



net events

ONTAP 9.11.1 EMS reference

NetApp
December 15, 2022

Table of Contents

- net events 1
 - net.cg events 1
 - net.fib events 2
 - net.ifconfig events 3
 - net.ifgrp events 4
 - net.ipsconfig events 5
 - net.static events 6
 - net.vserverupdatefailure events 6
 - net.vserverupdatesuccess events 7

net events

net.cg events

net.cg.backpressureEntered

Severity

NOTICE

Description

This message occurs when the current connection group experiences backpressure. The client workload is distributed among connection groups. If a connection group has too much work waiting to be processed, incoming packets will be dropped. If one connection group experiences backpressure, it might indicate an imbalance that could affect the subset of clients using that connection group. If all connection groups are experiencing backpressure, it might indicate that the workload is nearing the capacity of the storage controller.

Corrective Action

Use the "statistics show -raw -object cgstat -counter is_backpressured" command to monitor the connection group backpressure status. Use the "statistics show -raw -object cgstat -counter bkp_exited" command to monitor the connection group backpressure rate. Use the "statistics show -raw -object cgstat -counter bkp_ipv4_drops" and "statistics show -raw -object cgstat -counter bkp_ipv6_drops" commands to monitor packet drops due to the connection group backpressure. Adjust the workload or increase the capacity to avoid over-utilization.

Syslog Message

Connection group "%d" experienced backpressure %d times.

Parameters

connection_group (INT): Connection group which dropped packets due to backpressure.
count (INT): Number of times the current connection group experienced backpressure.

net.cg.ratelimited

Severity

NOTICE

Description

This message occurs when the rate of incoming traffic exceeds the threshold limit of the current connection group. The client workload is distributed among connection groups. If a connection group is receiving certain kinds of packets at a rate exceeding the allowed threshold, those incoming packets will be dropped. Packets subject to rate limits include UDP, ICMP, IP fragments, broadcast, and multicast. If a connection group is receiving packets at a rate that exceeds its threshold, the storage controller might be experiencing a packet storm.

Corrective Action

Use the "statistics show -raw -object cgstat -counter ratelimit_icmp", "statistics show -raw -object cgstat -counter ratelimit_bcast", "statistics show -raw -object cgstat -counter ratelimit_frag", "statistics show -raw -object cgstat -counter ratelimit_udp", and "statistics show -raw -object cgstat -counter ratelimit_other" commands to monitor packets that are being dropped because they are being received by the connection group at a rate that exceeds the threshold limit. Use packet traces to determine if there is a packet storm or

network misconfiguration causing packets not intended for consumption by the storage controller to be sent to the connection group. If using NFS-over-UDP, adjust the workload or increase the capacity to avoid over-utilization.

Syslog Message

"%s traffic received by connection group "%d" was received at a rate that exceeded the threshold limit.

Parameters

reason (STRING): The type of packets the current connection group received at a rate greater than its threshold limit.

connection_group (INT): Connection group which dropped packets because it received them at a rate greater than its threshold limit.

net.cg.utilThresholdExceed

Severity

NOTICE

Description

This message occurs when the current connection group utilization exceeds the configured threshold. The client workload is distributed among connection groups. If one connection group utilization is much higher than the others, it might indicate an imbalance that could affect the subset of clients using that connection group. If all connection groups are experiencing high utilization, it might indicate that the workload is nearing the capacity of the storage controller.

Corrective Action

Use the "statistics show -raw -object nwk_ctx -counter utilization" command to monitor the connection group utilization. Adjust the workload or increase the capacity to avoid over-utilization.

Syslog Message

Utilization of connection group "%d" (%d%%) exceeds the configured threshold (%d%%).

Parameters

connection_group (INT): Connection group whose utilization exceeded the configured threshold.

current_utilization (INT): Current connection group utilization.

configured_threshold (INT): Configured connection group utilization threshold.

net.fib events

net.fib.createfailed

Severity

ERROR

Description

This message occurs when a Vserver resource allocation fails. This leaves the system with an unusable Vserver, and additional Vservers cannot be created. This might also lead to system performance degradation.

Corrective Action

Delete the Vserver created by using the "vserver delete" command. Use the diagnostic privilege "debug

smdb table vserver_by_name show" command to determine the Vserver name corresponding to the ID. You must delete the other associated entities, such as LIFs and volumes, before deleting a Vserver.

Syslog Message

Resource allocation for Vserver (ID: %d) failed.

Parameters

vsid (INT): Vserver ID.

net.fib.nearinglimit

Severity

NOTICE

Description

This message occurs when Vserver resources have reached 90% and will soon be exhausted. When the resources are exhausted, additional Vservers cannot be created. The system will function normally with respect to other Vservers.

