



dbS events

ONTAP 9.12.1 EMS reference

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dbfs events

dbfs.api events

dbfs.api

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) event related to an API operation occurs, such as an authentication failure.

Corrective Action

(None).

Syslog Message

A DBS API event %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the API event. It displays as a string, in JSON format, or is empty.

dbfs.assignments events

dbfs.assignments

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) assignments event is reported, which occurs when the distribution of block data within the cluster changes. The DBS is responsible for managing the data that backs the FlexVols®.

Corrective Action

(None).

Syslog Message

A DBS assignments event %s of type %s occurred for ServiceID %u on node %u/%s. DriveID = %u/%s. EventID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

db.block events

db.block.repair.success

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) successfully completes a block service repair operation involving block rewrites to all BServices that are replicas for the block . See the previous data related events for further information. If the original DBS event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

Contact NetApp technical support for data related events to assess the severity and for any required corrective actions.

Syslog Message

A DBS block repair success event %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

dbb.bulk events

dbb.bulk.op

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) event related to bulk volume operations such as backups, restores, making of Snapshot copies, or cloning occurs. If the original distributed block store event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

(None).

Syslog Message

A DBS event occurred, event %s, type %s, service %u, node %u/%s, drive %u/%s, eventID %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

dbb.clone events

dbb.clone

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) event related to volume cloning occurs. If the original DBS event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

(None).

Syslog Message

A DBS event occurred, event %s, type %s, service %u, node %u/%s, drive %u/%s, eventID %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

dbcluster events

dbcluster

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) event related to cluster operations occurs. If the original DBS event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

(None).

Syslog Message

A DBS event occurred, event %s, type %s, service %u, node %u/%s, drive %u/%s, eventID %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

dbcluster.iops.overprov

Severity

ERROR

Description

This message occurs when the distributed block store detects that the sum of all minimum quality of service (QoS) IOPS of flexible volumes is greater than the expected IOPS of the cluster. Minimum QoS cannot be maintained for all flexible volumes simultaneously. The distributed block store is responsible for managing the data that backs the flexible volumes.

Corrective Action

Adjust QoS settings on one or more flexible volumes, or add more nodes to increase cluster IOPS capabilities.

Syslog Message

The distributed block store detects that the sum of all minimum QoS IOPS is greater than the expected IOPS of the cluster. The cluster fault type is %s and fault id is %u.

Parameters

cfType (STRING): Distributed block store cluster fault type of the associated object.

cfID (INT): Distributed block store 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).

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

cfExtSrc (STRING): Distributed block store cluster fault external source label created by the "CreateClusterFault" API command and attached to the fault for testing purposes.

dbns.cluster.master

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) event related to cluster master operation occurs, such as cluster master being selected or cluster capacity limits being reached.

Corrective Action

(None).

Syslog Message

A DBS cluster master event %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

dbb.db events

dbb.db

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) event related to its internal shared database occurs.

Corrective Action

(None).

Syslog Message

A DBS database event %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

dbb.director events

dbb.director.addrstable

Severity

NOTICE

Description

This message occurs when data address assignments are stable. This means that all data address movement, graceful or ungraceful, is complete and remains stable until another event on the cluster requires subsequent data address movement.

Corrective Action

(None).

Syslog Message

Data address movement is complete and data address assignments are stable.

Parameters

(None).

dbfs.director.aggrs.stable

Severity

NOTICE

Description

This message occurs when aggregate assignments are stable. This means that all aggregate movement, graceful or ungraceful, is complete and remains stable until another event on the cluster requires subsequent aggregate movement.

Corrective Action

(None).

Syslog Message

Aggregate movement is complete and aggregate assignments are stable.

Parameters

(None).

dbfs.discon events

dbfs.discon.snapmirror.end

Severity

ERROR

Description

This message occurs when the Distributed Block Store (DBS) is unable to access snapmirror endpoint on the network. The DBS is responsible for managing the data that backs the FlexVols®.

Corrective Action

Check network connectivity between the cluster and the remote snapmirror endpoint. Check the 1G management network.

