connectx events

ONTAP 9.15.1 EMS reference

NetApp
June 10, 2024

This PDF was generated from https://docs.netapp.com/us-en/ontap-ems/connectx-cmdinterface-events.html on June 10, 2024. Always check docs.netapp.com for the latest.

Table of Contents

connectx events . . . 1
- connectx.cmdinterface events . . . 1
- connectx.fatalerror events . . . 1
- connectx.ibcabledetected events . . . 1
- connectx.iblinkretrainnotreqd events . . . 2
- connectx.iblinkretrainreqd events . . . 2
- connectx.ibqsfpdumpctrl events . . . 3
- connectx.ibqsfpdumpdata events . . . 3
- connectx.ibretimerfailcount events . . . 4
- connectx.ibretimerprogrmpass events . . . 4
- connectx.ibretimerskipprogrm events . . . 5
- connectx.ibunsupportcable events . . . 5
- connectx.portdisabled events . . . 5

connectx events

connectx.cmdinterface events

connectx.cmdInterface.hung

Severity

NOTICE

Description

This message occurs when the command interface of ConnectX HA interconnect hardware is temporarily hung. If the command interface fails to recover, the HA interconnect goes down.

Corrective Action

Typically, the command interface recovers after a few seconds. If not, an AutoSupport message is generated when the HA interconnect goes down.

Syslog Message

HA interconnect ConnectX hardware command interface is temporarily hung.

Parameters

(None).

connectx.fatalerror events

connectx.fatalError

Severity

ERROR

Description

This message occurs when a fatal error is polled from the ConnectX(tm) InfiniBand® adapter. Controller failover will be disabled.

Corrective Action

Contact NetApp technical support. ConnectX registers have been dumped to the /etc/mlxlog/ConnectX_regdump file.

Syslog Message

HA interconnect HBA failure, ConnectX fatal error was polled.

Parameters

(None).

connectx.ibcabledetected events

connectx.IbCableDetected

Severity

INFORMATIONAL

Description

This message occurs when an InfiniBand cable is detected on the InfiniBand port.

Corrective Action

(None).

Syslog Message

Detected %s of length %dM on InfiniBand port %s.

Parameters

cable_type (STRING): InfiniBand cable type.
cable_length (INT): Length of the InfiniBand cable in meters.
port_str (STRING): InfiniBand port in which the cable is plugged.

connectx.iblinkretrainnotreqd events

connectx.IBLinkRetrainNotReqd

Severity

INFORMATIONAL

Description

This message occurs when the software detects that the previous InfiniBand link training was successful.

Corrective Action

(None).

Syslog Message

InfiniBand Link training was successful for ConnectX in slot %d, port %d.

Parameters

pcie_slot (INT): PCIe slot in which ConnectX is present.
port_num (INT): Port number where the success was detected.

connectx.iblinkretrainreqd events

connectx.IBLinkRetrainReqd

Severity

NOTICE

Description

This message occurs when the software detects that the previous InfiniBand link training was unsuccessful.

Corrective Action

(None).

Syslog Message

InfiniBand Link training failed for ConnectX in slot %d, port %d. Link Retraining Request status %d.

Parameters

pcie_slot (INT): PCIe slot in which ConnectX is present.
port_num (INT): Port number where the issue was detected.
status (INT): Status of the link retraining request.

connectx.ibqsfpdumpctrl events

connectx.IbQsfpDumpCtrl

Severity

ERROR

Description

This message occurs when InfiniBand retimer programming fails due to a quad small form-factor pluggable (QSFP) transceiver register dump failure, causing the control registers of QSFP to be dumped.

Corrective Action

Automatic retry of InfiniBand retimer programming will be done and an AutoSupport(tm) message will be generated if two retries fail.

Syslog Message

InfiniBand retimer programming failed on port %s due to %s. Dumping registers: control 0x%0x, data 0x%0x, timeout 0x%0x, clock 0x%0x.

