# qos events

## ONTAP EMS reference

NetApp
November 19, 2025

# Table of Contents

# qos events

# qos.bgtask events

## qos.BgTask.Throttle

**Severity**

NOTICE

**Description**

This message occurs when the Quality of Service (QoS) subsystem starts throttling requests to help critical background tasks meet their min-throughput and their service-level objectives (SLOs).

**Corrective Action**

(None).

**Syslog Message**

QoS throttle limit for background task: "%s" with id: "%u" is %u IOPS.

**Parameters**

**bg_task_name** (STRING): Name of the Background Task that requested QoS to throttle requests.
**bg_task_id** (INT): ID of the Background Task that requested QoS to throttle requests.
**limit** (INT): The limit value enforced in terms of IOPS and a block size of 4K.

# qos.mgmt events

## qos.mgmt.operation.failed

**Severity**

ERROR

**Description**

This message indicates that cluster quality of service (QoS) cannot propagate settings to the classification and control components on the specified node. This might be a transient condition, or it might indicate insufficient resources to complete the operation. QoS workload classification and control might behave incorrectly on this node.

**Corrective Action**

Inspect the management gateway process log for errors indicating why the command failed. If this behavior persists, contact NetApp technical support.

**Syslog Message**

QoS configuration update failed on node %s: %s

**Parameters**

**node** (STRING): Node on which operation failed.
**error** (STRING): Error description.

# qos.min events

## qos.min.tput.not.honoured.for.sync

**Severity**

NOTICE

**Description**

This message occurs when minimum throughput value is not honoured if adaptive QoS is set on a SnapMirror Synchronous protected storage object.

**Corrective Action**

(None).

**Syslog Message**

Adaptive QoS policy "%s" set on SnapMirror Synchronous volume "%s" or any of it’s storage object has a min-throughput value set. SnapMirror Synchronous does not support min-throughput hence min-throughput setting will not be honoured from the policy, only max-throughput setting will be honoured.

**Parameters**

**policy** (STRING): Policy group name.
**volume** (STRING): Volume name.

# qos.mintp events

## qos.mintp.high.intrconct.lat

**Severity**

NOTICE

**Description**

This message occurs when the Quality of Service (QoS) subsystem notices high latency in the cluster interconnect for workloads associated with minimum-throughput policy groups. As a result, workloads might not be able to meet their minimum-throughput values.

**Corrective Action**

Consider using the "qos statistics" CLI command to monitor the workloads and policy groups that have high cluster interconnect latency and also do not meet their minimum-throughput Service Level Objectives (SLOs). Either avoid the interconnect by moving workloads or LIFs, or reduce contention for the interconnect by applying QoS maximum throughput constraints on interfering workloads.

**Syslog Message**

QoS has noticed high cluster interconnect latency. Some workloads and policy groups might not meet their specified minimum-throughput.

**Parameters**

(None).

# qos.monitor events

## qos.monitor.memory.abated

**Severity**

NOTICE

**Description**

This message occurs when the Quality of Service (QoS) subsystem’s dynamic memory is no longer at its limit for the current platform hardware. All QoS features will operate as normal.

**Corrective Action**

(None).

**Syslog Message**

QoS dynamic memory is no longer at its limit. All QoS features will operate as normal.

**Parameters**

**subject** (STRING): QoS Memory message title.
**count** (INT): Number of times this has happened.
**object_type** (STRING): Type of resource object under notification. For this EMS, the object_type will always be NODE.
**object_uuid** (STRING): UUID of the resource object. For this EMS, the UUID will be of the node.

## qos.monitor.memory.maxed

**Severity**

ERROR

**Description**

This message occurs when the Quality of Service (QoS) subsystem’s dynamic memory hits its limit for the current platform hardware. As a result, some QoS features might operate in a limited capacity.

**Corrective Action**

Some active workloads or streams should be deleted to free up memory. Use the 'statistics show -object workload -counter ops' command to determine which workloads are active. Active workloads will show non-zero ops. Then use the 'workload delete [workload name]' command multiple times to remove particular workloads. Alternatively, use the 'stream delete -workload [workload name] *' command to delete the associated streams from the active workload.

**Syslog Message**

QoS dynamic memory has reached its limit. Some QoS features might operate in a limited capacity.

**Parameters**

**subject** (STRING): QoS Monitor message title.
**count** (INT): Number of times this has happened.
**object_type** (STRING): Type of resource object under notification. For this EMS, the object_type will always be NODE.
**object_uuid** (STRING): UUID of the resource object. For this EMS, the UUID will be of the node.

# qos.onnix events

## qos.onnix.classf.failure

**Severity**

ERROR

**Description**

This message occurs when the classification subsystem for Quality of Service (QoS) fails. Any limits that are configured for volumes will not be applied.

**Corrective Action**

Contact Contact NetApp technical support. for assistance.

**Syslog Message**

QoS classification failed. Any limits that are configured for volumes will not be applied.

**Parameters**

(None).

# qos.qtree events

## qos.qtree.fh.error.report

**Severity**

ERROR

**Description**

This message occurs when the Quality of Service (QoS) subsystem recognizes that an older version of a filehandle is still being used to access a qtree associated with a QoS policy group. Use of this filehandle will impact the ability of the qtree workload to meet its service-level objectives (SLOs).

**Corrective Action**

Use the "qos workload show -wid workloadID" command to show the affected qtree. Use the "network connections active show -local-port 2049" command to show all of the active NFS protocol connections to each node. Verify that, after a QoS policy group was associated with the qtree, each client did in fact remount all of its mount points with the qtree. If any client did not remount, first determine which Vserver exported the mount points by using the "volume qtree show -fields qtree,vserver" command. Next stop all applications that are using the qtree and unmount all exports from the Vserver in question. Finally, remount the exports and restart the applications.