Syslog Message

The Distributed Block Store is unable to access the snapmirror endpoint from cluster. The cluster fault type is %s and fault id is %u.

Parameters

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).

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.

db.disconn events

db.disconn.cluster.pair

Severity

ERROR

Description

This message occurs when the distributed block store detects that a cluster pair is disconnected or configured incorrectly. The distributed block store is responsible for managing the data that backs the flexible volumes.

Corrective Action

Check network connectivity between clusters. One of the clusters in the pair might have become misconfigured or disconnected. Remove the local pairing and retry pairing the clusters.

Syslog Message

The distributed block store detects that the cluster pair is disconnected or configured incorrectly. The cluster fault type is %s and fault id is %u.

Parameters

cfType (STRING): Distributed block store cluster fault type of the associated object.

cfID (INT): Distributed block store 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).

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

cfExtSrc (STRING): Distributed block store cluster fault external source label created by the "CreateClusterFault" API command and attached to the fault for testing purposes.

db.disconn.remote.node

Severity

ERROR

Description

This message occurs when the Distributed Block Store (DBS) detects that a remote node is not connected to cluster network. The DBS is responsible for managing the data that backs the FlexVols®.

Corrective Action

Ping the remote nodes using jumbo frames to test network connectivity.

Syslog Message

The Distributed Block Store has detected that a remote node is not connected to cluster network. The cluster fault type is %s and fault id is %u.

Parameters

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).

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.

db.drives.events

db.drives.events

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) event related to drive operations occurs. If the original DBS event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

(None).

Syslog Message

A DBS event occurred, event %s, type %s, service %u, node %u/%s, drive %u/%s, eventID %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

db.drives.capacity.mismatch

Severity

ALERT

Description

This message occurs when Distributed Block Store (DBS) detects a drive capacity mismatch.

Corrective Action

Check capacity of drive against other DBS drives on the node. All drives are expected to be the same size.

Syslog Message

DBS has detected a drive capacity mismatch. Cluster fault node %u, node UUID %s, drives %s, drive UUIDs %s, type %s, fault ID %u, status %u. %s

Parameters

nodeID (INT): Node ID number of the associated node.

nodeUUID (STRING): Node UUID string of the associated node.
cfDriveIDs (STRING): IDs of the affected drives.
cfDriveUUIDs (STRING): UUIDs of the affected drives.
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).
cfDetails (STRING): Details of the hardware mismatch.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.

db.drives events

db.drives.failed

Severity

ERROR

Description

This message occurs when Distributed Block Store (DBS) has one or more failed drives. This can happen due to: no access, too many failures, a missing drive, inaccessible master service for the node, or the drive is locked and cannot be unlocked or the authentication key cannot be accessed.

Corrective Action

Check network connectivity for the node. Replace the drives. Make sure that the authentication key is available.

Syslog Message

DBS has detected a failed drive(s). Cluster fault node %u, node UUID %s, drives %s, drive UUIDs %s, type %s, cluster fault ID %u, status %u. %s

Parameters

nodeID (INT): Node ID number of the associated node.
nodeUUID (STRING): Node UUID string of the associated node.
cfDriveIDs (STRING): IDs of the failed drives
cfDriveUUIDs (STRING): UUIDs of the failed drives
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).
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.

db.ekm events

db.ekm.cert.alert

Severity

ALERT

Description

This message occurs when Distributed Block Store (DBS) detects that an External Key Management (EKM) key server configuration contains a certificate that will expire in less than 7 days.

Corrective Action

Renew each listed certificate and update the associated EKM key server configuration.

Syslog Message

DBS has detected that an EKM key server certificate is nearing expiration. Cluster fault type %s, fault ID %u, status %u. %s

Parameters

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).

cfDetails (STRING): Details of the certificates that are nearing expiration.

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

dbb.ekm.cert.error

Severity

ERROR

Description

This message occurs when Distributed Block Store (DBS) detects that an External Key Management (EKM) key server configuration contains a certificate that will expire in less than 30 days.

Corrective Action

Renew each listed certificate and update the associated EKM key server configuration.

