



ctran events

ONTAP 9.14.1 EMS reference

NetApp
February 12, 2024

Table of Contents

- ctran events 1
- ctran.disabled events 1
- ctran.enabled events 1
- ctran.gbuf events 1
- ctran.gc events 2
- ctran.group events 3
- ctran.jpc events 3
- ctran.net events 5

ctran events

ctran.disabled events

ctran.disabled

Severity

INFORMATIONAL

Description

This message occurs when Kernel Cluster Services (KCS) Cluster Transaction Manager (CTRAN) subsystem is disabled.

Corrective Action

This happens only when the local node went out of CLAM quorum. Take the corrective action specified in EMS_clam_node_ooq event.

Syslog Message

CTRAN subsystem is now disabled.

Parameters

(None).

ctran.enabled events

ctran.enabled

Severity

INFORMATIONAL

Description

This message occurs when Kernel Cluster Services (KCS) Cluster Transaction Manager (CTRAN) subsystem is enabled.

Corrective Action

No action is needed.

Syslog Message

CTRAN subsystem is now enabled.

Parameters

(None).

ctran.gbuf events

ctran.gbuf.alloc.unsuccessful

Severity

NOTICE

Description

This message occurs when one or more attempts to allocate a message buffer to convey messages between nodes for the Kernel Cluster Services (KCS) Cluster Transaction Manager (CTRAN) has been unsuccessful.

Corrective Action

If this message occurs more than 10 times in a hour KCS CTRAN logs will need to be collected for further analysis. Trigger an ALL autosupport by using, "autosupport invoke -node * -message "ctran.gbuf.alloc.unsuccessful" -type all", a diagnostic autosupport by using "autosupport invoke-diagnostic -node * -message "ctran.gbuf.alloc.unsuccessful" -subsystem kcs" and contact NetApp technical support support.

Syslog Message

Attempt to allocate a message buffer for CTRAN has been unsuccessful. Total number of unsuccessful attempts is %u.

Parameters

attempts_failed (LONGINT): Total number of message buffer allocation attempts that have been unsuccessful.

ctran.gc events

ctran.gc.proposal.stuck

Severity

EMERGENCY

Description

This message occurs when the Cluster Transaction Manager (CTRAN) Group Coordinator (GC) of a group runs a prop-done probe for a proposal longer than anticipated.

Corrective Action

KCS CTRAN logs need to be collected for further analysis. Trigger an ALL AutoSupport® message by using the "autosupport invoke -node * -message "ctran.gc.proposal.stuck" -type all" command. Also trigger a diagnostic AutoSupport by using the "autosupport invoke-diagnostic -node * -message "ctran.gc.proposal.stuck" -subsystem kcs" command. Then contact NetApp technical support support.

Syslog Message

CTRAN group %s has attempted a prop_done probe %d times against gm_id %ld on node %s with UUID %s for txn %ld with opcode %d.

Parameters

group_name (STRING): Name of the group being polled.
attempts (LONGINT): Number of attempts.
gm_id (LONGINT): Group member (GM) ID.
node_name (STRING): Name of the node the GM resides on.
node_uuid (STRING): UUID of the node the GM resides on.
trans_id (LONGINT): ID of the stuck transaction.
opcode (INT): Operation type of the stuck transaction.

ctran.gc.reselection.failed

Severity

ALERT

Description

This message occurs when some Kernel Cluster Services (KCS) Cluster Transaction Manager (CTRAN) groups lose their Group co-ordinator (GC) and a subsequent GC reselection process fails to complete.

Corrective Action

Reboot the node, and if the node is waiting for giveback then perform a giveback.

Syslog Message

CTRAN GC Reselection failed on local node (name=%s, id=%llu).

Parameters

localhostname (STRING): The host name of the local node.

localnodeid (LONGINT): The node ID of the local node.

ctran.group events

ctran.group.reset.failed

Severity

EMERGENCY

Description

This message occurs when an attempt to reset a group by Kernel Cluster Services (KCS) Cluster Transaction Manager (CTRAN) fails.

Corrective Action

KCS CTRAN logs will need to be collected for further analysis. Trigger an ALL autosupport by using "autosupport invoke -node * -message "ctran.group.reset.failed" -type all", a diagnostic autosupport by using "autosupport invoke-diagnostic -node * -message "ctran.group.reset.failed" -subsystem kcs" and contact NetApp technical support support.

Syslog Message

Group reset for %s has failed on node %s.

Parameters

localhostname (STRING): The host name of the local node.

group_name (STRING): The group on which the group reset operation is attempted.

ctran.jpc events

ctran.jpc.assigned

Severity

INFORMATIONAL

Description

This message occurs when a Join Proposal Coordinator (JPC) node is assigned by Kernel Cluster Services (KCS) Cluster Transaction Manager (CTRAN).

Corrective Action

(None).

Syslog Message

Cluster node (name=%s, ID=%llu) is the Join Proposal Coordinator (JPC) node.

