corrective Action

(None).

Syslog Message

(None).

Parameters

```
errorno (INT): Error that occurred.
errortext (STRING): Error description as text.
diskname (STRING): Name of the disk.
serialno (STRING): Serial number of the disk.
```

diskown.stealingdisk events

diskown.StealingDisk

Severity

NOTICE

Description

This event is issued when a user reassigns a disk that is owned and has a reservation from another system.

(None).

Syslog Message

Ownership for disk %s (S/N %s) is being stolen from node "%s" (System ID: %u).

Parameters

diskname (STRING): Name of the disk whose ownership is being reassigned.

serialno (STRING): Serial number of the disk.

hostname (STRING): Name of the host that currently owns the disk.

systemid (INT): System ID of the host that currently owns the disk.

thread (STRING): Name of the thread that issued the ownership change request. **APIname** (STRING): Name of the API that issued the ownership change request.

diskown.stealingdiskprevented events

diskown.StealingDiskPrevented

Severity

NOTICE

Description

This message occurs when a "storage disk assign" operation is performed on a disk that is owned and has a reservation from another system. The reservation prevents the disk ownership change from being completed.

Corrective Action

Perform the "storage disk assign" operation on the system that currently owns the disk.

Syslog Message

Ownership for disk %s (S/N %s) cannot be changed because node "%s" (System ID: %u) currently owns the persistent reservation.

Parameters

diskname (STRING): Name of the disk whose ownership is being assigned.

serialno (STRING): Serial number of the disk.

hostname (STRING): Name of the host that currently owns the disk.

systemid (INT): System ID of the host that currently owns the disk.

thread (STRING): Name of the thread that issued the ownership change request.

APIname (STRING): Name of the API that issued the ownership change request.

diskown.uprevversion events

diskown.UpRevVersion

Severity

NOTICE

Description

This message occurs when disk ownership information has been read and found to be from a version that is

higher (newer) than what the current version of Data ONTAP understands. New fields in the ownership information will be ignored.

Corrective Action

(None).

Syslog Message

(None).

Parameters

diskname (STRING): The name of the disk with the newer version.

serialno (STRING): The serial number of the disk.

foundversion (INT): The version of the disk ownership information found on the disk.

curversion (INT): The version of the disk ownership information that the current Data ONTAP uses.

diskown.waitingforreassign events

diskown.WaitingForReassign

Severity

NOTICE

Description

This message occurs when a giveback is occurring and the "storage disk reassign" is in progress. The giveback must wait until the reassign operation is complete.

Corrective Action

(None).

Syslog Message

Waiting for ownership of the partner disks to be updated as a result of a "storage disk reassign" command.

Parameters

(None).

Copyright information

Copyright © 2024 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

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

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

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

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

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

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

Trademark information

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