Syslog Message

DBS has detected that an EKM key server certificate is nearing expiration. Cluster fault type %s, fault ID %u, status %u. %s

Parameters

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).

cfDetails (STRING): Details of the certificates that are nearing expiration.

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

dbb.ekm.events

dbb.ekm.at.rest

Severity

NOTICE

Description

This message occurs when Distributed Block Store (DBS) enables or disables encryption at rest on a self-encrypting drive. Encrypting drives automatically encrypt and decrypt the data as it is written or read from the drive media. Enabling encryption at rest protects the data from unauthorized access if the drive is power-cycled. If the original DBS event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

(None).

Syslog Message

A DBS encryption at rest event occurred, event %s, type %s, service %u, node %u/%s, drive %u/%s, eventID %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

db.ensemble events

db.ensemble

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) event related to the database ensemble occurs, such as the inability to reach the database in a node.

Corrective Action

(None).

Syslog Message

A DBS ensemble event %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

db.ensemble.alert

Severity

ALERT

Description

This message occurs when the Distributed Block Store (DBS) detects the database connection to less than half of the ensemble nodes (of 3 or 5 total) is not available. The database still has quorum and is operational.

Corrective Action

Verify power for all nodes and their network connectivity. Wait 10 minutes and check that the fault status has changed to Resolved. If the condition persists, contact NetApp technical support.

Syslog Message

DBS has lost network connectivity or power an ensemble node. Cluster fault type %s, fault ID %u, status %u. %s

Parameters

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).

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.

db.exception events

db.exception

Severity

ERROR

Description

This message occurs when the Distributed Block Store (DBS) is unable to process a cluster fault.

Corrective Action

Wait 60 minutes and check that the fault status has changed to Resolved. If the condition persists, contact NetApp technical support.

Syslog Message

DBS has detected a software exception. Cluster fault type %s, fault ID %u, status %u. %s

Parameters

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).

cfDetails (STRING): Description of the exception.

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

dbf.fault events

dbf.fault.checker

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) event related to the fault checker occurs, such as excessive time for the periodic fault checker to execute.

Corrective Action

(None).

Syslog Message

A DBS fault checker event %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

dbf.file events

dbf.file.system.capacity.low

Severity

ERROR

Description

This message occurs when the Distributed Block Store (DBS) detects the mounted container file system ("/", "/persist", "/var/log") has capacity below 5 percent.

Corrective Action

Add additional filesystem capacity to the node or remove any unneeded files until the fault is cleared.

Syslog Message

DBS has detected low filesystem free space on node %u/%s. Cluster fault type %s, fault ID %u, status %u.
%s

Parameters

nodeID (INT): Node ID number of the associated node. It is "0" if there is no associated node.
nodeUuid (STRING): Universal unique identifier (UUID) of the associated node. If there is no associated node, zeroes display.
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).
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.

dbs.file.system.read.only

Severity

ALERT

Description

This message occurs when Distributed Block Store (DBS) detects a mounted container file system ("/", "/persist", "/var/log") that should be writeable is marked as read-only.

Corrective Action

Verify required node file systems ("/", "/persist", "/var/log") are writeable. If not, resolve this issue. Contact NetApp technical support if cause cannot be found.

Syslog Message

DBS has detected a file system is read-only. Cluster fault node %u, node UUID %s, type %s, fault ID %u, status %u. %s

Parameters

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).
cfDetails (STRING): Details of the file system set to read-only.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.

dbb.generic events

dbb.generic.cluster.fault

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) 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.

Corrective Action

None.

Syslog Message

A DBS generic cluster fault occurred, fault %s (%u), sev %u, service %u, node %u/%s, drives %s.

Parameters

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).

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.

dbb.generic.event

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) event is reported as a generic event. The DBS is responsible for managing the data that backs the FlexVols®. Multiple DBS events are mapped to this one event. If the original DBS event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

(None).

Syslog Message

DBS generic event %s occurred, type %s, service %u, node %u/%s. drive %u/%s, eventID %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

db.s.ie events

db.s.ie

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) internal interface exception condition occurs. If the original DBS event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

(None).

Syslog Message

A DBS IE event %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

db.s.ikm events

db.s.ikm

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) event relating to Internal Key Management (IKM) occurs, such as purging a key.