Parameters

nodename (STRING): Host name of the JPC node.

node_id (LONGINT): Node id of the JPC node.

ctran.jpc.multiple.nodes

Severity

EMERGENCY

Description

This message occurs when multiple Join Proposal Coordinator (JPC) nodes for the Cluster Transaction Manager (CTRAN) are detected.

Corrective Action

KCS CTRAN logs will need to be collected for further analysis. Trigger an ALL autosupport by using, "autosupport invoke -node * -message "ctran.jpc.multiple.nodes" -type all", a diagnostic autosupport by using "autosupport invoke-diagnostic -node * -message "ctran.jpc.multiple.nodes" -subsystem kcs" and contact NetApp technical support support.

Syslog Message

Cluster node %u detected multiple JPC nodes (node %u reports JPC %u, node %u reports JPC %u)

Parameters

local_node_id (LONGINT): ID of the local node.

src_node_id_1 (LONGINT): ID of the first node reporting a JPC.

jpc_node_id_1 (LONGINT): ID of the JPC node reported by src_node_id_1.

src_node_id_2 (LONGINT): ID of the second node reporting a JPC.

jpc_node_id_2 (LONGINT): ID of the JPC node reported by src_node_id_2.

ctran.jpc.not.found

Severity

EMERGENCY

Description

This message occurs when this node cannot find a a Join Proposal Coordinator (JPC) within the cluster for Kernel Cluster Services (KCS) Cluster Transaction Manager (CTRAN). Until this error is resolved the reporting node will not be able to participate in distributed operations.

Corrective Action

Perform a planned takeover/giveback sequence to reset the reporting node non-disruptively by using the "takeover -ofnode (reporting node)" and "giveback -ofnode (reporting node)" commands. If the error

message is still seen KCS CTRAN logs will need to be collected for further analysis. Trigger an ALL autosupport by using, "autosupport invoke -node * -message "ctran.jpc.not.found" -type all", a diagnostic autosupport by using "autosupport invoke-diagnostic -node * -message "ctran.jpc.not.found" -subsystem kcs" and contact NetApp technical support support.

Syslog Message

This node was unable to locate a Join Proposal Coordinator (JPC) node.

Parameters

(None).

ctran.jpc.valid.failed

Severity

EMERGENCY

Description

This message occurs when the Join Proposal Coordinator (JPC) validation fails due to an inconsistent state of some of the Cluster Transaction Manager (CTRAN) group members following a JPC reselection event. In some cases, this can result in loss of SAN data access, CLI command failures and/or giveback failures.

Corrective Action

Reset the CTRAN subsystem during a maintenance window by placing the node specified ineligible by using "cluster modify -node (node reporting error) -eligibility false". Once complete return the node to service by entering "cluster modify -node (node reporting error) -eligibility true". Note, making a node ineligible impacts all protocols on that node. During the time that a node is ineligible, it will not serve any data. If a non-disruptive resolution is desired, takeover the reporting node by using "takeover -of-node (reporting-node)", and then returning it to service by "giveback -of-node (reporting-node)" when it is ready. If the error is still seen KCS CTRAN logs will need to be collected for further analysis. Trigger an ALL autosupport by using "autosupport invoke -node * -message "ctran.jpc.valid.failed" -type all", a diagnostic autosupport by using "autosupport invoke-diagnostic -node * -message "ctran.jpc.valid.failed" -subsystem kcs" and contact NetApp technical support support.

Syslog Message

CTRAN JPC validation failed on local node (name=%s, id=%llu, num_groups=%llu).

Parameters

localhostname (STRING): Host name of the local node.

localnodeid (LONGINT): Node ID of the local node.

numgroups (LONGINT): Number of inconsistent groups.

ctran.net events

ctran.net.unreachable

Severity

ALERT

Description

This message occurs when the Cluster Transaction Manager (CTRAN) on the local node is unable to reach a peer node that it believes is in CLAM quorum.

Corrective Action

Check all cluster interfaces on the node initiating this error message and the peer node specified in the message. * Ensure all interfaces are in up state with "network interface show -role cluster". * Ensure that each node initiating this message can reach their peer node with "cluster ping". * Check the cluster interconnect switches and correct any issues found with the health or configuration found. If the error still persists KCS CTRAN logs will need to be collected for further analysis. Trigger an ALL autosupport by using, "autosupport invoke -node * -message "ctran.net.unreachable" -type all", a diagnostic autosupport by using "autosupport invoke-diagnostic -node * -message "ctran.net.unreachable" -subsystem kcs" and contact NetApp technical support support.

Syslog Message

Node %s (id=%llu) is unable to reach peer node %s (id=%llu) on connection %s (ACN=0x%08llx).

Parameters

local_node_name (STRING): Node name of the local node.

local_node_id (LONGINT): Node ID of the local node.

peer_node_name (STRING): Node name of the unreachable peer node.

peer_node_id (LONGINT): Node ID of the unreachable peer node.

connection (STRING): Name of connection that is unreachable.

acn (LONGINTEX): The ACN value.

Copyright information

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

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

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

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

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

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

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

Trademark information

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