**Syslog Message**

QoS qtree violation for qtree with workload ID = %u.

**Parameters**

**wid** (INT): The QoS workload ID of the qtree.

# qos.viodet events

## qos.VioDet.maxThrottle

**Severity**

NOTICE

**Description**

This message occurs when the Quality of Service (QoS) subsystem has already throttled requests severely to help workloads meet their min-throughput and their service-level objectives (SLOs) and will not throttle any further. Possible reasons for severe throttling could be that there are bully workloads or insufficient resources, which means the system cannot support the specified targets in the SLOs.

**Corrective Action**

Collect ONTAP statistics counters and use 'qos statistics' CLI command on the node to monitor the workload and policy group to find the workloads that do not meet their min-throughput SLOs. The cpu utilization and aggregate utilization can be used to help identify if there is sufficient load or if the system is over-provisioned. First validate if the policy group client generates sufficient load. If the system is over provisioned, identify the critical resources (cpu, memory, network, disk, etc.) that could lead to the violation, or identify the hot spot in a clustered system and move workloads around to avoid the hot spot or limit bully workloads by setting a QoS limit to reduce the contention.

**Syslog Message**

QoS violation limit for %s %s is %u IOPS.

**Parameters**

**object_type** (STRING): Type of resource object under notification. For this EMS, the object_type will always be NODE.
**object_uuid** (STRING): UUID of the resource object. For this EMS, the UUID will be of the node.
**vdlimit** (INT): Current limit value in terms of IOPS and a block size of 4K.

## qos.VioDet.Mintput.Throttle

**Severity**

INFORMATIONAL

**Description**

This message occurs when the Quality of Service (QoS) subsystem starts throttling requests to help workloads meet their min-throughput and their service-level objectives (SLOs). Possible reasons for throttling could be that there are bully workloads or insufficient resources, which means the system cannot support the specified targets in the SLOs.

**Corrective Action**

Collect ONTAP statistics counters and use 'qos statistics' CLI command on the node to monitor the workload and policy group to find the workloads that do not meet their min-throughput SLOs. The CPU utilization and aggregate utilization can be used to help identify if there is sufficient load or if the system is over-provisioned. Firstly validate if the policy group client generates sufficient load. If the system is over provisioned, identify the critical resources (CPU, memory, network, disk, etc.) that could lead to the violation, or identify the hot spot in a clustered system and move workloads around to avoid the hot spot. Or limit bully workloads by setting a QoS limit to reduce the contention.

**Syslog Message**

QoS min-throughput feature has started throttling requests for node: "%s" with uuid: "%s".

**Parameters**

**object_type** (STRING): Type of resource object under notification. The object_type will always be NODE.
**object_uuid** (STRING): Universal unique identifier (UUID) of the resource object. The UUID is of the node.

## qos.VioDet.noMemory

**Severity**

ERROR

**Description**

This message occurs when the Quality-of-Service (QoS) process cannot allocate memory required for the Violation Detection subsystem (likely there is not enough system memory available). As a result workloads will not meet their min-throughput and their service-level objectives (SLOs).

**Corrective Action**

(None).

**Syslog Message**

QoS dynamic memory has reached its limit. QoS min-throughput might operate in a limited capacity.

**Parameters**

**object_type** (STRING): Type of resource object under notification. For this EMS, the object_type will always be NODE.
**object_uuid** (STRING): UUID of the resource object. For this EMS, the UUID will be of the node.

## qos.VioDet.publishFail

**Severity**

ERROR

**Description**

This message occurs when the Quality-of-Service (QoS) process cannot communicate throttle limits due to an internal error. As a result workloads might not meet their min-throughput and their service-level objectives (SLOs).

**Corrective Action**

Contact NetApp technical support.

**Syslog Message**

QoS subsystem cannot publish throttle limits.

**Parameters**

**object_type** (STRING): Type of resource object under notification. For this EMS, the object_type will always be NODE.
**object_uuid** (STRING): UUID of the resource object. For this EMS, the UUID will be of the node.

# qos.violation events

## qos.violation.report

**Deprecated**

Deprecated as of version 9.4.0 since the QoS violation detection functionality has been deprecated.

**Severity**

NOTICE

**Description**

This message occurs every hour to provide a snapshot of violation detection status for the Quality of Service (QoS) policy groups. The snapshot shows the states of those policy groups that either cannot meet their service-level objectives (SLOs), or are impacted by (deactivation) actions taken by QoS to remedy the situations. Possible violation states include LOW_OFFERED, which means the offered load for a policy group is too low, or INSUFFICIENT_RESOURCES, which means the system can not support the specified targets in the SLO. The deactivation states include ACTIVATED, which means this policy group is not impacted by deactivation, or DEACTIVATED, which means this policy group is deactivated to support other violated policy group.

**Corrective Action**

After observing a violation, one should collect ONTAP statistics counters and use 'qos statistics' CLI command to monitor the violated policy group. Increase the client load if a low offered violation is present and the policy group client does not generate sufficient load. For other violations, identify the critical resources (cpu, memory, network, disk, etc.) that could lead to the violation, or identify the hot spot in a clustered system. The solution to the former is to add more resources; while the latter is to move workloads around to avoid the hot spot.

**Syslog Message**

QoS violation state for policy group %s is (pgid= %u violation= %s deactivation= %s).

**Parameters**

**name** (STRING): The QoS policy group name.
**id** (INT): The QoS policy group identifier.
**vdstate** (STRING): The violation state for a QoS policy group.
**dastate** (STRING): The deactivation state for a QoS policy group.

## Copyright information



## Trademark information