Corrective Action

(None).

Syslog Message

DBS IKM event %s occurred, type %s, service %u, node %u/%s. drive %u/%s, eventID %u.

Parameters

evtMessage (STRING): Description of the DBS 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): Generated Universal Unique Identifier UUID of the associated node. It displays 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): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

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

dbinstall events

dbinstall

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) install event occurs, such as inability to install the system software on a pending node.

Corrective Action

(None).

Syslog Message

A DBS install event %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

db.s.limit events

db.s.limit

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) limit event occurs, such as reaching the recommended or maximum number of volumes or virtual volumes. If the original DBS event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

(None).

Syslog Message

A DBS limit event %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

db.s.maintenance events

db.s.maintenance.mode

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) maintenance mode event occurs, such as that a node no longer exists. If the original DBS event specifies multiple drives, then an EMS event is generated

for each drive.

Corrective Action

(None).

Syslog Message

A DBS maintenance mode event %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

dbms.master events

dbms.master.didnt.start.cm

Severity

NOTICE

Description

This message occurs when the node fails to execute cluster master startup. The system attempts to start the cluster master again automatically.

Corrective Action

(None).

Syslog Message

Cluster master startup on service ID %u on node ID %u (UUID: %s) failed. Reason: %s.

Parameters

serviceID (INT): Service ID that identifies the associated master service.

nodeID (INT): Node ID number of the associated node.

nodeUuid (STRING): Node UUID of the associated node.

reason (STRING): Reason cluster master startup failed.

dbms.master.started.cm

Severity

NOTICE

Description

This message occurs when the node completes cluster master startup successfully.

Corrective Action

(None).

Syslog Message

Cluster master startup on service ID %u on node ID %u (UUID: %s) completed successfully.

Parameters

serviceID (INT): Service ID that identifies the associated master service.

nodeID (INT): Node ID number of the associated node.

nodeUuid (STRING): Node universal unique identifier (UUID) of the associated node.

db mem events

db mem threshold alert

Severity

ALERT

Description

This message occurs when Distributed Block Store (DBS) detects a node's container has very low memory.

Corrective Action

Purge unused volumes and allow up to an hour for garbage collection between the Block and Slice services to run. Alternatively, add more nodes.

Syslog Message

DBS has detected free memory is low on a node. Cluster fault node %u, node UUID %s, type %s, fault ID %u, status %u. %s

Parameters

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).

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.

db mem threshold error

Severity

ERROR

Description

This message occurs when Distributed Block Store (DBS) detects a node's container has low memory.

Corrective Action

Purge unused volumes and allow up to an hour for garbage collection between the Block and Slice services to run. Alternatively, add more nodes.

Syslog Message

DBS has detected free memory is low on a node. Cluster fault node %u, node UUID %s, type %s, fault ID %u, status %u. %s

Parameters

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).

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.

db.network events

db.network.error.fault

Severity

ERROR

Description

This message occurs when a distributed block store detects network configuration or connectivity errors on nodes in the cluster. Multiple error conditions are mapped to this one event. The distributed block store is responsible for managing the data that backs the flexible volumes.

Corrective Action

Check and rectify network configuration parameters for configuration faults. For network connectivity faults, check physical components such as network interface card (NIC) port, switch port and ethernet cable. Replace the faulty component.

Syslog Message

The distributed block store detects a network configuration cluster fault on node %u/%s. The cluster fault type is %s and fault ID is %u.

Parameters

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

nodeUuid (STRING): Universal unique identifier (UUID) of the associated node. If there is no associated node, zeroes display.

cfType (STRING): Distributed block store cluster fault type of the associated object.

cfID (INT): Distributed block store 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).

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

cfExtSrc (STRING): Distributed block store cluster fault external source label created by the "CreateClusterFault" API command and attached to the fault for testing purposes.

dbns.network.event

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) event related to storage cluster networking occurs.

Corrective Action

Contact NetApp technical support for events related to network errors to assess the severity and for any required corrective actions.