Parameters

port_str (STRING): InfiniBand port in which the cable is plugged.
reason (STRING): Reason for the failure of InfiniBand retimer programming.
ctrlreg (INTHEX): Contents of the QSFP control register in hexadecimal notation.
datareg (INTHEX): Contents of the QSFP data register in hexadecimal notation.
timeoutreg (INTHEX): Contents of the QSFP timeout register in hexadecimal notation.
clockreg (INTHEX): Contents of the QSFP clock register in hexadecimal notation.

connectx.ibqsfpdumpdata events

connectx.IbQsfpDumpData

Severity

ERROR

Description

This message occurs when InfiniBand retimer programming fails due to a quad small form-factor pluggable (QSFP) transceiver parse error, and 128 bytes of QSFP data are dumped.

Corrective Action

Automatic retry of InfiniBand retimer programming will be done and an AutoSupport(tm) message will be generated if two retries fail.

Syslog Message

InfiniBand retimer programming failed on port %s due to %s. Dumping registers: %s.

Parameters

port_str (STRING): InfiniBand port in which the cable is plugged.
reason (STRING): Reason for the failure of InfiniBand retimer programming.
qsfp_data (STRING): Contents of QSFP data registers from offset 128 to 256 in hexadecimal notation.

connectx.ibretimerfailcount events

connectx.IbRetimerFailCount

Severity

ERROR

Description

This message occurs when InfiniBand retimer programming fails due to one of the following reasons: InfiniBand device not found, GPIO read failure or retimer chip failure.

Corrective Action

Automatic retry of InfiniBand retimer programming will be done and an AutoSupport(tm) message will be generated if two retries fail.

Syslog Message

InfiniBand retimer programming failed on port %s due to %s.

Parameters

port_str (STRING): InfiniBand port in which the cable is plugged.
reason (STRING): Reason for the failure of InfiniBand retimer programming.

connectx.ibretimerprogrmpass events

connectx.IbRetimerProgrmPass

Severity

INFORMATIONAL

Description

This message occurs when InfiniBand retimer programming is succesfully completed after the system detects that a cable is plugged in.

Corrective Action

(None).

Syslog Message

InfiniBand retimer programming was successful on port %s.

Parameters

port_str (STRING): InfiniBand port in which the cable is plugged.

connectx.ibretimerskipprogrm events

connectx.IbRetimerSkipProgrm

Severity

INFORMATIONAL

Description

This message occurs when InfiniBand retimer programming is skipped after the system detects that a cable is plugged in, because there was no change in the cable's type and length.

Corrective Action

(None).

Syslog Message

InfiniBand retimer programming was skipped on port %s for %s cable.

Parameters

port_str (STRING): InfiniBand port in which the cable is plugged.
cable_type (STRING): InfiniBand cable type.

connectx.ibunsupportcable events

connectx.IbUnsupportCable

Severity

ERROR

Description

This message occurs when an unsupported InfiniBand cable is detected on the InfiniBand port.

Corrective Action

Unplug the unsupported InfiniBand cable and plug in a supported cable. Search the support site "Hardware Universe" for information about supported InfiniBand cables.

Syslog Message

Detected unsupported %s on InfiniBand port %s.

Parameters

cable_type (STRING): InfiniBand cable type.
port_str (STRING): InfiniBand port in which the cable is plugged.

connectx.portdisabled events

connectx.portDisabled

Severity

ALERT

Description

This message occurs when the HA interconnect port experiences persistent node advertisement send timeouts. Port reinitialization does not correct the problem. The port is disabled.

Corrective Action

Reboot the controller. Contact NetApp technical support if the problem persists.

Syslog Message

Node advertisement send timed out for the ConnectX device in slot %d, port %d. The port is disabled. Device registers have been dumped to the /etc/mlxlog/ConnectX_regdump file.

Parameters

phys_slot (INT): Physical slot in which ConnectX is present.
port_num (INT): Port number that is disabled.

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