Corrective Action

Check for configured Vservers by using the "vserver show" command, and delete unused Vservers by using the "vserver delete" command. You must delete the the other associated entities, such as LIFs and volumes, before deleting a Vserver.

Syslog Message

Vserver resource allocation is nearing the limit.

Parameters

(None).

net.ifconfig events

net.ifconfig.addLimitExceed

Severity

ERROR

Description

This message occurs when the limit for adding logical virtual local area network (VLAN) and interface group (ifgrp) interfaces is exceeded. The latest attempt to add an interface did not succeed.

Corrective Action

Delete any existing unused VLAN or ifgrp interface and retry adding the new logical interface.

Syslog Message

The limit for adding logical virtual local area network (VLAN) and interface group (ifgrp) interfaces is exceeded. The maximum limit per host is %d.

Parameters

maxlimitperhost (INT): Maximum interfaces per host.

net.ifconfig.ioctlError

Severity

NOTICE

Description

This event is generated when the ifconfig command encounters an error while attempting to perform an ioctl.

Corrective Action

(None).

Syslog Message

ioctl error encountered while configuring interface '%s' using ioctl '%s' (error string='%s', error code=%d).

Parameters

ifname (STRING): The name of the interface

ioctl (STRING): The name of the ioctl

errorString (STRING): The error string

error (INT): The internal error code

net.ifgrp events

net.ifgrp.addLimitExceeded

Severity

ERROR

Description

This message occurs when the system fails to create a new interface group because the number of such groups already present on the node exceed either the number of physical ports on the node or the upper bound on number of interface groups supported.

Corrective Action

Delete any existing unused interface groups and retry adding the new interface group. Use the "network port ifgrp delete" and "network port ifgrp create" commands, respectively, to do so.

Syslog Message

ifgrp %s could not be created because the limit for logical interface groups on this node has been reached. The limit per node is equal to the number of physical ports present on the node with an upper bound of %d.

Parameters

vifName (STRING): Name of the interface group that could not be created.

maxIfgrp (INT): Upper bound on number of interface groups supported.

net.ifgrp.lacp.link.active

Severity

NOTICE

Description

This message occurs when a link in an Link Aggregation Control Protocol (LACP) aggregate becomes active.

Corrective Action

(None).

Syslog Message

ifgrp %s, port %s has transitioned to the active state.

Parameters

aggregateName (STRING): Name of the interface group.

portName (STRING): Name of the member port.

net.ifgrp.lacp.link.inactive

Severity

ERROR

Description

This message occurs when a link is operationally up, but becomes inactive in the Link Aggregation Control Protocol (LACP) aggregate with which it has been associated. This can occur due to a configuration, software, or link error, or a hardware failure.

Corrective Action

Search kb.netapp.com for "How to troubleshoot LACP port channel groups".

Syslog Message

ifgrp %s, port %s has transitioned to an inactive state. The interface group is in a degraded state.

Parameters

aggregateName (STRING): Name of the interface group.

portName (STRING): Name of the member port.

net.ipsconfig events

net.ipsconfig.failed

Severity

ALERT

Description

This message occurs when creation of an IPspace fails. This failure leaves the system with an unusable IPspace.

Corrective Action

Delete the IPspace reporting the failure by using the "ipspace delete" command. Use the (privilege: diag) "debug smdb table ipspaces_byname show" command to find the mapping from the ID reported in the event to the IPspace name required to delete this IPspace.

Syslog Message

IPspace (%d) needs to be deleted because configuration (%s) failed with error (%s).

Parameters

ipsid (INT): IPspace ID.

configuration (STRING): Configuration attempted.

error (STRING): Error returned.

net.static events

net.static.ustroute.replaced

Severity

NOTICE

Description

This event is generated when user configured static host route entry being replaced with a dynamic entry by route redirect message.

Corrective Action

(None).

Syslog Message

rtredirect_fib: User static route to destination(%s) through gateway(%s) being redirected to new gateway(%s)

Parameters

Dest (STRING): IP address of the destination.

OldGW (STRING): IP address of the old gateway.

NewGW (STRING): IP address of the new gateway.

net.vserverupdatefailure events

net.vServerUpdateFailure

Severity

NOTICE

Description

This message occurs when a node cannot be updated with Vserver configuration. This can result in that node not being able to host LIFs.

Corrective Action

(None).

Syslog Message

Unable to update node %s with current Vservers.

Parameters

`remote_node` (STRING): Node being updated.

net.vserverupdatesuccess events

net.vServerUpdateSuccess

Severity

NOTICE

Description

This message occurs when the Vserver configuration on a node is successfully updated after a previous failure.

Corrective Action

(None).

Syslog Message

Vserver configuration is successfully updated on node %s.

Parameters

`remote_node` (STRING): Node that was updated.

Copyright information

Copyright © 2022 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

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

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

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

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

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

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

Trademark information

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