Syslog Message

A DBS software networking event %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

dbns.network.mtu.check

Severity

ERROR

Description

This message occurs when a distributed block store fails to send messages between the storage cluster nodes using configured maximum transmission unit (MTU size). The distributed block store is responsible for managing the data that backs the flexible volumes.

Corrective Action

Check and rectify network MTU size on cluster nodes and switches connected to it. Contact NetApp technical support.

Syslog Message

The distributed block store detects a network MTU check cluster fault on node %u/%s. The cluster fault type is %s and fault ID is %u.

Parameters

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

nodeUuid (STRING): Universal unique identifier (UUID) of the associated node. If there is no associated

node, zeroes display.

cfType (STRING): Distributed block store cluster fault type of the associated object.

cfID (INT): Distributed block store 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).

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

cfExtSrc (STRING): Distributed block store cluster fault external source label created by the "CreateClusterFault" API command and attached to the fault for testing purposes.

dbns.node events

dbns.node.maint.mode.alert

Severity

ALERT

Description

This message occurs when Distributed Block Store (DBS) detects a node with a maintenance mode failure.

Corrective Action

Contact NetApp technical support.

Syslog Message

DBS has detected a node with a maintenance mode failure. Cluster fault node %u, node UUID %s, type %s, fault ID %u, status %u. %s

Parameters

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).

cfDetails (STRING): Details of the node in maintenance mode.

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

dbns.node.maint.mode.error

Severity

ERROR

Description

This message occurs when Distributed Block Store (DBS) detects a node is in maintenance mode.

Corrective Action

Disable maintenance mode when maintenance is complete.

Syslog Message

DBS has detected a node is in maintenance mode. Cluster fault node %u, node UUID %s, type %s, fault ID %u, status %u. %s

Parameters

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).

cfDetails (STRING): Details of the node in maintenance mode.

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

dbfs.node.offline

Severity

ALERT

Description

This message occurs when Distributed Block Store (DBS) detects the Cluster Master cannot communicate with the master service on a node.

Corrective Action

Check for network connectivity issues and hardware errors.

Syslog Message

DBS has detected the Cluster Master cannot communicate with the master service on a node. Cluster fault node %u, node UUID %s, type %s, fault ID %u, status %u. %s

Parameters

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).

cfDetails (STRING): Details of the node offline.

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

dbfs.platform_hardware events

dbfs.platform_hardware

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) platform hardware event occurs, such as a drive hardware fault. If the original DBS event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

(None).

Syslog Message

A DBS platform hardware event %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

db.s.prestartup events

db.s.prestartup

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) prestartup event occurs. Several events might be posted during startup.

Corrective Action

(None).

Syslog Message

A DBS prestartup event %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

dbfs.provisioned events

dbfs.provisioned.space.full

Severity

ERROR

Description

This message occurs when the distributed block store detects that the overall provisioned capacity of the cluster has exceeded the slice reserve space threshold. The slice reserve space is only used when slices get reassigned due to slice drive failure. Therefore, the slice files can no longer be migrated during drive failure until this fault is resolved. The distributed block store is responsible for managing the data that backs the flexible volumes.

Corrective Action

Add more provisioned space, or delete and purge volumes to resolve this fault.

Syslog Message

The distributed block store detected that the overall provisioned capacity of the cluster is full. The cluster fault type is %s and fault id is %u.

Parameters

cfType (STRING): Distributed block store cluster fault type of the associated object.

cfID (INT): Distributed block store 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).

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

cfExtSrc (STRING): Distributed block store cluster fault external source label created by the "CreateClusterFault" API command and attached to the fault for testing purposes.

dbfs.raid events

dbfs.raid.group.degraded

Severity

ERROR

Description

This message occurs when distributed block store detects that a RAID group in the cluster is degraded. The RAID group can continue to serve data, but performance might be adversely affected.

Corrective Action

Look for disk error EMS messages, or use REST, Kubernetes, or kubectl calls to check for disk errors. If the errors cannot be resolved, contact NetApp technical support.

Syslog Message

Distributed block store has detected a degraded RAID group. Cluster fault node %u, node UUID %s, type %s, fault ID %u, status %u. %s

Parameters

nodeID (INT): Node ID number of the associated node.

nodeUUID (STRING): Node universal unique identifier (UUID) string of the associated node.

cfType (STRING): Distributed block store cluster fault type of the associated object.

cfID (INT): Distributed block store 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).

cfDetails (STRING): Details of the degraded RAID group.

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

dbfs.raid.group.not.oper

Severity

ALERT

Description

This message occurs when distributed block store detects that a RAID group is not operational and is unable to serve data.

Corrective Action

Look for disk error EMS messages, or use REST, Kubernetes, or kubectl calls to check for disk errors. If the errors cannot be resolved, contact NetApp technical support.

Syslog Message

Distributed block store has detected a nonoperational RAID group. Cluster fault node %u, node UUID %s, type %s, fault ID %u, status %u. %s

Parameters

nodeID (INT): Node ID number of the associated node.

nodeUUID (STRING): Node universal unique identifier (UUID) string of the associated node.

cfType (STRING): Distributed block store cluster fault type of the associated object.

cfID (INT): Distributed block store 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).

cfDetails (STRING): Details of the RAID group that is not operational.

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

dbfs.remote.events

dbfs.remote.cluster

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) event such as a change in cluster pair connectivity status occurs. If the original DBS event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

(None).

Syslog Message

A DBS remote cluster event occurred, event %s, type %s, service %u, node %u/%s, drive %u/%s, eventID %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

db.remote.rep.cluster.full

Severity

ALERT

Description

This message occurs when the distributed block store detects that the volumes have paused remote replication because the target storage cluster is full. The distributed block store is responsible for managing the data that backs the flexible volumes.

Corrective Action

Free target space.

Syslog Message

The distributed block store detects that the volumes have paused remote replication because the target storage cluster is full. The cluster fault type is %s and fault id is %u.

Parameters

cfType (STRING): Distributed block store cluster fault type of the associated object.

cfID (INT): Distributed block store 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).

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

cfExtSrc (STRING): Distributed block store cluster fault external source label created by the "CreateClusterFault" API command and attached to the fault for testing purposes.

db.remrep events

dbfs.remrep.async.dly.exceed

Severity

ERROR

Description

This message occurs when the Distributed Block Store (DBS) is executing remote replication for a pair of volumes, but that it has not reached active state for 6 hours. The DBS is responsible for managing the data that backs the FlexVols®.

Corrective Action

Check network connectivity between clusters. Inspect slice service logs to see if some issue is preventing replication from continuing.

Syslog Message

The Distributed Block Store is attempting to perform remote replication that has not reached active state for 6 hours. The cluster fault type is %s and fault id is %u.

Parameters

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).

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.

dbfs.remrep.snap.cluster.full

Severity

ALERT

Description

This message occurs when the Distributed Block Store (DBS) detects that Remote Replication of Snapshots is paused for associated volumes because target cluster is full. The DBS is responsible for managing the data that backs the FlexVols®.

Corrective Action

Free space on the target volume.

Syslog Message

The Distributed Block Store detected that Remote Replication of Snapshots is paused for associated volumes because target cluster is full. The cluster fault type is %s and fault id is %u.

Parameters

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).

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.

dbfs.remrep.snapshots.exceed

Severity

ALERT

Description

This message occurs when the Distributed Block Store (DBS) detects that Remote Replication of Snapshots is paused for associated volumes because target volume has exceeded its snapshot limit. The DBS is responsible for managing the data that backs the FlexVols®.

Corrective Action

Delete snapshots on the target volume.

Syslog Message

The Distributed Block Store detected that Remote Replication of Snapshots is paused for associated volumes because target volume has exceeded its snapshot limit. The cluster fault type is %s and fault id is %u.

Parameters

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).

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.

dbfs.schedule events

dbfs.schedule.action.error

Severity

ERROR

Description

This message occurs when the Distributed Block Store (DBS) is running one or more of the scheduled activities but the activity failed, for example running a scheduled create snapshot fails to complete. The fault clears if the scheduled activity runs again and succeeds, if the scheduled activity is deleted, or if the activity is paused and resumed. The DBS is responsible for managing the data that backs the FlexVols®.

Corrective Action

Check the scheduler entry for issues.

Syslog Message

The Distributed Block Store is attempting one or more scheduled activities which fails to complete. The cluster fault type is %s and fault id is %u.

Parameters

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).

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.

dbsecsecondary events

dbsecsecondary.cache.thresh

Severity

ALERT

Description

This message occurs when the Distributed Block Store (DBS) detects that Slice volume secondary write cache has reached the first fullness warning threshold. Secondary cache starts to fill 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 if this condition persists. The DBS is responsible for managing the data that backs the FlexVols®.

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

Slice secondary cache fullness threshold reached for service ID %u on node %u.

Parameters

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).

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.

dbsecservice events

dbsecservice

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) service event occurs, such as inability to start the FireStorm service.

Corrective Action

(None).

Syslog Message

A DBS service event %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

db.service.not.running

Severity

ALERT

Description

This message occurs when Distributed Block Store (DBS) detects a service is not running.

Corrective Action

Verify that the service is started within 10 minutes.

Syslog Message

DBS has detected a service is not running. Cluster fault service ID %u, node %u, node UUID %s, type %s, fault ID %u, status %u. %s

Parameters

serviceID (INT): Service ID that identifies the associated cluster service.

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).

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.

db.slice events

db.slice.operation

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) event relating to a slice service operation such as removing a metadata drive, slice reassignment i.e. balancing volumes, moving primaries, snapshot success, failure, expiration, group snapshot success, failure occurs. If the original DBS event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

(None).

Syslog Message

A DBS slice event occurred, event %s, type %s, service %u, node %u/%s, drive %u/%s, eventID %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

db.slice.service.unhealthy

Severity

ALERT

Description

This message occurs when the Distributed Block Store (DBS) is trying to migrate data away from an unresponsive Slice Service. The DBS is responsible for managing the data that backs the FlexVols®.

Corrective Action

Expect DBS to automatically resolve this failure. The cluster is automatically decommissioning data and re-replicating its data onto other healthy drives.

Syslog Message

DBS is migrating data away from unresponsive Slice service %u, node %u.

Parameters

serviceID (INT): Service ID that identifies the associated DBS 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.

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).

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.

db.snapshot events

db.snapshot.scheduler

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) event related to scheduling snapshots occurs. If the original DBS event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

(None).

Syslog Message

A DBS scheduler event occurred, event %s, type %s, service %u, node %u/%s, drive %u/%s, eventID %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

db.snmp events

db.snmp.trap

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) reports an SNMP trap. If the original DBS event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

(None).

Syslog Message

A DBS SNMP trap event %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

dbsoftware events

dbsoftware.version.mismatch

Severity

ALERT

Description

This message occurs when Distributed Block Store (DBS) detects a software version mismatch in the cluster.

Corrective Action

Bring the node out of maintenance mode. Check for cluster faults and upgrade again if the faults are cleared.

Syslog Message

DBS has detected a software upgrade that has failed. Cluster fault node %u, node UUID %s, type %s, fault ID %u, status %u. %s

Parameters

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).

cfDetails (STRING): Details of the software version that did not upgrade properly.

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

dbssl events

dbssl.node.cert.expire

Severity

NOTICE

Description

This message occurs when Distributed Block Store (DBS) detects that a Secure Socket Layer (SSL) certificate on a node is nearing expiration. No action is needed. The system resolves this issue by automatically updating the certificate.

Corrective Action

(None).

Syslog Message

DBS has detected that an SSL certificate is nearing expiration. Cluster fault node %u, node UUID %s, type %s, fault ID %u, status %u. %s

Parameters

nodeID (INT): Node ID number of the associated node.

nodeUUID (STRING): Node universal unique identifier (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).

cfDetails (STRING): Details of the certificates that are nearing expiration.

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

dbstat events

dbstat

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) statistics event occurs, such as inconsistent statistics. If the original DBS event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

(None).

Syslog Message

A DBS statistics event %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

dbsw.events

dbsw.encr.at.rest

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) event relating to Software Encryption At Rest occurs, such as master key rekey completes or fails, rewrapping drive keys with new SEAR master key takes too long occur. Software Encryption At Rest when enabled, encrypts all data written, and decrypts all data read automatically in the software. If the original DBS event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

(None).

Syslog Message

A DBS SW Encryption at Rest event occurred, event %s, type %s, service %u, node %u/%s, drive %u/%s, eventID %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

dbsw.unexpected.events

dbsw.unexpected.exception

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) exception occurs unexpectedly, such as the inability to analyze existing error information. If the original DBS event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

(None).

Syslog Message

An unexpected DBS exception %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

db.unresponsive events

db.unresponsive.service.alrt

Severity

ALERT

Description

This message occurs when Distributed Block Store (DBS) Master Service detects an unresponsive service.

Corrective Action

Wait 10 minutes and check that the fault status has changed to Resolved. If the condition persists, contact NetApp technical support.

Syslog Message

DBS has detected an unresponsive service. Cluster fault service ID %u, node %u, node UUID %s, type %s, fault ID %u, status %u. %s

Parameters

serviceID (INT): Service ID that identifies the associated cluster service.

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

dbfs.unresponsive.service.err

Severity

ERROR

Description

This message occurs when Distributed Block Store (DBS) detects an unresponsive service.

Corrective Action

Verify that the service is restarted within 10 minutes.

Syslog Message

DBS has detected an unresponsive service. Cluster fault service ID %u, node %u, node UUID %s, type %s, fault ID %u, status %u. %s

Parameters

serviceID (INT): Service ID that identifies the associated cluster service.
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).
cfDetails (STRING): Name of the affected service.
cfExtSrc (STRING): DBS cluster fault externalSource label created by the CreateClusterFault API command and attached to the fault for testing purposes.

dbfs.upgrade events

dbfs.upgrade

Severity

ERROR

Description

This message occurs when Distributed Block Store (DBS) detects a software upgrade is in progress longer than 24 hours.

Corrective Action

Contact NetApp technical support.

Syslog Message

DBS has detected a software upgrade is in progress. Cluster fault type %s, fault ID %u, status %u. %s

Parameters

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).

cfDetails (STRING): Details of the upgrade.

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

db.valence events

db.valence.test.bad

Severity

NOTICE

Description

This message occurs when a Distributed Block Store (DBS) valence test failure event occurs. Valence test are internal periodic tests. If the original DBS event specifies multiple drives, then an EMS event is generated for each drive.

Corrective Action

(None).

Syslog Message

A DBS valence test failure event %s of type %s occurred for Service ID %u on node %u/%s. Drive ID = %u/%s. Event ID = %u.

Parameters

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

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

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

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

nodeUuid (STRING): Generated Universal Unique Identifier (UUID) of the associated node. It displays zeroes if there is no associated node.

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

driveUuid (STRING): Generated UUID of the associated drive. It displays zeroes if there is no associated drive.

evtID (INT): DBS event ID number.

evtDetails (STRING): Specific details of the DBS event. It displays as a string, in JSON format, or is empty.

db.volumes events

db.volumes.degraded

Severity

ALERT

Description

This message occurs when the distributed block store detects that the listed volumes currently have only one copy of some of their data (they do not have a live secondary). This normally happens when a primary or live secondary slice service experiences remote procedure call (RPC) message timeouts to a peer slice service and changes it to a dead secondary. It can also happen briefly when a volume is created. The volume is current, syncing to a live secondary. The distributed block store is responsible for managing the data that backs the flexible volumes.

Corrective Action

Check for network connectivity issues and hardware errors. There should be other faults if specific hardware components have failed. This fault clears when syncing completes and there is a live secondary slice service.

Syslog Message

The distributed block store detects that the listed volumes currently have only one copy of some of their data (they do not have a live secondary). The cluster fault type is %s and fault id is %u.

Parameters

cfType (STRING): Distributed block store cluster fault type of the associated object.

cfID (INT): Distributed block store 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).

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

cfExtSrc (STRING): Distributed block store cluster fault external source label created by the "CreateClusterFault" API command and attached to the fault for testing purposes.

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